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

Date Submitted: 5/11/2023

Water Use Efficiency
Annual Performance Report - 2022

WS Name: BELFAIR WATER DISTRICT 1

Water System ID# : 05350 WS County: MASON

Report submitted by: *James Freeman*

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 *01/01/2022* To *12/31/2022*

Incomplete or missing data for the year? *No*

If yes, explain:

Total Water Produced & Purchased (TP) – Annual volume gallons	*46,340,074* gallons	
Authorized Consumption (AC) – Annual Volume in gallons	*41,221,000* gallons	
Distribution System Leakage – Annual Volume TP – AC	*5,119,074* gallons	
Distribution System Leakage – DSL = [(TP – AC) / TP] x 100 %	*11.0 %*	
3-year annual average - %	*11.2 %*	*2020, 2021, 2022*

Goal-Setting Information:

Enter the date of most recent public forum to establish WUE goal: *06/26/2018*

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):

Our daily consumption from below 238 per/eru to below 200 gallons per day/eru by 2024 (17% reduction)

Customer (Demand Side) Goal Progress:

as you can see the District has made consistent and steady progress, through education of the our customer base, monthly conservation tips in billing, annual school days, farmers market, et.

Additional Information Regarding Supply and Demand Side WUE Efforts

We have been making progress in reaching our goals, for 2022 we hired a leak detection firm 1/3 of our district was surveyed 7 leaks were found and repaired also there were 4 other leaks found and repaired through out the district, along with 1 complete service line replacement. we also replaced 92 consumer meters with the intention to have all the replaced by end of 2023 but we unable to get enough meters due to supply chain issues there is still 25.9 percent of the district left to be replaced with goal to be completed by end of 2024. this has been helping tremendously since all our source meters have been upgraded and the majority of consumer meters have been replaced. along with community education we are working together for same goal to be water wise.

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.

Please reference above statements

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	01/01/2022	180.8	
February	02/01/2022	181.8	
March	03/01/2022	182.3	
April	04/01/2022	182.5	
May	05/01/2022	182.5	
June	06/01/2022	183.1	
July	07/01/2022	182.5	
August	08/01/2022		120.6
September	09/01/2022		120.3
October	10/01/2022	180.8	
November	11/01/2022	179.7	
December	12/01/2022	181.5	

Water level data:

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

Well tag Id number:	aba 656
Well depth:	640.0
Water level accuracy (within 0.01 ft < 1 ft ~ 1 ft)	188ft
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)	ne/nw 2b 23 1w
Water level parameter name (e.g. depth below measuring point, depth below top of casing, depth below ground surface)	188ft below top of casing
Elevation of top of casing OR elevation of measuring point if different than top of casing (as specified in question 7)	350 above sea level

Monthly/Seasonal Water Usage:

What was your maximum daily water demand for the previous year (in gallons per day)? 288,943

Month	Volume of Water Produced in gallons
January	3,575,720
February	3,295,697
March	3,372,060
April	3,423,097
May	4,044,938
June	4,028,059
July	5,781,732
August	6,220,313
September	3,819,096
October	4,593,083
November	3,447,438
December	3,393,553