



Date Submitted: 5/29/2012

Water Use Efficiency Annual Performance Report - 2011

WS Name: SPOKANE, CITY OF

Water System ID# : 83100

WS County: SPOKANE

Report submitted by: *Bill Rickard*

Meter Installation Information:

Estimate the percentage of metered connections: 100%

If not fully metered - Current status of meter installation:

n/a

Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period: 01/01/2011 To 12/31/2011

Incomplete or missing data for the year? *No*

If yes, explain:

Distribution System Leakage Summary:

Total Water Produced and Purchased (TP) – Annual Volume	20,803,552,000 gallons
Authorized Consumption (AC) – Annual Volume	16,536,826,000 gallons
Distribution System Leakage – Annual Volume TP – AC	4,266,726,000 gallons
Distribution System Leakage – Percent DSL = $[(TP - AC) / TP] \times 100$	20.5 %
3-year annual average	17.9 %

Goal-Setting Information:

Date of Most Recent Public Forum: 11/28/2007 Has goal been changed since last performance report? *No*

Note: Customer goal must be re-established every 6 years through a public process

WUE Goals:

Customer Goal (Demand Side):

In 2006, the City of Spokane adopted the Water Stewardship Strategic Plan, which outlined the public awareness program and adopted Water Use Efficiency Goals. The Goals are calculated over the timeframe of 2006-2017 with seasonal reductions in all customer sectors based on customer reductions as follows:

Oct. - Mar. 0.5% per year

Apr. – Jun. 1.0% per year

Jul. – Sept. 2.0% per year

Describe Progress in Reaching Goals:

Customer (Demand Side) Goal Progress:

The City of Spokane Water Stewardship Program continued its public awareness activities, especially promoting a customer rebate program.

The City continued its incentive program in 2011 providing high efficiency toilet rebates to 423 customers and outdoor irrigation Smart Controller rebates to 490 customers.

Showing that the Customer WUE Goals (Demand Side) were attained is difficult due to wide swings in demand resulting from weather related factors. The majority of our water demand is in the single family residential sector. Achieving the water use goals is demonstrated using billed (metered) usage to show water use trends in this sector:

Over the 2002-2011 timeframe, a linear regression of water use by single family residential customers during January and February showed an average of 1.39% reduction per year. This exceeds the 0.5% per year goal for the Oct. – Mar. time frame.

Over the 2002 – 2011 timeframe, a linear regression of water use by single family residential customers during August and September showed an average of 2.36% reduction per year. This exceeds the 2.0% per year goal for the Jul. – Sept. timeframe.

This trending, while subject to substantial external influences, indicates that customer side goals for single family residences are being met.

Additional Information Regarding Supply and Demand Side WUE Efforts

Include any other information that describes how you and your customers use water efficiently:

Supply Side Goals

The adopted City of Spokane Water Stewardship Strategic Goal includes seasonal Supply Side Goals that are an extension of the Customer Demand Side Goals, including some assumptions on baseline per capita use and assumed a 1.28% annual rate of growth.

The total pumpage volumes in the seasonal Supply Side Goals for 2011 was:

Oct. – Mar. 6,920,000,000 gal.

Apr. – Jun. 6,920,000,000 gal.

Jul. – Sept. 8,750,000,000 gal.

Supply Side Goal Progress

The seasonal total pumpage for 2011 was:

Oct. – Mar. 6,454,442,000 gal.

Apr. – Jun. 4,655,473,000 gal.

Jul. – Sept. 9,450,578,000 gal.

The total pumpage for the first two seasons meets the adopted goals, as has been typical in the past. The pumpage for Jul. – Sept. exceeded the 2011 goal for this season, a more challenging goal related to summer irrigation demand, thereby not meeting this goal.

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