

Low-cost Ways to Conserve Water at Home

"When the well's dry, we know the worth of water."

-Benjamin Franklin

If you live in an area where water shortages are not an issue, consider yourself lucky. Nearly 450 million people in 29 countries face severe water shortages. Predictions indicate that within 5 years, at least 36 U.S. states will face water shortages due to a combination of rising temperatures, drought, population growth, and waste.

But there is hope -- research has shown that residential water use could be reduced by as much as 50 percent through efficiency. Here are a few simple, low-cost suggestions for reducing your family's water consumption.

Reduce water use from showers and faucets

Although it's often the smallest room in the house, the bathroom is where 75 percent of indoor household water consumption occurs. Seem impossible? Consider this: The average 6-minute shower uses about 20 gallons of water! Reduce this amount with the following tips:

- **No cost:** Limit shower time to 5 minutes or less.
- **Less than \$10:** Install an on/off valve between the shower arm and showerhead. This temporarily shuts off the flow while maintaining the temperature, and can be a useful water-saver while soaping up or shaving.
- **\$10-\$50:** Install a low-flow (less than 2 gallons per minute) showerhead. Previous low-flow showerheads sacrificed water pressure for efficiency, but now there are many options ([GAIAM](#) and [Delta](#) make two of my favorites) that don't simulate a dripping faucet.
- **\$20-\$50:** Insulate all accessible hot-water pipes, especially those within 3 feet of the water heater. You'll get hot water faster, avoid wasting H₂O while it heats up, *and* save energy in the process.

Finally, fit all household faucets with [low-flow aerators](#) (less than two gallons per minute). This is the best in-home water conservation method, and it's also the cheapest.

Toilets are the enemy

Each day, the U.S. uses *5.8 billion* gallons of fresh water to flush waste. If you're in the market for a new porcelain throne, check out options with either a very low (less than 1.6) gallon per flush (gpf) rating, or dual flush controls.

This new technology provides 2 buttons for flushing: one at 1.6 gpf for solid waste, and another at only 0.8 gpf for liquids. These double-duty flushers can reduce water usage by up to 67 percent compared with traditional toilets.

Feeling even earthier? Go for a waterless [composting toilet](#) and be the envy of all your neighbors!

And if you haven't budgeted for a new toilet, try these quick fixes:

- **Check for leaks:** Put a little food coloring in your toilet tank. If the color begins to appear in the bowl within 30 minutes, you have a leak that should be repaired. Most replacement parts are inexpensive and easy to install.
- **Displace water:** older toilets don't require nearly as much water as they use (3.5-5 gallons) to flush properly. To "trick" your toilet into using less water, place a half-gallon plastic bottle inside your toilet tank to displace water volume. (Be sure at least 2.5 gallons of water remain in the tank so it will flush properly.) Ideally, weigh down the bottle with sand or pebbles so it doesn't interfere with the tank mechanisms. This simple retrofit could save a three-person family 225 gallons of water per month! Not

a do-it-yourselfer? For only a few dollars, you can purchase a prepared [toilet bag](#) designed to displace 0.8 gallons of water with every flush.

Minimize appliance water consumption

Outside the bathroom, most water is used to wash clothes and dishes. Rather than wearing dirty clothes and using paper plates, keep these tips in mind while tackling daily chores:

- **Fully loaded:** Dishwashers and clothes washers should be operated when full for optimum water conservation. If you must wash partial loads, adjust the water levels as appropriate.
- **The dishwasher is your friend:** Even old-school dishwashers don't use as much water per dish as hand-washing. Newer, more efficient dishwashers use only 1/6 of the water used during hand-washing, and save 230 hours of your time each year.
- **Scrape, don't rinse:** Pre-rinsing dishes before loading the dishwasher is unnecessary. Scrape off food and then trust that bad boy to do its job.
- **Pass on permanent press:** Avoid the permanent press cycle when washing clothes, which uses an *additional 5 gallons* for the extra rinse.
- **Upgrade your equipment:** Consider buying a water-saving front-loading clothes washer, or a top-loading one with no central agitator. Check [ENERGY STAR](#) for ideas and ratings.