

RESOLUTION NO. 10-034

A RESOLUTION OF THE CITY OF ROSLYN, WASHINGTON, ADOPTING THE CITY'S 2010 WATER USE EFFICIENCY PROGRAM AND SETTING GOALS

WHEREAS, the City of Roslyn owns and operates a Class "A" Municipal Water System, and

WHEREAS, in 2003 the Washington State Legislature passed the Municipal Water Law (Engrossed Second Substitute House Bill 1338), to address increasing demand on our state's water resources, and

WHEREAS, under this law municipal water suppliers are required to 1.) Collect Data, 2.) Forecast Demand, 3.) Calculate Distribution System Leakage, 4.) Implement a Water Use Efficiency (WUE) Program, and 5.) Evaluate WUE Program Measures, and

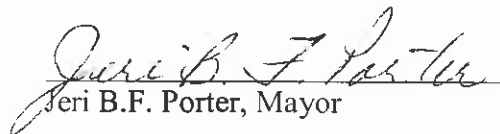
WHEREAS, the City prepared a draft plan, developed proposed goals, and conducted a public hearing on October 12th, 2010 to take comment on that plan and proposed goals;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ROSLYN, WASHINGTON, AS FOLLOWS:


Section 1. The City adopts the attached 2010 Water Use Efficiency Program and Goals

**ADOPTED BY THE CITY COUNCIL AT A REGULAR MEETING THEREOF THE
26TH DAY OF OCTOBER, 2010.**

CITY OF ROSLYN:


Jeri B.F. Porter, Mayor

ATTEST:


Amber Shallow, Clerk-Treasurer

Approved as to form:


Margaret J. King, City Attorney



CITY OF ROSLYN

National Historic District and Preserve America Community

2010 Water Use Efficiency (WUE) Program

A copy of the City's current water conservation program is located in the 2005 Water Comp Plan and is available upon request at the City's Administration Offices. The conservation program consists of two major components related to water use efficiency measures: Supply-side measures for system efficiency, and Demand-side measures to promote conservation from Roslyn's water customers. Below is a summary of the evaluation of the current program from November 1, 2007 through November 1, 2009 and the proposed WUE program for 2010 - 2015 years.

1) CURRENT WATER CONSERVATION PROGRAM EVALUATION

A. SUPPLY-SIDE

The City of Roslyn replaced its water distribution system and installed water meters on all customers' service lines in 1992. In 1998-1999, the City of Roslyn constructed a Slow Sand Filtration water plant, new raw and finished water meters and lined and covered its distribution reservoir. Also a part of this project, the city identified and replaced leaky sections of its raw water transmission main. In 2007/08, approx. 4,000' of its raw water transmission main was replaced with 16" ductile piping by Suncadia in their development area. Water meters at the City Parks, Cemeteries, Fire Hall and Old City Hall were not installed in 1992 as a cost saving measure. Water meters were installed at all City Parks, except for Fireman's Park, and all cemeteries except Veterans, Lithuanian, Croatian, Eagles and Polish Cemeteries. The uses in the Historic Cemeteries, except for the Veterans, are minimal as they only have one hose bib for their irrigation needs.

Raw and treated water flows at the Treatment Plant are monitored daily. The meter at the inlet of the Roslyn Reservoir is monitored daily. The Ronald Reservoir meter is monitored monthly. The High School and K-8 meters are also read monthly. The total amount of water produced at Roslyn water treatment plant is for 2008 was 99,359,000 gallons and for 2009 was 97,694,000 gallons. This information was collected from November 1st to November 1st to better correlate with our consumption meters and when they are read.

B. DEMAND-SIDE

All Customers have service meters. They are read every two months, during the spring, summer and fall (end of April, June, August, and October). The only exceptions are public uses at the Old City Hall, the Fire Hall, a small park and a few historic cemetery plots which are read yearly when water is turned off for winterization. All meters were tested and calibrated prior to installation in 1992. The City provides its customers with water usage information on their water bills after each meter read. The Public Works Department provides leak detection to customers, if their meter shows high usage. The City of Roslyn is currently working to budget and create a time line to replace our water meters.

Below is a table that illustrates customer water usage (in gallons) from 2008 to 2009.

Year	Residential and Commercial Consumption	KCWD#2 (Ronald) Consumption	High School and K-8 Consumption	Parks and Cemeteries	Total Water Consumption
2008	57,580,382	9,423,200.00	17,405,400	2,534,837	86,943,817.40
2009	65,610,894	8,635,000	9,280,748	2,961,078	89,934,782

Below is a table that illustrates above table data that represents Roslyn's "lost and unaccounted for water" in percentage.

Year	Total Water Produced	Total Water Consumption	"Lost and Unaccounted for" in Percentage
2008	99,359,000	86,943,817.40	12.49%
2009	97,694,000	89,934,782	7.94%

2) PROPOSED WATER USE EFFICIENCY PROGRAM (2010-2015)

The City proposes the following changes to the current water conservation plan for the 2010-2015 periods.

A. SUPPLY-SIDE

The City of Roslyn would only see minimal cost savings benefits in its implementation of its Water Use Efficiency Program. The Roslyn water system is 100% gravity flow. Costs of running the water treatment plant are minimal due to the pure and clean nature of our water supply, low maintenance requirements and electrical demands of slow sand filtration, and efficient use of chlorine. The biggest costs to our system are the capital and interest costs that were incurred to construct our water treatment and distribution system.

The City of Roslyn is planning a replacement program for the service meters installed in 1992. The City will also install meters on currently unmetered uses (i.e. Fireman's Park, the Old City Hall, the Fire Hall, and Veterans and other Cemeteries) to determine their consumption. The Old City Hall will be undergoing reconstruction/remodeling and will have water meter installed as a part of this project.

The City of Roslyn may plan to offer customer consumption data from the previous period in its utility billing. New software will be required to achieve this goal. This will give its customers the information needed to begin to realize the effects of their usage and gauge it from the previous year. This will hopefully encourage customers to seek conservation measures and reduce their consumption and see any benefits from their conservation measures that they have already taken. The City may also have base or average usage data available on its website (www.ci.roslyn.wa.us) so customers can compare their usage and help encourage conservation. Roslyn's water customers are welcome to get this information on an individual basis upon request. The City of Roslyn is currently undergoing a rate study to appropriately charge the customer for operation, maintenance costs, and adequately fund capital projects. A goal of that study is to set and implement conservation rates that will further encourage customers to use water efficiently.

The City of Roslyn may automate the irrigation systems at the parks to make it more efficient and effective. The City may also install a new water system to the Roslyn Historic Cemeteries to reduce loss due to system leakage and aid in installation of meters to measure consumption at the separate cemeteries.

The City of Roslyn will continue to fix leaks found in its transmission and distributions system as they are discovered. The transmission main between the treatment plant and the reservoir has had three leaks repaired from 2008 to 2009, thus reducing our total percentage of lost and unaccounted for during this period.

B. DEMAND-SIDE MEASSURES

The City will also begin to draft and implement an educational program to inform its customers about additional conservation methods. The City of Roslyn sees peak usage of water during the summer irrigation season. The City can encourage water conservation during these times by providing an educational mailing in the utility bill. The City may also encourage use of water timers and other irrigation methods that would conserve water. Savings can be seen through the Schools usage from 2008 to 2009 and their addition of timers and automated irrigation systems thus reducing consumption by over 8.1 million gallons of water. Average consumption during peak irrigation time from July to August is approximately 451 gallons per day per residence. With a 10% reduction, the City's average daily consumption would drop to approximately 406 gallons per day. During this time the total consumption savings for the City would be 1,854,900 gallons of water. When establishing this goal it is important to note that Roslyn's customers do not use the same amount of water. Some customers are already using minimal amounts of water, while others will need to reduce their usage by greater than 10% to achieve this overall goal.

For the 2009 winter meter reads there were 39 customers who used over 10,000 cubic feet of water. The current base rate is 6,000 cubic feet during this time period. This is an indication that customers either let their taps run continuously or had frozen pipes that burst and leaked. The City can insert in the fall utility bill, educational information about proper winterization of homes that will not be occupied and the use of devices like heat tape and insulation for permanent residents as an alternative to letting water run at the tap continuously. If this educational method is successful and the City can reduce leaks and continuous tap flow from those 39 customers and get them down below 10,000 cubic feet of consumption, the City would reduce our annual consumption by approximately 1.2 million gallons.

The City of Roslyn may also have this information available through its website for both summer and winter water conservation tips.

The City of Roslyn may require water conservation measures in new construction such as low flow shower heads, Energy Star rated appliances, and low flush toilets. The City may also provide to its customers low cost water saving devices like hose timers, water gauges and low flow shower heads to help encourage water conservation.

3) PROPOSED WATER USE EFFICIENCY PROGRAM GOALS

A. Supply-side Goals.

The City of Roslyn will install meters on currently unmetered uses.

The city will plan for a replacement program for service meters installed in 1992.

B. Demand-side Goals.

A 10% reduction in peak summer irrigation uses by customers which equals 45 gallon per day decrease. If successful the city would reduce our annual consumption by approximately 1.85 million gallons.

During the winter the city would reduce water use by encouraging proper winterization and use of heat tape to eliminate frozen pipes and running taps by customers. If successful the city would reduce our annual consumption by approximately 1.2 million gallons.