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## Flush with knowledge on water-efficient toilets

**By Tom Watson**

*Special to The Seattle Times*

What do you want from your toilet?

A toilet needs to accomplish its main job. That's certainly the No. 1 (and No. 2) concern. But these days we should expect even more. Modern toilets can take care of business without wasting water, and save us money as they conserve resources.

**Q:** Let's flush this out a little bit. What's the problem?

**A:** It's the sheer volume of water that whooshes down our toilets. Each of us flushes the toilet 140,000 times over an average lifetime. Toilets account for 30 percent of indoor residential water consumption and are the largest use of water in the home.

Saving water makes sense even here in the rainy Northwest, since we still experience summer droughts. Water conservation also saves energy that would have been required to transport and treat water.

**Q:** Haven't toilets already gotten a lot more efficient?

**A:** Yes. Older toilets, many of which are still around, use more than 3 gallons of water for every flush. Since 1994, however, all U.S. toilets sold have been required to use no more than 1.6 gallons per flush.

Unfortunately, in a scenario similar to what happened with energy-saving light bulbs, some of the first water-efficient toilets performed poorly. In the past 10 years 1.6-gallon toilets have gotten much better, and now the technology exists to use even less water per flush.

**Q:** What are the latest developments in water-efficient toilets?

**A:** Dual-flush toilets top the list. Popular worldwide for years, these eminently practical commodes are just beginning to make a splash in the U.S. They have one button for solids (usually providing 1.6 gallons of water per flush) and one for liquids (0.8 to 1.1 gallons per flush, depending on the model).

New single-flush toilets that use 1.28 gallons per flush, 20 percent less than the federal 1.6-gallon standard, are also considered "high-efficiency" toilets.

Both these types of water-saving toilets have gotten positive reviews for performance. They still usually cost more than regular models, but prices are dropping as they become more widely available. Check Internet reviews or consult with several plumbers or bathroom-supply stores to find the most reliable brands.

The U.S. Environmental Protection Agency's WaterSense program ([www.epa.gov/WaterSense](http://www.epa.gov/WaterSense)) certifies approved high-efficiency models, and water utilities often offer discounts or rebates on them.

**Q:** Anything else cool on the horizon?

**A:** If you've traveled in Japan, you may recall the ingenious toilets with a small hand-washing sink on the top of the toilet tank. The water running down the drain supplements the water used to flush the toilet. This type of toilet can now be ordered here

through the Ecohaus store in Seattle or from some plumbers.

Reusing water in that manner is a type of "graywater" system. Larger graywater systems might store and use water from the washing machine or shower to flush toilets or water gardens. Utilizing graywater will likely become increasingly common, especially in regions where water is scarce.

**Q:** I'm fascinated by composting toilets. Do those really work?

**A:** They perform just fine but do require more ongoing upkeep than regular toilets. Self-contained composting toilets are currently best suited for rural cabins, since being able to have a toilet without a sewer or septic system can be a real advantage in an isolated location. Be sure to check with your local government about regulations. Fans of composting toilets say they have less odor than a regular toilet.

**Q:** If I get a new toilet, should I recycle the old one?

**A:** Definitely. Many area recycling events accept toilets, or you can find a recycler in King County's "What Do I Do With?" listings (<http://your.kingcounty.gov/solidwaste/wdidw>) under "Construction/Demolition Debris Porcelain." A small fee may be charged.

Most households can save more than \$100 a year in water bills by installing a more efficient toilet, says the local Saving Water Partnership ([www.savingwater.org](http://www.savingwater.org)). So conserve, or get off the pot!

*Tom Watson is project manager for King County's Recycling and Environmental Services.*

*Reach him at [tom.watson@kingcounty.gov](mailto:tom.watson@kingcounty.gov), 206-296-4481 or [www.KCecoconsumer.com](http://www.KCecoconsumer.com)*