



Date Submitted: 6/20/2013

## Water Use Efficiency Annual Performance Report - 2012

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

Report submitted by: *Teresa Fowlkes*

### Meter Installation Information:

Estimate the percentage of metered connections: *100%*

If not fully metered - Current status of meter installation:

### Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period: *01/01/2012* To *12/31/2012*

Incomplete or missing data for the year? *No*

If yes, explain:

### Distribution System Leakage Summary:

Total Water Produced and Purchased (TP) – Annual Volume	203,449,800 gallons
Authorized Consumption (AC) – Annual Volume	175,396,526 gallons
Distribution System Leakage – Annual Volume TP – AC	28,053,274 gallons
Distribution System Leakage – Percent DSL = $[(TP - AC) / TP] \times 100$	13.8 %
3-year annual average	16.4 %

### 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 update is completed in 2012. •Reduce distribution system leakage to 10% by 2025.*

### Describe Progress in Reaching Goals:

Customer (Demand Side) Goal Progress:

*The following are some of the Association's existing 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 implemented an increasing block rate structure with a very high end rate for high water consumption. This measure has been very strong for encouraging reduced water usage.*
- *Non-residential rates: In 2006 new rates were implemented for commercial, institutional and irrigation customers, these are some of the Association's highest users and their usage has decreased dramatically.*
- *Customer education: conservation tips are sent to the customers three times a year in the Association newsletter.*
- *School outreach: annual contributions to conservation education in local schools.*
- *Customer rebate program: support water efficient appliances by providing rebates for qualifying Energy Star clothes washers.*

*WUE measures have allowed the Association to meet our water reduction goal of 0.5 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 measures 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 the water usage for flushing and other related activities.*
- *The Association coordinates with the local Fire Department to obtain water usage information on fire hydrants used during fires and training.*
- *In 2008 the Association completed an electronic pump curve calibration analysis on its source meters. Annual head removal and inspections have been set up for the source meters.*
- *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.*
- *The Association continues replacement of old meters that may be registering low. This will help get a more accurate level of distribution system leakage.*
- *Stickers on all hydrants state it is unlawful to use hydrants without Association authorization. Unauthorized users are subject to a fine of \$500.*

**Do not mail, fax, or email this report to DOH**