Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

Date Submitted: 4/19/2024

Water Use Efficiency
Annual Performance Report - 2023

WS Name: SNOW CREEK

Water System ID# : 01220 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 *02/08/2023* To *01/08/2024*

Incomplete or missing data for the year? *No*

If yes, explain:

Total Water Produced & Purchased (TP) – Annual volume gallons	*1,416,180*	gallons	
Authorized Consumption (AC) – Annual Volume in gallons	*1,341,628*	gallons	
Distribution System Leakage – Annual Volume TP – AC	*74,552*	gallons	
Distribution System Leakage – DSL = [(TP – AC) / TP] x 100 %	*5.3 %*		
3-year annual average - %	*8.3 %*		*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 Goals established and approved by the PUD BOC in the 2020-2025 Water Use Efficiency Program is: 1.Demand Side – Maintain 83 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/.

Annual customer usage appears to have met the goal of 83 gallons per day (gpd), and significantly at 69 gpd. That's about 5,000 gallons per connection. This is impressive! Usage from customers in a small water system does vary widely and a few customers using their property only occasionally can really skew the savings higher. But when most if not all customers use water wisely, these low usage numbers can be achieved. Well done, Snow Creek!

Additional Information Regarding Supply and Demand Side WUE Efforts

Thankfully, the Snow Creek well water levels have remained stable showing seasonal declines and recharge recoveries even while Western Washington precipitation trends have been less than average. While the water level reflects high and low flow periods in the creek which it is connected, it shows no discernable annual trends.

Supply side goals were not met in 2023. The goal of 1,328,824 gallons was topped by pumping 1,416,180. The PUD met and exceeded the state 10% leakage standard, improving 3-year average leakage to 8.3% by losing only 5.3% in 2023. Our hope is that the installation of the new wellhouse will improve efficiencies in the near future and for years to come to help reduce production and unacconted usage.

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	18.0	
February	02/01/2023	18.1	
March	03/01/2023	18.3	
April	04/01/2023	18.6	
May	05/01/2023	18.9	
June	06/01/2023	18.2	
July	07/01/2023	19.3	
August	08/01/2023	21.6	
September	09/09/2023	21.5	
October	10/06/2023	18.5	
November	11/07/2023	19.3	
December	12/01/2023	21.5	

Water level data:

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

Well tag Id number: AEA126

Well depth: 55.0

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, with perforations.
Location coordinates (latitude, longitude) and accuracy of the coordinates (< 1ft, ~1ft, >1000ft)	47.941, -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)	215 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	92,170
February	74,020
March	92,150
April	79,500
May	154,020
June	178,330
July	194,780
August	180,960
September	152,740
October	67,230
November	73,860
December	76,420

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

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