



Date Submitted: 1/21/2022

Water Use Efficiency Annual Performance Report - 2021

WS Name: YAKIMA WATER DIVISION CITY OF

Water System ID# : 99150 WS County: YAKIMA

Report submitted by: *David Brown*

Meter Installation Information:

Estimate the percentage of metered connections: 100%

If not 100% metered – Did you submit a meter installation plan to DOH? No

Within your meter installation plan, what date did you commit to completing meter installation?

Current status of meter installation:

Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period 01/01/2021 To 12/31/2021

Incomplete or missing data for the year? No

If yes, explain:

Total Water Produced & Purchased (TP) – Annual volume gallons	3,466,319,000 gallons
Authorized Consumption (AC) – Annual Volume in gallons	3,033,327,000 gallons
Distribution System Leakage – Annual Volume TP – AC	432,992,000 gallons
Distribution System Leakage – DSL = [(TP – AC) / TP] x 100 %	12.5 %
3-year annual average - %	12.9 % 2019, 2020, 2021

Goal-Setting Information:

Enter the date of most recent public forum to establish WUE goal: 07/11/2017

Has goal been changed since last performance report? No

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

Customer WUE Goal (Demand Side):

Maintain the current residential per capita use of 74.9 through January 1, 2019 (average water use per person per day). As this is a very low per person use no additional water savings is expected. The city has a separate irrigation supply so reducing this very low per capita rate will be very difficult. Reduce DSL to less than 10% by January 2019.

Customer (Demand Side) Goal Progress:

Maintain the current residential per capita use of 74.9 through December 31, 2020. This is a very low per person use no additional water savings is expected. The city has a separate irrigation supply so reducing this very low per capita rate will be very difficult. Conservation Rate Structures are already in place. A Rate Study was completed 2017 as part of the 2017 Water System Plan Update where additional conservation rates were analyzed. Utility bill shows consumption history for both Residential and Industrial/Commercial customers. Customers have access to their billing records including water use through an internet portal. Education measures identified in the 2017 Water System Plan update are ongoing. The current residential per capita use in the 2017 Water System Plan the average per capita use was 74.9 gallons per capita per day. The 2017 per capita use has remained approximately the same. The per person use is very low and we have determined further reduction is per person use is not financially feasible at this time. The per person use will be analyzed again in the 2027 Water System Plan Update. Automated meter reading system is installed, which replaced all meters. This automated system will allow water use, consumption and DSL to be calculated every week. We have been conducting audits to determine proper meter size and replacing meters with smaller appropriate sized meters. We have an intensive meter calibration program for all meters over 1 1/2 inch. Public education has resulted in lower total use. The goal to reduce DSL to 10% or less by January 2019 was not achieved at 12.3% this year. Reservoirs were inspected for leaks in 2020, found several leaks in the range of 21,000 gallons per day. Made some repairs and reduced to near 10,000 gallons per day. Currently developing design to make further repairs, those repairs should be completed by end of 2022.

Additional Information Regarding Supply and Demand Side WUE Efforts

Leak detection surveys are conducted every few years. In 2020, some leaks were found and eliminated. Leak detection of reservoirs began in the summer of 2020. Additional steps implemented to reduce DSL include: Two metered fill stations for use by street sweepers and for other city uses has been installed and several more are in planning, this will allow more accurate tracking of water use. Implemented a program to more accurately account for water used for other uses such as firefighting and training, has not proven to be successful. The City has adopted the latest Uniform Building Codes which mandate low use plumbing fixtures.

Describe Progress in Reaching Goals:

- Estimate how much water you saved.
- Report progress toward meeting goals within your established timeframe.
- Identify any WUE measures you are currently implementing.
- If you established a goal to maintain a historic level (such as maintaining daily consumption at 65 gallons per person per day for the next two years) you must explain why you are unable to reduce water use below that level.

Maintain the current residential per capita use of 74.9 through December 31, 2020. This is a very low per person use no additional water savings is expected. Unrealistic to expect any lower per capita use. However we continue to promote low water use and have implemented several low water use city planting areas to save water used on landscaping and as an educational too. We have teamed up with Benton County Conservation District to promote more low water use gardens.