GET ON THE WATER SAVINGS BANDWAGON

A typical family could save a remarkable amount of water by making a few simple, inexpensive plumbing repairs and fixture changes. For example, most older toilets have some kind of leak. A leaky toilet can waste an average of 750 gallons of water per month. A leaky faucet can waste an average of 300 gallons per month. Replacing a conventional showerhead with a 2.5 gallons-per-minute fixture could result in a water savings of 17.5 gallons per person per day. Efficient faucet aerators which replace conventional areators can save about 3 to 5% of total indoor residential water use. It just takes a few dollars and a few minutes to get started on your way to water and energy savings. Contact a local plumbing supply store to learn how they can help you get started. Then use the ideas in this brochure to help you get begin reaping the rewards of reducing your water use.

REPAIRING TOILET LEAKS

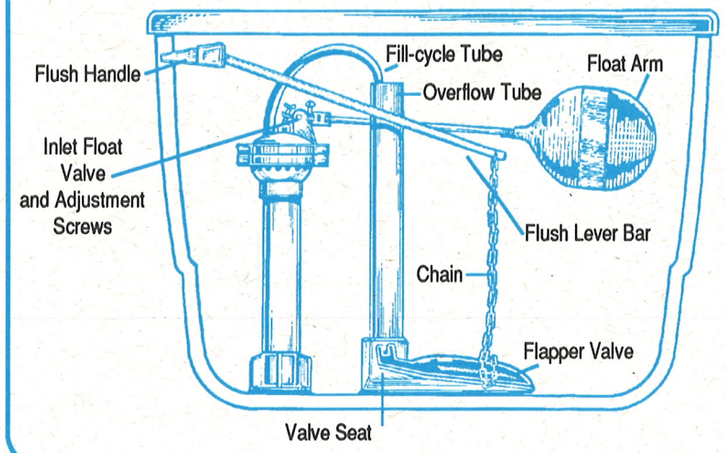
NOTE: If none of the following steps solves the problem, a plumber should be contacted to repair or replace the toilet.

Overflow tube leaks

Toilets usually leak at the overflow pipe or around the plunger seal. Check the float arm for proper adjustment. Ideally the water level should be set so that it's about even with the fill line on the back of the toilet tank (approximately 1/2 inch below the overflow tube). If the water is too high in the toilet tank and is spilling into the overflow tube, the water level can be adjusted by turning the adjustment screw or by very gently bending the float arm down so that the water shuts off at a level below the overflow tube.

Flapper valve leaks

A frequent problem that causes a toilet to leak is a worn flapper valve or a flapper valve that does not sit properly on the valve seat. If the flapper valve is worn, it can be removed and replaced with a new one. If a flapper valve is being replaced, care should be taken to note how the chain is adjusted before the old valve is removed. Also, the valve seat should be checked for scale or corrosion and cleaned if necessary. If cleaning does not work, you can purchase a new valve seat at most plumbing or hardware stores. A new valve seat will quickly pay for itself in water savings.



Flush handle problems

If the handle needs to be jiggled to keep the toilet from "running," the flush lever bar and chain, or the handle itself may be sticking. Remove the toilet tank lid. Flush the toilet and watch the flush lever bar, chain, and handle work to identify where the sticking is occurring. Adjust the nut that secures the flush handle in the toilet tank. If that does not work, the handle may have to be replaced.

1993 WATER EFFICIENCY STANDARDS FOR PLUMBING FIXTURES

(In New and Remodeled Buildings)

Fixture	Standard
Tank-type toilet*	1.6 gal. per flush
Flushometer-valve toilets*	1.6 gal. per flush
Flushometer-tank toilets*	1.6 gal. per flush
Electromechanical hydraulic toilets*	1.6 gal. per flush
Urinals	1.0 gal. per flush
Showerheads	2.5 gal. per minute
Lavatoryfaucets	2.5 gal. per minute
Kitchen faucets	2.5 gal. per minute
Public lavatory faucets (other than self-closing)*	0.5 gal per minute
Replacement aerators	2.5 gal. per minute

*Some exceptions are made for fixtures intended for certain purposes. Contact a local building official for additional information. Standards effective July 1, 1993.

If you have an older home, you can save water by installing more efficient plumbing fixtures!

FOR MORE INFORMATION

Port Townsend Public Works
5210 Kuhn Street, Port Townsend, WA 98368 (206) 385-7212

W.S.U. Cooperative Extension
(206) 385-9158

State Building Code Council
(206) 753-5927

Making the most of a limited resource

a customer's guide to efficient use of water. . . with Plumbing Fixtures & Repairs

Port Townsend Public Works

TOILET LEAKS

The greatest single cause of unusually high water and sewer bills is a leaking toilet. A constantly running toilet can waste thousands of gallons per day. Most older toilets have some type of leak.

Leak Detection Tablets:

NOTE: This test must be done at least 5 minutes after the last time the toilet was flushed. If you do not have access to leak detection tablets, a few drops of food coloring in the toilet tank will work.

1: Remove toilet tank lid.
2: Drop one tablet into the tank and replace lid.
3: Wait 15 minutes without flushing.
4: If colored water appears in the toilet bowl, you have a leak.

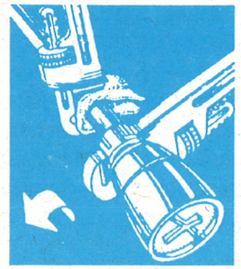
TOILET DISPLACEMENT DEVICE

Toilet displacement devices are a good way to reduce water use indoors. A clean heavy glass jar, such as a pickle jar, no taller than 6-1/2 inches will work well. A glass jar (without a lid) will not move around in the tank and will not deteriorate over time.

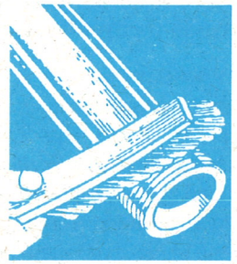
1: Remove cover from toilet tank.
2: Remove the lid from a clean glass jar and let water in the toilet tank fill the entire jar.
3: Carefully put the jar upright at the bottom of the tank but do not put the lid back on the jar. (Important: Place jar away from moving toilet parts.)
4: Flush toilet while the tank cover is off to verify that the glass jar does not interfere with the working parts of the toilet. Adjust jar location if needed. If you're flushing more than once to clear toilet, discontinue use of displacement device.

CHANGING SHOWERHEADS

You may need to use one or more of the following tools to install your showerhead: crescent or adjustable wrench, pipe wrench, pliers, vice-grips, cloth rag, stiff brush, plumbers tape.



1: Remove your old showerhead carefully from the showerarm by turning it counter-clockwise. If you need to use a wrench to remove the old showerhead, use a second wrench to hold the showerarm while you loosen the old showerhead. **(Important: do not allow the showerarm to turn.)** Use pieces of heavy cloth to protect the pipe's finish because a wrench may cause damage.



2: Before installing your new showerhead, briefly turn on the shower water to flush out the showerarm and dislodge any rust or debris. Turn off water. Wipe the threads of showerarm with stiff brush or a rag.
3: Screw on the new showerhead, clockwise, and hand tighten. Make sure the showerhead is screwed on all the way. Turn on the water and test showerhead. If the showerhead leaks, tighten by using a wrench on the showerhead (use pieces of cloth to protect finish). Tighten until snug. Do not over-tighten.

(NOTE: If your showerhead is leaking around the showerarm threads you may need to use plumbers tape. To apply plumbers tape, remove the showerhead. Thoroughly dry around the showerarm threads with a cloth. Wrap plumbers tape once or twice clockwise around the showerarm threads. Screw on the new showerhead as described above.)

FAUCET LEAKS

If one of your faucets drips no matter how tightly you turn it off or water leaks around the faucet handle when it's turned on, your faucet needs to be repaired or replaced. Most leaking faucets can be repaired by simply changing the washers. Here's how:

1: Shut off the water at the nearest shut-off valve—or at the main shut-off valve.
2: Faucet handles usually have a plastic decorative button that, when flipped off with a screwdriver, exposes the screw beneath. Unscrew it to allow the handle to be removed. Using an adjustable crescent wrench, grip the large hexagonal nut and unscrew to reveal the stem. If your faucet does not have decorative handles, simply unscrew the already exposed hexagonal nut.
3: With the hexagonal nut loose, pull out the stem assembly.
4: At the bottom of the stem you will see a rubber washer held in place by a screw. Remove the screw, replace the washer with one of the same size and replace the screw.
5: Replace the stem assembly and tighten the hexagonal nut. Replace the handle and the decorative button, if there is one.
6: Turn on water at shut-off valve. Test faucet.

If the faucet begins leaking soon after replacing the washer, check the valve seat. It may be scarred and need replacing also.

FAUCET AERATOR INSTALLATION

1: Remove the old aerator from the faucet. A wrench may be required. **(Important: Do not allow faucet base to turn.)**
2: Before installing the new aerator, turn on water to flush out faucet and remove debris.
3: Turn off water. For inside threaded faucets, screw on the new aerator and hand tighten. For outside threaded faucets, first remove the top washer from the aerator and then screw on.
4: Turn on water. If the aerator leaks, check washer combinations and/or tighten by using a wrench. Use cloth on the wrench teeth to protect finish. Tighten until snug. Do not over-tighten.