



Date Submitted: 6/10/2022

## Water Use Efficiency Annual Performance Report - 2021

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 01/01/2021 To 12/31/2021

Incomplete or missing data for the year? No

If yes, explain:

<b>Total Water Produced &amp; Purchased (TP)</b> – Annual volume gallons	1,939,100 gallons
<b>Authorized Consumption (AC)</b> – Annual Volume in gallons	1,938,562 gallons
Distribution System Leakage – Annual Volume TP – AC	538 gallons
Distribution System Leakage – DSL = [(TP – AC) / TP] x 100 %	0.0 %
3-year annual average - %	3.1 %      2019, 2020, 2021

### 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 one Demand Side Goals established, and 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.*

## Customer (Demand Side) Goal Progress:

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.

In 2021, Mats View customers used 212 gal/day, significantly more than the 3-year average baseline goal of 179 gal/day established by the PUD Board of Commissioners in 2020. The higher-than-average usage is not a surprise. The early and long summer of 2021 included record breaking high temperatures that no doubt adversely impacted landscaping, which is significant at Mats View. Homeowners may have either overwatered to compensate for the heat and/or replaced heat-killed plants with new landscaping leading to increased outdoor water usage. Covid 19 may have contributed to people working or staying at home for prolonged periods as well. If the summer proves to be cooler as forecasted, the spike in per day usage in 2021 could prove to be an anomaly.

## Additional Information Regarding Supply and Demand Side WUE Efforts

*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. Rebates for water efficient clothes washers continue to be available to those who are also PUD power customers.*

## 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 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%) and dropped even further in 2021 (3.1%). 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. The 3-year average production goal of 1,543,313 gallons was exceeded by 396,000 gallons due likely to the record-breaking heat wave and its lingering aftereffects on landscaping. Very little of the well production contributed to leaks. There was one new connection added to the system in 2021, but alone cannot explain the increase in production. Hopefully, a more normal summer will help the system achieve its well production goal.*

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			
February	02/09/2021	119.6	
March	03/09/2021	117.9	
April	04/06/2021	118.2	
May	05/04/2021	119.6	
June	06/08/2021	153.3	
July	07/06/2021	145.2	
August	08/03/2021	143.0	
September	09/07/2021	126.2	
October	10/05/2021	121.3	
November	11/02/2021	115.2	
December	12/07/2021	109.4	

**Water level data:**

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

Well tag Id number: BAC 253

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	142,670
February	110,860
March	131,430
April	157,990
May	143,680
June	290,730
July	292,020
August	215,760
September	136,840
October	99,120
November	119,100
December	98,910

## 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**