



Date Submitted: 6/14/2023

Water Use Efficiency Annual Performance Report - 2022

WS Name: TRITON COVE

Water System ID# : 89447

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 02/07/2022 To 01/06/2023

Incomplete or missing data for the year? No

If yes, explain:

Total Water Produced & Purchased (TP) – Annual volume gallons	2,492,600 gallons
Authorized Consumption (AC) – Annual Volume in gallons	1,488,750 gallons
Distribution System Leakage – Annual Volume TP – AC	1,003,850 gallons
Distribution System Leakage – DSL = $[(TP - AC) / TP] \times 100 \%$	40.3 %
3-year annual average - %	34.3 % 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 PUD Board of Commissioner (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 61 gallons/day.

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. Water newsletters are sent to customers that include links to conservation messages and tips for indoor and outdoor usage.

Triton Cove water customers as a group saved 54,286 gallons in 2022 relative to 2021 usage but are still significantly above the proposed demand side goal.

In 2022, Triton Cove customers averaged 70.3 gals/day, about 9 gals/day over the goal of 61 gals/per day and slightly less than in 2021. This usage may have been due to lingering impacts to heat damaged or replaced landscaping. Landscapes may have been heat-stressed for many years and outdoor watering is sometimes a big part of a homeowners water budget.

Additional Information Regarding Supply and Demand Side WUE Efforts

The three Supply Side Goals 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.*
- 3. Supply Side - Maintain water production at or below the 3-year mean average.*

The DSL at Triton Cove is a growing concern. In 2022, the DSL was 40.3%. This moved the regulatory 3-year DSL from 32.0% to 34.3% meaning that both supply goals number 1 and 2 were not met in 2022. Crews continue to work to identify the location(s) of the leak(s) and repair them when they can. Slope creep may be responsible for pulling apart lines and causing leaks as much of the area is somewhat steep and on moderately stable soils. Water line replacement for Triton Cove is within our recently updated capital improvement and water system plans.

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.

Water production at Triton Cove in 2022 was 22,000 gallons more than in 2021 and 688,600 more than the 3-year (2017 - 2019) mean average production goal of 1,804,000. Much if not most of that excess production contributed to the leakage. PUD crews will continue to work to resolve this leakage issue by diligently monitoring the sites where the system lies and repair system leaks when identified. Leak surveys with sensors may be need to isolate and identify areas to be repaired.

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	01/03/2022	227.6	
February	02/07/2022	225.2	
March	03/07/2022	232.4	
April	04/04/2022	233.0	
May	05/09/2022	232.6	
June	06/06/2022	233.7	
July	07/11/2022	233.0	
August	08/01/2022	229.2	
September	09/12/2022	229.1	
October	10/03/2022	232.9	
November	11/07/2022	233.0	
December	12/05/2022	232.8	

Water level data:

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

Well tag Id number: ABA508

Well depth: 443.0

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...) Open-ended, no screen or perforations

Location coordinates (latitude, longitude) and accuracy of the coordinates (< 1ft, ~1ft, >1000ft) 47.611, -122.991 (~ 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) 307.2 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	86,038
February	114,950
March	104,890
April	102,412
May	118,793
June	105,050
July	121,871
August	196,357
September	202,548
October	130,272
November	93,827
December	73,060

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