

Help Your Septic System Reach Old Age

Installing Water-Efficient Plumbing Fixtures Extends System Life

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If you own a septic system, maintenance is the most important thing you can do to protect your investment. That means having the system pumped regularly and taking care not to overload it.

When septic systems work properly, they will remove most of the contaminants that can come from your home. When they don't, they can make dream homes turn into a nightmares.

"Overloading the system is a big problem," says Zane Satterfield, engineering scientist with the National Environmental Services Center. "A septic system is designed to handle a certain volume of water. When system owners go over that amount again and again, it can lead to system backups, ponding in drainfields, and drainfield failure.

"A consistently overloaded septic system can fail prematurely," he explains. "And at the very least, it can cause some expensive repair bills."

Septic system failure is the last thing a homeowner wants to deal with. But the really bad stuff can be avoided. Reducing water use inside the home is the single best way to prevent septic system overload that can lead to total system failure. And it just takes a few simple steps.

Leaky Toilets Lead to Overload

A frequent source of overload is leaking plumbing fixtures. Leaks can lead to hundreds of extra gallons of water going into a septic system—up to 200 gallons per day, according to SepticSystem101.com. Running toilets are ranked high among septic system overload sources.

Aside from leaks, toilets use the most water of any other appliance or fixture in the home. About 30 percent of indoor residential water use gets flushed down the toilet. Replace old toilets with new high efficiency toilets.

Many of the new high efficiency toilets perform better than standard toilets, according to HighEfficiency-Toilets.org. They save water without sacrificing flushing power. And new models and designs look as good as any toilet that doesn't save water. Further, high efficiency toilets can save more than \$2,000 in water costs over the life of the toilet for a family of four.

Install Water-Saving Fixtures

Another way to reduce the flow of wastewater into the onsite system is to install water-saving devices such as water-efficient showerheads and faucets.

Water efficient means:

Toilets: 1.6 gallons per flush or less

Faucets: 2.5 gallons per minute or less

Showers: 2.5 gallons per minute or less

Installing low-flow, highly efficient fixtures and aerators saves water and money. Aerators for faucets and showers require an initial capital investment, but they can pay back the investment in less than a year, especially when they are used often. The water and money saving features of high efficiency fixtures makes them attractive to utilities and city governments. Many of them offer incentives to customers who purchase and install them, according to the Natural Resources Defense Council.

Niagara Falls Could Flow for Two Weeks

If every home in America replaced one old leaky toilet with a new high efficiency one, the country would save close to one trillion gallons of water per year, according to HighEfficiencyToilets.org. That's enough to equal the amount of

water that flows over Niagara Falls in two weeks. And that's a lot of water.

Water Savings Leads to Money Savings

The upfront cost of installing new water efficient fixtures can be returned in a few years in water savings alone. Reducing the amount of water going through the septic system may save thousands of dollars in septic system repairs. And all it takes is a trip to the home improvement store and a little effort to make life simpler.

To find information about water efficient fixtures, go to NESC's Future Water website at www.nesc.wvu.edu/futurewater/. You also may find information about septic systems and how to maintain them at NESC's website about wastewater and onsite systems at www.nesc.wvu.edu/wastewater.cfm.

