

A Better Way to Beautiful



Regional 1% Water
Conservation Program

2005 Annual Report

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Acknowledgements

Seattle Public Utilities:

Chuck Clarke, Director, Seattle Public Utilities

Sharon White, Deputy Director, Customer Service Branch
Lisa Espinosa, Director, Customer Programs and Contracts Management Division
Julie Burman, Water Conservation Business Area Manager
Richard Gustav, Resource Conservation Manager
Al Dietemann, Water Conservation Team Leader

Seattle Water System Wholesale Customer Conservation Technical Forum:

Debbie Rannfeldt, Chair, Woodinville Water District
Sean Vance, Cedar River Water & Sewer District
Barbara Petersen, Coal Creek Utility District
Greg Wilson, Highline Water District
Carl Lunak, Northshore Water District
Bob Heivilin, Shoreline Water District
Marci Oda, Soos Creek Water & Sewer District
Glen Boettcher, City of Mercer Island
Astrid Perry, WD 119
Dick Swaab, WD 20
Tom Hoffman WD 90

Seattle Public Utilities Staff Contributors:

Cornell Amaya	Arece Hampton	Philip Paschke
David Broustis	Mialee Jose	Tracey Rowland
Liz Fikejs	Nota Lucas	Donald Saito
Billie Fisher	David McDonald	Jenna Smith
Bruce Flory	Mike Mercer	Carl Woestwin

For more information:

www.savingwater.org (206) 684-SAVE
or the Natural Lawn & Garden Hotline (206) 633-0224

Detailed extracts of program specific data can be made available upon request. For TTY assistance please call (206) 233-7241. This information can be made available on request to accommodate people with disabilities and those who need language assistance.



2005 Water Conservation Year in Review

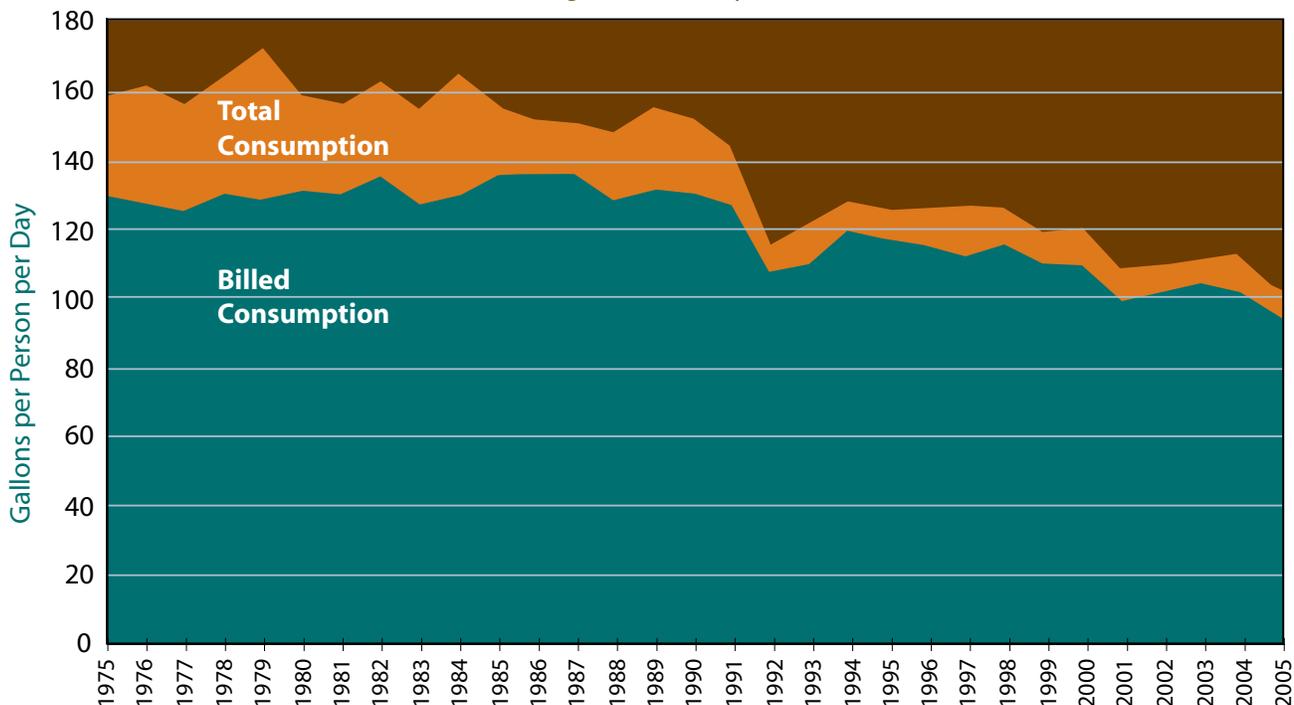
Summary

Excellent progress on regional water conservation continued in 2005, with completion of the fifth year of the 1% Program (2000-2010). Regional per capita use is continuing to decline when normalized for variation in weather conditions. The Program continues to be close to target to meet its 2010 water saving goal.

The first chart below shows how a combination of factors including the 1% Program, have affected per capita use since 1975. The strong dip seen in the chart in 1992 was due to a mandatory lawn watering ban in that drought year. Voluntary curtailment of water use associated with a second drought contributed to another notable decline in water use in 2001. With these dips removed, a steady per capita consumption decline emerges consistent with the goal of the 1% program. The second chart provides an overall perspective of declining regional water consumption in the context of a continuing rise in population served.

Total and Billed Annual Average Consumption per Capita

Seattle Regional Water System: 1975-2005

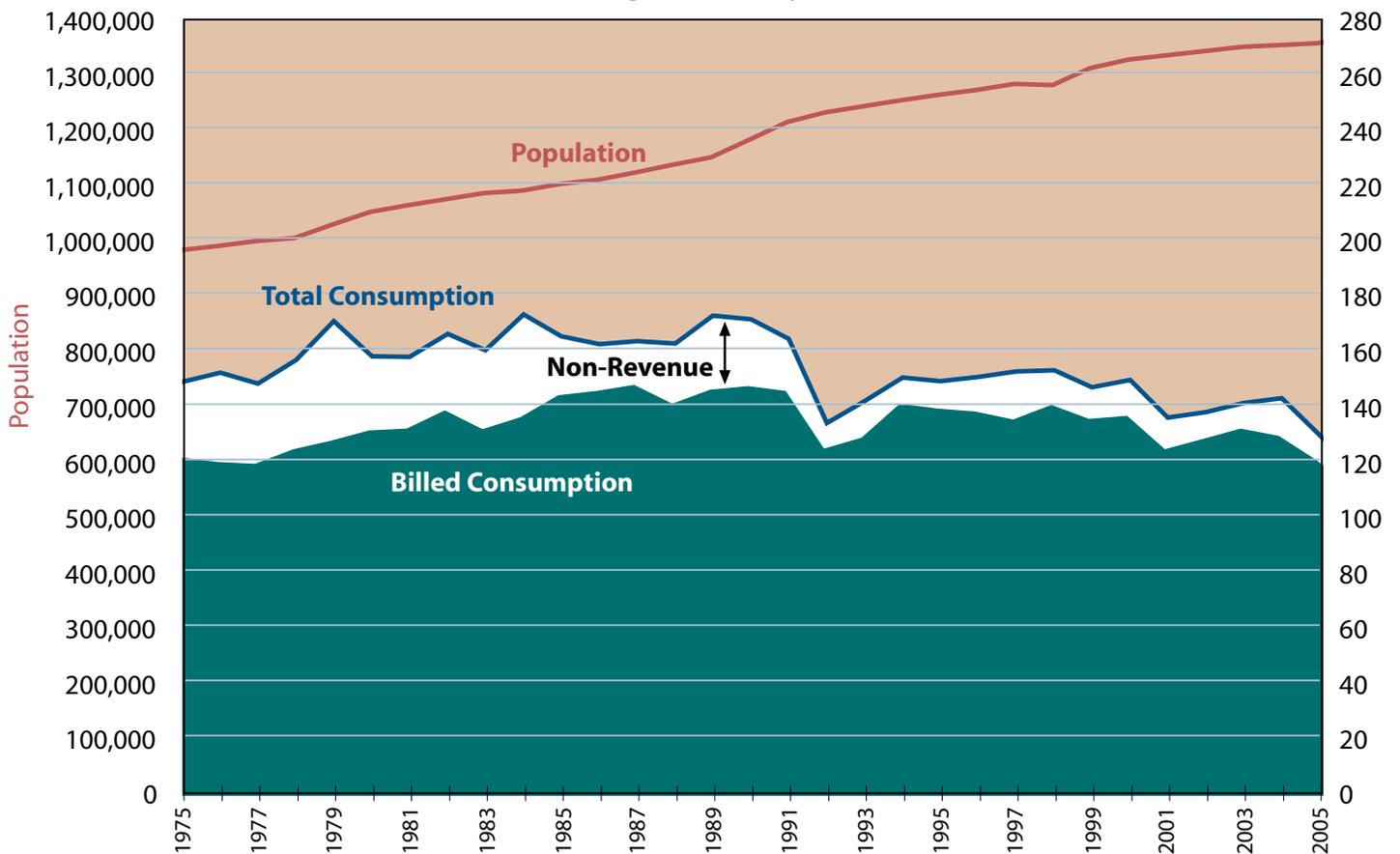


Regional 1% Program Goal and Objectives

The regional 1% Water Conservation Program (1% Program) is sponsored by the Saving Water Partnership (SWP). This Partnership includes the City of Seattle and a group of 17 utilities purchasing wholesale water from the City of Seattle. Five Cascade Water Alliance (CWA) utilities that were part of the program from 2000-2003 left the 1% Program in 2004. Accordingly, the 1% Program savings targets have been reduced by the ratio of the remaining population served to the original population served. Seattle Public Utilities administers the 1% Program in collaboration with participating wholesale utility customers, under terms of long-term water supply contracts.

Growth in Population and Water Consumption

Seattle Regional Water System: 1975-2005



The long-term goal of the 1% Program is to keep water demand at the end of 2010 the same level as it was in 2000, despite growth in population and economic activity. To achieve this goal based on the forecasted growth rates at the time of program initiation, three specific target objectives were developed to track program achievements:

- Reduce peak season per capita average consumption 1% per year from 2000 to 2010;
- Achieve total programmatic conservation savings (as adjusted following the departure of CWA utilities) of 14.5 million gallons per day (MGD) peak season savings (11.0 MGD annual average) in the ten years from 2000 through 2010;
- Achieve annual programmatic conservation savings targets. The target for 2005 was 1.2 MGD peak season savings (0.9 MGD annual average).

The 1% target was selected to achieve a number of objectives, including:

- **Keeping up with demand.** If each person and business in the region becomes 10% more water efficient over the next ten years, the region will save approximately 14.5 million gallons of drinking water per day in the peak season (11.0 MGD of annual average gallons).
- **Resource stewardship and endangered species protection.** Leveling out the impact of growth on the region's water supplies means there is less need for additional river diversions, 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 to these goals for governmental agencies whose operations 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 demand 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 these programmatic savings are largely technology based, savings can be obtained with certainty.

The regional 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. In 2004, the ten year savings goal and the respective annual savings targets were adjusted downward after five wholesale customers withdrew from the 1% program under terms of a new Cascade Water Alliance contract.

2005 Program Measures and Strategies

The 2005 1% Program fixture and equipment rebate programs for residential and commercial customers expanded upon 2004 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 assistance 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, new web and hotline resources, seminars and workshops, agency and trade association partnerships and a host of targeted promotions.

2005 Savings Targets

Water system demand reduction comes from several sources: savings from water rates and changes in customer water use behaviors, plumbing codes, hardware programs, utility non-revenue water use, and other savings such as the impact of the economy on water use. The 1% Program focuses on customer water use behaviors and customer water using equipment.

The Saving Water Partnership has an established goal of reducing per capita water use in the regional service area by 1% every year through 2010. By implementing the 1% Program and despite a forecasted 10% growth in regional population over this same time frame, water withdrawn from the Tolt and Cedar River supply sources will be no greater in 2010 than in year 2000, providing significant environmental benefits for fish and other riparian resources. More detailed objectives and strategies for the 10-year program and beyond are presented in the Ten Year Conservation Program Plan (Seattle Public Utilities, 2002), and in previous annual reports issued beginning in 2001.

For 2005, the annual demand reduction target was 0.9 Million Gallons per Day (MGD) which is equal to a 1.2 MGD reduction during peak season. In 2005, to be consistent with reporting of code, price, and non-revenue water savings, and to mesh with

ongoing water system planning, an annual average savings target for the 1% program was adopted and has replaced peak savings as the tracking measure. The original 14.5 MGD Peak Season goal for the life of the 1% program translates to an 11.0 MGD annual average goal.

Conservation Measure Selection and Modification

In 1998, SPU completed a detailed econometric analysis of water conservation potential, the Conservation Potential Assessment (CPA, Seattle Public Utilities, 1998). The CPA provides a rigorous analysis of the cost, volume, and reliability of conservation savings available within Seattle's wholesale and direct service areas. The CPA is an analytical tool used to help direct customer demand reduction programs towards the most cost-effective conservation opportunities.

The 1998 CPA is being updated. It will become a key tool to help shape future conservation programs. In addition to calculating water savings and levelized costs for 135 conservation measures, the updated CPA will incorporate efficiencies expected from the State Building Code relative to plumbing fixtures. These savings will be built into the new regional water demand forecast. The 2006 CPA will calculate other benefits obtained by conservation measures including savings from reductions in demand for electricity, storm water and wastewater. It will rank conservation measures according to the marginal cost of achieving a unit of water savings. The 2006 CPA analysis will be used to:

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

The 2006 CPA will provide input into a new water supply planning model that evaluates the costs of new water supply alternatives, including additional conservation programs. The new model will use a "value score" that captures the non-monetary benefits of water supply alternatives.

2005 Conservation Measures and Strategies

Conservation savings have resulted from improvements in water use efficiency in residential, commercial, industrial, institutional and landscape customer sectors. The 1% Program is implementing conservation programs to improve customer water use efficiency through strategies that integrate information, education, incentives, codes and regulations. Table One on the next page provides details on the types of measures and the strategies used in 2005.



An example of a media strategy is Natural Lawn Care: "A better way to beautiful" educational campaign.

Each customer sector has a unique pattern of annual water usage. Water use in the residential and commercial landscape sectors is heavily peak-season oriented, as landscapes are watered mainly during the hot summer months. Some commercial process water uses increase during the summer months, while others may only increase slightly or remain constant year-round. Examples of water uses that increase during the peak season include hotel rooms, other tourism-related businesses, canning and bottling, and cooling. Examples of water uses that remain constant year-round include office building restrooms, laboratories, and commercial and industrial process water. While some residential indoor water uses such as showering tend to increase during the summer months, the increase is not significant enough to differentiate peak season usage from year-round use.

Table 1
2005 Conservation Measures and Strategies

Types of Measures	Types of Strategies
RESIDENTIAL INDOOR	
<ul style="list-style-type: none"> ■ Replace washing machines ■ Replace toilets & faucets (single family & multifamily) ■ Fix leaks ■ Change behaviors (flushes, faucet use, shower time, full loads) 	<ul style="list-style-type: none"> ■ WashWise rebates ■ Multifamily toilet rebates ■ Building owner and operator targeting ■ Behavior messaging ■ Collaboration with energy utilities ■ Program recruiting through media, mailing ■ Promotion of Flush Star toilet performance
RESIDENTIAL LANDSCAPE	
<ul style="list-style-type: none"> ■ Improve watering efficiency <ul style="list-style-type: none"> ■ Irrigation system performance ■ Landscape watering behaviors ■ Practices that affect watering (e.g. mulch and soil prep) 	<ul style="list-style-type: none"> ■ Irrigation system efficiency rebates ■ Aesthetic-oriented media campaign ■ Regional sales events ■ Retailer partnerships (nurseries & home & garden centers) ■ Technical materials ■ High peak users targeting
COMMERCIAL PROCESS/DOMESTIC	
<ul style="list-style-type: none"> ■ Upgrade toilets and other domestic water use fixtures ■ Upgrade efficiency of equipment for cooling, process other industrial uses ■ Improve cooling performance ■ Upgrade efficiency of specific water consuming medical and lab equipment ■ Replace pre-rinse spray heads 	<ul style="list-style-type: none"> ■ Small and large business targeting ■ Restaurant targeting and other users of inefficient pre-rinse spray heads ■ Project recognition through BEST awards program ■ Outreach to chambers of commerce and other business groups through Resource Venture ■ Technical assistance, assessments, workshops ■ Financial incentives (custom projects & standard rebates) ■ Bonus incentives to increase specific measure participation ■ Targeted promotion through vendors, trade groups, agencies ■ End-use metering wherever possible to build cost-effective conservation recommendations
COMMERCIAL LANDSCAPE	
<ul style="list-style-type: none"> ■ Upgrade irrigation equipment (controls, rain sensors, drip) ■ Improve scheduling & maintenance 	<ul style="list-style-type: none"> ■ Assessments, workshops and technical assistance ■ Financial incentives (custom projects and set rebates) ■ Targeted recruiting and promotion ■ Market transformation by establishing and building vendor and contractor relationships
Supporting Elements	
YOUTH EDUCATION (Supports savings in other sectors)	
<ul style="list-style-type: none"> ■ Build conservation awareness and residential measures 	<ul style="list-style-type: none"> ■ Educator training and resources ■ Classroom and take-home materials ■ Educational TV PSA for kids ■ Interactive activities
OVERALL MESSAGING (Supports savings in other sectors)	
<ul style="list-style-type: none"> ■ Conservation awareness supporting recruitment of residential and commercial customers 	<ul style="list-style-type: none"> ■ Targeted marketing ■ Collaboration with Puget Sound regional water utilities ■ Festivals

2005 Program Performance

Cumulative long-term¹ water savings remain on track to reach the long term goal stated in the Ten Year Water Conservation Program Plan. 1% Program savings of 0.94 MGD were achieved in 2005, slightly above the annual target of 0.9 MGD. Total long term customer savings for 2005 was 2.4 MGD. This consists of the savings from the 1% Program, as well as price, code, and Seattle-only conservation. Table 2 shows the various components of the estimated long-term savings achieved in 2005, along with expenditures:

Table 2
New Water Savings Achieved in 2005 and Program Cost

Component	Annual Average Million Gallons Per Day	Program Cost in thousands of \$
Regional 1% Conservation Program		
Hardware Incentives		
Residential Indoor	0.27	\$ 1,267
Landscape	0.18	\$ 512
Commercial Non-Landscape	0.17	\$ 850
Total Hardware	0.61	\$ 2,629
Behavior	0.33	\$ 481
Total 1% Conservation Program	0.94	\$ 3,110
Seattle Ordinance # 120532 (I-63 Settlement Ordinance)	0.1	\$ 966
Total Conservation Programs	1.0	\$ 4,076
Price Elasticity ²	1.1	
Plumbing Code ³	0.3	
Total Customer Long-Term Savings	2.4	
System Operation Savings ⁴	6.2	
TOTAL SAVINGS FOR 2005	8.6	

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 0.61 MGD annual average) in 2005.

¹ As opposed to short-term transitory savings such as those associated with water curtailment events or economic downturns.

² Price effects and behavior change savings components are so interrelated that they can't be easily separated. The behavior savings shown above came from remaining savings after subtracting all the other savings listed in the table above from the total savings. It is likely, but hard to quantify, that some of the savings shown as price were obtained by behavior change induced by a price response.

³ 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, since they all relate to hardware change out.

⁴ System operation use was reduced significantly in 2005 in response to drought risks in the early Spring from record low snow pack.

Price and Behavioral Savings include permanent conservation achieved from changes in customer water-using behaviors. These savings are difficult to separate from each other since price has a strong influence in stimulating customers to change water using behaviors. Customer surveys will be conducted in 2006 to better quantify these combined savings, estimated to be 1.4 MGD annual average, in 2005. Price savings came from using the price elasticity parameters from SPU's water demand forecast model.

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 0.3 MGD code savings shown would happen with or without a regional conservation program just 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. Refinements in the method of calculating code savings during the process of updating the CPA has resulted in a decrease in these cumulative savings compared to the figure reported in the 2004 Annual Report. This adjustment was made in consideration of customer research indicating that the rate of replacement of plumbing fixtures was less than previously estimated. The 2006 CPA will be used to estimate future code savings, using new customer research to provide an even greater level of confidence.

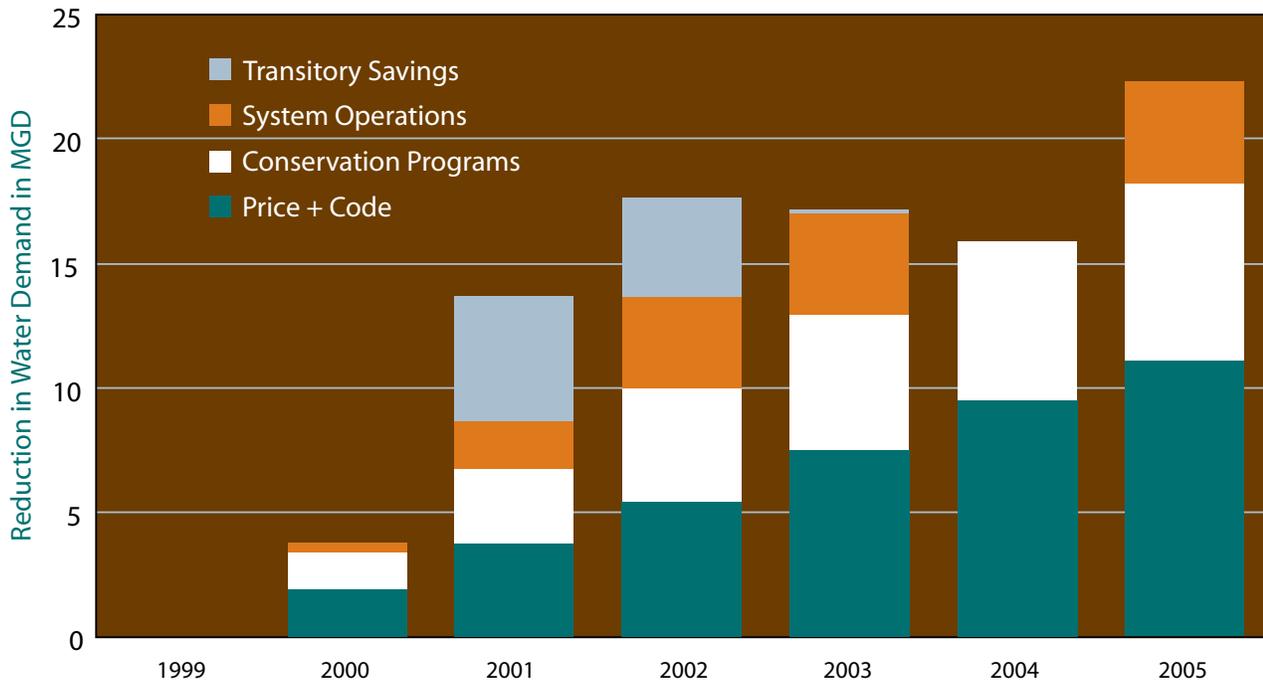
Seattle-Only Low Income and Seattle-Only Accelerated savings are not considered part of the 1% regional program. Rather, they are savings funded solely by Seattle and obtained within the Seattle direct service area in addition to (on top of) the 1% savings. The Mayor and Seattle City Council have directed SPU to go beyond the regional program and accelerate savings for Seattle customers, with an emphasis on low income. Funding comes 100% from direct service ratepayers (no wholesale customer rate dollars are expended for this program, yet the region benefits from these water savings). A portion of the cost of the Conservation Potential Assessment (CPA) was funded from this Seattle-only program.

System Savings (i.e., a reduction in non-revenue water from the previous year) are obtained from reductions in water used for water main and tank flushing, water main leaks, accurate metering, and a variety of actions not related to specific customer demand reduction activities. This water is not being sold to customers, hence the name *non-revenue water*, so it is not considered a component of the 1% conservation program. Some of these savings are permanent, such as reservoir covering and leak repair. The majority of the savings fluctuate from year to year, and some years (such as 2004) were negative savings. These are not permanent water savings, but vary from year to year with water quality conditions. System savings were rather dramatic in 2005 due to special attention being made to minimize overflows and water quality flushing during a shortage situation. Another reason for the large amount of apparent savings in 2005 is that non-revenue water in 2004 (the point of comparison) was unusually high.

Cumulative Savings

The following chart depicts cumulative water savings. This chart is best used as a picture of historical progress, rather than as an absolute count of cumulative savings. Long-term customer savings, including rate and code effects, (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 use. System savings come from a variety of sources such as reducing leaks and lining/covering reservoirs, improved meter accuracy, and modifications to how water mains and reservoirs are flushed to maintain the highest water quality. System savings since 1990 have fluctuated from year to year, but have averaged about 12 MGD on an annual average basis.

Cumulative Water Savings¹ Since 1990



The savings breakout in the chart above was estimated as follows:

- Price - 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.
- 1% Program - see individual program estimates from this report
- System - analysis of water system operation use
- Transitory Savings - analysis of post-drought experience.

Progress in Meeting the Regional 1% Goal

Table 3 shows the year-by-year savings targets and actual accomplishments of the Regional 1% Program leading up to the overall program goal in 2010 established in the Ten Year Conservation Program Plan. Note that from now on, savings targets and accomplishments will be measured in units of *average annual* MGD. Expressing the 1% Program goals in *peak season* MGD resulted in some confusion when compared with estimates of water demand, firm yield, and other components of conservation savings (price, code, reductions in non-revenue water) that have always been expressed in annual average MGD. The 11 MGD of annual average cumulative savings for 2010 shown in Table 3 is equivalent to the original 1% Program goal of 14.5 MGD peak season savings.

¹This chart above provides historical progress rather than an absolute count of cumulative savings. All program categories are shown as annual average savings.

Cumulative savings at the end of 2005 are slightly lower than the target savings. Actual 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 therefore on-target to reach the 2010 goal.

Table 3
Regional 1% Program Cumulative Savings

	2000-01 "Ramp-Up" 2-Year Total	2002	2003	2004	2005	2006	2007	2008	2009	2010
Actual 1% Savings Cumulative in MGD	2.1	3.1	3.7	4.4	5.3					
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*

*Note: Original 1% Program goal was 14.5 MGD Peak Season cumulative through year 2010, following adjustment for departure of CWA utilities from the regional conservation program. 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 original 14.5 MGD Peak Season goal is equivalent to an 11.0 MGD annual average goal.

2005 Detailed Program Accomplishments

Program savings and accomplishments were strong across all customer sectors in 2005. In addition, program changes were initiated in a number of areas that will strengthen service delivery and conservation savings in 2006. This Chapter provides detailed results of conservation program activity in each major customer sector.

Highlights:

- The Plant List was completed and printed twice in 2005. This proved to be especially important because of the statewide drought declaration in the Spring due to record low snow pack. The Plant List received a conservation award from the American Water Works Association (AWWA) in 2006.
- The landscape irrigation rebate program initiated significant customer service improvements by standardizing rebates for the most common irrigation hardware efficiency measures. The benefits of these improvements began showing in late 2005 and should make a big difference in 2006.
- A free toilet option for commercial customers was offered for the first time in 2005, paralleling a similar offer for multifamily residential buildings. Many small businesses took advantage of this new offer in 2005.
- The commercial pre-rinse spray head program for food-handling businesses was completed in 2005. This proved to be a very successful partnership with Puget Sound Energy that benefited thousands of businesses.
- The Waterbusters on-line interactive water conservation game was upgraded and promoted aggressively through youth-oriented TV. The game also received a conservation award from AWWA in 2006.
- The WashWise program issued over 6,000 rebates, including a \$500 rebate to the program's 50,000th customer.
- Education outreach began for Flushstar, the SWP efficiency standard for high performing low water use toilets.
- The Saving Water Partnership's www.savingwater.org web site was redesigned and upgraded, making it much more user friendly and attractive.

2005 Residential and Commercial Landscape Highlights

Landscape Customer Outreach

Outreach Contact Type	Outreach Target	Actual Outreach
Naturals Guides & Plant List	70,000	80,000
Classes and Trainings	360	642
Lawn & Garden Hotline Calls	8,000	8,552
Earned Media Spots	20	36
Soaker Hose Fact Sheet	3,000	5,000

Publications

The Plant List, the newest Natural Lawn & Garden Guide, was launched at the 2005 Flower & Garden Show. Developed with the assistance of the Great Plant Picks horticultural education program, The Plant List assists customers in selecting the right plant for the right place in their landscapes. It has been a resounding success, with over 30,000 copies distributed during the

year, was featured in a number of local garden newspaper and magazine columns, and received a communications award from the American Water Works Association. The Plant List is organized into four categories:

- Wet Winter/Dry Summer Plants,
- Moisture-Loving Plants,
- Favorite Pacific Northwest Native Plants, and
- Drought-Tolerant Plants.

In 2000, SWP developed a Soaker Hose Fact Sheet. While it provided important proper installation and use information, too many customers weren't reading it and were instead using soaker hoses incorrectly and potentially increasing their water use. A new fact sheet was completed in 2005 that is very visual and succinct. Molbak's nursery in Woodinville used the fact sheet tagline, "Good for your garden, your wallet, and our environment," in their summer print ads for soaker hose sales. Approximately 5000 copies of the revised fact sheet were distributed within six months, by nurseries, SWP utilities and the Natural Lawn & Garden Hotline.

Landscape Plans and Design

The SWP began offering technical assistance to developers of new properties in 2005 with the purpose of promoting new landscapes designed to have limited resource impacts. Assistance is targeted to projects that can provide demonstration opportunities to the public. In 2005, landscape plans were reviewed for the Ashworth Cottages, a LEED development north of Green Lake. Technical assistance was provided by SPU staff to improve the landscapes at the north and south transfer stations. Finally, technical assistance was provided to the Seattle Parks Department and the Pinehurst neighborhood to improve the resource efficiency of a new pocket park.

Training Classes

With the release of The Plant List, 17 classes were held in 2005 to inspire and educate gardeners about specific plants that will thrive in their gardens with little or no water after establishment. The classes were designed to promote The Plant List and its 240 plant ideas. Half of these classes were offered April through May (the peak of plant buying season), and the other half coincided with the fall Northwest Natural Yard Days promotion. The Yard Days promotion included the message, "fall is for planting." Three of the classes were designed for larger audiences and attracted 320 gardeners. The other classes were developed with smaller groups in mind. These classes allowed more opportunities to ask questions, allowed gardeners to experience a privately-owned drought tolerant garden in person and to see a variety of drip irrigation systems at work in a public garden. In all, 642 people attended these classes by year's end.

Media Messaging

Local area garden columnists have encouraged and educated our customers about "natural" approaches to gardening for some time. In 2005, an expanded effort was made by the landscape staff to obtain earned media articles. This strategy was highly successful in reaching customers without reliance on expensive paid ads. The media have been enthusiastic partners in helping SWP promote practices toward that end. Fifteen print and radio stories directly referenced Partnership resources such as our brochures or web site. In addition, there were 21 other print and radio stories that carried water conserving messages inspired by interviews with our landscape staff, bringing the total number of earned media spots to 36 for all of 2005. Garden columnists rose to the occasion the first half of 2005 with concerns about low snow pack. From February 24 through July 2, there were a total of 28 articles suggesting certain plants, websites, books and strategies on conserving water in residential landscapes - many referencing the Natural Lawn & Garden Guides (produced by SWP), the Natural Lawn & Garden Hotline (partly funded by SWP), and the savingwater.org web site. On June 4 and 5, the most popular columnists in the Seattle P.I. and Seattle Times each wrote about different approaches for healthy but waterwise gardens. Ann Lovejoy's

article focused on garden beds in, "The Organic Garden: Give your water-addicted landscape a fix of compost mulch." Val Easton, in the Times' Pacific NW Magazine, wrote about natural lawn care, focusing on dormant lawns with the title of "Embrace Brown."

In response to a below normal mountain snow pack and greater statewide water supply concerns, a partnership with a local newspaper was created to report on water supply conditions as a regular feature on the daily weather page (and continues today). This report provided readers with up-to-date water supply information during the drought alert, and increased general awareness of the importance of conservation.

Water Efficient Irrigation Program and Rebates Summary

Irrigation related program initiatives in 2005 included rebates for irrigation system upgrades, free on-line tools to assist with more efficient scheduling, training of irrigation contractors and vendor fairs displaying water efficient technologies. In 2005, the Over-watering Soaks You campaign continued with radio, newspaper and bus ads, plus a direct mail piece to customers.

Landscape Rebates	Number of Customers	Savings in gallons/day
Single Family Homes	116	26,562
Commercial	24	149,482

Irrigation contractors received a new promotional brochure to pass along to their customers that describes the Saving Water Partnership's irrigation rebates program and free on-line irrigation tools. Contractors also attended two training events. The June event included a rebate program training and vendor fair to introduce contractors to most of the weather-based irrigation controllers, a central technology for reaching program water savings goals. The December event focused on the new Certified Site Water Management Planning training and a contractor roundtable event to gather information from contractors about the effectiveness of the rebate program and initiatives.

To correspond with the irrigation contractor's trainings, more attractive additions to the standard flat rebates were rolled out for commercial and multifamily customers making it easier for them to apply and receive rebates.

Looking ahead to 2006

In 2006, the SWP will revisit public information and outreach materials to ensure that the right information in the right format is provided to customers, given current program needs. In the interest of paper and cost reduction, more emphasis will be placed on distribution of electronic copies of materials, although printed copies continue to be our customer's strongest preference. Plans are underway for partnerships with broadcast news, weathermen, and garden columnists for even more extensive media coverage in 2006, including the use of television, for an enhanced water efficient landscape message. Work has begun with Premier Golf Centers, a major user of irrigation water, on a series of improvements to the irrigation equipment at their four golf courses.

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

Commercial Hardware Savings

2005 Commercial Incentives (other than landscape)	Projects	Savings (gallons per day)
Restroom Measures	38	56,091
Refrig / Ice / Cooling	10	22,865
Medical Equipment	7	47,333
Process Water	7	17,003
Coin Op Washers	5	2,962
Sprayheads	346	22,750
Total from Incentive Projects		169,004
Non-incentive savings		19,243
TOTAL		188,247

The Water Smart Technology Program added a free tank-type toilet option for commercial customers in 2005, consistent with the free toilet option available to Multi-family building owners begun in 2004. Customer response was enthusiastic and overwhelmingly preferred the free toilet option, with only a relatively few customers opting for the standard toilet rebate.

A pilot Greening Ethnic Business Program was partially funded through the Resource Venture contract. A Multi-cultural team was trained to provide, among an array of tasks, water audits and installation of efficient pre-rinse spray heads in primarily non-english speaking ethnic restaurants.

The SWP and Seattle Steam Company cosponsored a workshop focused on steam condensate reclaim. There are potentially dozens of cost-effective projects in Seattle Steam's customer's facilities that would lead to significant water and energy savings, and they are willing to provide technical assistance to interested customers.

A new commercial services brochure was developed and mailed to approximately 10,000 business customers. Services promoted include water conservation technical assistance and financial incentives.



Washing Town Laundry replaced 11 old water and energy guzzling coin-op machines with the new water efficient Huebsch machines.

The highly successful pre-rinse spray head change-out program, in cooperation with City Light and Puget Sound Energy, was completed with the food service sector in 2005. Thousands of high efficiency spray heads were installed to reduce energy and water use from rinsing dishes prior to loading them into commercial dishwashers. Additional savings of 22,750 gallons per day were obtained in 2005, on top of the savings already achieved in 2004. Most of the water saved was hot water. This cooperative effort was a great example of multi-utility leveraging of resources, resulting in much lower overall cost for the Saving Water Partnership, and significantly more savings.

Looking ahead to 2006

A new contractor will take over the Resource Venture to help market and promote commercial conservation programs. Research will be conducted on water efficient urinals, ice machines, steamers, and commercial dishwashers to provide accelerated savings for those products.

Youth Education

2005 Youth Education Performance

Activity	Target	Accomplishments
Conservation Kits	1,000	1,200
Posters distributed	300	400
Water Timers distributed	800	1,000
Activity Books distributed	800	1,000
WaterBusters Game Hits	10,000	15,000



Water Fest at the Cedar River Watershed Education Center.

Efforts continued in 2005 to bolster the on-line presence of regional youth water education. This medium has proven to be successful in reaching youth. The increasing pressure for schools to meet new State education standards has greatly limited more conventional classroom visit opportunities. A revised and updated version of the popular Waterbusters home conservation game was created with new features that make it more fun and challenging to play. A promotional ad ran during peak summer and early fall water use months on KTWB 22 and Q13 Fox resulting in more than 15,000 web site visits. Data collected showed that visitors spent more than five minutes learning about conservation when playing the game. Sponsorship and staffing of three regional water festival events drew more than 2,500 K-6 youth. This included the first annual Water Fest at the Cedar River Watershed, where the star of the show was Bert the Salmon. 1,000 five-minute water timers and 1,200 home water conservation kits were distributed as part of these festivals and at other public events.



Water Busters on-line educational game was played over 15,000 times: <http://www2.seattle.gov/util/waterbusters/>

Residential Indoor

2005 Residential Hardware Change Outs

Measure	Fixture Targets	Fixtures Completed	Savings (gallons/day)
Multifamily Toilets	5,000	4,510	112,600
Washing Machines	5,000	6,468	115,518
Showerheads	2,500	4,071	24,426
Aerators	2,500	3,961	15,844
Total Savings			268,388

WashWise Resource Efficient Clothes Washers

2005 was another banner year for WashWise, passing a new milestone with the 50,000th rebate since program inception. For just 2005, a total of 6,468 WashWise rebates were issued. While the annual total is somewhat lower than some previous years, the rebate numbers are actually proportionately higher on a service area basis when adjusted for the lower number of total customers following departure of Cascade Water Alliance utilities from the WashWise program.

Multi-family Toilet Rebates

Over 4,500 toilets in 281 apartment buildings were upgraded to 1.6 gallon per flush from 3.5 gallon per flush or greater models. Many of the older toilets were leaking or in need of repair. Customer feedback continues to be excellent. Most customers participated in the SWP's voluntary toilet recycling as an environmentally friendly way to dispose of their old toilets.

Behavior Messaging

Promotion of FlushStar toilets began, with the listing of the results of toilet performance testing on the SWP website, savingwater.org. In-store displays and information assisted customers in selecting a toilet that not only saves them water, but will have high user satisfaction and retain those savings with relatively low maintenance costs over the lifetime of the toilet. Messaging on leak repair and washing full loads complimented and continued SWP's efforts to reduce indoor water use.

Looking ahead to 2006

Consideration will be given to using a contractor to administer the WashWise program. Additional attention will be given to promotion of leak identification and repair. Several outreach techniques are being evaluated to reach and motivate customers to repair leaks. For most customers replacement of an old inefficient leaky toilet is a better long term value than continuing to make leak repairs.

General Customer Outreach and Messaging

Outreach efforts for the 1% Regional Conservation Program continued to focus on developing messages that both encourage water conservation and direct customers to specific programs. Focusing on individual programs instead of general messaging is proving to be an effective way to achieve actual water savings with customers. Advertising such as the "Overwatering Soaks You" campaign included a general message with a program specific promotion. The ad campaign originally started in 2004 and continued in 2005 promoting rebates for in-ground lawn sprinkler systems, and also carried a general message that overwatering was bad - not good - for the lawn.

Conservation received a lot of earned media attention because of the historic low snow pack and water supply concerns in the Spring. This included broadcast and print media stories. Noteworthy is the attention paid to water conservation in the landscape and to SWP information resources by local garden writers.

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. In 2005, the partnership undertook a radio advertising campaign about water conservation targeting listeners of Mariners Baseball games on KOMO radio.

Looking ahead to 2006

The SWP will continue supporting the Partnership for Water Conservation's efforts to increase water conservation awareness in Puget Sound and look for opportunities to expand this effort.

The SWP is beginning discussions with KOMO TV and Radio about an index for landscape watering based on weather conditions that would be featured during weather reports throughout the irrigation season. Conservation tips would accompany the index. Including watering conservation messages in local weather reporting has been a long-standing goal of the SWP, and a breakthrough may be near at hand.

Evaluation and Monitoring

Work neared completion on a comprehensive updating of the 1998 Conservation Potential Assessment (CPA). A new conservation measure library was completed that included econometric analysis of over 120 conservation measures, 50 more than analyzed in the 1998 CPA. The updated CPA report will be issued in 2006. It will provide the analytical framework for regional conservation program planning and design for 2006 forward.

Evaluation of landscape behavior change began in 2005 with the goal of developing new tools to better understand the effectiveness of SWP landscape outreach and education efforts. This work will continue in 2006.

The 2004 annual accomplishments report was issued.

Looking ahead to 2006

The SWP will undertake its first benchmark customer survey since 2001. This research will provide trend information about customer conservation behaviors and attitudes, and continuing receptiveness to existing and new conservation programs. A savings attribution component to the survey will be examined as part of the survey that would attempt to correlate customer responses to actual water consumption.

Program management for WashWise will switch to a contractor in 2006. From a customer service viewpoint, rebates are streamlined by having a single contractor administering rebates for the region on behalf of several water and energy utilities. A contractor will be also used to review rebate projects and verify savings in 2006.

Report prepared by: Seattle Public Utilities Resource Conservation Office
For more information contact:
Seattle Public Utilities
Seattle Municipal Tower
700 5th Avenue, Suite 4900
P.O. Box 34018
Seattle, WA 98124-401



Saving Water Partnership

www.savingwater.org



- 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 No. 20
- Water District No. 45
- Water District No. 49
- Water District No. 90
- Water District No. 119
- Water District No. 125
- Woodinville Water District