

**SAVING WATER
FIXING LEAKS
SAVING MONEY**

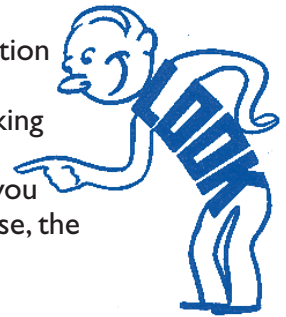
RetroFIT



Fixing leaks and installing a few inexpensive water-saving devices in your home could save you more than 30,000 gallons of water each year. If you use utility or county water, your efforts could cut your monthly water and sewer bill in half.

Unless your house was built in the last few years, you probably have pre-conservation era plumbing that guzzles water. Retrofitting your home — fixing leaks and replacing old plumbing fixtures with water-saving ones — is a simple and easy way to protect our drinking water supply and save money at the same time.

Take a close look at your water bill. Unless you have a septic tank, you'll see that you pay to pipe water into your home and then you pay to pipe it out. The more water you use, the more to dispose of — and the higher your water and sewer charges climb.



Most *RetroFIT* devices will reduce your water and sewer bill enough to pay for themselves within six months.

HERE'S HOW YOU CAN **RetroFIT** YOUR HOME

Start with the toilet.

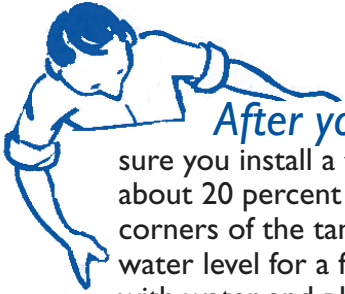
Leaks inside your toilet can waste up to 200 gallons of water a day! If left unrepaired for six months, as much as 36,500 gallons of water goes unused down the drain. To check your toilet for leaks, remove the lid from the toilet tank, remove any colored cleaning agent, flush to clear water in the bowl, then drop one leak-detecting dye tablet (or five drops of food coloring) into the tank and wait 15 minutes. If colored water appears in the toilet bowl without additional flushing, there is a leak.

To fix the leak yourself, you need a large adjustable wrench and a screwdriver.

Now, follow these simple steps:

1. Jiggle the toilet handle. If that makes the water stop running, the chain or guide wire attached to the handle may be out of alignment.
2. Make sure the handle fits snugly against the tank. If it doesn't, use the adjustable wrench to tighten the nut attached to the handle on the inside of the tank.
3. Check the rubber flapper or flush valve at the bottom of the tank. It may not be reseating tightly after flushing. If it is worn or corroded, it needs to be replaced. Replacement kits with easy-to-follow instructions are available at most hardware and home stores.
4. Check the tank water level. The correct water level is about 1/4 to 2 inches below the top of the overflow tube in the middle of the tank. The overflow tube drains directly into your sewer system. To lower the water level, use the screwdriver to adjust the screw on the end of the ball cock float arm or bend the float arm down until the correct water level is achieved.
5. If the water won't shut off at all, replace both the flapper and the ball cock.

**If these simple procedures don't stop the leak,
you should call your plumber.**



After you fix your toilet, unless it is a newer water-saving fixture, make sure you install a toilet tank water saver. It saves about 50 gallons of water a day and trims about 20 percent off your water bill. You can fit the tank with a toilet tank dam that walls off the corners of the tank to hold back water when you flush. This maintains the proper volume and toilet tank water level for a forceful flush. Another option is to fill either a displacement bag or a plastic milk bottle with water and place it inside the tank between the tank wall and the intake valve. Easy-to-install toilet tank dams and displacement bags are available at most hardware, plumbing and home stores.

If your toilet can't be fixed, or if you are ready to replace it with a water-saving fixture, make sure you purchase a new toilet that uses only 1.6 gallons of water per flush, instead of the 5 gallons most older toilets use.



Check all your faucets inside and outside.

Leaky faucets waste up to 20 gallons of water a day. If it is hot water, you're wasting water and the energy required to heat it. Leaky faucets are usually caused by a worn washer or O rings. To fix leaky faucets, you need:

- Adjustable wrench or pliers
- Screwdriver
- Replacement washers and tap-fixer tool
(purchased at a hardware, home or plumbing store)

Now, follow these steps:

1. Shut off the water supply to the faucet you are repairing. Remove the cap on the top of the faucet handle. Turn exposed screw counterclockwise to remove screw.
2. Pull off handle.
3. Remove nut. Loosen valve stem by turning counterclockwise.
4. Remove valve stem assembly.
5. Remove screw at base of the valve stem and remove worn washer. Replace with a new washer of the same size.
6. Use tap fixer tool to reseat valve, following kit instructions.
7. Replace faucet parts in reverse order of removal. Then, turn on water supply to faucet and check to make sure it does not leak.



Once all leaks are fixed, check the amount of water flowing from each faucet. You can do this by opening the faucet and allowing water to flow into a container for 10 seconds. Multiply the amount of water in the container by six to determine the per-minute flow. If your existing aerator flows more than 3 gallons per minute, you should replace it with a low-flow aerator. This one simple step can save 3 to 5 percent of your total indoor water bill.

In your kitchen, you will want a 1.5 to 2.5 gallons per minute aerator to make sure the flow of water is enough to wash and rinse dishes.

Your bathroom faucet is used primarily for rinsing. Therefore, a .5 to 1.5 gallons per minute aerator will provide enough water for shaving, hand washing and other personal hygiene tasks. In the laundry, a 2.5 gallons per minute aerator works best.

You may want to use a low-flow aerator with an on/off flip handle that allows you to increase or reduce the flow as needed.

If you can't fix the leak, replace the valve stem or buy a new faucet.

Next, check your showerhead.

If it is leaking or if the flow rate is more than 3 gallons per minute, you should change to a low-flow showerhead of your choice. To fix leaky showerheads yourself, you need an adjustable wrench or pliers and joint sealer or tape.

Now, follow these steps:

1. Shut off the water supply to the shower.
2. Use the adjustable wrench to remove the old showerhead.
3. Clean the threads to remove old joint sealer.
4. Apply joint sealer or tape, using package instructions.
5. Use the adjustable wrench to install new showerhead.
6. Turn water supply back on and test the showerhead.

Use a cloth between the showerhead and the jaws of the wrench to avoid scratching.



Now that you have all the visible leaks repaired, check for those that you *don't* know about. Here's how: Locate your water meter and make note of the meter reading. Turn off all the water-using fixtures in your home and don't use any water for an hour. Then, go back and check the reading on the meter. If it has changed, you have leaking pipes and may need a plumber or your water utility to help you find and repair them. To find out how you can save even more water indoors and outdoors, call the Southwest Florida Water Management District and ask for free copies of *50 Ways to Do Your Part and Irrigate Smart*.

How Much Water Do You Use?

If the fixtures in your house are not low-flow or water-saving devices, use these figures to estimate the amount of water used daily in your household:



Toilet flush = 6 gallons
Shower = 7 gallons per minute
Bath = 28 gallons
Automatic dishwasher cycle = 15 gallons
Washing machine cycle = 55 gallons
Washing dishes by hand = 20 gallons

To get a more accurate idea of the amount of indoor and outdoor water you use, read your water meter before and after a specific task, such as lawn watering or laundry use.

Nice to Know

- Toilet water use can be cut by 40 percent with a toilet tank dam or displacement bag.
- Faucet water use can be cut by 50 percent with a low-flow faucet aerator.
- Shower water use can be cut by 50 percent with a low-flow showerhead.



Save Water/Save Money

By installing simple, inexpensive water savers, the average family of four realizes these savings:

- Annual water bill - \$56 (@ \$.90 per 1,000 gallons)
- Annual sewage bill - \$69 (@ \$1.10 per 1,000 gallons)
- Annual hot water heating - \$380 (@ \$.06 per kilowatt hour if 30,000 gallons are saved)

For more information, write or call your
Southwest Florida Water Management District Service Office listed below:

Bartow

170 Century Blvd.
Bartow, Florida 33830-7700
1-800-492-7862 (FL only)
(863) 534-1448 • Suncom 572-6200

Brooksville

2379 Broad Street
Brooksville, Florida 34604-6899
1-800-423-1476 (FL only)
(352) 796-7211 • Suncom 628-4150

Tampa

7601 U.S. Highway 301 North
Tampa, Florida 33637-6759
1-800-836-0797 (FL only)
(813) 985-7481 • Suncom 578-2020

Lecanto

3600 West Sovereign Path - Suite 226
Lecanto, Florida 34461-8070
(352) 527-8131 • Suncom 667-3271



Web site: www.swfwmd.state.fl.us

Venice

115 Corporation Way
Venice, Florida 34292-3524
1-800-320-3503 (FL only)
(941) 486-1212 • Suncom 526-6900

Anyone requiring reasonable accommodation as provided for in the Americans With Disabilities Act should contact the Communications and Community Affairs Department at (352) 796-7211 or 1-800-423-1476; TDD only: 1-800-231-6103.