

Rates & Regulatory Affairs UW-240151

Cascadia Water LLC Proposed General Rate Case **Data Request Response**

Request No.: UW-240151 PC IR 1

Of all assets added to service since the Company's 2021 General Rate Case Docket UW-200979 (2021 GRC), please identify those that the Washington State Department of Health required through a direct order or that were necessary because of overdue compliance (e.g., meter installation). Please do not include assets that the Department of Health only recommended.

Response:

There are two categories of assets relevant to this question. First, there are assets associated with projects mandated by enforcement or corrective action plans from the Washington State Department of Health. Those projects are:

- (1) Estates (Clallam County) Reservoir This project was required due to the issues and directive that came about due to the sanitary survey and follow-up underwater reservoir inspection due to multiple cracks and root infiltration in the existing underground reservoirs.
- (2) Monterra (Clallam County) Meters This system was out of compliance with the DOH requirement for systems to meter all connections.
- (3) Rolf Bruun (Snohomish County) Disinfection Treatment This project was required by DOH due to repeated positive bacteriological tests on the system.

Second, there are assets installed because of requirements to bring systems into compliance with DOH <u>minimum</u> design standards. From the DOH design manual: "Where this manual doesn't simply restate a regulatory requirement, it reflects our best thinking on what constitutes the basis for designing a safe, reliable, and sustainable water system—one that does not result in exhausted water sources, empty reservoirs, premature equipment breakdowns, contamination, low service pressures, or destructive pressure surges. While establishing these standards, we attempted to balance the reduction of risk against the added cost to provide that reduced risk and the capacity of water systems to maintain the associated physical and human infrastructure." (Source: https://doh.wa.gov/sites/default/files/2022-02/331-123.pdf)

Below are the projects and the compliance issue(s):

- (1) CAL Waterworks System Loop at Beachwood Drive: This was a required improvement since the Water System Plan showed that the system could not provide peak hour demand (PHD) or fire flow (FF) & maximum day demand (MDD) while maintaining minimum pressures. See WAC 246-290-230(5) for pressure requirements for a closed system (such as CAL).
- (2) CAL Waterworks Booster Pump Improvements: As shown in the Water System Plan, the system could not provide Fire Flow (FF) & Maximum Daily Demand (MDD) while maintaining minimum pressure requirements (WAC) 246-290-230(6). The issue was only exacerbated when trying to comply with DOH standards of providing FF & MDD with the largest pump out of service. The system also did not supply the recommended minimum standby storage volume (See DOH Design Manual Section 7.1.1.3) for the approved number of connections (WAC 246-290-235(3)).
- (3) Estates Booster Pumps Since the reservoir was being replaced it was necessary to replace booster pumps. The old pumps were bolted to the old reservoir and would have been incompatible with the new reservoir.
- (4) W&B Waterworks Well Site Improvements The DOH has required the completion of the reservoir and treatment project in order to provide W&B Waterworks enough capacity to serve the current and committed number of ERUs.
- (5) Sea View Source Development This project was required in order to continue to supply the system with safe, reliable drinking water since the existing sources either had unacceptable water quality (Wells 1 and 2) to meet state standards or were no longer reliable (Well 3).
- (6) Generators Per the DOH Water System Design Manual the minimum recommended standby storage is MDD for the pressure zones served (See Section 7.1.1.3). The DOH Design Manual allows for a consideration for a reduction in standby storage volume for systems with "two or more sources have permanent on-site auxiliary power that starts automatically when the primary power feed is disrupted." For the systems analyzed, this would apply to W&B Waterworks, Sea View, CAL Waterworks (Prior to the new reservoir), TEL 1, TEL 3, TEL 4, and Silver Lake.
- (7) W&B Waterworks Mutiny Bay Creek Crossing/Pressure Reducing Vault (PRV) This was required due to the existing main line crossing the creek over a manmade dam. Temporary repairs made in the past were threatening the liability of the main line so we had to directional drill underneath the creek and install a PRV to keep customers within the pressure perimeters required by DOH.
- (8) W&B Waterworks Mutiny Bay Rd Pressure Reducing Vault (PRV) This was required due to the age of the previous PRVs that were no longer operational and capable of allowing Fire Flow.