



SEATTLE WATER SUPPLY SYSTEM REGIONAL WATER CONSERVATION PROGRAM

Saving Water Partnership 2012 Annual Report

June 2013

Saving water benefits people, salmon, and local wildlife

2012 was a successful year for the Saving Water Partnership (SWP), the regional conservation program for customers of Seattle Public Utilities and 18 participating wholesale water utilities. In 2012, the SWP saved enough water to supply 5,237 single family homes for a whole year. SWP programs and messages touched more than 360,000 customers last year – including residents, business owners, students, teachers, and more. These programs and messages helped customers save money, save water and become good stewards of our environment.

This report focuses primarily on the activities and results of the SWP in 2012. For an overview of conservation progress see previous SWP annual reports at www.savingwater.org/education_reports.htm.

HIGHLIGHTS OF 2012

- Translated fix-leaks videos into Spanish, Chinese, Vietnamese and Somali which are now available on the SWP regional web site: www.savingwater.org
- Upgraded equipment in 50 ethnically owned small businesses
- Co-sponsored 44 Savvy Gardener Classes attended by 800 gardeners in combined SWP and Cascade Water Alliance service areas
- Provided training on sustainable landscaping and water use efficiency practices to more than 400 landscape professionals
- Completed a six-year strategies and actions report to steer implementation of the 2013-2018 regional program
- Added new partner: the City of Renton

New Water Savings Achieved in 2012

Component	Average Annual Million Gallons Per Day
Saving Water Partnership Program	
Equipment Incentives	0.19
Behavior and Price Response ¹	0.60
Total 2012 Saving Water Partnership Program	0.78³
Other Customer Savings	
Building Codes and Standards ²	0.32
TOTAL WATER CONSERVATION SAVINGS FOR 2012	1.11³

¹ Price effects and behavior change savings components are interrelated and can't be easily separated. However, most of this is thought to be price response. The regional Water Use Efficiency Goal for 2011 and 2012 includes customer price response to consumption-based water and sewer rates over the SWP service area. In 2007-2010 price response savings were not included in the regional WUE Goal.

² Over time, codes and standards result in more efficient appliances, plumbing fixtures and other water-using equipment. When customers upgrade their equipment, water savings are achieved as older less efficient equipment is replaced by new more efficient equipment.

³ Totals do not equal sum of individual lines due to rounding.

WATER SAVINGS FROM THE SAVING WATER PARTNERSHIP

The SWP program emphasizes long-term water use efficiency without customer sacrifice. Conservation measures promoted by the program eliminate unnecessary, wasteful use of water while customers and the community continue to enjoy high-quality drinking water. The range of services for customers includes a mix of education as well as financial rebates for water-saving equipment. A summary of the measures implemented in 2012 is shown in the table on page 3.

With the support of residential, commercial

and institutional customers, the Saving Water Partnership achieved an estimated annual average savings total of 0.78 mgd in 2012, at a cost to the participating utilities of \$1.7 million. From 2007-2012, the Saving Water Partnership has collectively saved 5.39 million gallons per day (mgd) compared with the six-year cumulative goal of 5.98 mgd¹.

Looking toward the future, the SWP 2013-2018 conservation goal will require a continued reduction in per person water demand. The goal is to hold total water use

below a specified level despite population growth being forecasted to increase by 3.9 percent over the six-year period. A new reporting metric will capture the cumulative effect of all demand-side savings from SWP customers – including water savings from utility funded customer-based programs, price-induced customer response to water and sewer rates, and building codes and standards.

¹ Water utilities in Washington State are required to set a six-year water conservation goal by the WA State Department of Health.

SWP CONSERVATION PROGRAM ACTIVITIES IN 2012 INCLUDE:

- **Fix Leaks Education** - Mailed Leak Detection Kit and aired TV commercials targeted to zip codes of residents in half the service area to complete the promotion begun in 2011; promoted Fix a Leak Week; assisted Shoreline Water District with a Fix a Leak Week Challenge to elementary and middle schools; translated the five How to Fix Leaks videos produced by SWP into four languages – Chinese, Spanish, Somali, and Vietnamese – and published them on www.savingwater.org;
- **Single Family WaterSense Toilet Rebate Program** - completed more than 1,400 rebates.
- **Multifamily WaterSense Toilet Rebate Program** - replaced more than 840 toilets in 52 buildings.
- **Irrigation Rebate Program** – Installed more than 80 rain sensors to shut off irrigation systems when it's raining, continuing a partnership with Cascade Water Alliance (Cascade) to offer Rain Sensor installation in both service areas. Also, collaborated with Cascade to complete a large assessment of all Boeing properties with irrigated landscapes.
- **Commercial Program** - Completed financial incentive projects with 55 businesses in 2012. Issued two reports to assist customers with efficiency investments: “How High Efficiency Restroom Fixtures Really Perform”, and “Optimization of Cooling Tower Water Treatment”. Both are available on www.savingwater.org.
- **Greening Ethnic Businesses** – Outreach staff contacted 40 small, ethnically owned foodservice businesses in the southeast

part of the service area to promote financial incentives for changing out bathroom fixtures and kitchen equipment. Aerators were installed at no cost to the customer. Also replaced all the toilet fixtures in a multi-ethnic retail and office complex in Seattle, reaching more than 30 individual businesses.

- **Landscape Education** - Outreach and education shifted from a regional Spring Garden Fair to an expanded number of free Savvy Gardener classes across the entire service region. Co-sponsored 44 classes (26 in the SWP service area) at 26 venues with Cascade and partner nurseries. 800 gardeners attended classes designed to inspire, create, and maintain healthy, water-efficient landscapes.
- **Training for Landscape Professionals** – Co-sponsored the Integrated Pest Management Conference and four days of technical irrigation workshops for a second consecutive year with the King County Local Hazardous Waste Management Program, Cascade, and Lake Washington Technical Institute. Over 300 landscape professionals and

others attended. Sustainable landscaping information was also presented to nursery staff - reaching a total of 140 staff at 10 trainings provided to 15 nurseries – and to more than 100 landscape professionals who speak English as their second language.

- **Welcome, City of Renton** – The City of Renton joined the SWP at the end of 2011. In 2012, a newspaper insert about the SWP program and rebate offerings was produced and delivered to residents via the Renton Reporter. Commercial and multifamily rebates were also promoted via targeted marketing.
- **Program Planning** – The Conservation Technical Forum formed three working groups about landscape, youth and community education, and communication, to develop these aspects of the 2013-2018 Actions and Strategies Report, available at www.savingwater.org/education_reports.htm. Cedar River Water & Sewer District, City of Renton, Northshore Utility District, Shoreline Water District, Woodinville Water District and SPU staff developed program strategies to meet the direction established by the Water Supply Operating Board for 2013-2018, to preserve customers' ethic of conservation as an element of stewarding our water resources.
- **Conservation Benefits Salmon** – Included this message on the regional web site, adding a promotional link to the regional Salmon SEEson county-wide educational campaign during the fall. Also promoted the message in Savvy Gardener classes, as well as in tabletop displays at utility lobbies and festivals.



SPU's Arece Hampton was interviewed by KING 5 TV as they covered the 30 businesses at King Plaza "flushing out old toilets."

2012 Conservation Measures and Strategies

Types of Measures

Types of Strategies

RESIDENTIAL INDOOR

- Replace toilets
- Fix leaks (toilets, faucets, hose bibs, meter)
- Change behaviors (toilet flushes, faucet use, shower time, full loads)

- Multifamily and single family toilet rebates
- Multifamily building owner and operator recruiting
- Leak-detection dye strip mailing to customers
- Leak repair videos and translations
- Program recruiting through media, direct mailing, web
- Promotion of WaterSense product performance

RESIDENTIAL LANDSCAPE

- Replace inefficient irrigation equipment
- Improve irrigation system performance
- Change landscape watering behaviors
- Encourage practices that affect watering (e.g. mulch, soil prep and plant selection)

- Irrigation system efficiency rebates
- *Savvy Gardener* regional classes
- *The Garden Hotline*
- *Natural Lawn & Garden Guides* (how-to materials)
- Promotion of seasonal messages in utility newsletters
- Trainings for irrigation professionals
- Development of standards for irrigation component performance
- On-line weather data, watering index and irrigation scheduling tools

COMMERCIAL PROCESS/DOMESTIC

- Upgrade toilets and other domestic water use fixtures
- Upgrade equipment efficiency for cooling, process and other industrial uses
- Improve building cooling tower performance
- Upgrade efficiency of specific water consuming medical and lab equipment
- Outreach to ethnic businesses

- Small and large business targeting
- Restaurant targeting – Commercial Kitchen Equipment Program Partnership with multiple energy and water utilities
- Outreach to business groups through Resource Venture
- Technical assistance, assessments, workshops
- Financial incentives (custom projects & standard rebates)
- Targeted promotion through vendors, trade groups, agencies
- End-use metering where possible to gather data to build cost-effective conservation recommendations
- Raise awareness of WaterSense products on web site
- New technologies and measures research

COMMERCIAL LANDSCAPE

- Upgrade irrigation equipment (controllers, rain sensors, drip)
- Improve scheduling & maintenance

- Targeted outreach to large commercial customers
- Provide site-specific recommendations and technical assistance
- Financial incentives (custom projects & standard rebates)
- Targeted recruiting and promotion to large commercial customers
- Market transformation by establishing and building vendor and contractor relationships
- On-line weather data, watering index and irrigation scheduling tools
- Trainings for irrigation professionals

Supporting Elements

Types of Measures

Types of Strategies

YOUTH EDUCATION (Supports savings in other sectors)

- Build conservation awareness and residential measures

- Support of water festivals and events
- Fix leaks classroom challenge
- Educator resources on-line
- Low-cost classroom and take-home materials and devices
- Web-based interactive activities

OVERALL MESSAGING (Supports savings in other sectors)

- Conservation awareness supporting recruitment of residential and commercial customers

- Targeted marketing
- Web (www.savingwater.org) and phone (684-SAVE) resources
- Festivals, utility “open house” events
- Low-cost take-home materials and devices
- Raise awareness of WaterSense products on web site

PROGRAM EVALUATION (Supports savings in other sectors)

- Evaluate measure savings
- Evaluate program effectiveness

- Conservation Potential Assessment
- Annual reports
- Emergency Curtailment of Customer Water Demand
- Customer baseline surveys of attitudes and behaviors



"I think the program is a no-brainer for anyone who owns a multifamily property. In addition to the water savings, the quality toilets reduce maintenance fees! It's good business and it's good for our community."

- Casey Bishop - Plus One Capital, Plus One Construction, Plus One Plumbing



*"Lots of fun and very informative."
- Savvy Gardener Class Attendee*



money-saving leak detection kit

The kit includes:

- Two dye strips to detect toilet leaks (the dye will not stain your toilet)
- Step-by-step instructions to help you fix toilet leaks
- Where to go for additional resources

Did You Know... 40% of homes have a leaky toilet? And a leaky toilet can cost up to \$200 a year! Repairing a leaky toilet or replacing toilets made before 1994 with high-efficiency one will save you money on utility bills.

OPEN TO FIND OUT HOW TO BEGIN SAVING!

*"Thank you! This was helpful and appreciated!"
- Leak Detection Kit Recipient*

find and fix

find a leaky toilet flapper:

- Remove the toilet tank lid.
- Remove the dye strips from the packet and put in the tank. Don't flush the toilet.
- After 10 minutes, look in the bowl. If you see dye color in the bowl, you have a leak, probably from a worn flapper.
- If you do not find a leak during your initial testing, it may take a few flushes to clear the testing dye from your tank.

replacing a flapper

To remove your flapper, disconnect the chain from the flush arm, unclip the flapper from the fill tube, and remove.

There are many different types of flappers on the market today, so take your old flapper to a plumbing supply store to make sure you purchase the right one for your toilet.

finding a toilet leak – fill valves

If the flapper isn't the cause of the leak, check your toilet's fill valve:

- Remove the tank lid, and look at the overflow tube. No water should be going down the top opening.
- If water is going down, adjust the position of the fill valve or float arm until water stops flowing down the overflow tube.
- If you can't stop the flow of water by making adjustments, then the fill valve needs to be replaced.

To find out how to find and fix other leaks around your home please see our videos at www.savingwater.org/fixaleak

- use your meter to find a leak
- how to fix outdoor faucets leaks
- how to fix indoor faucets leaks
- how to fix toilet leaks

Saving Water Partnership

Seattle and Participating Local Water Utilities

(206) 684-SAVE

www.savingwater.org

Seattle Regional Water Conservation Service Area



- Saving Water Partnership:**
- Cedar River Water & Sewer District
 - City of Bothell
 - City of Duvall
 - City of Mercer Island
 - City of Renton
 - 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

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Symphony of Butterflies
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