



FACTS ABOUT TEXAS WATER



WHY CONSERVATION

During the 1980's, Texans used between 12.5 and 16 billion gallons of water a day for municipal, industrial, and agricultural purposes. Texans also produced three billion gallons of wastewater each day that had to be treated to prevent pollution of our state's lakes and streams. Even more demand will be placed on this limited resource and billions of tax payer's dollars will have to be spent on water and wastewater facilities as our state's populations grows from 17 million people in to 1990 to a projected 30 million or more in the next fifty years.

As a result of increased demands, more areas may experience water shortages in the future. The state's dependable fresh-water supply from our lakes, rivers, and water well is currently about 14.5 billion gallons a day. Even with full development of our existing ground water and an ambitious reservoir building program, the ultimate potential for dependable, replenishable supply in the future is only 18.5 to 19 billion gallons a day. Quite simply, Texas' conventional fresh-water supplies are already 75 to 80 percent developed.

The more efficient use of our precious water resource through water conservation and reuse holds a real potential to both preserve and extend limited water supplies and to save Texans real money. Consider that even a 10 to 15 percent reduction in personal water use can save Texas water and sewer rate payers billions of dollars over the next 50 years. However, the effort to conserve water must begin now with each individual. This brochure provides the homeowner with water and money-saving tips on how to use water more efficiently in and around their home.

POSSIBLE SAVINGS WITH WATER CONSERVATION

For approximately \$10 to \$20.00, the average homeowner can install two low-flow showerheads, place dams or bottles in the toilet tanks, put low-flow aerators on the faucets, and repair dripping faucets and leaking toilets. This could save from 10,000 to over 25,000 gallons a year for a family of four, and would pay for itself in less than a year! Even more could be saved if good outdoor water conservation is practiced for the lawn and garden.

CONSERVATION TIPS

In the Bathroom...

- Install a low-flow showerhead that restricts the flow from the shower to less than 3.0 gallons per minute.
- When building a new home or remodeling a bathroom, install a new low-volume flush toilet that uses only 1.6 gallons per flush.
- Take short showers and install a cutoff valve or turn the water off while soaping and back on again only to rinse.
- Take a shower instead of filling the tub and taking a bath.



Showers with low-flow showerheads usually use less water than tub baths.

- Do not use hot water when cold will do. Water and energy can be saved by washing hands with soap and cold water. Hot water should only be added when hands are especially dirty.
- Reduce the level of the water being used in a bathtub by one or two inches if a shower is not available.
- When brushing teeth, turn the water off until it is time to rinse.
- Do not let the water run when washing hands. Water should be turned off while soaping and scrubbing and turned on again to rinse. A cutoff valve may also be installed on the faucet.
- Shampoo hair in the shower. Shampooing in the shower takes only a little more water than is used to shampoo hair during a bath and much less than shampooing and bathing separately.
- When shaving, fill the lavatory basin with hot water instead of letting the water run continuously.
- Test toilets for leaks. Add a few drops of food coloring or a dye tablet to the water in the tank, but do not flush the toilet. Watch to see if the coloring appears in the bowl within a few minutes. If it does, the toilet has a silent leak that needs to be repaired.
- Use a toilet tank displacement device such as a toilet dam or bag. Also, a plastic bottle can be filled with stones or with water, recapped, and placed in the toilet tank. These devices will reduce the volume of water in the tank but will still provide enough for flushing. (Bricks are not recommended since they eventually crumble and could damage the working mechanism). Displacement devices are not recommended with new low-volume flush toilets.
- Install faucet aerators to reduce water consumption.
- Never use the toilet to dispose of cleansing tissues, cigarettes butts, or other trash. This wastes a great deal of water and also places an unnecessary load on the sewage treatment plant or septic tank.

In the Kitchen...

- Use a pan of water (or place a stopper in the sink) for rinsing pots, pans, and cooking implements, rather than turning on the water faucet each time a rinse is needed.
- Never run the dishwasher without a full load. This practice will save water, energy, detergent, and money.
- Use the sink garbage disposal sparingly or start a compost pile.
- Keep a container of drinking water in the refrigerator. Running water from the tap until it is cool is wasteful. Better still, both water and energy can be saved by keeping cold water in a picnic jug on a kitchen counter to avoid opening the refrigerator door frequently.



- Use a small pan of cold water when cleaning vegetables, rather than letting the water run over them.
- Use only a little water in the pot and put a lid on it for cooking most food. Not only does this method save water, but also food is more nutritious since vitamins and minerals are not poured down the drain with the extra cooking water.
- When washing dishes by hand, use a pan of water for sensing instead of rinsing each dish under running water.
- Always keep water conservation in mind, and think of other ways to save in the kitchen. Small kitchen savings from not making too much coffee or letting ice cubes melt in a sink can add up in a year's time.

In the Laundry...

- Wash only a full load when using an automatic washing machine (32 to 50 gallons are required per load).
- Whenever possible, use the lowest water-level setting on the washing machine for light or partial loads.
- Use cold water as often as possible to save energy and to conserve the hot water for uses which cold water cannot serve. (This is also better for clothing made of today's synthetic fabrics).

For Appliances and Plumbing...

- Check water requirements of various models and brands when considering purchasing any new appliances. Some use less water than others.
- Check all water line connections and faucets for leaks. A slow drip can waste as much as 170 gallons of water EACH DAY, or 5,000 gallons per month, and will add to the water bill.
- Learn to repair faucets so that drips can be corrected promptly. It is easy to do, costs very little, and can mean a substantial savings in plumbing and water bills.
- Check for water leakage that one may be entirely unaware of, such as a leak between the water meter and the house. To check, turn off all indoor and outdoor faucets and water-using appliances. The water meter should be read at 10 to 20 minute intervals. If it continues to run or turn, a leak probably exists and needs to be located.
- Insulate all hot water pipes to reduce the delays (and wasted water) experienced while waiting for the water to "run hot".
- Be sure the water heater thermostat is not set too high. Extremely hot settings waste water and energy because the water often has to be cooled with cold water before it can be used.
- Use a moisture meter to determine when house plants need water. More plants die from over-watering than from being on the dry side.

For Out-of-Door Use...

- Water lawns early in the morning during the hotter summer months. Otherwise, much of the water used on the lawn can simply evaporate between the sprinkler and the grass.
- To avoid excessive evaporation, use a sprinkler that produces large drops of water, rather than a fine mist. Sprinklers that send droplets out on a low trajectory also help control evaporation.



- Use drip irrigation systems for bedded plants, trees, or shrubs, or turn soaker hoses upside-down so the holes are on the bottom. This will help avoid evaporation.
 - Water slowly for better absorption, and never water on windy days.
 - Forget about watering the streets or walks or driveways. They will never grow a thing.
 - Condition the soil with mulch or compost before planting grass or flower beds so that water will soak in rather than run off.
 - Fertilize lawns at least twice a year for root stimulation, but do not over fertilize. Grass with a good root system makes better use of less water and is more drought tolerant.
 - Learn to know when grass needs watering. If it has turned a dull gray-green or if footprints remain visible, it is time to water.
 - Do not water too frequently. Too much water can overload the soil so that air cannot get to the roots, can encourage plant diseases, and can cause salt buildup.
 - Do not over-water. Soil can absorb only so much moisture, and the rest simply runs off. A timer will help, and either a kitchen timer or an alarm clock will do. An inch and one-half of water applied once a week will keep most Texas grasses alive and healthy.
 - Operate automatic sprinkler systems only when the demand on the town's water supply is lowest. Set the system to operate between four and six a.m.
 - Do not scalp lawns when mowing during hot weather. Taller grass holds moisture better. Grass should be cut fairly often, so that only $\frac{1}{2}$ to $\frac{1}{4}$ inch is trimmed off. A better-looking lawn will result.
 - Use watering can or hand water with the hose in small areas of the lawn that need more frequent watering (those near-walks or driveways or in especially hot, sunny spots).
 - Use native and adapted plants. Learn what types of grass, shrubbery, and plants do best in the area and in which parts of the lawn, and then plant accordingly. If one has a heavily shaded yard, no amount of water will make roses bloom. Choose plants that have a low water requirements, are drought tolerant, and are adapted to the area of the state where they are to be planted.
 - Consider decorating areas of the lawn with rocks, gravel, wood chips, or other materials now available that require no water at all.
 - Do not "sweep" walks and driveways with the hose. Use a broom or rake instead.
 - Use a bucket of soapy water and use the hose only for rinsing when washing the car.
- Learn about the principles of Xeriscape.