

# NAVARRE BEACH

WATER & SEWER DEPARTMENT

1411 UTILITY DRIVE

NAVARRE BEACH, FL 32566

A Division of Santa Rosa County Board of Commissioners

**Roger A. Blaylock, P.E.**

EXECUTIVE DIRECTOR

**Terry W. Wallace**

UTILITIES SUPERVISOR

## Indoor Plumbing Fixture Retrofitting

Replacing old plumbing fixtures and water using appliances with new, high efficiency models can achieve significant water savings. The actual savings will vary depending on the age/efficiency level of the old and new items as well as the frequency of use.

### Water Savings: Residential

**Table 1** shows common plumbing fixtures and appliances and their respective water consumption rates. The water consumption shown is before and after industry standards were established by the 1992 Energy Policy Act (effective after 1994) and at two increasing levels of efficiency.

	Pre 1980	1980-1994	Post 1994	High Efficiency	Ultra High Efficiency	Dual Flush (Average)
Toilets (Gallons per flush)	5.0 – 7.0	3.5	1.6	1.28	0.8	1.20
Showerheads (gallons per minute)	5.0 – 8.0	2.75	2.5	2.0	1.75	-
Faucets (gallons per minute)	4.0 – 7.0	2.75	2.5	1.0 – 1.5	0.5	-
Dishwasher (gallons per load)	56	10 – 14	7	6.5	4.50	-
Clothes Washer (gallons per load)	-	39	27	22	-	-

**Table 2** shows estimated water use of less expensive plumbing fixtures in a household of 2.64 people in gallons per day. Retrofit programs involving these fixtures are usually highly cost effective.

Water Appliance/ Fixture	Pre 1994	Post 1994	High Efficiency	Ultra High Efficiency
Toilet	44 – 88	20	16	10
Showerhead	24 – 70	23	17	15
Faucets	37 – 93	29	20	13
Total	105 - 210	72	53	38

Retrofitting 1,000 houses built to pre 1994 standards with high efficiency devices would save between 50,000 – 100,000 gallons per day, or 19 – 57 million gallons per year. Retrofitting 1,000 houses built to post 1994 standards with high efficiency devices would save about 22,000 gallons per day, or 8 million gallons per year. Greater savings still can be expected using ultra high efficiency devices.