

Water Use Efficiency Annual Performance Report - 2024

WS Name: BYWATER BAY

Water System ID# : 02043

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 01/11/2024 To 12/09/2024

Incomplete or missing data for the year? No

If yes, explain:

Total Water Produced & Purchased (TP) – Annual volume gallons 17,478,190 gallons

Authorized Consumption (AC) – Annual Volume in gallons 16,470,470 gallons

Distribution System Leakage – Annual Volume TP – AC 1,007,720 gallons

Distribution System Leakage – DSL = $[(TP - AC) / TP] \times 100 \%$ 5.8 %

3-year annual average - % 4.1 % 2022, 2023, 2024

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 Side Goal approved by the PUD Board of Commissioners in the 2020-2025 Water Use Efficiency Program is: 1. Maintain gallons per day per connection at 3-year (2017 – 2019) mean average of 199 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 and sometimes identify leaks. Monthly utility newsletters occasionally include water articles. 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/>.

Bywater Bay water customers used 160 gallons/day in 2024 saving 14,235 gallons annually against the goal. This is significant savings at a system that once was the PUD’s highest average user. The savings is much needed at a system that has been stressed by intense customer demand in the past.

Additional Information Regarding Supply and Demand Side WUE Efforts

--- See descriptions above ---

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 PUD pumped just over a million gallons (1,021,810) less than its set goal in 2024. We also stayed comfortably below the state’s 3 year average distribution system leakage standard of 10% by leaking only 5.8% of what we pumped in 2024 with a 4.1% 3 year average.

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	01/01/2024	182.4	
February	02/01/2024	182.5	
March	03/01/2024	181.7	
April	04/01/2024	181.5	
May	05/01/2024	181.7	
June	06/01/2024	186.4	
July	07/01/2024	193.0	
August	08/01/2024	194.1	
September	09/09/2024	191.6	
October	10/06/2024	188.6	
November	11/07/2024	187.4	
December	12/01/2024	187.5	

Water level data:

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

Well tag Id number: AAB869

Well depth: 295.0

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, no perforations, screened interval

Location coordinates (latitude, longitude) and accuracy of the coordinates (< 1ft, ~1ft, >1000ft) 47.876, -122.665 (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) 222.5 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	974,120
February	792,480
March	916,500
April	1,074,380
May	1,784,690
June	2,329,620
July	3,430,160
August	2,050,020
September	1,339,760
October	1,044,640
November	751,690
December	990,130

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