

WATER CONSERVATION CHECKLIST for the HOME



TEXAS A&M
AGRILIFE
EXTENSION


Texas Water
Resources Institute
make every drop count

 Cooperative State Research,
Education, and Extension Service
Research, Education, and Economics

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WATER CONSERVATION:

How does your home checkout?



The availability of water, now and in the future, should be a concern for everyone. In most areas of the country and most of the time, water has been readily available. The situation is changing. There are constantly new demands on our water supply. Sometimes that supply may be less than at other times because of climatic conditions such as a drought, a disaster, or just a breakdown in the water system.

Conserving water also conserves other resources—energy and money. It costs money to pump water and make it available in our homes, for irrigation, and for business and industrial uses. Energy is required to pump, move, and to purify water. Both energy and money are required to heat water—whether it is the water we heat and use, or the water we heat and waste through poor management practices.

By becoming more aware of your water use habits—both old and new—you can reduce water use (consumption), eliminate waste, and save energy and money.

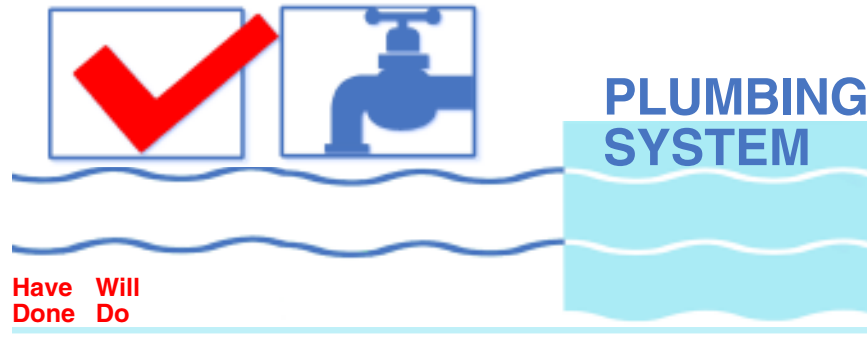
How much water do you use in a day? A gallon? Do you use 25, 50, or even 100 or more gallons? Few people know how much they use. Studies show wide variation in the amount of

water used by rural and urban households. Water use ranges from 66 to 118 gallons per person per day, with urban households using larger amounts.

Imagine what it would be like to turn on the tap and not get at least a drop of water. People in some parts of the country know this does happen. They are learning how to conserve water. They know that water is a limited resource. Water shortages are now a local or regional problem. Some day they may be a national problem. It is wise to learn now how to conserve water.

This checklist is designed to help you see how effectively you are using water, and to alert you to ways to save. Some actions suggested are more severe than others and would need to be implemented only in an emergency situation—and are indicated as such.

As you read this list, check the steps you have already taken to conserve water. Note what you still need to do to become a better manager of water resources. Concentrate on the big water uses first.



Have Done **Will Do**

- Inspect the plumbing system to see that there are no leaks.
- Install reduced-flow showerheads (2.5 gal./min.).
- Limit the amount of shower water by the way you use the controls for the hot and cold water faucets, or a mixer faucet.
- Turn off all water if you are going to be away from home on a vacation or trip. This keeps children from turning on outside faucets while you are away.
- Check to see how often your home water softening equipment regenerates and backwashes. It can use as much as 100 gallons of water each time it does this. You may want to cut down on the use of such equipment. Reserve softened water for kitchen use, bathing, and laundry. Use unsoftened water for all other purposes. (This may require a bypass line but this is advisable under all circumstances).
- Insulate hot water pipes. Having to clear the “hot” line of cooled water is wasteful.
- Install a circulating hot water system.
- Check all faucets, inside and out, for drips. Make repairs promptly. These problems get worse—never better.
- Teach children to turn water faucets off quickly and tightly after each use.
- A toilet leak can waste lots of water. Put a small amount of food coloring into the tank, if the color trickles into the bowl there is a leak and repairs are needed.

Have Done **Will Do**

- Repace existing toilets with 1.6 gal./flush toilets.
- Water required to flush some toilets can be reduced. Experiment by placing a quart plastic (not glass) bottle filled with water in the flush tank to save 1 quart of water per flush. (Don't use a brick to fill space in your toilet flush tank. Particles from the brick could damage the valve).
- Or, adjust the float level of the toilet to reduce the amount of water necessary to flush the toilet. Do this carefully to avoid damaging the system. Try only a slight adjustment.
- Never use the toilet as a trash basket for facial tissues, etc.
- Emergency Situations:**
When the toilet needs flushing, use gray water saved from cleaning, bathing, etc. Put the water in the toilet bowl—not the flush tank. If the system loses pressure, gray water, if placed in the tank, could back-siphon into the system and contaminate the drinking water.



- Wait until you have a full load before washing items, or use a lower water level setting.
- Replace 40 gal./load washer with an Energy Star™ washer that uses 18-25 gal./load.
- Check garments to make sure they need washing. Don't wash clothes more often than necessary.
- Encourage children to change into play-clothes after school so that school-and play-clothes can be worn several times.

Have Done **Will Do**

- Buy clothing and household items that do not require separate washing.
- Emergency Situations:**
Siphon gray water from your washing machine into a laundry tub or other container for cleaning, to flush the toilet, or water plants. (See directions for using gray water on plants). Use the gray water as soon as possible. Do not store longer than 24 hours.



- Urge family members to take 4 minute showers instead of tub baths. Showers—especially those fitted with flow restrictors or low-volume heads—usually use less water than a bath.
- Cut down on the number of showers taken. Replace some of them with sponge baths using a small amount of water in a basin.
- Seek other ways to relax besides staying in the shower for long periods of time.
- Turn off shower water while you apply soap to body, or lather hair and massage scalp. Install shut-off valve to stop flow without affecting temperature.
- Turn off water while you shave, brush teeth, etc.
- Emergency Situation:**
Close bathtub drain during shower so that the water stays in the tub. Use this to flush the toilet or water outdoor plants.



Have Done **Will Do**

- Use a pan of water when peeling and cleaning vegetables and fruits rather than letting the sink tap run.
- To get warm water, turn hot water on first; then add cold water as needed. You get warm water quicker this way and save water, too.
- Limit use of a garbage disposal. Save food scraps and run the disposal once to conserve water. You can use the disposal even less by saving food scraps for a compost pile.
- Use the smallest amount of water necessary to cook foods such as frozen vegetables and stews. You'll preserve nutrients as well as save water.
- A tight-fitting lid on a pan saves water from boiling away and also cooks food faster, thereby using less energy.
- Plan more one-dish meals in which vegetables are cooked or baked without adding water.
- Use a tea kettle or covered pan to heat water and avoid loss of water through evaporation.
- Time foods during the cooking process to avoid overcooking and loss of liquids through evaporation.
- Select the proper size pans for cooking. Large pans require more cooking water.
- Use a pressure cooker to save water, energy, and time.
- A bottle of drinking water kept cold in your refrigerator saves running the tap to get cold water.

Have Done **Will Do**

- Save leftover vegetable juices for soups, cooking raw or frozen vegetables, stews, and making gravy. Refrigerate and use juices within a day or two.
- Using syrups and juices from canned goods saves water and makes foods taste better. Use leftover fruit juices for drinking and making gelatin salads.
- Food Preparation Emergency Situation:**
If a water shortage seems likely, store water in clean plastic or glass jugs with tight-fitting lids. Keep in the refrigerator and use sparingly.



- Cut down on the number of utensils used in food preparation, and on the plates and glassware used with meals. This will save on dishwashing water used to clean them.
- Wash only full loads of dishes in dishwasher. A dishwasher uses about 9 to 13 gallons of water per cycle.
- Avoid unnecessary rinsing of dishes that go into the dishwasher for immediate washing. Scrape if necessary.
- When washing dishes by hand, use one pan of soapy water for washing and a second pan of hot water for rinsing. Rinsing in a pan requires less water than rinsing under a running faucet.



MEAL SERVICE

Have Done **Will Do**

- Chill water in bottles in the refrigerator to avoid running excess water from the lines to get cold water for meals. Shake bottle before serving to incorporate air in the water so that it doesn't taste flat.
- Put drinking water on the table only if people really drink it.



HOUSEHOLD CLEANING

- Wipe up small spills as they occur to avoid frequent mopping of floors.
- Regularly vacuum carpets and rugs so you will not need to shampoo them as often. There is less danger of permanent stains when you take care of spots as they occur.
- "Collect" household cleaning chores. Do them together to save water. Clean the more lightly soiled surfaces first—the mirrors, walls, woodwork—and then floors.



HOUSE PLANTS

Have Done **Will Do**

- Use rinse water—gray water—saved from bathing or clothes washing to water indoor plants. Do not use soapy water on indoor plants. It could damage them.
- Water indoor plants only when needed. Too much water can damage plants.
- Use water from dehumidifier to water plants.



OUTSIDE the HOME

- Car washing, if you use the hose down method, can use a lot of water. You may have to lower your standards and wash the car less often.
- Use a bucket of warm sudsy water to remove soil from the car. Hose down only as a final rinse.
- Take advantage of a soft summer rain to wash your car. Get out there with soap and sponge! Children will enjoy this.
- If water supply allows use of an outdoor pool, cover the pool when it's not being used to prevent evaporation.

Have Done **Will Do**

- Clean the swimming pool filter often. You will not have to replace the water as often.
- Use a broom, not the hose, to "sweep" the garage, sidewalks, and the driveway.



- Plan landscaping and gardening to minimize watering requirements.
- Use native and low water-use plants and turf.
- Vegetables requiring more water should be grouped together in the garden to make efficient use of water applications.
- Mulch shrubs and other plants to retain moisture in the soil longer. Spread leaves, lawn clippings, chopped bark or cobs, or plastic around the plants. Mulching also controls weeds that compete with garden plants for water. Mulches should permit water to soak into the soil
- Try trickle or drip irrigation systems in outdoor gardens. These methods use 25 to 50 percent less water than hose or sprinkler methods. The tube for the trickle system has many tiny holes to water closely-spaced plants. Drip system tubing contains holes or openings at strategic places for tomatoes and other plants that are more widely spaced.
- Irrigate with the proper amount and only when necessary. Understand different water requirements of "zones" in your landscape, and check automatic sprinkler or drip irrigation systems periodically to ensure plants are receiving the water they need without being overwatered.

Have **Will**
Done **Do**

- If you are using a garden hose or sprinkler, water the garden thoroughly, but less frequently. Don't let water run down driveway or street.
- Lawns should be watered during hours when the water system experiences the least demand—avoid watering when windy or in heat of day and keep track of the time. Set an alarm clock or timer as a reminder. A sprinkler left on overtime in one spot wastes water.
- Less frequent but heavier lawn watering encourages a deeper root system to withstand dry weather better.
- Collect rain water in a barrel and use it to water your garden (please note, this is not a legal practice in all areas).
- Avoid planting turf in areas that are difficult to irrigate properly such as steep inclines and isolated strips along sidewalks and driveways.
- Aerate clay soils at least once a year to help the soil absorb and retain moisture.
- Use porous materials for walkways and patios to keep water in your yard and prevent wasteful runoff.
- Emergency Situations:**
If water is rationed or otherwise restricted, lawns should receive the lowest priority for outside watering. Water trees and shrubs which die more quickly without it and are more expensive to replace.
- Soapy water is generally okay for use on outdoor plants. Do not use water that contains bleach or borax on plants. It could damage them. Rinse water from laundry can be used on outdoor or indoor plants.

BE WATER-CONSCIOUS WHEN YOU MAKE PURCHASE DECISIONS

Have Done Will Do

- | | | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <u>When Selecting New Equipment:</u> |
| | | Install and use low-volume showerheads. |
| <input type="checkbox"/> | <input type="checkbox"/> | Select a dishwasher and clothes washer based in part on water requirements and with options on water levels. Consider a suds-saver to reuse water. |
| <input type="checkbox"/> | <input type="checkbox"/> | Select water-saving toilets. In areas where severe water problems exist, bioconversion toilets may be an answer. |
| <input type="checkbox"/> | <input type="checkbox"/> | Smaller than standard bath tubs may meet your needs and save water. |
| <input type="checkbox"/> | <input type="checkbox"/> | Select a water heater sized for family needs, and insulated to prevent heat loss. |
| <input type="checkbox"/> | <input type="checkbox"/> | Select the most effective type of watering hose for your needs—soaker hose or drip irrigation, if appropriate. |
| | | <u>When Building or Remodeling:</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Locate water heater near area where hottest water is needed, usually in the kitchen/laundry area. |
| <input type="checkbox"/> | <input type="checkbox"/> | If remodeling or building, locate the hot water heater as close as possible to bathroom, kitchen, and laundry areas. The closer to the faucet the heater is, the less water has to be run through pipes. |
| <input type="checkbox"/> | <input type="checkbox"/> | For this reason, it's sometimes better to have two smaller water heaters: one located in the kitchen area, and one in the bathroom area when the distances between the two areas are great. |
| <input type="checkbox"/> | <input type="checkbox"/> | Plan landscaping and gardening to minimize watering requirements. |

LIST WATER CONSERVING PRACTICES YOU PLAN TO USE









1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

For more information on ways to conserve water, contact your local Extension agent, usually listed in your telephone directory under county government offices. Or, write to Housing and Environment Specialist, Texas Cooperative Extension, Texas A&M University, College Station, Texas 77843-2251.

This booklet adapted and written for use in Texas by Janie Harris, Extension Housing and Environment Specialist, and edited by Bev Kellner, Texas Cooperative Extension.

CHECK OUT THESE WEB SITES FOR MORE INFORMATION



-  **Water Wiser Drip Calculator**
<http://www.waterwiser.org/books/wwdripcalc.htm>
-  **Texas Water Resources Institute**
<http://twri.tamu.edu/>
-  **Texas A & M Horticultural Department, Landscape Water Conservation-Xeriscape**
<http://aggie-horticulture.tamu.edu/extension/xeriscape/xeriscape.html>
-  **Water Saver Home, California Urban Water Conservation Council**
<http://www.h2ouse.org/>
-  **Texas Water Resources Institute Rio Grande Basin Initiative**
<http://riogrande.tamu.edu>
-  **Texas Water**
<http://texaswater.tamu.edu>

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