

Update to Property Owners on the Timberline Village Water System Seeking Water Connections

Meeting with Thurston PUD and Members of the Department of Health

Virtual Meeting – Thursday, January 5, 2023

Introductions (John Weidenfeller)

- John Weidenfeller, General Manager, Thurston PUD
- Julie Parker, Assistant General Manager, Thurston PUD
- Kim Gubbe, Director of Planning and Compliance, Thurston PUD
- Jim Campbell, Director of Field Operations, Thurston PUD
- Doug Piehl, P.E., District Engineer, Thurston PUD
- Teal Theam, Senior Administrative Assistant, Thurston PUD
- Kurin Miller, Administrative Services Coordinator, Thurston PUD

DOH OFFICE OF DRINKING WATER - SOUTHWEST REGIONAL OFFICE MANAGER & STAFF

- Andy Anderson, P.E., Regional Manager
- Deborah L. Johnson, Environmental Planner
- Connor Lockwood, Engineer In Training

Background (John Weidenfeller)

- Thurston PUD acquired the Timberline Village water system from H&R Waterworks on October 1, 2017
- The system was overconnected when the PUD assumed ownership
- The WA State Department of Health (DOH) Office of Drinking Water (ODW) changed the status of the water permit from a “Green Permit” to a “Blue Permit” status on December 12, 2018 which means:
 - System substantially **in compliance** but exceeds # of DOH approved conn.
 - Able to serve the existing connections adequately
 - **No new connections allowed without DOH approval**
- Thirty-five (35) customers are on the waiting list for water availability
- The PUD immediately started working to address water system issues
- In a November 4, 2022 letter to property owners who requested connections, the PUD stated, “**We cannot guarantee when, or even if DOH will grant additional water system connections.**”

Actions the PUD Completed Since Acquiring the Timberline Water System (Jim Campbell)

- PUD reduced the leakage by more than 50%
 - From an average loss of 75-acre feet per year prior to 2018 to 15-acre feet per year in 2021
 - Implemented a Zone Metering System
 - Installed meters on every connection on the water system
 - Replaced 800+ feet of mainline pipe
 - Worked with customers to repair leaks located on their property
- In May 2022, the PUD asked DOH to approve 45 more connections
 - PUD's Engineer submitted a capacity analysis
- October 2022, DOH denied this request and directed the PUD to do some follow-up prior to considering approval of new connections

DOH And Ecology Are Concerned that Additional Connections Will Cause the System to Exceed Its Water Rights (Doug Piehl)

- **Concern** - Decreasing water consumption trends since PUD ownership are not long enough in duration and could be temporary or unrelated trends, and that consumption or leakage will trend back up over time.
- **Concern** - Although existing leaks are found and fixed, concerns that more will continue to develop
- **Concern** - As summers get longer and warmer more water will be used for irrigation
- **Concern** - That existing customers may use more water as people use more homes as short-term vacation rentals or the community experiences gentrification.
- **Concern** - That vacation homes will transition to full time residences and therefore use more water, a general trend in Washington and only increased following COVID.

DOH Requests to Thurston PUD (Doug Piehl)

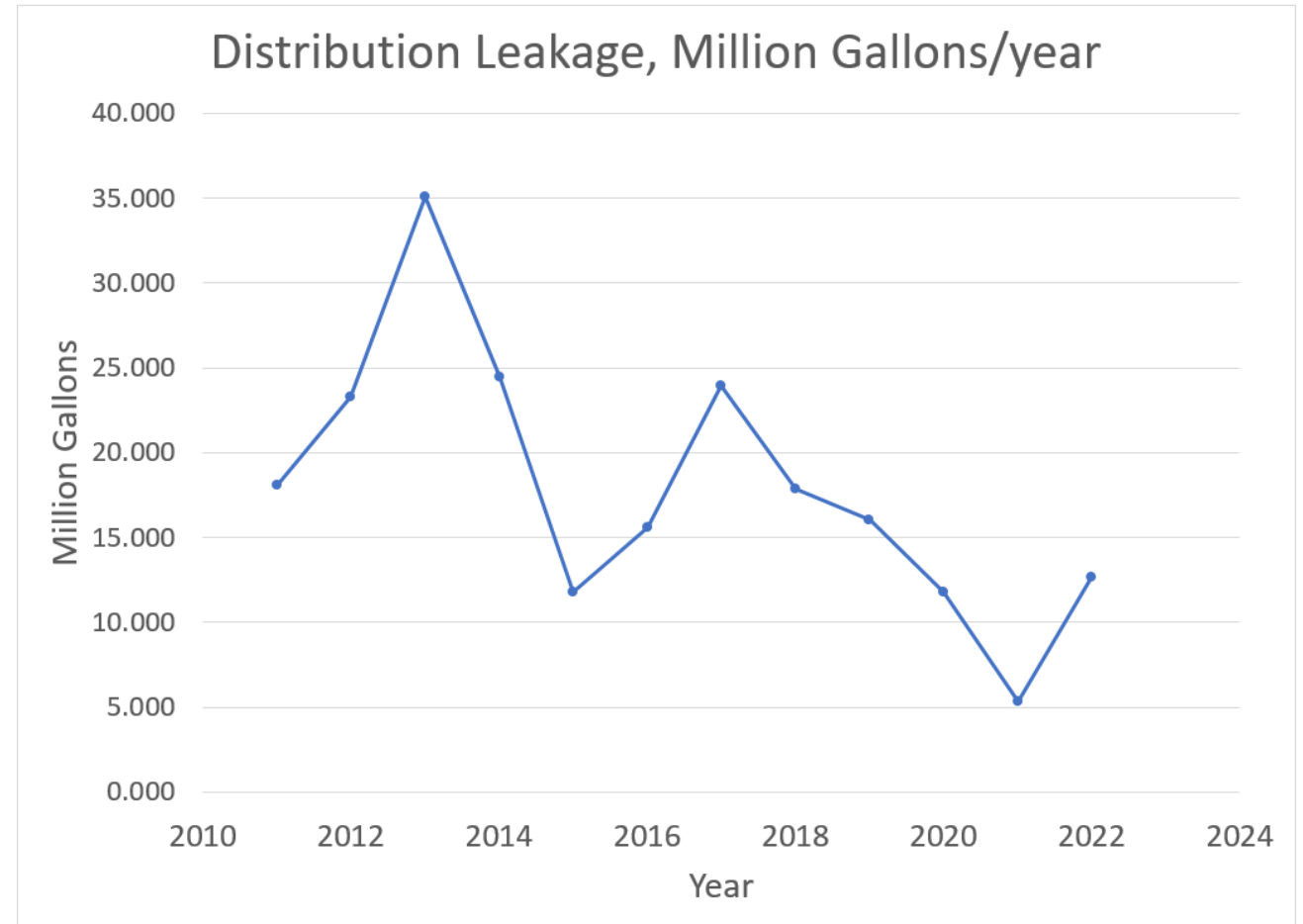
1. Update the Water System Plan that includes a robust capacity analysis
2. Provide a comprehensive strategy to bring DSL levels to an acceptable level (under 20%)
3. Update the Capacity Analysis to show that the system will not exceed its water right if additional connections are granted
 - **Should be supported by actual statistics of 3-5 years**
 - **DOH may consider use of only 2-3 years**
 - **Must address changing demographics or use patterns**
 - **Must address distribution system leakage**
4. Develop a water loss control action plan

Water Loss Control Action Plan (Doug Piehl)

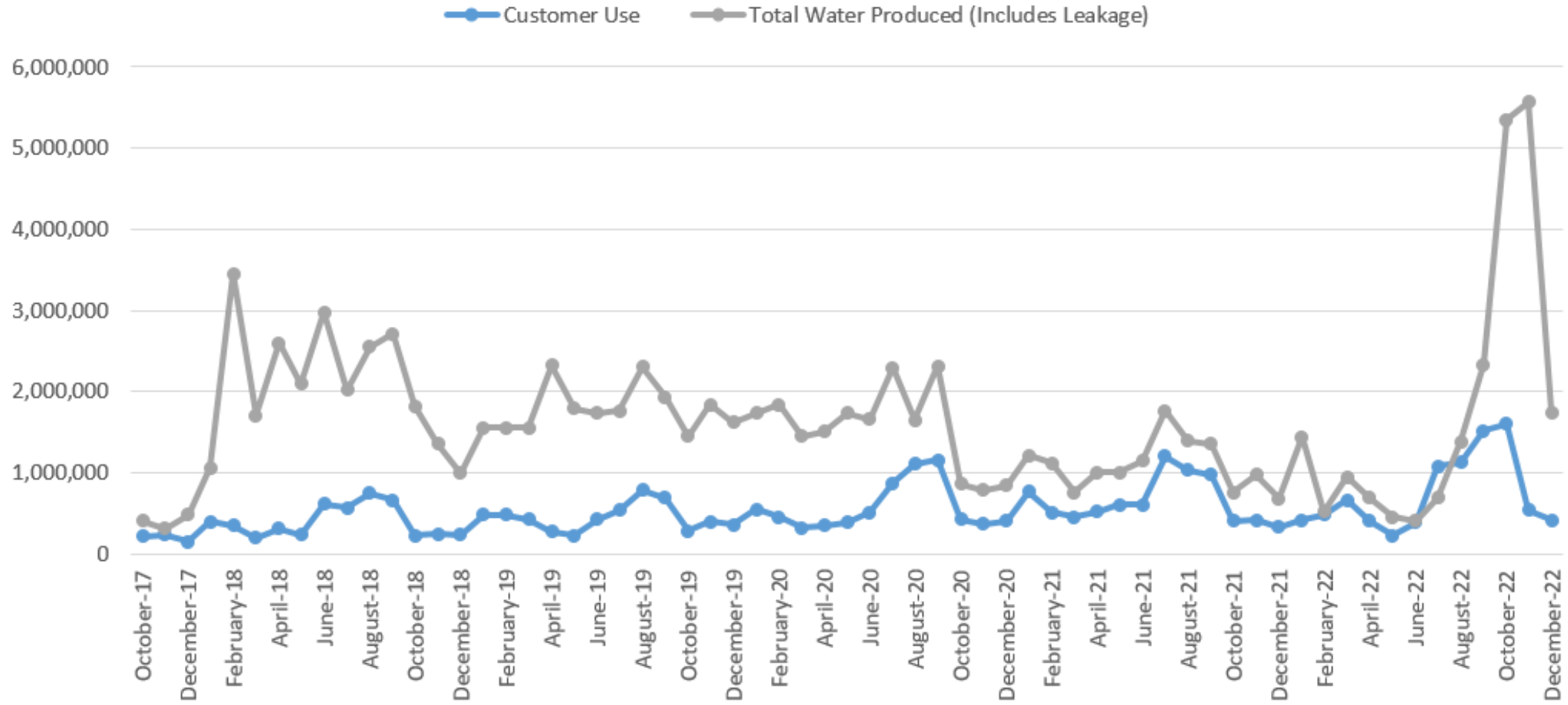
- **PUD already employs many methods to reduce usage and water loss**
 - Zone metering and source meter logging, tiered rates, public education, efficient toilet incentive, offering smart meters and water audits.
 - Replaced 800 linear feet of main, aggressively finding and fixing leaks.
- **Further possible measures:**
 - More aggressive tiered rates, HOA could implement community bylaws restricting water use, vacation rental use, or full time occupancy
 - Install real time source monitoring to more quickly identify leaks or high use
 - Encourage emergency personnel to track water use for fire fighting, etc.
 - Distribution replacement

Distribution Leakage (Doug Piehl)

- Reduced from an average of over 20 million gallons per year prior to PUD acquisition, to 5 million gallons in 2021.
- The year 2022 was on track to be 3 million gallons (projecting to end of year from September), but **Fire Fighting** and a major main break increased it to 12 million gallons for that year.



Monthly Customer Use and Total Water Pumped, Million Gallons



Distribution Leakage (Continued) (Doug Piehl)

- Currently PUD can only find and fix leaks as they occur.
- Average leakage is rate of 2019-2021 only 20 gpm, however this is 45% and exceeds DOH's 20% maximum.
- Due to fire and large main break in September and October of 2022 loss was 25 gpm (prior to this we were on trend to be below 6 gpm).
- 25,000 feet of mains and only 286 customers - this is a lot of pipe per customer and elevates leak %.
- The distribution system should not be due for replacement for 15 to 30 years, however, may require pre-mature replacement.
- Estimated cost is over \$3 million if completed now (around \$11,000/customer).

Drilling an Exempt Well (John Weidenfeller)

- In the November 4th PUD letter that was sent to all property owners who have requested water service stated the following:
 - The PUD could not provide timely and reasonable service per the MWL
 - “Drilling an exempt well is normally denied by the PUD within its service areas.
 - However, the **PUD will not object to or stand in the way of any customer drilling an exempt well in this circumstance** for property owners that currently own a vacant lot within the Timberline Village water system service area.”
 - “**If you are interested** in drilling an exempt well at your property, **please contact the Lewis County Environmental Health Department** at (360) 740-1135. You can also contact them by visiting their website at www.lewiscountywa.gov/departments/environmental-health/.”

Drilling an Exempt Well (Continued) (John Weidenfeller)

- On December 19, 2022, the PUD received a letter from the WA State Department of Ecology stating, “that drilling permit exempt wells within the service area of a DOH approved water system would constitute a violation of Campbell v. Gwinn.”
- The letter from Ecology further said, “I anticipate voluntary compliance to resolve these issues (exceeding water rights). If voluntary compliance is not achieved, formal enforcement may be initiated in the form of an Administrative Order and/or Civil Penalties.”
- The PUD does not have the authority to authorize permit exempt wells to be drilled; we are not drilling any wells. Approval to drill wells is a County/State permitting action.
- Thurston PUD has responded questioning Ecology’s interpretation of the Campbell v. Gwinn case law.

Next Steps (John Weidenfeller)

1. Complete the updated Water System Plan
2. Continue to work with DOH to do what we do to get property owners of Timberline Village lots permission to get water availability as soon as possible
3. Continue monitoring source and service meters monthly
 - **Depending on Snow**
4. Continue repairing leaks as they are found
5. Continue to explore opportunities for enhanced or continuous leak monitoring
6. Engage community on willingness to enact water conservation related measures or bylaws” “Consider targeted early replacement of distribution system; explore funding measures, including grants, loans, and dedicated new-connection surcharges”.
7. Note, the community should realize that getting them connections comes at a cost to the PUD and that its possible the PUD may have to share some of those costs with recipients of the connections.



Questions