

Water Use Efficiency Annual Performance Report - 2024

WS Name: QUILCENE

Water System ID# : AB292

WS County: JEFFERSON

Report submitted by: William Graham

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 02/09/2024 To 01/08/2025

Incomplete or missing data for the year? No

If yes, explain:

Total Water Produced & Purchased (TP) – Annual volume gallons 3,003,530 gallons

Authorized Consumption (AC) – Annual Volume in gallons 1,915,351 gallons

Distribution System Leakage – Annual Volume TP – AC 1,088,179 gallons

Distribution System Leakage – DSL = $[(TP - AC) / TP] \times 100 \%$ 36.2 %

3-year annual average - % 17.9 % 2022, 2023, 2024

Goal-Setting Information:

Enter the date of most recent public forum to establish WUE goal: 09/23/2020

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):

The Demand Side Goal approved by the PUD Board of Commissioners (BOC) in the 2020-2025 Water Use Efficiency Program is: 1. Maintain gallons per day per connection at 3-year (2017-2019) mean average of 117 gal/day. Goals were based on single family home use.

Customer (Demand Side) Goal Progress:

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Quilcene residential water customers used just 61 gallons per day (gpd) in 2024, each saving 20,440 gallons annually against the goal. However, this is misleading as Quilcene has a lot of commercial customers that use wildly different amounts of water. When all 40 customers are counted, the daily average usage per customer is 131 gpd, exceeding the daily use goal significantly. This goal will be reviewed in 2026 and perhaps should be reset separately for residential and commercial daily use.

Other Conservation Efforts:

The 4-tier water conservation rate structure remains in place as an incentive for customers to conserve water. Billing statements graph annual usage by month allowing the customer to track and compare monthly usage and sometimes identify leaks. Monthly utility newsletters occasionally include water articles. Rebates are available for customers who have purchased new energy and water efficient clothes washers. Information on how to apply can be found at <https://www.jeffpud.org/additional-rebates/>.

Additional Information Regarding Supply and Demand Side WUE Efforts

---see description above ---

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.

Supply side Goal Progress:

Quilcene has what could be a water main leak as indicated by a large difference in metered production and consumption. This may be an issue with controls at the new tank or a major transmission leak. Annual leakage reached 36.2% in 2024, elevating the 3 year average to 18%. Consequently, the utility pumped 800,000 gallons over its production goal last year. A leak mitigation survey may be conducted later this year or in 2026 to fix leaks here and at other systems.

The following questions will help DOH better understand water usage, water resources management and drought response. The data will be used to provide technical assistance, not for regulatory purposes.

All questions are voluntary

Month	Date of Measurement	Static Water Level (feet below measuring point)	Dynamic Water Level (feet below measuring point)
January	01/01/2024	42.9	
February	02/01/2024	41.6	
March	03/01/2024	42.8	
April	04/01/2024	43.0	
May	05/01/2024	42.8	
June	06/01/2024	42.8	
July	07/01/2024	47.5	
August	08/01/2024	44.4	
September	09/09/2024	44.5	
October	10/06/2024	44.0	
November	11/07/2024	44.2	
December	12/01/2024	43.2	

Water level data:

Please provide the following information (if known) to help us better utilize the water level data.

Well tag Id number: ABR399

Well depth: 165.0

Water level accuracy (within 0.01 ft < 1 ft ~ 1 ft) 1 ft

Completion type (e.g., cased open interval, cased open-ended, cased open-ended with perforations, etc...) Cased, open interval, no perforations, screened.

Location coordinates (latitude, longitude) and accuracy of the coordinates (< 1ft, ~1ft, >1000ft) 47.823, -122.885 (10 ft)

Water level parameter name (e.g. depth below measuring point, depth below top of casing, depth below ground surface) Depth below measuring point

Elevation of top of casing OR elevation of measuring point if different than top of casing (as specified in question 7) 83 ft

Monthly/Seasonal Water Usage:

What was your maximum daily water demand for the previous year (in gallons per day)?

Month	Volume of Water Produced in gallons
January	214,040
February	180,470
March	193,140
April	236,220
May	308,870
June	299,180
July	494,220
August	315,700
September	212,760
October	229,660
November	147,390
December	171,880

Water shortage response:

Did you activate any level of water shortage response plan the previous year?

- ☐ Yes ☐ No ☒ There was no need to

If you activated a water shortage response plan the previous year, what level did you activate? (Check all that apply)

- ☐ Advisory Conservation ☐ Voluntary Conservation
☐ Mandatory Conservation ☐ Rationing ☐ Other

What factors caused your water shortage the previous year?

- ☐ Drought ☐ Fire ☐ Landslides ☐ Earthquakes
☐ Flooding ☐ Water Supply Limitations ☐ Other

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