



Date Submitted: 4/22/2024

Water Use Efficiency Annual Performance Report - 2023

WS Name: GARDINER LUD 1

Water System ID# : 07877

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 01/02/2023 To 12/01/2023

Incomplete or missing data for the year? No

If yes, explain:

Total Water Produced & Purchased (TP) – Annual volume gallons	9,971,300 gallons
Authorized Consumption (AC) – Annual Volume in gallons	8,242,225 gallons
Distribution System Leakage – Annual Volume TP – AC	1,729,075 gallons
Distribution System Leakage – DSL = $[(TP - AC) / TP] \times 100 \%$	17.3 %
3-year annual average - %	12.2 % 2021, 2022, 2023

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/Customer Side Goal established, and approved by the PUD BOC, in the 2020-2025 Water Use Efficiency Program is: 1. Maintain 160 gallons per day per connection at 3-year mean average (2017 - 2019).

Customer (Demand Side) Goal Progress:

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. Customers receive an annual water newsletter that includes links to the PUD's website and conservation tips for indoor and outdoor water usage. 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/>.

Gardiner customers did well to exceed their set goal of 160 gallons per day (gpd) by each conserving 12 gpd on average. Overall, that equates to about 670,000 gallons saved in 2023. Significant savings! Demand may have been down due to a relatively cooler summer. Many Gardiner residents have large lots with significant landscaping needs which is why the goal was set somewhat high. Goals will be revisited in 2026. One customer got a rebate on a water and energy efficient clothes washer saving up to around 300 - 350 gallons last year. It all counts!

Additional Information Regarding Supply and Demand Side WUE Efforts

Water levels in the lone Gardiner well do not fluctuate much annually and show no signs of stress despite the trends in less than normal precipitation in recent years. In 2023, the PUD changed out the 40 plus year old pump and air gauge and can now use a well sounder to get more precise water level measurements. Water level monitoring will continue monthly to assure you have access to safe and reliable drinking water far into the future.

Last year, the utility did not meet its production goal, pumping over 400,000 gallons more than its target of 9.55 million gallons annually. The likely culprit was the distribution system leakage (DSL) which reached a high of 17.3% for the year. Due to this value, it pushed the 3 year average upward to 12.2%, over the state's DSL standard of 10%. The age of the system may be a factor and an advanced leak survey may be necessary to identify the leaks. Crews will be on the lookout to address this issue. Please, if you see a water leak, let us know.

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.

See descriptions above.

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	01/02/2023	144.0	
February	02/01/2023	143.0	
March	03/01/2023	144.0	
April	04/01/2023	143.0	
May	05/01/2023	136.6	
June	06/01/2023	136.7	
July	07/01/2023	136.9	
August	08/01/2023	137.2	
September	09/09/2023	137.3	
October	10/06/2023	138.6	
November	11/07/2023	136.7	
December	12/01/2023	136.7	

Water level data:

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

Well tag Id number: ACM503

Well depth: 315.0

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-ended, screened multiple intervals.

Location coordinates (latitude, longitude) and accuracy of the coordinates (< 1ft, ~1ft, >1000ft) 48.057968, -122.944568

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) 144.5 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	601,000
February	546,000
March	630,000
April	537,100
May	778,500
June	1,072,600
July	1,463,000
August	1,723,100
September	1,114,800
October	474,000
November	494,000
December	537,200

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