rinse water or at least run the water at minimum volume during rinsing.

While cooking: Rinse produce in a pan of cold water instead of letting the water run while you rinse it. Instead of letting hot water run over frozen foods, transfer them to the refrigerator the night before you need them. Keep a container of water in the refrigerator rather than running tap water until it is cool enough to drink. Use garbage disposals only for really messy stuff, not a heap of peels that can easily be dumped in the garbage.

In the laundry room: Wash only full loads! If you must wash partial loads, match the load setting with the amount of laundry to be washed. Pretreat stains to avoid re-washing. Use the shortest wash cycle for lightly soiled loads as it uses less water than other cycles.

Around the house:

Pipes: Insulate hot water pipes where possible to avoid wasting water while waiting for it to "run hot." Pipe insulation is inexpensive, and easy to install.

Plants: Don't over-water your houseplants! More plants die from over-watering than from drying out. Collect rainwater or recycle water from fish tanks to water your plants.

Don't Wait to Fix Leaks!

Leaks can account for 10 percent or more of the water bill and waste both water and energy if the source is a hot water faucet. In the average household, water lost through leakage is 9.5 gallons per person per day! For example, a toilet with a silent leak of one cup of water a minute (a mere dribble) wastes about 2,700 gallons of water a month!

Toilet Leaks: Most of the water lost to leaks is attributable to toilet leakage. Approximately 25% of all toilets leak. To determine if the toilet is leaking, remove the tank lid after the tank has stopped filling. You may be able to see a leak or hear water running. If not, you may still have a "silent leak." To test for a silent leak, mix a few drops of food coloring or place a dye capsule or tablet (available from home improvement centers and many utilities) into the water in the toilet tank. **Do not** flush the toilet. Wait for about ten minutes, and if the dye appears in the toilet bowl, the toilet has a silent leak. The most common causes of toilet leaks are: worn or improperly seated flappers, worn/broken ballcocks (try replacing washers and tightening screws first), leaking refill valves, broken or improperly adjusted lift chains and handle rods, or poorly sized replacement parts. Toilet parts can deteriorate faster when automatic toilet bowl cleaners are used. Check each item, replace worn parts with good quality parts as necessary, and retest to make sure the leak has been fixed. Universal parts often do not work, so you may need to ask for replacement parts specific to your toilet brand.

Faucet Leaks: Faucet leaks are usually caused by worn washers or "O" rings (for a washerless faucet), which are inexpensive and can be replaced with a screwdriver and an adjustable wrench. If that doesn't work, you may need to replace the entire stem assembly. Note the faucet brand and take the original part with you to a home improvement center.

Other Leaks: The water meter can be used to check for invisible or unnoticed leaks. Turn off all faucets and water-using appliances. Read the dial on the water meter and record the reading. After 15 to 20 minutes, recheck the meter. If no water has been used and the reading has changed, a leak is occurring somewhere in the plumbing system. The services of a plumber or trained water utility employee are often required to locate and fix these invisible leaks. The water meter is often located along the property line near the street.

Developed by the Texas Water Development Board. Some reference material was adapted from "**Handbook of Water Use and Conservation**" by Amy Vickers (WaterPlow Press, 2001).

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Being Water Smart Indoors

Why Conserve Water?

According to the Texas State Water Plan, Texas' existing water sources will meet only 75% of the projected water demand by 2050. Single-family residential indoor water use in the U.S. is an average of 69 gallons per person per day. This average can be cut to 45 gallons just by installing water efficient fixtures and reducing leaks as outlined in this brochure. Changing water-wasting habits can save even more water. Using water more efficiently will also save energy and money, and protect the quality of life of future generations. We must be responsible and conserve water now.

What Can You Do To Conserve Water?

Install Water Efficient Appliances

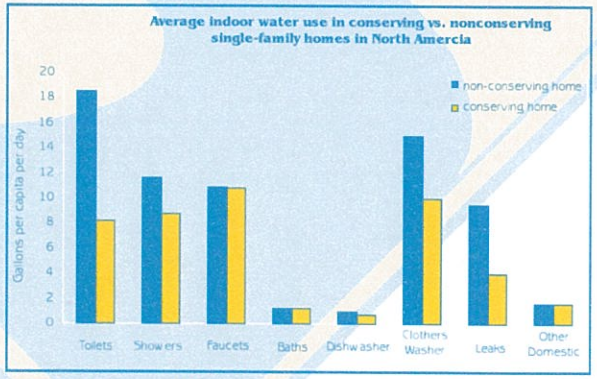
Toilets: Standard toilets manufactured before 1980 usually require 5 to 7 gallons per flush (gpf) and toilets sold during the 80's use 3.5 gpf. Since 1992 in Texas, new toilets must use no more than 1.6 gpf. Replacing older, larger-use toilets with the newer models can result in significant water and sewer savings. If you replace a 3.5 or 5 gpf toilet with a 1.6 gpf toilet, you can save about 9,740 or 17,300 gallons per year! It's a myth that low volume flush toilets don't work as well. In fact, the operating and cleaning performance of many models of low-volume fixtures is better than that of the older fixtures. Water can be conserved in the larger-use toilets by installing displacement devices such as a plastic bottle or bag (do not use a brick-it can crumble and damage the fixture). These devices can save 0.5 to 1.5 gpf in older fixtures, and although they are much cheaper than replacement of high volume toilets, they save significantly less water and do not last as long. Some cities offer rebates that pay for all or some of the cost of purchasing and installing a new toilet.

Showers: Showers installed in the 1980's use 3-4 gallons per minute and pre-1980 showerheads use 5-8 gallons per minute! Since 1992 in Texas, and 1994 nationally, new showerheads must use a maximum of 2.5 gallons per minute at 80 pounds per square inch. Currently available water efficient showerheads work much better than early models produced in the 1980's, and there are even good 1.5 gallon per minute models available. Installing a water efficient showerhead is the single most effective conservation step that can be taken inside the home.

Sinks: Installing faucet aerators on lavatory and kitchen sinks can save up to one-half the amount of water used by sinks without aerators. Since 1992 in Texas, new faucets must use a maximum of 2.2 gallons per minute at 60 pounds per square inch. Aerators are inexpensive, and do not require any special adapters. Faucets that do not have aerators can use up to 7 gallons per minute! The flow rate of bathroom faucets does not need to be as high as kitchen faucets. Bathroom faucets need only 1 to 1.5 gallons per minute, and kitchen faucets generally need 2.2 gallons per minute.

Washing Machines: When buying a washer, look for one that has adjustable or automatically adjusting water levels for different load sizes and ideally one that is a high efficiency washer (http://www.energystar.gov/products/clotheswashers/ has a list of qualifying models). Some cities offer rebates on high efficiency washers. Full-sized Energy Star qualified high efficiency clothes washers use 18-25 gallons per load. Conventional washers installed in the 1980's use 48 to 55 gallons per load, and washers installed since 1990 use about 39-43 gallons. High efficiency washers use 35-55% less water and 50% less energy! In addition, high efficiency washers are capable of extracting more water from clothes during the spin cycle, reducing the time and energy needed for drying. They also require less detergent, rinse more thoroughly, are less abrasive on clothes, and can fit larger capacity loads in the same size drum.

Dishwashers: Water efficient dishwashers use a maximum of 7 gallons per load, but some use as little as 4.5 gallons. Although dishwasher use may be a small percentage of household use, dishwashers manufactured before 1990 use about 14 gallons per load, so replacing an older model with a water efficient model could cut dishwasher water use in half.



Source: *Handbook of Water Use and Conservation*, 2001.

Change Water-Wasting Habits

In the bathroom: Don't use your toilet as a trash can for paper and facial tissues!

At the sink: Don't let the water run when you aren't using it! Instead of allowing the tap water to run while brushing, run it just to wet and rinse the toothbrush. Apply the same idea when washing your hands. Use only as much water flow as you really need. Fill the sink with water instead of letting the water run continuously while shaving.

In the shower: Take shorter showers and take a shower instead of a bath. Showers with water efficient showerheads often use less water than a bath. Turn off the water while you are shampooing your hair.

In the kitchen: Don't leave the water running when you go away from the sink! The volume of wasted water can add up quickly. If you let the water run at full volume for only two minutes each day you will waste 1,600 gallons of water each year even if you have a water efficient faucet!

When washing dishes: Only run the dishwasher with a full load! This practice will save water, energy, detergent, and money. If your dishes are only lightly soiled, use the short wash cycle. Dry scrape dishes instead of rinsing them and do not pre-rinse dishes if you are using the dishwasher. When washing dishes by hand, fill a basin or the sink with soapy water instead of letting the water run continuously. Soak pans rather than scrubbing them while the water is running. Fill the other basin with