

Cooperative Extension Service
University of the Virgin Islands
#2 John Brewers Bay
St. Thomas, VI 00802-9990
(340) 693-1080

WATER CONSERVATION CHECKLIST FOR THE HOME

WHY CONSERVE WATER?



The availability of fresh water should be a concern for everyone in the Virgin Islands. We depend on very limited resources for our drinking, bathing, and wash water. Most of our water supply comes from desalinated sea water (60%), the remainder comes from cisterns (20%) and groundwater wells (20%). In

times of drought, cisterns and wells run dry and water becomes more expensive. There are also constant new demands on our water supply due to development. Hurricanes and other natural disasters or a breakdown in the water supply system can further decrease the amount of fresh water available to Virgin Islanders.

Each day a little over 6 million gallons of wastewater flows directly into our coastal waters from sewage treatment plants. Much more wastewater flows into individual septic systems and private treatment plants, many of which provide only partial treatment. This partially-treated wastewater then flows into groundwater or into guts, and eventually into our coastal waters. Most of us take for granted that we will always have clean drinking water available, yet development in the Virgin Islands has increased water use and added to coastal and groundwater pollution. Conserving water reduces the amount of wastewater we generate and can reduce the need for new or expanded sewage treatment plants. Money saved from not having to build new plants can be used to upgrade water treatment at existing plants. Also, reducing the amount of wastewater entering sewage treatment plants can lead to more efficient treatment and cleaner water being discharged back into the ocean.

Conserving water will also conserve energy and money. It costs money to desalinate sea water and to pump it to homes and businesses. It also costs money each time we have to refill our cisterns. Energy is required to pump, move, purify and heat water. By becoming more aware of our water use habits, we can reduce water use, eliminate waste, and save energy and money.

Use this checklist to see how effectively you are using water, and to find ways to save water. You may already be using many of these water-saving practices. Each extra gallon saved is a dollar saved, a gallon available for other uses, and one gallon less wastewater generated.

WATER-SAVING CHECKLIST

<u>Have Done</u>	<u>Will Do</u>
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Bathroom

- | | | |
|--------------------------|--------------------------|--|
| ☐ | ☐ | Check toilets for leaks. Drop food coloring or a leak-detection tablet in the toilet tank. If color appears in the bowl, there is a leak that needs to be fixed. |
| ☐ | ☐ | Flush only when necessary – don't use the toilet as a wastebasket. |
| ☐ | ☐ | Reduce the water used per flush by installing a water displacement device in the toilet tank. A plastic bottle, weighted with water or sand, works well. Make sure device doesn't interfere with flushing mechanism. |
| ☐ | ☐ | Take shorter showers. Turn off the water when soaping up. |
| ☐ | ☐ | Install water-saving shower heads or flow restrictors. These are available at local hardware or department stores. |
| ☐ | ☐ | Don't let the faucet run while shaving, washing hands or brushing teeth. Turn off water after wetting and then turn back on to rinse. |
| ☐ | ☐ | Check all faucets and pipes for leaks. Even a small drip from a worn washer can waste 20 or more gallons of water per day. |

Kitchen & Laundry

- | | | |
|--------------------------|--------------------------|---|
| ☐ | ☐ | Don't wash dishes under running water. Use a wash basin and rinse basin or both sides of a two-basin sink. |
| ☐ | ☐ | Limit the number of utensils used to prepare meals and the number of glasses and plates used with meals. This will save on the amount of dishwasher needed. |
| ☐ | ☐ | Clean vegetables in a pan of water instead of under a running faucet. Re-use this water for other washing or to water plants. |

Have
Done

Will
Do

- ☐ ☐ Select the proper size pans for cooking. Large pans require more water.
- ☐ ☐ Use the smallest amount of water necessary to cook foods such as frozen vegetables and stews. You'll preserve nutrients as well as water.
- ☐ ☐ Use a tea kettle or a pan with a tight-fitting lid to prevent water from boiling away and also to cook food faster, using less energy.
- ☐ ☐ Plan one-dish meals in which vegetables are cooked or baked without adding water.
- ☐ ☐ Time cooking of foods to avoid over-cooking and losing liquids through evaporation.
- ☐ ☐ Use a pressure cooker to save water, energy and time.
- ☐ ☐ Use syrups and juices from canned goods to save water and make foods taste better. Use leftover fruit juices for drinking and making gelatin salads.
- ☐ ☐ Pre-rinse clothes only when absolutely necessary.
- ☐ ☐ Use the proper water level or load size selection on the washing machine.

Household Cleaning

- ☐ ☐ Wipe up small spills as they occur to avoid frequent mopping. 
- ☐ ☐ Regularly vacuum carpets and rugs so you won't need to wash 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 lightly soiled surfaces first – mirrors, walls, woodwork, counters and then floors.

House Plants, Lawn and Garden

- ☐ ☐ Use rinse water (or *gray water*) saved from bathing or washing clothes to water plants. Don't use excessively soapy water on indoor plants or herbs – it could damage them.

Have
Done

Will
Do

- ☐ ☐ Do not use *gray water* containing bleach or borax on plants, these compounds can damage plants.
- ☐ ☐ Water plants only when needed. Too much water can damage plants. Frequency depends on plant type and soil conditions. 
- ☐ ☐ Water only as fast as the soil can absorb the water.
- ☐ ☐ Water root areas of plants to establish hardiness and maximize water uptake.
- ☐ ☐ For large gardens, install a trickle or drip irrigation system for a slow, steady supply of water to plant roots. This method can save up to 60% over other methods.
- ☐ ☐ Plant species that are adapted to local conditions (preferably drought-tolerant, native species). They will require less frequent watering.
- ☐ ☐ Water plants in the early morning or evening when less evaporation occurs.
- ☐ ☐ Place a layer of mulch around plants and trees to minimize water loss. Mulching also controls weeds. Use grass cuttings, leaves, chipped brush, or synthetic fibers.
- ☐ ☐ Avoid using sprinklers – if not placed correctly they will water pavement as well as lawns and gardens. Sprinklers also lose much more water to evaporation than other irrigation systems.

Other Areas In & Around the Home

- ☐ ☐ Inspect entire plumbing system for leaks and fix any found.
- ☐ ☐ Locate the master water supply valve and label it. The master supply valve can be easily turned off in case of emergency.
- ☐ ☐ Turn off all water if going away on a trip. This prevents water loss from leaks or someone from turning on outside faucet.
- ☐ ☐ Insulate hot water pipes. Clearing the *hot* line of cooled water is wasteful.

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

- ☐ ☐ Use a broom, not a hose, to clean driveways and walks.
- ☐ ☐ Use a hose with a shut-off nozzle or a bucket to wash the car.
- ☐ ☐ If you own a pool, cover it when it is not in use to prevent evaporation. Consider routing water from porch covering or shed in the pool area into the pool instead of using cistern water.
- ☐ ☐ Clean the pool filter often – this minimizes the number of times pool water has to be replaced.

BE WATER-CONSCIOUS WHEN YOU BUY

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

When Selecting New Equipment

- ☐ ☐ Consider low volume toilets.
- ☐ ☐ Look at water requirements when selecting dish and clothes washers.
- ☐ ☐ Smaller-than-standard bathtubs may meet your needs and save water.
- ☐ ☐ Select a water heater sized for family needs and insulated to prevent heat loss.
- ☐ ☐ Buy clothing and household items that do not require separate washings.

When Building or Remodeling

- ☐ ☐ Group bathrooms, laundry and kitchen in one general area to avoid long plumbing lines. This will reduce the amount of water that must be run to get hot water.
- ☐ ☐ Locate water heater where hottest water is needed – usually in the kitchen/laundry area.
- ☐ ☐ Sometimes it is 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 is great.
- ☐ ☐ Plan landscaping and gardening to minimize watering requirements.

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

Emergency Situations

- ☐ ☐ Use *gray water* from cleaning, bathing, etc. to flush toilet. Put the water in the toilet bowl, not the tank.
- ☐ ☐ Close the bathtub drain during a shower so the water stays in the tub. Use saved water to flush toilet or water plants.
- ☐ ☐ Cut down on the number of showers taken – replace some with sponge baths.
- ☐ ☐ Store water in clean plastic or glass jugs with tight-fitting lids if receive hurricane or earthquake warnings.



HOW MUCH WATER DO YOU USE PER DAY?

1. Read your meter in the morning (if you get WAPA water) before using any water.
2. Keep track of all water-using activities for one day (see example below).
3. Calculate the number of gallons used for each activity (use the table on the next page).
4. Divide the total gallons of water used by the number of people living in the house to get a per-person consumption rate.
5. Check your meter the next morning to verify your calculations.

Beginning Reading: _____ Ending Reading: _____

BATHROOM

Toilet: 18 flushes x 5 gal/flush = 90 gal.
Sink: 6 minutes x 3 gal/minute = 18 gal.
Shower: 25 minutes x 5 gal/minute = 125 gal.

KITCHEN

Sink: 6 minutes x 3 gal/minute = 18 gal.
Dishwasher: 1 wash x 15 gal/use = 15 gal.

OTHER

Laundry: 1 wash x 37 gal/use = 37 gal.

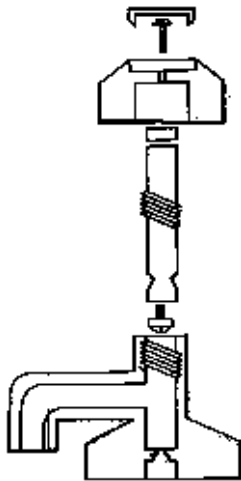
TOTAL 303 gal.
per day

303 ÷ 4 (# in family) = 76 gal. per person per day

	Gallons Used per use	Water Savings Over Conventional Methods
TOILET		
Conventional	5.0	---
Common low-flush	3.5	32%
WASHING MACHINE		
Wash recycle	37.0	---
Front load	26.0	29%
	21.0	43%
FAUCETS		
Conventional	3.0	---
Common low-flow	2.5	42%
Flow-limiting	1.5	63%
SHOWERHEADS		
Conventional	5.0	---
Common low-flow	3.0	42%
Flow-limiting	2.0	63%

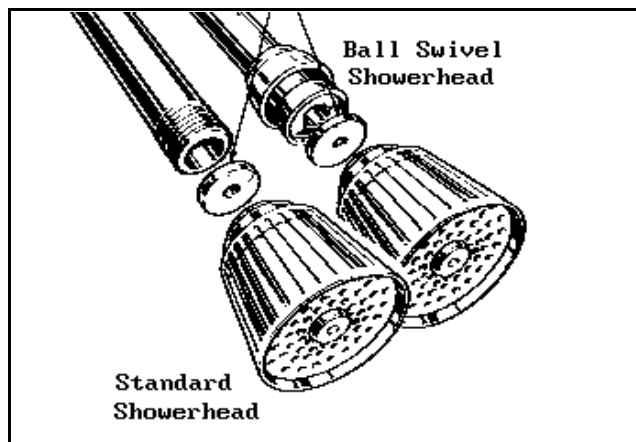
HOW TO FIX A LEAK

1. Turn off water supply to faucet.
2. Remove decorative cover and handle.
3. Remove collar or locknut.
4. Take out stem.
5. Replace washer. Be sure to use the correct size and type of washer.
6. Reverse the process to reassemble.
7. Turn water supply back on.



BATHROOM FIXTURES

Bathroom use accounts for 73% of all water use in the home. Small changes add up to big water savings. Shower flow restrictors save two to three gallons of water per minute. Faucet restrictors save water, too.



FOR MORE INFORMATION:

[St. Thomas - St. John](#)

UVI Cooperative Extension Service

New House Building
#2 John Brewers Bay
St. Thomas, VI 00802-9990
(340) 693-1080

<http://rps.uvi.edu/CES/wqhome.htm>

UVI Water Resources Research Institute

Classroom/Administration Building
#2 John Brewers Bay
St. Thomas, VI 00802-9990
(340) 693-1063

<http://rps.uvi.edu/WRRI/wrri.htm>

V.I. Water and Power Authority (WAPA)

Subbase, P.O. Box 1450
St. Thomas, VI 00801
(340) 774-3552

[St. Croix](#)

UVI Cooperative Extension Service

Research and Extension Center
RR 02, Box 10,000
Kingshill, VI 00850
(340) 692-4080

V.I. Water and Power Authority

Vitraco Park
P.O. Box 1009
Christiansted, VI 00820
(340) 773-2250

Information in this publication was derived from the following publications: Water Conservation Checklist for the Home, Alabama Cooperative Extension Service; Water Saving Guideline 1: 28 Ways to Reduce Water Waste, Washington State Department of Ecology; and Water Conservation: Wasted Water Means Wastewater, Chesapeake Bay Foundation, and compiled by Julie Wright, Natural Resources Program Supervisor, UVI Cooperative Extension Service, St. Thomas, VI.

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