SEATTLE WATER SUPPLY SYSTEM REGIONAL 1% WATER CONSERVATION PROGRAM

## saving water partnership 2010 annual report & TEN YEAR PROGRAM REVIEW



# Ten Years of Increasing Efficiency

## EXECUTIVE SUMMARY – A CONSERVATION SUCCESS STORY

#### **GOAL AND RESULTS**

In 2000, the Saving Water Partnership (SWP) took on an ambitious goal: keep water demand from increasing over the next ten years, despite regional population and economic growth. Seattle was one of the very few large cities in the country attempting to manage expected growth in water demand through conservation. This would be accomplished by reducing per capita consumption an average of one percent per year for ten years, or ten percent over the life of the program. Accordingly, the program was named the Regional 1% Water Conservation Program. Ten years later, thanks to the great efforts of regional water customers, the overall goal was not only achieved, but exceeded. Average annual demand was lower in 2010 than in 2000. In fact, regional water consumption is at its lowest level in 50 years.

The ten-year goal translated into a conservation program target of saving 11 million gallons per day (mgd) by the end of 2010. With the support of residential, commercial and institutional customers, the SWP achieved 0.57 million gallons per day of conservation program savings in 2010, for a cumulative total of 9.56 mgd for the years 2000-2010. At a cost of \$35 million versus the originally projected program life cost of \$55 million, the Regional 1% Conservation Program has been delivered on-time and nearly one-third below expected cost. Given the ambitious goal and the conservative estimate of savings achieved, the 1% Water Conservation Program has become one of the most successful examples of utility-led water conservation in the nation.

#### WHY CONSERVATION?

Water conservation is an economically and environmentally responsible way to accommodate the competing demands for drinking water and in-stream environmental flows for fish and other aquatic species. As a proven water supply resource, conservation measures have demonstrated reliable savings that are expected to continue into the future.





#### HOW WAS THE GOAL ACHIEVED?

The Regional 1% Water Conservation Program (1% Program) emphasized long-term water use efficiency without customer sacrifice. Conservation measures promoted by the 1% Program eliminated unnecessary, wasteful use of water while customers and the community continue to enjoy their accustomed use of high-quality drinking water. Achieving the goals of the 1% Program required significant water conservation savings across all customer sectors and end uses:

- Residential indoor water use. Clothes washer rebates moved the market. Efficient machines moved from relative obscurity in 2000 to a dominant market share in the region by 2010. High-efficiency WaterSense-labeled toilets that flush at 1.28 gallons per flush are now widely available and popular with customers.
- Commercial domestic and process

water use. Industry relationships and efficient technologies both matured over the decade. The program reached business customers through partnerships with energy utilities and trade groups, equipment vendors, and targeted recruitment of businesses. The performance and water-efficiency of commercial restroom fixtures greatly improved, and measures that were new in 2000 have matured and become more commonplace, delivering consistent savings.

Residential landscape water use.
Promotional campaigns and collaboration with

plant nurseries, garden centers and garden writers helped customers to see landscapes in a more sustainable way, as ecosystems. Customers know the concepts of "right plant, right place," smart watering and other water-saving maintenance practices.

- Commercial landscape water use. Through long-term commitment and consistent messaging, the SWP played a major role in changing customer and landscape industry attitudes. The Water Efficient Irrigation Program expanded the array of choices customers and contractors have for improving the efficiency of irrigation systems, and contributed to the development of thirdparty testing protocols for irrigation equipment. Hundreds of contractors and their crews have participated in SWP irrigation water-efficiency trainings in both English and Spanish. The SWP established irrigation scheduling tools in collaboration with the non-profit Irrigation Water Management Society to enable customers to create irrigation schedules that reflect the changing water needs of plants.
- Youth education. The SWP reached thousands of students and dozens of teachers through a comprehensive approach that included teacher workshops, classroom presentations and materials, curriculum development, and watershed tours.
  When access to classrooms became limited, the SWP developed engaging educational activities on the regional website. More than 40,000 people played the Water Busters game in five years.

#### FOUNDATION OF RESEARCH

SPU's Conservation Potential Assessment (CPA) provided an analytical framework for selecting conservation measures that produce reliable, longterm water savings at good value to all ratepayers relative to more traditional supply development options. Measures that would result in a loss of service or satisfaction for the customer were eliminated from consideration. In addition to periodic program impact evaluations, the SWP systematically conducted quantitative and qualitative market research with residential customers to assess program acceptance and success.



### SEATTLE REGIONAL WATER CONSERVATION SERVICE AREA



#### 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



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