

New Water Technologies that can \$ave You Money

As the search for greater sources of potable water continues, many municipalities have been raising the cost of water per gallon, as a way to encourage homeowners to conserve as much water usage as possible. Thankfully, new technologies are making it easier than ever for consumers to restrict their water usage. These technologies help prevent consumers from making huge sacrifices to their water usage habits.

One thing homeowners can do is change the water fixtures throughout the home to EPA WaterSense certified products. The EPA WaterSense program certifies those products that are tested by a third party and receive high marks for water efficiency, while maintaining excellent performance. Fixtures such as low-flow toilets have made great strides in recent years. As Todd Stair from Herr Environmental asserts, "Toilets [now use] lower and lower gallons per flush while actually flushing better than older toilets that used more water." Where standard toilets older than 15 years generally utilized 3.5 gallons per flush, residential toilets are now required to use no more than 1.6 gallons per flush. Furthermore, dual flush toilets, which now offer improved performance over older dual flush models, use just 0.9 gallons per flush.

In addition to toilets, other fixtures that can be exchanged without sacrificing performance include faucets, dishwashers, and washing machines. Faucets, like toilets, can be WaterSense certified, and have a "gallons per minute" rating on them. For dishwashers, the ENERGY STAR program certifies

these appliances if they use less than 5.8 gallons per load. Lastly, "[f]ront load high efficient clothes washing machines save a lot of water and energy because the drying time is much less due to better rinsing cycles, and [a lower level of water needed for] front loading washing machines," according to Stair. Also, utilizing your clothes washer (and dishwasher, for that matter) when loads are full will drastically cut down on your water usage. When you're shopping for new fixtures or new appliances, be sure to keep all of the above considerations in mind, as you will be able to see a noticeable difference in your water bill.

Another new technology that can be used to save water and energy in homes are tankless water heaters. While these have been around for a number of years, the newest versions now make them more efficient than ever. These machines, which heat water only upon demand, can reduce energy consumption by up to 40%, according to Brandon Engen of Dave Jones Plumbing & Heating. This is because standard water heaters, unlike the tankless variety, heat water regardless of whether it is needed.

Also in the interest of saving hot water, an easy and cost effective do-it-yourself project for your home can be to insulate the hot water pipes in your home. If water must travel a far distance from the water heater to the fixture, a large amount of heat is lost during the journey. To prevent much of this heat loss, you can buy pre-slit foam that fits directly over your pipes. This will help to give you hot water faster, as well as reduce the amount of wasted cold water that goes down your drain.



WaterSense Products



Front Load High Efficiency Washers



Low-flow, Dual Flush Toilets

Whatever technique you choose to help lessen the amount of wasted water consumed each day, any steps towards water efficiency will benefit your wallet as well as the environment. As water quantity issues continue to be a concern throughout the world, water will only get more expensive. Because of this, retrofitting your fixtures with WaterSense products, buying ENERGY STAR rated appliances, and doing small things like water pipe insulation will pay big dividends in the future.

Todd Stair of Herr Environmental, Inc. and Brandon Engen of Dave Jones Plumbing & Heating shared their expertise for this article.