



# SEATTLE WATER SUPPLY SYSTEM REGIONAL 1% WATER CONSERVATION PROGRAM

Saving Water Partnership 2008 Annual Report

May 2009

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# ACKNOWLEDGEMENTS

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# 2008 PROGRAM RESULTS

## Year in Review

The Saving Water Partnership (SWP), with the support of residential, commercial and institutional customers, completed the eighth year of the 1% Program (2000-2010). Regional per capita use is continuing to decline when normalized for variation in weather conditions. In 2008 the 1% Program achieved 0.75 million gallons per day (mgd) of savings, for a cumulative total of 8.4 mgd. The Program continues to be close to target to meet its 2010 water savings goal. Table 3 showing 2008 Water Savings appears on page 8. Table 1 showing 1% Program Cumulative Savings appears on page 3.

The 1% Program gained ground in all major customer sectors:

- Particularly strong progress was made in the multi-family sector. Partnerships were formed successfully with Puget Sound Energy, Seattle City Light, and Cascade Water Alliance (Cascade) to conduct a major regional showerhead, aerator and compact fluorescent light bulb distribution program that delivered efficient, well-received products to nearly 9,500 apartment units in the SWP service area. The showerhead program generated leads for the Multifamily Toilet Replacement Program, assisting that program to reach a new level of customer participation.
- In the landscape sector, the Savvy Gardener lecture series added a new winter class to keep the message going year-round, and built on the “Right Plant, Right Place” campaign to promote a ‘climate-smart’ message in partnership with participating garden centers.
- The irrigation rebate program conducted mailings in July and September, and co-sponsored the largest Washington Irrigation Contractors Association bi-annual professional training yet.
- In the commercial sector, two successful customer events were held. An Integrated Conservation Workshop included topics ranging from new technologies to customer motivation, and attracted more than 100 attendees. A Green Properties Forum attracted more than 40 property managers to learn about

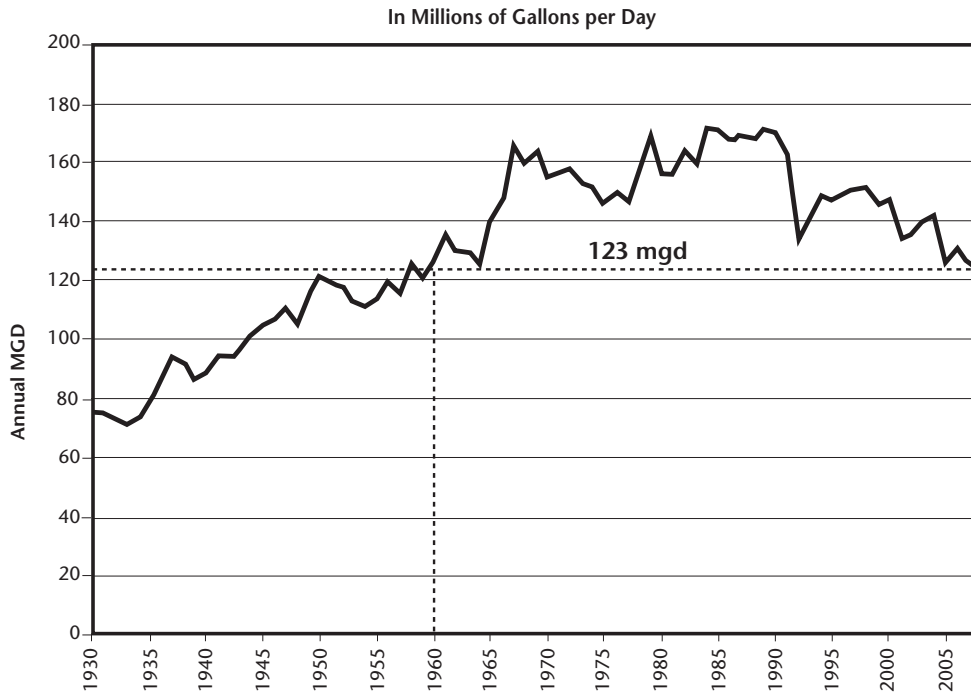
regional incentive programs. In addition a research study of a large customer, the University of Washington (U of W), showed that their cumulative efforts since 2000 have reduced their water use by 30 to 40%, saving nearly \$20 million. Many of the projects completed at the U of W are replicable in businesses throughout the SWP service area.

Total annual average water consumption in 2008 was 123 mgd, an almost 3 mgd drop from the previous year. This decline was due mostly to the impact of a cooler and wetter than average summer on peak season consumption. Winter base consumption in 2008 was only about half an mgd less than in 2007. Regional water use continues to decline, as it has since 1990.

Charts 1, 2 and 3 (on the next 2 pages) show how water consumption patterns have changed over time. For most of the region’s history, water consumption has increased along with its population. However, that link was broken around 1990 when annual average consumption reached its highest levels of about 170 million gallons per day (mgd). Since then, water consumption has steadily declined due to the combined effects of conservation programs, increases in water and sewer rates, the state plumbing code, and improved system operations, despite continued population growth. Annual consumption is now about 123 mgd. The last time the Seattle regional system used that little water was about 50 years ago.

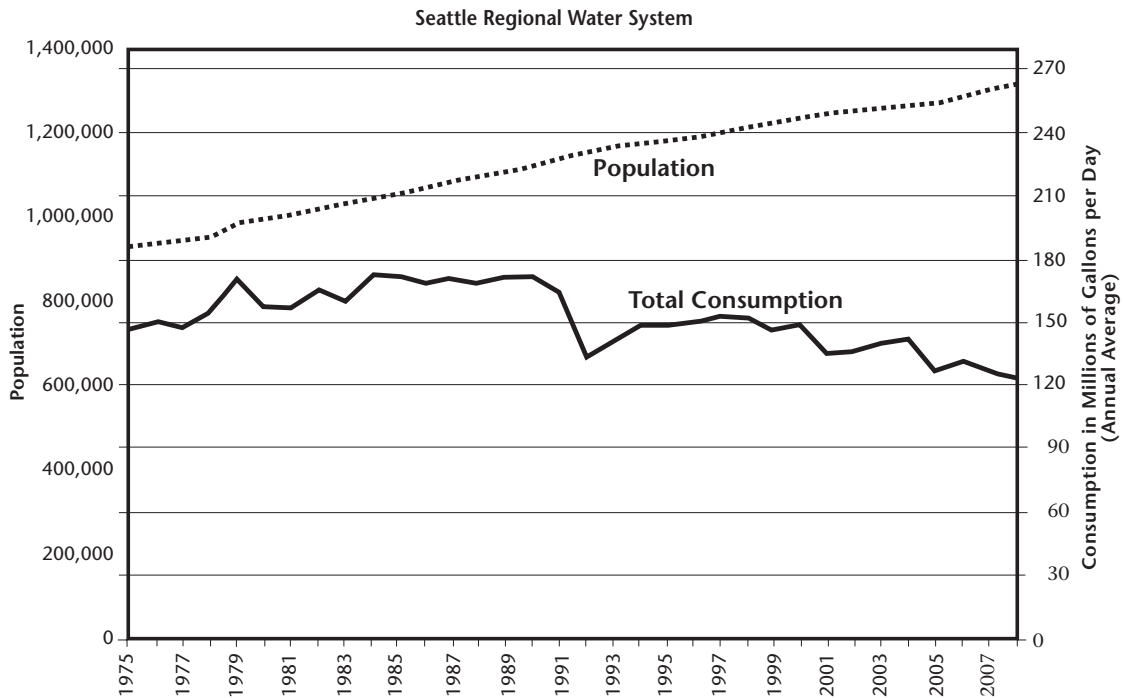
Chart 1 shows the history of annual demand for water from the Seattle regional water system since the system’s beginnings in 1930. Chart 2 provides a perspective of declining regional water consumption in the context of a continuing rise in population served. Water consumption has declined by 47 mgd or 28% since 1990, while population has increased 18% during those same years. Chart 3 illustrates the dramatic progress made in per capita demand reduction. On a per person basis, water consumption has shrunk by 38% from 152 to just 94 gallons per day.

**Chart 1<sup>1</sup>: Total Seattle Regional Water System Annual Demand: 1930-2008**



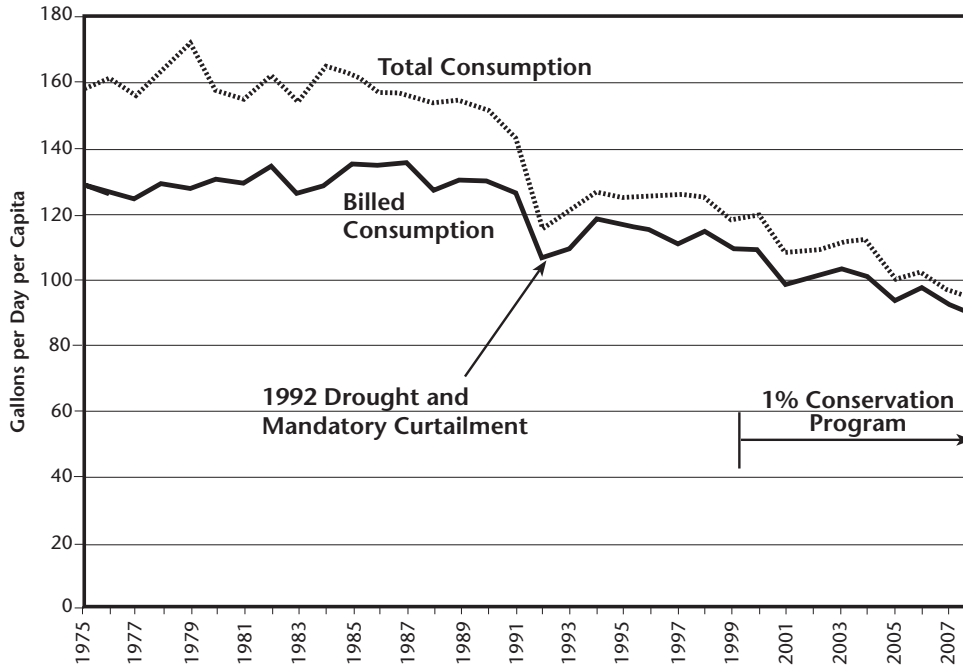
<sup>1</sup> In the years 1999 through 2003, the SWP service area included utilities in the Cascade Water Alliance. Due to difficulties in separating Cascade data from SWP, Chart 1, Chart 2 and Chart 3 include the Cascade service area for the years 1975 through 2008.

**Chart 2<sup>1</sup>: Growth in Population and Water Consumption: 1975-2008**



<sup>1</sup> In the years 1999 through 2003, the SWP service area included utilities in the Cascade Water Alliance. Due to difficulties in separating Cascade data from SWP, Chart 1, Chart 2 and Chart 3 include the Cascade service area for the years 1975 through 2008.

**Chart 3<sup>1</sup>: Water Consumption Per Person<sup>2</sup>: 1975-2008**



<sup>1</sup> In the years 1999 through 2003, the SWP service area included utilities in the Cascade Water Alliance. Due to difficulties in separating Cascade data from SWP, Chart 1, Chart 2 and Chart 3 include the Cascade service area for the years 1975 through 2008.

<sup>2</sup> Per person consumption is calculated by dividing total water demand by the population served.

**Table 1: Regional 1% Program Cumulative Savings**

	2000-01 "Ramp-Up" 2-Year Total	2002	2003	2004	2005	2006	2007	2008	2009	2010
Tally of 1% Savings Cumulative in MGD	2.15	3.08	3.78	4.48	5.42	6.35	7.63	8.38 <sup>1</sup>		
Target 1% Savings Cumulative in MGD	1.6	2.5	3.6	4.5	5.4	6.5	7.7	8.8	9.9	11.0 <sup>2</sup>

<sup>1</sup> Savings from hardware programs, which comprise 65 percent of the total 2008 savings, are tallied by adding the gallons per day saved by each efficient device installed (such as washing machines, showerheads, aerators, toilets, irrigation equipment, and commercial process equipment). The behavioral component is an estimate.

<sup>2</sup> The original 1% Program goal was 18 mgd peak season cumulative through year 2010, adjusted to 14.5 mgd peak savings for departure of Cascade Water Alliance utilities from the regional conservation program at the end of 2003. In 2005, to be consistent with reporting of code, price, and non-revenue water savings, an annual average savings goal for the 1% Program was adopted. The annual average savings goal is 11.0 mgd, equivalent to the original 14.5 mgd peak season goal.

## Regional 1% Program Goal and Objectives

The main focus of this 2008 Annual Report is savings from the 1% Program. The regional 1% Water Conservation Program (1% Program) is sponsored by the Saving Water Partnership (SWP). This Partnership includes the City of Seattle retail service area (population 628,000) and a group of 17 utilities (population 416,000) purchasing water wholesale from the City of Seattle. Seattle Public Utilities administers the 1% Program in collaboration with participating wholesale utility customers, under terms of long-term water supply contracts.

Five Cascade Water Alliance utilities that were part of the 1% Program from 2000-2003 left the 1% Program in 2004 and are pursuing conservation on their own. Accordingly, the 1% Program savings targets have been reduced proportionately for the remaining population served.

The 1% Program began in 2000. The first two years were ramp-up years for program measures, staffing, and funding. A *Ten Year Water Conservation Program Plan* (Seattle Public Utilities, 2002) was completed in 2002 detailing program budgets, savings targets and implementation strategies through 2010. SPU and its wholesale customers remain committed to achieving the cumulative 11.0 mgd annual average savings goal in 2010 and have adopted this goal as a component of utility Water System Plan six-year goals in compliance with the State of Washington Water Use Efficiency Rule.

The long-term goal of the 1% Program, as stated in 1999 when the Program was adopted, is to keep water demand at the end of 2010 the same level or lower than it was in 2000, despite anticipated growth in population and economic activity. At that time achievement of the goal translated into a reduction in peak season per capita consumption of 1% per year from 2000 to 2010. Hence the origin of the 1% Program name. To achieve this goal based on the forecasted growth rates at the time of Program initiation, two specific target objectives were established and continue to be used to track program achievements:

- Track cumulative historical progress in reaching the overall program goal established in the *Ten Year Conservation Program Plan*, to achieve total programmatic conservation savings (as adjusted following the departure of Cascade utilities) of 11 million gallons per day (mgd) annual average savings (14.5 mgd peak season) in the ten years from 2000 through 2010;
- Achieve annual programmatic conservation savings targets at a pace needed to cumulatively reach 11 mgd by the end of 2010. The annual target for year 2008 was 1.1 mgd.

In 1999, the 1% goal was selected to achieve a number of policy objectives, including:

- **Keeping up with demand.** If each person and business in the region became 10% more water efficient over the next ten years, the region will save approximately 11.0 million gallons of drinking water per day in annual average gallons (14.5 mgd in the peak season).
- **Resource stewardship and endangered species protection.** Leveling out the impact of growth on the region's water supplies means preserving more water for salmon, other aquatic life, recreation, water quality, and other important purposes. The federal Endangered Species Act (ESA) listing of the Chinook salmon has added emphasis for withdrawals that may have impacts on the Chinook.
- **Cost-effective extension of existing supplies.** The measures identified in the 1% Program are less costly on a per unit basis than developing most traditional new sources of water supply. This benefits customers by keeping rates lower than they would be if a new source of supply were added to the system to meet demand in lieu of reducing it through conservation.
- **Customer service.** Conservation provides a direct benefit to participating customers by giving them more control over their individual water bills. Participation in conservation measures has other benefits including lower wastewater, electric, and gas utility bills, convenience, labor savings, and in some cases like clothes washing, improved performance.
- **Reliability.** Developing traditional new water supply sources has lengthy regulatory approval processes. Conservation programs can be implemented quickly by utilities without permits, approvals, or revisions to comprehensive plans. Furthermore, because much

of the programmatic savings are technology based, savings can be obtained reliably.

### Conservation Measure Selection and Modification

Beginning in 1998, SPU has conducted conservation potential assessments to analyze the cost, volume, and reliability of conservation savings available within Seattle's wholesale and direct service areas. The analysis helps direct customer demand reduction programs toward the most cost-effective conservation opportunities that will meet the savings goal.

In 2006-7 conservation potential analysis was used to:

- Incorporate updated savings estimates into the regional 1% Program to fine-tune the implementation measures for 2007 through 2010;
- Package groups of measures to evaluate future, post-2010 water conservation alternatives of varying intensity; and
- Analyze "Technical Potential" packages of additional conservation for the *SPU Water Supply Planning Model*.

### Accounting for Conservation Savings

In order to track progress toward the target objectives, annual water savings (mgd) as reported in this document are estimated based on programmatic conservation activity. These estimates attribute savings based on installation of various 'hardware' measures – toilets, showerheads, washing machines, etc. This annual savings total is then augmented by adding an amount of water estimated to be saved by changes in customers' behavior as influenced by program education and informational campaigns. Together, savings from hardware measures and behavioral changes equal the annual mgd savings amount reported – this tally is known as the "bottom-up" approach to measuring savings as it relies on an annual summation of equipment installations.

An alternative method of calculating cumulative conservation savings over time is under review to increase confidence in the results of the "bottom-up" approach. This involves using the SPU water demand forecast model to "backcast" what demand would have been between 2000 and 2008 without the 1% Conservation Program. Referred to as the "top-down" approach, 2000-2008 forecasted demand absent conservation is compared to actual water use over the same period

with the difference representing cumulative programmatic conservation savings.

### Conservation After the 1% Program

SPU and its wholesale customers have selected a regional conservation goal of 15 mgd of cumulative average annual savings from programmatic and price-induced conservation over the period 2011 through 2030. The 2011 through 2030 Regional Baseline Conservation Program will begin after the conclusion of the current Regional 1% Conservation Program. Portions of both efforts are included in SPU's adopted Six-Year Conservation Goal, 2007 through 2012, stated in SPU's 2007 Water System Plan.

As part of the process to set a six-year conservation goal for compliance with the Washington Department of Health Water Use Efficiency Rule, SPU conducted a risk assessment to update policy objectives for conservation. In consultation with wholesale customers and program partners, agreement was reached that conservation is important as:

- low-cost insurance for meeting potential future challenges from climate change;
- an efficient management of water resources;
- assistance to customers for managing their bills; and
- valuable stewardship of our natural resources.

### 2008 Program Measures and Strategies

The 1% Program is implementing conservation programs to improve customer water use efficiency through strategies that integrate information, education, social marketing, incentives, codes and regulations. Conservation savings have resulted from improvements in water use efficiency in residential, commercial, industrial, institutional and landscape customer sectors. Table 1 provides details on the types of measures and the strategies used in 2008.

The 2008 1% Program fixture and equipment rebate programs for residential and commercial customers expanded upon 2007 efforts and customer contacts. Rebates were re-tooled in some instances, new incentives were introduced, and new utility partnerships were formed to leverage resources and increase services to customers. 1% Program outreach and technical as-

**Table 2: 2008 Conservation Measures and Strategies**

Types of Measures	Types of Strategies
<ul style="list-style-type: none"> <li>● Replace washing machines</li> <li>● Replace toilets, showerheads &amp; faucets (multifamily)</li> <li>● Fix leaks (toilets)</li> <li>● Change behaviors (toilet flushes, faucet use, shower time, full loads)</li> </ul>	<p><b>RESIDENTIAL INDOOR</b></p> <ul style="list-style-type: none"> <li>● WashWise rebates</li> <li>● Free showerhead distribution to multifamily properties</li> <li>● Multifamily toilet rebates</li> <li>● Multifamily building owner and operator recruiting</li> <li>● Behavior messaging</li> <li>● Collaboration with energy utilities</li> <li>● Program recruiting through media, direct mailing, web</li> <li>● Promotion of Flush Star and WaterSense toilet performance</li> </ul>
<ul style="list-style-type: none"> <li>● Reduce peak water use               <ul style="list-style-type: none"> <li>■ Irrigation system performance</li> <li>■ Landscape watering behaviors</li> <li>■ Practices that affect watering (e.g. mulch, soil prep and plant selection)</li> </ul> </li> </ul>	<p><b>RESIDENTIAL LANDSCAPE</b></p> <ul style="list-style-type: none"> <li>● Irrigation system efficiency rebates</li> <li>● Right Plant/Right Place promotion via retailer partnerships (nurseries, home &amp; garden centers)</li> <li>● <i>Savvy Gardener</i> e-newsletter and classes</li> <li>● The Garden Hotline</li> <li>● <i>Natural Lawn &amp; Garden Guides</i> (how-to materials)</li> <li>● Trainings for irrigation professionals</li> <li>● Development of standards for irrigation component performance through Irrigation Association Smart Water Application Technologies Initiative</li> <li>● On-line weather data, watering index and irrigation scheduling tools</li> </ul>
<ul style="list-style-type: none"> <li>● Upgrade toilets and other domestic water use fixtures</li> <li>● Upgrade equipment efficiency for cooling, process other industrial uses</li> <li>● Improve building cooling performance</li> <li>● Upgrade efficiency of specific water consuming medical and lab equipment</li> <li>● Outreach to ethnic businesses</li> <li>● New construction incentives</li> </ul>	<p><b>COMMERCIAL PROCESS/DOMESTIC</b></p> <ul style="list-style-type: none"> <li>● Small and large business targeting</li> <li>● Restaurant targeting – efficient food steamer rebate</li> <li>● Outreach to business groups through Resource Venture</li> <li>● Technical assistance, assessments, workshops</li> <li>● Financial incentives (custom projects &amp; standard rebates)</li> <li>● Bonus incentives to increase specific measure participation</li> <li>● Targeted promotion through vendors, trade groups, agencies</li> <li>● End-use metering wherever possible to build cost-effective conservation recommendations</li> </ul>
<ul style="list-style-type: none"> <li>● Improve watering efficiency               <ul style="list-style-type: none"> <li>■ Upgrade irrigation equipment (controllers, rain sensors, drip)</li> <li>■ Improve scheduling &amp; maintenance</li> </ul> </li> </ul>	<p><b>COMMERCIAL LANDSCAPE</b></p> <ul style="list-style-type: none"> <li>● Targeted outreach to large commercial customers</li> <li>● Provide site-specific recommendations and technical assistance</li> <li>● Financial incentives (custom projects and set rebates)</li> <li>● Targeted recruiting and promotion to large commercial customers</li> <li>● Market transformation by establishing and building vendor and contractor relationships</li> <li>● On-line weather data, watering index and irrigation scheduling tools</li> <li>● Trainings for irrigation professionals</li> </ul>

**Supporting Elements**

Types of Measures	Types of Strategies
<ul style="list-style-type: none"> <li>● Build conservation awareness and residential measures</li> </ul>	<p><b>YOUTH EDUCATION (Supports savings in other sectors)</b></p> <ul style="list-style-type: none"> <li>● Support of water festivals and events</li> <li>● Educator resources on-line</li> <li>● Classroom and take-home materials and devices</li> <li>● Web-based interactive activities</li> </ul>
<ul style="list-style-type: none"> <li>● Conservation awareness supporting recruitment of residential and commercial customers</li> </ul>	<p><b>OVERALL MESSAGING (Supports savings in other sectors)</b></p> <ul style="list-style-type: none"> <li>● Targeted marketing</li> <li>● Collaboration with Puget Sound-based Partnership for Water Conservation</li> <li>● Festivals</li> </ul>
<ul style="list-style-type: none"> <li>● Evaluate measure savings</li> <li>● Evaluate program effectiveness</li> </ul>	<p><b>PROGRAM EVALUATION (Supports savings in other sectors)</b></p> <ul style="list-style-type: none"> <li>● Conservation Potential Assessment</li> <li>● Annual reports</li> <li>● Customer baseline surveys of attitudes and behaviors</li> </ul>



sistance was expanded for large and small commercial customers, and for vendors and contractors.

Marketing strategies to increase rebates and long-term conservation behaviors focused on target recruitment of different types of customers for specific conservation programs. These strategies employed mass media, direct mailings, new program materials, web and hotline resources, seminars and workshops, agency and trade association partnerships and targeted promotions.



Participating nurseries displayed signs during the Right Plant, Right Place promotion to introduce the concept of climate smart gardening.



The SWP partnered with retailers to offer coupons to encourage customers to find 3 Ways to Save water at home.

## 2008 Program Performance

Total water consumption in 2008 was 123 mgd, down from 126 mgd in 2007. Rainfall and temperature in the summer of 2008 were a little wetter and cooler than normal.

1% Program savings of an estimated 0.75 mgd was achieved in 2008. Total long term customer savings for 2008 (that can be attributed to the 1% Program as well as conservation related to increased water rates, the plumbing code, and the Seattle-only low income and accelerated programs) are estimated at 1.49 mgd. Table 2 shows the various components of the estimated long-term savings achieved in 2008, along with expenditures.

Expenditure levels for 2008 reflect the constrained financial climate for both capital and operating spending at SPU. Budgets in the out years will likely mirror the region's economic condition.

**Table 3: New Water Savings Achieved in 2008 and Program Cost**

Component	Annual Average Million Gallons per Day	Program Cost in Thousands of \$
<b>Regional 1% Conservation Program</b>		
Hardware Incentives		
Residential Indoor	0.28	\$1,049
Landscape	0.08	\$ 269
Commercial Non-Landscape	<u>0.13</u>	<u>\$ 693</u>
Total Hardware	0.49	\$2,011
Behavior	<u>0.26</u>	<u>\$ 388</u>
<b>Total 2008 1% Conservation Program</b>	<b>0.75</b>	<b>\$2,399</b>
Seattle-Only Conservation Program	0.07	\$ 841
<b>Total 2008 Conservation Programs</b>	<b>0.81<sup>3</sup></b>	<b>\$3,240</b>
Price Elasticity <sup>1</sup>	0.08	
Plumbing Code <sup>2</sup>	<u>0.60</u>	
<b>Total Customer Long-Term Savings</b>	<b>1.49<sup>3</sup></b>	
<b>Total System Operation Savings</b>	<b>-1.04<sup>4</sup></b>	
<b>TOTAL SAVINGS FOR 2008</b>	<b>0.46</b>	

<sup>1</sup> Price effects and behavior change savings components are interrelated and can't be easily separated by SPU's analytical tools.  
<sup>2</sup> A considerable effort continues to be made to revise local, state, and national water efficiency codes and standards to obtain future savings. The cost for this ongoing effort is included as hardware costs.  
<sup>3</sup> Totals do not equal sum of individual lines due to rounding.  
<sup>4</sup> See explanation of system operation savings on page 8.

**Hardware Incentive Savings** include new fixtures and equipment upgrades that were supported with program incentives, as well as accelerated fixtures (beyond rates and code) that were upgraded without rebates. Based on program records, these savings are estimated to be 0.49 mgd annual average in 2008.

**Price and Behavioral Savings** include permanent conservation achieved from changes in customer water-using behaviors. Estimated to be 0.26 mgd annual average in 2008, behavior savings are difficult to separate from price savings since price has a strong influence in stimulating customers to change water using behaviors. The price savings estimate of 0.08 mgd is derived from the price elasticity and overlap parameters from SPU's water demand forecast model and actual changes in water and sewer prices.

**Plumbing Code Savings** include water saved by customers as they remodel plumbing fixtures to meet more stringent building code efficiency standards (1.6 gallons per flush for toilets, 1.0 gallons per flush for urinals, 2.5 gallons per minute for showerheads and aerators). The 0.6 mgd of code savings shown would happen with or without a regional conservation program due to ongoing new construction and remodeling in the service area. Fixture changes that might have occurred as a result of price or education about more efficient plumbing fixtures are not part of this total, but instead are credited to price or 1% Program savings. In 2005, refinements in the method of calculating code savings during the process of updating the CPA resulted in a decrease in these cumulative savings compared to the figure reported in the 2004 Annual Report. The 2006 regional benchmark customer survey affirmed this revised method.

**Seattle-Only Low Income and Seattle-Only Accelerated Savings** are not tallied as part of the 1% regional program. Rather, they are savings funded solely by Seattle and obtained within the Seattle direct service area in addition to (on top of) the 1% savings. Seattle Ordinance #120532 (I-63 Settlement Ordinance) directs SPU to go beyond the regional program and accelerate savings for Seattle customers, with an emphasis on low

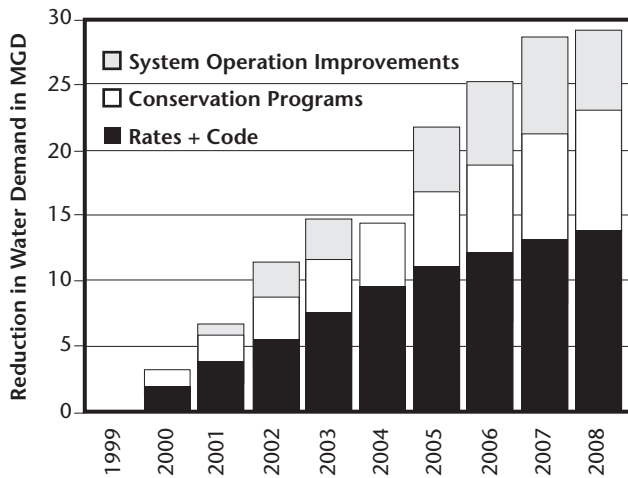
income participants. SPU will continue to offer the "Everyone Can Conserve" low-income conservation assistance program through 2010 per the requirements of Ordinance #120532. Funding comes 100% from direct service ratepayers (no wholesale customer rate dollars are expended for this program), and the region benefits from these water savings

**System Operation Savings** (i.e., a reduction in non-revenue water from the previous year) are obtained from reductions in water used for in-city reservoir cleaning and overflowing, water main and tank flushing, water main leaks, metering inaccuracies, and a variety of actions not related to specific customer demand reduction activities. This water is not being sold to customers, so it is not considered a component of the 1% Program. Non-revenue water fluctuates from year to year, in some years increasing and in others decreasing. Between 1992 and 2004, non-revenue water has shown no obvious trend, varying mostly between 10 and 13 mgd. This has been due primarily to different amounts of water used for reservoir cleaning and overflowing to optimize water quality. However several recent changes have contributed to non-revenue water falling to new lows since 2005. As more and more reservoirs are covered, the need for cleaning and overflowing is significantly reduced. In addition, the installation of meters at the outflows of some of the remaining open reservoirs has improved overflow monitoring. As a result, non-revenue water dropped to 6.3 mgd in 2006 and 5.2 mgd in 2007. Non-revenue water in 2008 was 6.2 mgd. Though a little higher than last year, this is still a very low level of non-revenue water and represents just 5% of total water produced by SPU.

## Cumulative Savings

Chart 4 on page 9 depicts cumulative water savings. Long-term customer savings, due to conservation programs, higher rates, and the plumbing code (the bottom and second bars) have grown steadily. Customer savings are derived from specific conservation measures and behavior actions. System savings (the third bar) are reductions in non-revenue water and come from a variety of sources such as reducing leaks

**Chart 4: Cumulative Water Savings<sup>1</sup> Since 1999**



<sup>1</sup> The measure of cumulative savings over time merits more confidence than the estimates of annual savings in any one year. All program categories are shown as annual average savings.

and lining/covering reservoirs, improved meter accuracy, and modifications to water main and reservoir flushing for water quality. With the notable exception of 2004 when more than usual reservoir overflowing occurred, system savings have generally been increasing since 2000.

The savings breakout in Chart 4 was estimated as follows:

- Rates – price elasticity parameters from SPU’s water demand forecast model.
- Code – natural replacement of plumbing fixtures by customers as forecast in SPU’s Conservation Potential Assessment model.
- Conservation Programs – includes 1% Program and Seattle-only I-63 Settlement Ordinance. See individual program estimates from this report.
- System Operation – analysis of non-revenue water and system operation use.

## Progress in Meeting the Cumulative Regional 1% Goal

Table 1 on page 3 shows the year-by-year savings targets and accomplishments of the regional 1% Program leading up to the overall program goal in 2010 established in the *Ten Year Conservation Program Plan*. Savings accomplishments were calculated using the “bottom-up” measurement approach described on page 5. Estimated cumulative savings at the end of 2008 are close to target. Savings vary by year in relation to the annual target, and some of the savings attributed to price may in fact be behavior savings influenced by 1% customer messaging. Overall progress to date is tracking to reach the 2010 goal.

As mentioned earlier in this report, an alternative method of estimating cumulative conservation savings is being developed to provide a double-check for the mgd savings reported in Table 1. This involves using the SPU water demand forecast model to “backcast” (i.e., forecast the past) what demand would have been between 2000 and 2008 with no conservation programs. The initial results of this “top-down” analysis produces a slightly higher estimate for cumulative conservation savings from the 1% Program than reported in Table 1. SPU will discuss the approach and preliminary results with its partners and stakeholders and provide further information in the 2009 Annual Report.

# DETAILED PROGRAM ACCOMPLISHMENTS

Program savings and accomplishments in 2008 continue to be strong across all customer sectors. In addition, program changes made in a number of areas will strengthen service delivery and conservation savings in 2009. This Chapter provides detailed results of conservation program activity in each major customer sector.

## Highlights:

- The SWP was awarded the EPA WaterSense Promotional Partner of the Year as a result of 2007 educational efforts to introduce 1.28 gallon per flush high-efficiency toilets (HET's) to residential and commercial customers, property managers, and plumbers.



*The SWP was awarded the 2008 Water Sense Promotional Partner of the Year for educational efforts to raise awareness of WaterSense toilets.*

- The SWP supported a major regional showerhead and aerator distribution program targeted to apartments and condominiums. Nearly 300 buildings participated, and the cooperative program will continue in 2009 with Seattle City Light and Puget Sound Energy.
- The Multifamily Toilet Retrofit Program had a very successful year, increasing savings by more than 30% over 2007.
- The WashWise program had another successful year, processing more than 8,000 rebates for efficient clothes washers. Program materials are now available in Spanish.
- The SWP promoted “smart” irrigation system controllers to customers and irrigation professionals through targeted marketing, newsletter articles, and mailings to customers. (Smart controllers are weather or soil-moisture based controllers that have been shown to reduce water use by up to 30%.)

- The SWP expanded its partnership with area garden centers by offering Savvy Gardener classes during the winter for the first time, and through the ‘Right Plant, Right Place’ campaign.
- In the commercial sector, a research study of a large customer, the University of Washington (U of W), showed that their cumulative efforts since 2000 have reduced their water use by 39%, saving nearly \$20 million. Many of the projects completed at the U of W are replicable in businesses throughout the SWP service area.
- The SWP participated in a number of criteria, codes, and standards development actions intended to improve water efficiency at the state and national level. A number of these actions were successful, including new Energy Star water efficiency criteria for dishwashers, updated water efficiency criteria for LEED credits, and plumbing product standards.
- SWP members coordinated effectively to meet the requirements of the State Department of Health Water Use Efficiency Rule, which requires annual reporting of water conservation goals and progress.

## Residential Indoor Highlights

**Table 4: 2008 Residential Hardware Savings**

Measure	Fixture Targets	Fixtures Installed	Savings (gallons/day)
Multifamily Showerheads	NA	17,769	28,008
Multifamily Toilets	2,500	3,341	84,861
Washing Machines	6,500	8,086	129,833
WaterSense HET Promotion	NA	500	8,820
3 Ways to Save	NA	2,998	7,265
Non-rebate Savings	NA	NA	20,324
<b>Total Savings</b>			<b>279,111</b>

## Multifamily Regional Showerhead & Aerator Distribution

In 2007, a partnership was formed between Seattle City Light (SCL), Puget Sound Energy (PSE), Cascade Water Alliance (CWA) and SWP to distribute high-efficiency showerheads to single family customers throughout the region. In 2008, the partnership moved into Phase II – the Multifamily and Condominium Association Showerhead Program - that launched in April. Planned to run through August 31, the program was extended through the end of the year in order to meet demand.



*Phase II of the Showerhead Replacement Program saw nearly 18,000 old showerheads and aerators replaced in multifamily buildings.*

The program replaced nearly 18,000 showerheads, 18,000 aerators and more than 40,000 compact fluorescent bulbs in 300 buildings, saving nearly 30,000 gallons of water per day and producing significant energy savings, including reduction of hot water usage.

The program distributed showerheads, aerators, and compact fluorescent light bulbs to managers of apartments and condominiums in the SWP area. The program used two different approaches to reach customers and deliver products, depending on the energy utility partner. SCL and SWP mailed a solicitation letter to building managers who used electricity to heat hot water (within Seattle and parts of five wholesale customer service areas). Interested customers returned a request to participate. A contractor then delivered the requested items for installation by the customer. The solicitation began in the northern end of Seattle City Light's service area, and moved south through the end of the year. Outside of Seattle, PSE, SWP, and CWA employed a contractor to contact property managers and condominium associations and complete a direct installation of fixtures in all buildings that participated. The PSE area solicitations began in the south end of the service area and moved north through the end of the year.

## Multifamily Toilet Retrofits

In 2008, 3,341 toilets in 136 apartment buildings were upgraded to 1.6 gallons per flush from 3.5 gallons per flush or greater models, saving the region 84,861 gallons per day. Several factors contributed to the program's 33% increase over 2007 activity: seamless referrals from the multifamily showerhead program; continued outreach to vendors, a successful new ad and articles that featured several program participants in trade publications; and a new flier of case studies added to the web site and distributed at the annual Trends trade show.

Some notable large projects include a 134 unit building in Northshore Utility District, a 300 unit condominium in Woodinville Water District, a 310 unit facility for seniors and disabled in Seattle, and a 543 unit apartment building in Water District 20. The program added the new generation of toilets - U.S. Environmental Protection Agency's WaterSense labeled high-efficiency toilets (HET's) that flush 1.28 gallons or less – 20% less than code fixtures - to the rebate list. The program continued to research these toilets in order to select a model for use as the free toilet in the program.

## WashWise Resource Efficient Clothes Washers

The WashWise Program had another very successful year, processing more than 8,000 rebates in 2008 and achieving nearly 130,000 gallons per day of savings. Partners in this program include PSE, Cascade, SCL, SWP, City of Renton, Tacoma Power, Tacoma Water, Bonney Lake and Snohomish PUD. Rebate levels continued at \$50-\$100. New point-of-purchase clings, banners and signage were installed at retailers, which brought a new and brighter look to the program, and attracted customer participation. In addition, materials in stores and on the washwiserebate.com and saving-water.org web sites were translated into Spanish. The program gained some publicity through an Earth Day Event at Lowes in Renton, which featured the City of Renton Mayor talking about WashWise and demonstrating some of the qualifying WashWise machines. A short TV spot aired on Channel Q13 on the evening news that day. Also in April, the SWP hosted a regional WashWise Partner meeting to review 2007 successes and discuss 2008 marketing opportunities.



*Chakorn Phisuthikul is one of several property owners featured in a new case study flier and trade journal article this year.*



*The Jan Tun Apartments reduced water use by 25% by replacing toilets in 14 units.*

### **WaterSense HET Promotion**

The SWP kept up the awareness-raising efforts begun in 2007. An estimated 500 toilets were replaced with beyond-code high-efficiency-toilets (HET's), saving 8,820 gallons per day, as a result of the SWP-sponsored signage at retailers, television advertising, print ads targeting property managers, pilot projects in multi-family buildings, signage at the Trends multifamily owners and managers trade show, a presentation at the regional Green Plumbers forum, and educational messaging in the 3 Ways to Save campaign described below.

### **An Award-Winning Year**

The winter, 2007 – spring, 2008 media and outreach efforts to raise awareness of WaterSense toilets among residential and commercial customers, retailers and plumbers earned the SWP the national EPA WaterSense Promotional Partner of the Year award. In addition, the Puget Sound Chapter of the Public Relations Society of America awarded the 2007 Single Family Showerhead Program the Totem Award for best public relations program in the area of public service and partnerships.

### **Behavior Messaging**

The SWP teamed up with Seattle City Light, the Home Depot and Bartell Drugs to implement a month-long summer campaign called 3 Ways to Save. The campaign encouraged customers to save water and energy by: 1) Checking for and repairing toilet leaks; 2) Washing full loads of laundry and dishes; and 3) Taking shorter showers (five minutes or less). A direct mail piece that included money-saving coupons was sent to single-family homeowners. Bartell Drugs offered discounts on Mrs. Meyer's biodegradable, high-efficiency laundry detergent, and the Home Depot reduced the price of FluidMaster toilet flapper and fill valve replacement kits. An additional coupon offered a free showerhead, shower timer and compact fluorescent light bulb from SCL, available at local water utilities. Nearly 3,000 devices were distributed by utilities, and nearly 300 coupons were collected by retailers.

The SWP also assisted customers in moving beyond awareness to trying out new behaviors through person-to-person interactions at community festivals. Several SWP member utilities held festivals where educational materials, bookmarks and activity books were distributed.

### **Looking Ahead to 2009**

Selected approaches for launching a single family WaterSense toilet retrofit program will be analyzed in early 2009. The cost and projected savings will be compared to the budget and other savings options, and a go or no go decision will be made. The showerhead program for multifamily residents and condominiums begun in 2008 will continue into 2009, in cooperation with energy and water utility partners. WashWise Program marketing will continue as it has in the past, with an additional focus on marketing to audiences we have not targeted to date, such as ethnic communities. Planning is underway for a possible launch of a new Energy Star residential dishwasher rebate program in July, in cooperation with the energy utilities. After July, 2009, all Energy Star labeled dishwashers will need to meet a water and energy consumption metric, which means that all Energy Star dishwashers will

also be water efficient. The Multifamily Toilet Rebate Program and educational messaging for single-family customers will focus on WaterSense labeled HET's (1.28 gallons per flush) and the FlushStar list (1.6 gallon per flush) will be phased out.

## Residential and Commercial Landscape Highlights

**Table 5: 2008 Landscape Customer Outreach**

Outreach Contact Type	Outreach Targets	Actual Outreach
Naturals Guides, Plant List & Soaker Hose Fact Sheet	58,000	56,645
Savvy Gardener Subscriptions	2,500	2,467
Savvy Gardener Class Attendance	300	225
Professional Trainings: •SPU Staff •Green Gardening Program	600 540 Professionals 75 Students	1,785 430 Professionals 79 Students
Lawn & Garden Hotline Questions	11,000	16,319
Earned Print Media Spots	15	16
NW Natural Yard Days (Number of Discounted Products Sold)	NA	68,977

**Table 6: 2008 Landscape Rebates**

Landscape Rebates	Number of Customers	Savings (gallons/day)
Single Family Homes	108	9,600
Single Family Non-Rebate	NA	21,055
Commercial (Including Multifamily)	44	16,506
Commercial Non-Rebate	NA	28,243
Total Savings		75,404

## New "Why Conserve" Messaging Developed

The SWP developed a "look", "identity" and key messages to assist in improving consistency and cohesiveness across all of the water conservation materials. In addition, SWP tested messaging to help gardeners understand how they can address climate change as an important, new reason to conserve. Unlike transportation and energy use, the climate change connection to water consumption is not as apparent for most customers. Landscaping practices that the SWP promotes already have the potential to both mitigate and help customers adapt to climate change but need clear explanations.

Climate change actions that were incorporated into outreach tools and partnerships include:

- We can meet the greater demand on our water resources resulting from climate change and population growth by using smart watering practices, building healthy soil and choosing the right plants.
- By building healthy soils with compost and mulch, gardens can store more carbon from the atmosphere and help decrease greenhouse gas emissions.
- Soils amended with compost hold more moisture, decreasing the amount of water needed in gardens and the demands on water supply.
- Choosing the right plants for the right place reduces the need for chemical fertilizers and pesticides which in their production contribute to global warming.
- Choosing the right plants also reduces summer watering and the demand on water supply.

## Savvy Gardener E-newsletter

By mid-2008, the newsletter had nearly 2000 subscribers and it was time to assess the newsletter's effectiveness and identify areas for improvement. SWP sent an electronic survey to subscribers and received 188 responses. We found that as a result of reading the newsletter, 40-48% of the respondents had applied mulch (40%), added compost to their soil (41%) and selected plants based on the sun, shade and soil in their garden (48%). These are all critical behaviors toward using less water in the garden. The summer newsletter took on a

new look, building off of original strengths and making changes to reflect the new brand identity work. In addition, the newsletter incorporated “climate smart” messaging in the form of a “climate smart tip” and feature stories. By years’ end the subscription base grew by almost 500 new people.

### **Nursery Partnerships: “Right Plant, Right Place”**

Gardeners frequently make plant choices based on aesthetic appeal. While this is important, it can translate into plants that struggle in full sun when they should be in shade or get water-logged because the gardener doesn’t understand how little water the plant needs. This can lead to customers using far more water than is necessary. Encouraging gardeners to instead use the “right plant, right place” concept correctly is a long-term effort.

Prior to developing the climate change messaging, SWP partnered with local nurseries including Furney’s (Des Moines), Molbak’s (Woodinville), Swansons (Seattle) and Sky Nursery (Shoreline) to distribute simple one-page fact sheets on choosing the “right plants for the right place.” These sheets described how gardeners could choose plants that match the sun, shade and soil conditions found in their yards. Sales and customer traffic at nurseries was especially low in spring 2008 given the very late spring.



*Nurseries grouped plants so customers could match the sun, shade and soil conditions of their yard.*

SWP partnered again with three of these nurseries from September 20 to October 31 to promote fall as the best time to plant and to repeat the message of right plant, right place. This time, climate change was the focus for both of these messages. Each nursery was given a very large sign, revised fact sheets and a new plant list describing the “right plant, right place” concept and the Climate Smart tagline. In turn, nurseries arranged plants according to their ideal site conditions (shade and sun) to provide easy solutions for gardeners. Promotion of the messages occurred through print advertising: two ads – one about fall planting and one about right plant right place – ran in the Seattle Times Pacific NW Magazine, as well as in papers that reach customers in Bothell/Kenmore, Woodinville, Kent, Covington/Maple Valley and Renton, Shoreline, North Seattle, Northgate, Ballard/Fremont and University. The messages also appeared in editorials, nursery websites and newsletters (including the Savvy Gardener newsletter, Woodinville Water District’s Pipeline and SPU’s @ Your Service).

Gauging the effectiveness of these partnerships is an ongoing challenge. While the nursery partners see the signage and factsheets as important information, it is hard to know if customers are making more informed choices as a result. To gain some insight, SWP and Swanson’s Nursery hosted a single focus group at the close of 2008. Participants were recruited off of a list of high water-using, gardening customers who had responded to our last regional water use survey. Findings showed that customers misunderstood the meaning of “climate smart” entirely and therefore it was not an effective hook for behavior change. More testing will be done with additional gardeners to develop a climate change connection with gardening.

### **Savvy Gardener Classes & Spring Garden Fair**

SWP hosted eight classes with a total of 225 attendees at nurseries and garden designers’ homes. Classes were developed to inspire gardeners with plant combinations for varying sun, soil and shade conditions and provide them with key practices for water conserving,



low maintenance gardens. Overall attendance was down, due to cool weather and slow nursery business.

The Spring Garden Fair, first started by the Woodinville Water District, expanded to include the Cascade Water Alliance and moved to Redmond City Hall. Nearly 800 people attended and participated in classes. The fair sold out of rain barrels and gave attendees opportunities to buy compost bins, native plants, gardening books as well as learn about related topics from partnering non-profit organizations.

### Professional Training In Natural Landscaping

SPU's county-wide professional training (funded by SPU drainage and solid waste utility funds, and the Local Hazardous Waste Management Program in King County) also promotes water-efficient landscape design, installation, and maintenance. In 2008, professional training focused on:

- environmentally friendly turf management practices;
- landscape design,
- installation and maintenance for both new construction and urban infill projects;
- implementing landscape management plans to conserve resources;
- design training at local community college horticulture programs and university landscape architecture programs;
- lunch-and-learn presentations for practicing landscape architects;
- builder trainings on proper site and soil preparation for conservation;
- combining best landscape practices with State-required stormwater management for Low Impact Development.

All of these trainings included water conservation best practices.

Classes, seminars, and field trainings reached a variety of professional audiences, including landscape architects, architects, developers, planners, engineers, builders, project managers, grading contractors, realtors,

landscape installation and maintenance contractors (including Spanish and Vietnamese-speaking professionals), and students preparing to enter these professions.

In 2008, 1,785 professionals participated at a total of 41 training events.



*Contractors learn how to install a compost blanket, to promote successful plant establishment on hillsides with poor soils and no irrigation.*

### Natural Lawn and Garden Hotline

The regional Hotline continued to be a resource to help customers use less water, avoid pesticides, build healthy soil and find "natural" solutions to gardening problems. The Hotline is jointly funded by the SWP, SPU Solid Waste Utility, and the King County Local Hazardous Waste Management Program. In 2008 the Garden Hotline had 6,884 contacts from the gardening public, answering 16,319 questions. 22.5% of calls in 2008 were from King County outside of Seattle.

### Northwest Natural Yard Days

Funded by the SWP, SPU Solid Waste Utility, King County and Suburban Cities Association, the fall promotion of mulching lawn mowers and other natural yard care products at regional retailers encouraged outdoor water use efficiency. Since the largest retailer, Home Depot, decided not to participate in 2008, sales are distinctly lower than in 2007. Comparing 2007

data without Home Depot, sales of products that improve water efficiency, such as soaker hoses, water wands and bark mulch were down in 2008. Sales of compost increased slightly.

### **Water Efficient Irrigation Program and Rebates**

The SWP continued to offer rebates on a wide range of water-efficient irrigation hardware. More than 100 households took advantage of the rebates, saving nearly 10,000 gallons per day. In 2008, rebate amounts were adjusted on controllers and rain sensors to reflect the decreasing cost of these technologies and to encourage the use of smart controllers over controllers that need to be manually adjusted. Smart controllers are weather- or soil-moisture-based controllers that automatically adjust the watering schedule based on weather and landscape conditions. They have been shown to cut water use by up to 30 percent.

In addition, staff conducted intensive outreach to commercial customers and to irrigation and landscape contractors who specialize in commercial properties. Forty-four commercial projects took place, saving nearly 17,000 gallons per day. Some of the projects completed or in progress in 2008 include: Issaquah School District (Water District 90); City of Burien Parks (Water District 20); Monte Villa Parkway (City of Bothell); Lake Washington School District (Northshore Utility District); and Calvary Cemetery (City of Seattle).

To market the rebates to residential irrigation customers, the program completed two direct mailings to approximately 12,000 customers: a postcard about smart controllers in July and a postcard about rain sensors in September. Program staff also continued to build relationships with local landscape and irrigation contractors, who are the most important source of referrals to the rebate program.

### **Irrigation Contractor Training**

Encouraging irrigation contractors to promote the SWP rebates and increasing contractors' expertise are key strategies of the Water Efficient Irrigation Program. In December, the SWP co-sponsored a week-long irrigation training series with the Washington Irrigation Contractors Association (WICA) and, for the

first time, with Cascade Water Alliance. Approximately 160 individuals attended one or more classes. The training included the only Spanish-language irrigation classes offered in western Washington. These Spanish-language classes have been some of the most popular classes since the SWP began offering them in 2007. In 2009, staff will work to expand training opportunities for landscape professionals in the region by collaborating with other organizations and local irrigation distributors.

### **Looking Ahead to 2009**

Due to budget constraints, no large-scale summer watering campaign is planned. Partnership efforts with garden writers and nurseries will continue, but at a lower intensity. Staff met with nursery partners during the winter to evaluate last fall's promotion and plan collaboratively for the spring campaign. The Savvy Gardener e-newsletter, web site and classes will be continued. The Spring Garden Fair will add booths and expand children's activities. The irrigation rebate program will continue to focus on commercial and multi-family customers with significant savings potential. In addition, staff will begin to research opportunities to improve the design and efficiency of new irrigation systems.



*Philip Paschke, SPU Commercial Conservation Program Manager, watches the penguins frolic in crystal clear recycled water, saving the region thousands of gallons per day.*

## Commercial, Industrial, and Institutional Highlights (other than landscape)

**Table 7: 2008 Commercial Hardware Savings**

Measure	Projects	Savings (gallons per day)
Restroom Measures	21	21,314
Greening Ethnic Businesses - Restroom	13	970
Refrigeration / Ice / Cooling	7	8,616
Laundry Systems	5	3,744
Process Water	2	6,333
Kitchen Measures	4	4,430
Water Features	1	15,394
Other Measures	3	44,690
New Construction Incentives	1	360
<b>Total from Incentive Projects</b>	<b>57</b>	<b>105,851</b>
Non-incentive Savings		26,030
<b>TOTAL</b>	<b>57</b>	<b>131,881</b>

### Commercial Applications Up But Completed Projects Down in 2008

The national economic downturn contributed to a slow year for the Water Smart Technology Program. While many rebate project applications were received early in the year, businesses, by the end of the year, chose to postpone their projects. Several projects did come through, including The Seattle Times facility in Bothell, which installed a new cooling tower water treatment system that virtually eliminates water loss outside of evaporation, and mostly eliminates chemical use in the cooling tower. Other projects include the Hilton Hotel in Highline Water District, the Spruce Motel in Water District 125, Wilder Elementary School in Woodinville Water District, and Juanita High School in Northshore Utility District. Three large projects in

Seattle account for the sizable savings in “Other Measures” in Table 7 above: new air compressor cooling at NuCor Steel, a much more efficient penguin exhibit at the Woodland Park Zoo and new high efficiency lab equipment at Fred Hutchinson Cancer Research Center.

### Two Events for Commercial/Industrial Customers

The SWP, in partnership with Seattle City Light and Puget Sound Energy, held a Green Properties Forum in May. Forty property managers learned about ways to save money through resource conservation programs and activities. Water, energy, solid waste, water quality issues, and climate change impacts were covered. A day-long workshop titled “Water Efficiency: Driving Sustainable Buildings and Sites” took place in September. A full house of 100 people gathered to hear topics including water efficient irrigation, new directions in efficiency technology and national performance standards, low impact development strategies, a case study of a LEED platinum development in Victoria with an innovative on-site water treatment facility, and ways to formulate persuasive language to increase the effectiveness of conservation programs.

### Commercial Toilets for Ethnic Businesses

Thirteen Free Commercial Toilet Program projects were completed by ethnic businesses around the SWP service territory through a program activity known as Greening Ethnic Businesses. The SWP provides multi-lingual assistance to ethnic businesses in the regional service territory. Businesses that participated received not only free toilets, but installation of free aerators and pre-rinse sprayheads where appropriate.

### Testing Newly Released Toilet Models

A downtown Seattle office tower tested two newly released models of flushometer High Efficiency Toilet (HET) toilets. Ten of each model were installed, and performance and user satisfaction are being monitored by building engineers. When the building operators have determined the better performing toilet, the remaining toilets in the 46 story building will be retrofitted with the selected model. For other building own-

ers and operators who are looking to become LEED Existing Building certified, and who want to reduce water consumption in their buildings, there will be less uncertainty with toilet performance issues in this very new category of HET fixtures.

### **Efficient Urinal Research**

Performance testing of new technologies, including some that use as little as an eighth of a gallon per flush, continued in 2008. The results and recommendations will be used to help inform commercial customers and guide expansion of the urinal retrofit program in 2009.

### **New Brochure Mailed to Businesses**

More than 600 businesses and property managers received a new brochure marketing commercial incentive programs. This brochure is the first new marketing piece for the commercial sector in several years. Complete with case studies and testimonials from projects in wholesale water districts, the handout provides up to date information on water conservation programs available to the commercial and multifamily sectors in the SWP.

### **Incentives for New Construction Projects**

Interest continues to build slowly in this incentive program to further the efficiency of new construction projects in the SWP area. Several projects were completed in new commercial and multifamily buildings in 2008. Word of the program reached design and building professionals through the Seattle Department of Planning and Development newsletter articles and [www.savingwater.org](http://www.savingwater.org) and [resourceventure.org](http://resourceventure.org) websites, and other online communication avenues.

### **Looking Ahead to 2009**

Plans are underway to partner with Puget Sound Energy and Seattle City Light on a retrofit of new higher efficiency food service sprayheads. Many of the sprayheads provided a few years ago are already reaching the end of their useful life, and greater savings can be obtained by installing the new generation of sprayheads using less than 1 gallon per minute. Commercial food service equipment could receive more emphasis than in previous years due to new water conservation rebates being offered for commercial dishwashers

and ice machines, and a new Commercial Kitchen Group partnership with local water and energy utilities working together to consolidate rebates into a shared program. Efforts to acquire more SWP participants in the Greening Ethnic Businesses program will continue. Incentives for water efficiency in new construction, begun in 2008, will be expanded, along with increased program awareness in the design and building community. Several large commercial and industrial water savings projects look to be cost effective, and will be awaiting the customer's decision regarding their investments in these difficult economic times.

## **General Customer Outreach and Messaging**

Customers were directed to the [www.savingwater.org](http://www.savingwater.org) site by a wide variety of program messages, including newsletters, bill messages, media spots, brochures, and presentations. A special effort was made to encourage media coverage of the residential indoor and landscape conservation measures. Leveraging news and feature stories with a small amount of paid advertising continued to prove to be an effective tool to broaden customer outreach and messaging.

Partnerships with the garden centers, plumbing and home improvement outlets, and major appliance dealers was another key outreach strategy. Many customers rely on and prefer to get water efficiency information from these trusted sources. Using popular local celebrities like garden show hosts and garden writers to help spread the conservation message further increased customer participation. A regional television ad aired in January to bolster last fall's campaign to invite people into retail stores to see or 'test-drive' Water-Sense toilets.

SPU and the SWP are both members and major contributors to the Partnership for Water Conservation, a non-profit organization of utilities, environmental organizations and businesses that encourage water conservation in the Puget Sound region.

### **Looking Ahead to 2009**

Customer messaging in 2009 will be greatly reduced. Revised budgets require deferral of plans for large scale

public messaging. However, a ramp-up of partnerships with the energy utilities to save hot water is planned. Landscaping practices that the SWP promotes have the potential to both mitigate - and help customers adapt to - climate change.

## Youth Education

**Table 8: 2008 Youth Education Performance**

Activity	Outreach Target	Actual Outreach
Activity Books Distributed	NA	500
WaterBusters Game Hits	NA	2,762

Efforts continued to educate young people about water conservation and environmental stewardship in 2008. Bookmarks were distributed to promote the SWP Kid’s Web Page, designed for people aged 7-17. The book-marks were distributed at utility customer counters, events and schools. Shared Waters activity books and shower timers were also distributed.

Cooperation with the Woodland Park Zoo continued in the form of information-sharing. In 2007 the Zoo included water conservation messages and device distribution as part of its regional Maasai Journey educational effort during the peak summer visiting season. In early 2008 SWP staff collaborated with the Zoo as they were selecting their summer message theme, which built on water awareness and conservation.

The SWP participated in a regional youth environmental education initiative with the Partnership for Water Conservation, a non-profit organization of utilities, environmental organizations and businesses that encourage water conservation in the Puget Sound region. The Partnership, with leadership from SWP, began to examine options for creating a multi-county schools program that would provide water conservation education tools for teachers throughout the Puget Sound Region. Mid-year, however the Partnership began a strategic planning process, and postponed youth education initiatives until the completion of the new plan.

## Looking Ahead to 2009

The SWP will continue to maintain the youth education pages on savingwater.org, distribute bookmarks and Shared Waters activity books, and consider opportunities as they arise. The SWP will monitor the regional youth environmental education initiative with the Partnership for Water Conservation.

## Evaluation and Monitoring

### 2007 Showerhead Program Evaluation

Puget Sound Energy and Seattle City Light conducted customer surveys to determine installation rates and customer satisfaction with the product, delivery strategy, and marketing of the 2007 showerhead & aerator replacement program. A draft program evaluation report has been completed by program partners Seattle City Light and Puget Sound Energy. The final report will be available in 2009.

### Evaluation Planning for Landscape Programs

Over the life of the 1% Water Conservation programs, staff have used many forms of evaluation to assess customer awareness, knowledge and behavior change in residential landscapes. An effort to summarize this work in a report has begun. The report is expected to be especially helpful to wholesale partners in understanding the complex nature of affecting change in customers’ water use habits. Development of the report has been helpful to staff in identifying evaluation gaps as well as important continuing methods of evaluation. As a follow up to these recommendations, staff began development of a short set of key indicators to monitor behavior change on an annual basis. Prior to this, SWP has executed large and costly surveys that are several years apart. While these surveys are more comprehensive, they have not allowed staff to assess the impacts of the landscape programs on a more immediate basis.

The 2007 annual accomplishments report was issued.

## Looking Ahead to 2009

Residential and commercial programs will continue to track and monitor their progress and implement refinements. Budget constraints may limit more extensive program evaluation.

# 2008 OUTREACH HIGHLIGHTS



The "Grow Your Business" post card was mailed to landscape contractors to encourage them to market Water Efficient Irrigation Program rebates.



September intermittent rains prompted this successful mailing to irrigation customers.

## Multifamily Toilet Program

What Property Owners and Managers are Saying

<p><b>The Nautica Condominiums</b> Seattle</p> <p>56 Units Reduced its water use by 43% "Our water maintenance was taking on. Replacements money, with the rising cost of utilities. We've saved over \$20,000 per year, and everybody's happy with the new toilets." Gerald Whalen, 2011 President Replaced 117 toilets</p>	<p><b>Heatherstone Park Apartments</b> Shoreline</p> <p>28 Units Reduced its water use by 25% "We endorsed the Saving Water Partnership Program and saw immediate results both lowering our utility bills and increasing our residents' satisfaction. Most exciting is that our water/sewer bill is 25% lower which is an instant value add for the property. We increased our entire rent by under a year." Janet Swaine, Principal of Pacific Real Estate Advisors, Inc. Replaced 30 toilets</p>	<p><b>Jan Tun Apartments</b> Seattle</p> <p>14 Units Reduced its water use by 25% "The program is ridiculously easy. Not only does it save on water and sewer bills, it also saves on maintenance." Chris Buchel, Property Manager Replaced 14 toilets</p>
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**FREE Toilets or \$100 Rebate**  
Typical project savings range from 15-35%

**Saving Water Partnership**  
Seattle and Participating Local Water Utilities  
For more information call (206) 615-1282 or visit [www.savingwater.org](http://www.savingwater.org)

This new case study flier helped attract participants to the multifamily program.

## Save With Every Flush

For multi-family property owners in the Saving Water Partnership area with 4 units or more.

Install a WaterSense Toilet and Lower Your Water Bills

Save up to 35% on your apartment building's water bills. You have the option of receiving **FREE Toilets\*** OR a **\$100 Rebate** for a WaterSense labeled high-efficiency toilet (HET).

**Saving Water Partnership**  
Seattle and Participating Local Water Utilities

\*Two toilets are 1.6 gpf.

**The Nautica Condominiums**

56 units, replaced 117 toilets. Water use reduced by 43%.  
"The water maintenance was saving our operations money, with the rising cost of utilities. We've saved over \$20,000 per year, and everybody's happy with the new toilets."  
Gerald Whalen, 2011 President

For more information please call (206) 615-1282 or visit [www.savingwater.org](http://www.savingwater.org)

This ad, published in newspapers for multifamily property owners and managers, raised awareness and generated toilet rebate applications.



Customers receive a special learning opportunity during Savvy Gardener classes held at Stacie Crooks' home.

The Savvy Gardener e-newsletter was redesigned to add more graphics and tools based on subscriber feedback.



Waterwise plants in Stacie Crooks' Shoreline garden. Ms. Crooks of Crooks Garden Design teaches classes in her garden for the Saving Water Partnership.

# SEATTLE REGIONAL WATER CONSERVATION SERVICE AREA



*Saving Water Partnership*

Seattle and Participating Local Water Utilities

[www.savingwater.org](http://www.savingwater.org)

## SAVING WATER PARTNERSHIP:

- Cedar River Water & Sewer District
- City of Bothell
- City of Duvall
- City of Mercer Island
- Coal Creek Utility District
- Highline Water District
- Northshore Utility District
- Olympic View Water & Sewer District
- Seattle Public Utilities
- Shoreline Water District
- Soos Creek Water & Sewer District
- Water District Number 20
- Water District Number 45
- Water District Number 49
- Water District Number 90
- Water District Number 119
- Water District Number 125
- Woodinville Water District

### Report prepared by:

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