## LEAK INFORMATION

Leaks, wasteful toilets cause water loss

## **By Bob Swanson**

## USA TODAY

Dennis Jobin used to cringe when he flushed the toilet in his Phoenix home.

To Jobin, it sounded like dollars going down the drain when the old toilet flushed three times with a single pull of the handle.

"I run maintenance at a school, so I'm very aware of the cost of water," Jobin says. "Around the house, I'm constantly checking for leaks. But the one thing that has baffled me has been that toilet."

The Environmental Protection Agency estimates that more than 1.25 trillion gallons of water – equivalent to the annual water use of Los Angeles, Chicago and Miami combined – leak from U.S. homes each year.

According to the EPA, toilets account for nearly 30 percent of indoor water consumption in American homes. Old, inefficient toilets are responsible for the majority of the water wasted – 200 gallons a day each in some cases.

Often such leaks can be stopped by simply replacing the flapper, the piece of rubber that seals water into the tank and allows it to leave when you flush. The flapper can deteriorate with age or develop mineral buildup, failing to provide a tight seal in the toilet tank.

Outside the home, it is important to check spigots and irrigation systems for leaks as well, and repairs can sometimes be as small as replacing a washer. Making simple fixes can save 10 percent on a residential water bill.

According to the U.S. Government Accountability Office, 36 states anticipate water shortages over the next five year.

"Like a lot of other limited resources, we expect that water bills are going to increase in the future, says Michael Shapiro, EPA's acting assistant administrator for water. Steps made now toward water efficiency will pay dividends in future water bill savings, he says.

In addition to fixing existing leaks, steps can be taken to reduce the amount of water used even before turning on the tap.

Much like the EPA's successful EnergyStar program, which labels appliances for their energy efficiency, the agency's WaterSense program makes consumers aware of water-efficient fixtures available on the market.

Bathroom sink faucets and accessories that have the WaterSense label, now numbering more than 500 on the market, can reduce a sink's water flow by 30 percent without sacrificing performance, the EPA says.

To an average family, this could conserve more than 500 gallons a year, saving not only on the water bill but also energy by reducing the demand on the water heater.

WaterSense toilets use 1.28 gallons per flush – much less water than toilets manufactured before 1993, which use 3.5 to 7 gallons per flush. Shapiro says the combination of fixing leaks and using WaterSense fixtures can save about 20 percent on the annual water bill.

Less water per flush does not mean less flushing power.

Design advances have enabled WaterSense-labeled toilets to save water with no trade-off in performance. In fact, many outperform standard toilets in consumer testing, the EPA says.

Water can be conserved outdoors as well as indoors.

In desert locations such as Phoenix, where pools and irrigation systems are plentiful, outdoor water use can make up 50-65 percent of residential consumption, says Mary Lu Nunley of the Phoenix Water Conservation Office.

Heat, hard water and damage to sprinkler heads result in leaks in irrigation systems. To lower water bills, homeowners can contact WaterSense irrigation professionals who are trained in water-efficient technologies and techniques.

Though WaterSense-labeled products may cost more than conventional fixtures, pricing may become more competitive as more high-efficiency products find their way into the market.

As it is, city and county water departments in 10 states offer rebate programs, mainly for WaterSense toilets and irrigation services. Some states, such as Georgia and Virginia, have already established special "sales-tax holidays' each on WaterSense- labeled products.

For Jobin, his new toilet and bathroom fixtures are free, courtesy of the city of Phoenix.

Last month, Jobin and his wife, Debbie, were selected to participate in the EPA's "Fix a Leak" week. A large display that included two leaky toilets, two faucets and one

showerhead was placed in front of the Jobin's home to represent the average leakage of a typical American Home. Two hundred gallons of water were collected in just a weeks' time.

With his updated bathroom, Jobin no longer fights with the toilet flapper or hears his hard-earned dollars go down the drain.

"I'm really glad to get one of these 1.28-gallon flushes," Jobin says. His new WaterSense toilet is "quite a system and works real well."