

# Conserving Water Means Big Savings

## *for the pocket & the planet*

Georgia's water resources are facing threats on several fronts. High growth rates are putting extra pressure on an already limited water supply. The state has been in a drought since May 1998. Saltwater intrusion threatens the Upper Floridan Aquifer, coastal Georgia's water supply. In the Alabama-Coosa-Talapoosa (ACT) and the Apalachicola-Chattahoochee-Flint (ACF) river systems, future water withdrawals will be limited by the allocation formula of the tri-state compacts between Georgia, Alabama, and Florida.

Water is a precious resource—our lives depend on it, yet many of us still take this resource for granted. In Georgia, average consumption (for residential, commercial, and industrial uses but not agricultural purposes) is 168 gallons of water per person per day—10% higher than the U.S. average of 153 gallons.

The average adult needs less than one gallon of water per day for drinking, yet residential water use in the U.S. averages 101 gallons per person per day (compared to 20 to 30 gallons per person per day in developing countries).

Water conservation is everyone's responsibility. We can significantly reduce our water usage and water and sewer bills by making a few behavioral changes, retrofitting some of our plumbing fixtures, and implementing simple water efficient landscaping practices. On the next page are a few water conservation tips to help you get started!

### Save \$\$\$ & H<sub>2</sub>O with Low-flow Fixtures

Did you know that all new plumbing fixtures are water efficient? The Energy Policy Act of 1992 established maximum water usage rates for plumbing fixtures manufactured after Jan. 1, 1994. Because of this legislation, water use will decline by an estimated 81 million gallons of water per day in the Apalachicola-Chattahoochee-Flint river system by 2010.

Fixture	Max. Water Usage
Toilets	1.6 gpf
Urinals	1.0 gpf
Showerheads	2.5 gpm @ 80 psi
Faucets	2.5 gpm @ 80 psi

### Web Resources

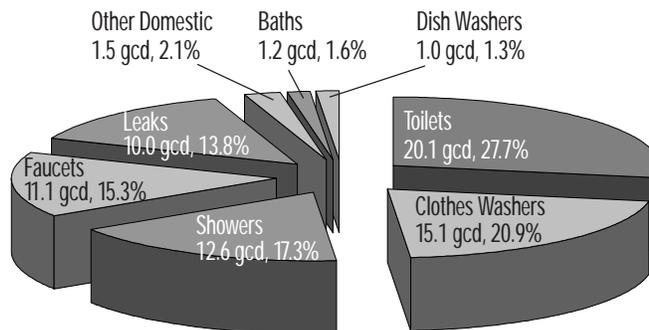
- Water Saving Products  
[www.niagraconservation.com](http://www.niagraconservation.com)
- Do-it-Yourself Plumbing Guide  
[www.doityourself.com/plumbing](http://www.doityourself.com/plumbing)
- Rain Barrels  
[www.gardeners.com](http://www.gardeners.com)  
[www.brookstone.com](http://www.brookstone.com)
- National Water Efficiency Clearinghouse  
[www.waterwiser.org](http://www.waterwiser.org)
- Water Efficiency for Industrial, Commercial, and Institutional Facilities  
[www.p2ad.org/watereff.html](http://www.p2ad.org/watereff.html)
- Water Efficient Landscaping  
[www.watersmart.net](http://www.watersmart.net)
- Guide to Developing a Water-Wise Landscape  
[www.ces.uga.edu/pubcd/B1073.htm](http://www.ces.uga.edu/pubcd/B1073.htm)
- Georgia Drought  
[www.georgiadrought.org](http://www.georgiadrought.org)
- Georgia Water Resources Toolkit  
[www.dca.state.ga.us/environmental/toolkit.html](http://www.dca.state.ga.us/environmental/toolkit.html)
- General Composting Information  
[www.ces.uga.edu/pubcd/c816-w.html](http://www.ces.uga.edu/pubcd/c816-w.html)
- Food Waste Composting  
[www.wormpoop.com](http://www.wormpoop.com)  
[www.wormwoman.com](http://www.wormwoman.com)

## Typical indoor single-family home water use

Source: *WaterWiser.org* © 1999 American Water Works Association

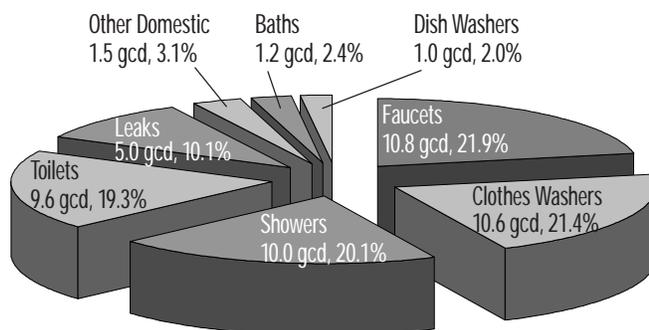
### Without Conservation

Total: 72.5 gallons per capita per day (gcd)



### With Conservation

Total: 49.6 gallons per capita per day (gcd)



### References

- William Y. Davis, "ACT-ACF Comprehensive Study: Municipal and Industrial Water Use," 1996.
- Georgia Environmental Protection Division, *1998-2000 Georgia Drought Report*, 2000.
- Amy Vickers, *Handbook of Water Use and Conservation*, WaterPlow Press, Amherst, MA, 2001.

# Simple Steps to Reduce Water Use at Home

	No Cost	Low Cost	Moderate Cost
Bathroom	<ul style="list-style-type: none"> <li>• Turn off water while brushing your teeth, washing your face, and shaving</li> <li>• Collect water from showers/sinks while waiting for the temperature to heat up, and use it to water plants</li> </ul> <p>Low-flow showerhead</p> 	<ul style="list-style-type: none"> <li>• Add a toilet retrofit device to reduce toilet flush volume. Toilet displacement bags, toilet dams, early closing flappers, and fill diverters can save more than 1,000 gallons per person per year.</li> <li>• About 20% of toilets leak. Check for a leak by adding food coloring to the tank. Wait 10 minutes; if the color appears in the bowl you have a leak and need a new flapper.</li> <li>• Install low-flow aerators on bathroom faucets. Aerators only cost a few dollars, and are available in flow ratings of 0.5 to 2.5 gallons per minute.</li> <li>• If your showerhead was purchased prior to 1994, install a new 2.5 gpm showerhead with a control valve to turn off the water when you soap up</li> </ul>	<ul style="list-style-type: none"> <li>• If your toilet was purchased prior to 1994, replace it with a new model to save 8,000 to 21,000 gallons per year for the typical household.</li> <li>• If your hot water heater is far from your shower and sinks, install a hot water demand recirculation system</li> </ul>  <p>Toilet displacement bag</p>
Kitchen	<ul style="list-style-type: none"> <li>• Only run the dishwasher when full</li> <li>• Use your dishwasher's water and energy saving cycle (light cycle vs. normal or pots and pans)</li> <li>• Save up to 15 gallons by soaking dirty dishes before rinsing them off</li> <li>• Don't pre-rinse dishes except in cases of sticky or burnt food</li> <li>• Plan ahead and defrost food in the refrigerator, not under running water</li> </ul>	<ul style="list-style-type: none"> <li>• Compost food waste instead of using garbage disposals that use large amounts of water</li> <li>• Install a 2.5 gpm aerator on the kitchen faucet. Fingertip controls on some aerators allow you to adjust the water flow.</li> </ul>  <p>Faucet aerator</p>	<ul style="list-style-type: none"> <li>• Purchase a water and energy efficient dishwasher that uses less than or equal to 7 gallons of water per load</li> </ul>
Laundry	<ul style="list-style-type: none"> <li>• Run only full loads</li> <li>• For washers with variable settings, select the proper water level</li> <li>• Use a shorter wash cycle for lightly-soiled clothes</li> </ul>		<ul style="list-style-type: none"> <li>• Purchase a high efficiency, front-loading clothes washer to save 12 to 29 gallons per load</li> </ul>
Leaks		<ul style="list-style-type: none"> <li>• Identify and repair leaks. A dripping faucet can waste 2,000 to 4,000 gallons per year. To identify leaks, turn off all water taps in your home and check the water meter to see if water is still flowing.</li> </ul>	
Outside	<ul style="list-style-type: none"> <li>• Pay attention to the weather! Don't water when rain is in the forecast</li> <li>• Water in the early morning hours to reduce evaporation</li> </ul> <p><i>Photos of water-saving devices courtesy of Niagra Conservation.</i></p>	<ul style="list-style-type: none"> <li>• Plant drought-tolerant native species</li> <li>• Use compost and mulch to retain moisture in the soil</li> <li>• Water slowly and deeply with soaker hoses</li> <li>• Install automatic shutoff nozzles on hand-held hoses</li> <li>• Minimize grass areas</li> <li>• Collect rainwater from your gutters in a rain barrel to irrigate lawn and plants</li> </ul>	<ul style="list-style-type: none"> <li>• Install a drip irrigation system for water savings of 25-75% over conventional sprinkler systems.</li> </ul>  <p>Auto-shutoff nozzles</p>