



Date Submitted: 6/30/2011

Water Use Efficiency Annual Performance Report - 2010

WS Name: UNION HILL WATER ASSOCIATION INC Water System ID# : 90260 WS County: KING

Report submitted by: *Teresa Fowlkes*

Meter Installation Information:

Is your water system fully metered? Yes

If not fully metered - Current status of meter installation:

Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period: 01/01/2010 To 12/31/2010

Incomplete or missing data for the year? No

If yes, explain:

Distribution System Leakage Summary:

Total Water Produced and Purchased (TP) – Annual Volume	206,229,000 gallons
Authorized Consumption (AC) – Annual Volume	166,764,250 gallons
Distribution System Leakage – Annual Volume TP – AC	39,464,750 gallons
Distribution System Leakage – Percent DSL = [(TP – AC) / TP] x 100	19.1 %
3-year annual average	%

Goal-Setting Information:

Date of Most Recent Public Forum: 04/08/2008 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):

The following are the Association's proposed water use efficiency goals.

- Achieve a water use reduction of .5 percent per year per ERU through 2010, with 2006 as the base year. This goal will be reevaluated when the water comprehensive plan is updated in 2011.
- Reduce distribution system leakage to 10% by 2025.

Describe Progress in Reaching Goals:

Customer (Demand Side) Goal Progress:

The following items are some of the Association's existing WUE measures:

- *Source Metering: Each of the Association's sources is equipped with meters*
- *Service Metering: All of the Association's service connections are metered*
- *Conservation Pricing: The Association has implemented an increasing block rate structure with a very high end rate for high water consumption. This has encouraged reduced water usage.*
- *Non-Residential Rates: In 2006 new rates were implemented for commercial, institutional and irrigation customers, the Association's highest water users, and usage has decreased dramatically.*
- *Customer Education: regular newsletters are submitted to customers which contain conservation tips.*
- *School Outreach: annual contribution to conservation education in schools.*
- *Customer Rebate Program: support water efficient fixtures by providing rebates for qualifying Energy Star clothes washers.*

WUE measures have allowed the Association to meet our water reduction goal of .5 percent per year per ERU since 2006.

Additional Information Regarding Supply and Demand Side WUE Efforts

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

The Association realized there was high unaccounted for water in the system during the preparation of the 2004 Comprehensive Water System Plan. Since 2004, the Association has taken the following measure to identify and reduce water system leakage.

- *A water leak survey was performed in 2004 and several areas of probable leaks were identified. As a result of the leak survey, the Association replaced approximately 125 deteriorating galvanized fittings between the service lines and the meter from 2005 to 2007.*
- *The Association began tracking water usage during flushing and other related activities.*
- *The Association has coordinated with the local Fire Department to begin obtaining water usage information on fire hydrant used during fires and training.*
- *Calibrate Source Meters: In 2008 the Association completed an electronic pump curve calibration analysis on one its source meters. Annual head removal and inspections have been set up for both source meters.*
- *Analyze Water Usage with Telemetry Data: Data from the telemetry system can be used to show use during non-demand periods which will help prioritize leak detection in different pressure zones.*
- *Customer Meter Replacement Program: Association continues replacement of old meters that may be registering low which would indicate a false level of distribution system leakage.*
- *Tag all Fire Hydrants: Stickers on all hydrants state it is unlawful to use hydrants without Association authorization. Unauthorized users are subject to a fine of \$250.*

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