



Date Submitted: 6/15/2023

## Water Use Efficiency Annual Performance Report - 2022

WS Name: MATS VIEW

Water System ID# : 05536

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 02/04/2022 To 01/05/2023

Incomplete or missing data for the year? No

If yes, explain:

<b>Total Water Produced &amp; Purchased (TP)</b> – Annual volume gallons	2,140,480 gallons
<b>Authorized Consumption (AC)</b> – Annual Volume in gallons	1,969,423 gallons
Distribution System Leakage – Annual Volume TP – AC	171,057 gallons
Distribution System Leakage – DSL = [(TP – AC) / TP] x 100 %	8.0 %
3-year annual average - %	3.0 % 2020, 2021, 2022

### 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):

*Demand Side Goal approved by the BOC in the 2020-2025 Water Use Efficiency Program is:  
1. Maintain gallons per day per connection at 3-year mean average. (2017 – 2019) of 179 gpd.  
Goals were based on single family home use.*

## Customer (Demand Side) Goal Progress:

The four-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 including same time previous year. Rebates for water efficient clothes washers continue to be available. Each customer receives an annual water newsletter that includes links to indoor and outdoor water conservation tips on its website.

Mats View customers as a whole in 2022 used about 31,000 gallons more than in 2021.

In 2022, Mats View customers used 225 gal/day, significantly more than the 3-year average baseline goal of 179 gal/day established by the PUD Board of Commissioners in 2020. This was also more than in 2021 per customer, the year of the “heat dome”. This isn’t the only local system to have used a lot of water per customer in both years. One theory is that people are overwatering to either restore existing heat-stressed landscapes or replanting landscapes that were heat-stressed or killed by the hot summers. Usage per customer is higher in Mats View than in any other standalone PUD water system. We hope this trend will not continue.

## Additional Information Regarding Supply and Demand Side WUE Efforts

*The three Supply Side Goals established and approved by the BOC in the 2020-2025 Water Use Efficiency Program are:*

- 1. Supply Side - Maintain distribution systems leak (DSL) percentage at or below 10-percent of system production as calculated on a 3-year average.*
- 2. Supply Side - Water systems not at or below DSL of 10-percent, reduce DSL by 10-percent in the next 3-years (Note: Baseline 3-year average from 2019, 2018 & 2017).*
- 3. Supply Side - Maintain water production at or below the 3-year mean average.*

*Distribution system leakage (DSL) remains low at Mats View and the 3-year average dropped below 10% in 2020 (8.1%), even further in 2021 (3.1%) and in 2022 stands at 3%, now one of the lowest 3 year average leakage rates of any of our systems. Mats View water losses on the supply side had been related to an aging pump and controls which have since been replaced. The resulting DSL has been extremely low since then. Both supply goals 1 and 2 were readily met in 2022*

## 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.

*The 3-year average production goal of 1,543,313 gallons was not met in 2022 and was exceeded by nearly 600,000 gallons, nearly all demand driven based on the low DSL. About 200,000 gallons more were pumped in 2022 than in 2021.*

*Demand in the form of new connections has been less than 5% in 10 years so the increase in demand is from existing customers. Perhaps the need for outdoor watering will diminish in the future, dropping both production and consumption volumes annually. Both of these goals will be re-evaluated in 2025 and may change significantly as well as the number of conservation measures offered.*

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	01/04/2022	112.4	
February	02/04/2022	112.7	
March	03/02/2022	108.8	
April	04/04/2022	110.2	
May	05/05/2022	110.2	
June	06/10/2022	121.5	
July	07/07/2022	120.6	
August	08/08/2022	142.4	
September	09/16/2022	139.2	
October	10/03/2022	127.9	
November	11/15/2022	110.2	
December	12/05/2022	112.6	

**Water level data:**

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

Well tag Id number: BAC253

Well depth: 192.0

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) 47.953, -122.699 (~ 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) 206.9 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	101,005
February	88,959
March	80,301
April	97,725
May	94,150
June	110,761
July	146,109
August	296,478
September	329,461
October	186,630
November	115,563
December	71,345

### 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**