

2008 WATER USE EFFICIENCY PERFORMANCE REPORT



Conservation Stewardship

Skagit PUD Six-Year Water Use Efficiency Goals Update

Pressure on Skagit PUD's water resources comes from many sources, including population growth, instream flows (protecting fish, wildlife and recreation), and business needs. Water systems using their water efficiently allow growth in their communities and water for other environmental uses. The efficient use of water helps ensure reliable water supplies are available for our customers.

In 2007, through a public forum process, the PUD established measurable water-saving goals for the next six years for both the supply- and demand-side of our distribution system. These goals provide a benchmark for achievement and play a significant role in defining the success of the PUD's water use efficiency program. Our water use efficiency goals and the steps we are taking to meet those goals are as follows:

1. Reduce consumption per Equivalent Residential Units from 178 gallons per service per day to 175 gallons per service per day.

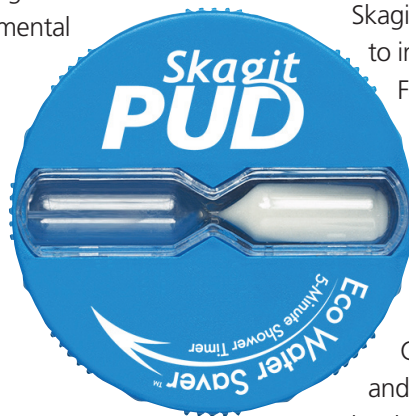
Water conservation is something we all should practice. Except for the air we breathe, water is the single most important element in our lives. It's too precious to waste.

Billing data for 2008 indicates that our Equivalent Residential Units dropped to 155 gallons per residential water service per day—a 12.9 percent reduction since 2006.

This past year, Skagit PUD focused its public education efforts on providing customers with simple water-saving ideas to use at their home or business. These suggestions help save hundreds, even thousands, of gallons per month without any great inconvenience.

Skagit PUD has stepped up its public outreach efforts to include educational displays at the Skagit County Fair, Business-to-Consumer Expo, and the Skagit and Island County Builders Association Home Show. The PUD also participated in a number of community events, such as: Economic Development Association of Skagit County's Schmooze Fair, Skagit Human Rights Festival, Swinomish Tribe Earth Enhancement Celebration, Storming the Sound, Letterbox Trail, and the Mount Vernon High School Science and Technology Fair. At these events, the PUD shared ideas on how to identify and stop common leaks, conserve water, and ways to use water more efficiently.

One of the more popular give-away items at our education booths were the five-minute shower timers. We have given away over 250 shower timers during the past six months. By



taking a five-minute or less shower, we estimate a minimal savings to the system of 7-10,000 gallons per day.

This year we introduced the Water Meter Monitor Program. Customers have the option to buy or borrow a water meter monitor to calculate their water usage and be alerted in the occurrence of a leak. This easy to use device allows customers to monitor their use of water during customer-defined time intervals as well as displaying the current reading of the water meter.

In November, Skagit PUD teamed with the U.S. Environmental Protection Agency's (EPA) WaterSense program to help customers decrease indoor and outdoor water use through water-efficient products and simple water-saving practices.

The program encourages customers to look for WaterSense labeled products, which have been independently certified for efficiency and performance, and promotes water-saving techniques that reduce stress on water systems and the environment. The PUD has helped promote the program through targeted print advertising.

2. Reduce the summer peak flows from 1.7 times Average Daily Demand to 1.6 times Average Daily Demand.

During summer months, about 30 percent of a family's household water use per day is devoted to outdoor purposes. More than half of that outdoor water is used for watering lawns and gardens. Other residential outdoor uses include washing automobiles, maintaining swimming pools, and cleaning sidewalks and driveways.

Our summer peak flows for 2007 were 1.43 times the Average Daily Demand (ADD). Our 2008 summer peak flows were up slightly to 1.46 times ADD. We will monitor this number to see if it climbs significantly due to an anticipated dry summer in 2009.

In an effort to continue to reduce summer peak flows, Skagit PUD is focusing on public education to create awareness of the need to use water wisely. The PUD provides outdoor water-saving tips in each issue of our *Pipeline* newsletter. We also utilize special publication advertising and the PUD's Web site to encourage customers to be water-wise and let their lawns go dormant in the summer.

3. Reduce unaccounted for water (fire flows, hydrant testing, water system flushing, unmetered consumption and leaks) by one percent.

Skagit PUD operates the most expansive water system in Skagit County with over 22,400 metered services, serving approximately 65,000 people an average of nine million gallons of water per day. The majority of Skagit PUD's services

are within the Judy Reservoir system; however, the PUD also operates seven remote water systems that we monitor for water quality.

All water services in Skagit PUD's water systems are metered. The PUD tracks high use meters to check on accuracy and our meter technicians routinely replace service meters that show signs of inaccuracy or failure. In 2008, the PUD significantly increased its service meter replacement program with 3,283 new radio-read meters installed. The new meters increase the overall accuracy of the system resulting in a decrease in unaccounted for water.

The chart below reports each system's water production performance for 2008. Some examples of unaccounted-for water would include: water main breaks, theft, meter inaccuracies, meter reading errors, data collection or calculation errors.

Water System Performance 2008	
Judy Reservoir Production	3,060,489/Kgals Produced
Judy Reservoir Billed	2,611,591/Kgals Billed
Percent Unaccounted	14.7% Unaccounted
Alger Production	7,332/Kgals Produced
Alger Billed	6,207/Kgals Billed
Percent Unaccounted	18.3% Unaccounted
Cedargrove Production	8,494/Kgals Produced
Cedargrove Billed	8,798/Kgals Billed
Percent Unaccounted	0% Unaccounted. Meter error.
Fidalgo Island Production	Not available. Data error.
Fidalgo Island Billed	40,515/Kgals Billed
Percent Unaccounted	NA % Unaccounted
Marblemount Production	1,099/Kgals Produced
Marblemount Billed	1,026/Kgals Billed
Percent Unaccounted	24.6% Unaccounted
Potlatch Beach Production	570/Kgals Produced
Potlatch Beach Billed	505/Kgals Billed
Percent Unaccounted	11.5% Unaccounted
Rockport Production	3,168/Kgals Produced
Rockport Billed	3,038/Kgals Billed
Percent Unaccounted	4.1% Unaccounted
Skagit View Village Production	3,471/Kgals Produced
Skagit View Village Billed	3,125/Kgals Billed
Percent Unaccounted	10% Unaccounted
<i>Numbers calculated in thousands of gallons.</i>	