BEFORE THE

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION Complainant, v. CASCADIA WATER, LLC Respondent.	DOCKET UW-240151

CASCADIA WATER, LLC

Joint Rebuttal Testimony of Culley J. Lehman and Jeff M. Tasoff

PLANNING, BUDGET REVIEW PROCESS, AND CAPITAL PROJECTS

Exh. CJL-JMT-1CJT

June 20, 2025

NONCONFIDENTIAL

JOINT REBUTTAL TESTIMONY OF CULLEY J. LEHMAN AND

JEFF M. TASOFF

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I. Introduction

Q. Mr. Lehman, are you the same Culley Lehman who previously submitted Prefiled Direct Testimony on behalf of Cascadia Water, LLC ("Cascadia Water" or "Company") in this proceeding?

A. Yes.

Q. Mr. Tasoff, please state your name, position, and summarize your educational background and relevant experience.

A. My name is Jeff M. Tasoff, and I am a Principal of Drinking Water at Facet NW ("Facet")—a full-service engineering firm in the Pacific Northwest. In my role as a consulting civil engineer, I work closely with clients, including Cascadia Water, to design, plan, and develop drinking water systems in Western Washington. I received a Bachelor of Science degree in Chemical Engineering from Washington State University in 1987, a Master of Science degree in Biochemistry from Duke University in 1993, and have worked as a licensed Professional Engineer in Washington since 2004. I am also a licensed Professional Engineer in Oregon and California, a member of the American Water Works Association ("AWWA"), and a member of the Board of Directors for Whidbey Island Water Systems. Before joining Facet (formerly known as DCG/Watershed), I worked for 5 years with the Island County Health Department as an Environmental Health Specialist.

In my 30 years of engineering experience, I have worked on over 400 water systems in Washington, Oregon, and California, for systems owned by entities ranging from water districts to privately owned utilities to the National Park Service and the U.S. Forest Service. I have also presented treatment technology sessions and

classes through local organizations and the Washington State Department of Health ("DOH") sponsored trainings. In 2025, I was awarded the Commitment to Excellence Award from DOH.[1]

I served as a system engineer for the capital projects for which Cascadia Water seeks cost recovery in this proceeding.

Q. What is the purpose of your Rebuttal Testimony?

A. The purpose of our Rebuttal Testimony is to respond to the adjustments and concerns raised by Staff of the Washington Utilities and Transportation Commission ("Staff"), the Public Counsel Unit of the Washington Attorney General's Office ("Public Counsel"), and the Water Consumer Advocates of Washington ("WCAW") (collectively, "Parties") regarding the Company's capital planning and project investments. As part of this response, we also address certain concerns raised by the Washington Utilities and Transportation Commission ("Commission") concerning Cascadia Water's documentation of its capital planning process.

Q. Please summarize your Rebuttal Testimony.

A. Our Rebuttal Testimony is organized in two parts:

- **First,** we respond to concerns raised regarding Cascadia Water's capital planning and budget review process, including documentation procedures, administrative capacity limitations, and steps that the Company is taking to enhance documentation in future proceedings.

[1] Wash. Dept. of Health, "Drinking Water Week," available at: https://doh.wa.gov/community-and-environment/drinking-water/related-links/drinking-water-week.

- **Second,** we respond to concerns from Public Counsel and WCAW concerning the need for and benefits of each of the Company's 14 capital projects, as well as the adequacy of the Company's project documentation. In addition, we provide an update on these 14 capital projects, explaining why each of the projects will be used and useful by the time rates take effect.

II. Planning & Budget Review Process

Q. Please summarize Parties' and the Commission's concerns with respect to Cascadia Water's planning and budget review practices.

A. Public Counsel, WCAW, and the Commission have expressed concern with the adequacy of documentation for Cascadia Water's capital decision-making planning and budget review process, particularly with respect to the timing of the Company's capital investments, the consideration of available alternatives, and analysis of the cost-benefit impacts for Cascadia's customers.[2] Parties also raise concerns regarding the overall level of spending planned for Cascadia Water's systems.[3]

Q. WCAW and Public Counsel (and, to a lesser extent, Staff) state that the Company did not provide contemporaneous documentation relevant to each of the capital projects for which it seeks cost recovery in this case.[4] Is that correct?

A. No. As detailed below for each capital project, the Company has provided contemporaneous documentation in the form of planning materials, contextual

[2] Gilles, Exh. BCG-1T at 26:9-11; Duren, Exh. SD-3CT at 3:10-13.
[3] Gilles, Exh. BCG-1T at 23:12-24:12; Reply Brief of Public Counsel ¶ 38.
[4] De Villiers, Exh. SDV-1T at 13:19-22; *see also* De Villiers, Exh. SDV-1T at 14:7-13. *See also* Public Counsel Post-Hearing Brief ¶ 83 (proposing to disallow certain capital costs associated with all 14 capital projects); *see also* Order 06 ¶ 56 ("Public Counsel recommends that the Commission should determine that Cascadia Water has failed to meet its burden to demonstrate that all 14 major capital projects were prudent[.]").

records, and sworn testimony by the project decision-maker. While we are not attorneys, we understand that the Commission recognizes that sworn testimony by a utility decision-maker can reasonably constitute documentation of the Company's contemporaneous decision-making, particularly where that decision is made consistent with utility policy.[5]

Q. Is Mr. Lehman's role as a decision-maker confirmed by a Company policy?

A. Yes. The General Manager job description clearly states that Mr. Lehman's responsibilities include the obligation to "[p]repare operating and capital budgets and administer approved utility budgets."[6]

Q. Please explain how the Company's system plans are used to document Cascadia Water's capital planning process.

A. Historically, most of Cascadia Water's acquired water systems developed their own system plans, which were used to identify that system's anticipated project needs, as well as the relative priority of each project within the system. As Cascadia Water has acquired these systems, it has gradually integrated planning for these systems. To date, the planning of the eleven Sea View and Lehman Enterprises systems have been consolidated, while the planning of four additional areas—Estates, Monterra, Diamond Point, and Discovery Bay—are being consolidated now. Cascadia Water intends to continue integrating these planning processes into a single Unified Water

Gilles, Exh. BCG-1T at 26; WCAW Post-Hearing Brief ¶¶ 108-09 (claiming without exception that Cascadia "failed to demonstrate the prudence of investments" and that the Commission should "[e]xclude from the rate base all capital expenses not proven to be prudent"). *See also* Stark, Exh. RS-12T at 15:16-16:2; Staff's Post-Hearing Brief at 9. *See also* Order 06 ¶ 50 (quoting Staff documentation concerns).

[5] Docket UE-130043, Order 05 at 101 ¶ 261-62.

[6] Exh. CJL-JMT-2.

System Plan. This planning consolidation allows Cascadia Water to streamline the overall planning process, while preserving the ability to prioritize projects for each subsidiary system.

Q. Do system plans reflect Mr. Lehman's decision-making analysis as General Manager for project priorities?

A. Yes. These system planning documents reflect the prioritization judgments of the General Manager of the projects for each system, and form the basis for the Company's subsequent capital budgets. To be clear, many of these systems have been in desperate need of considerable investment, and thus establishing relative project priorities in the system plans has allowed Cascadia Water to focus on the most important investments for its customers.

Q. When will the General Manager's decision to pursue a project diverge from the priorities in a preexisting system plan?

A. The General Manager will decide to re-prioritize a project when new information becomes available that alters the priorities. Cascadia Water must be able to respond to urgent new needs as circumstances change in order to ensure the safe and reliable provision of water services to customers.

Q. Were there specific projects in this proceeding that were not previously identified and prioritized in a system plan?

A. Yes. As relevant in this proceeding, there were four projects (besides the planning project itself, Project #14) that were not identified and prioritized in a system plan: Project #6 (Rolf Bruun System – Disinfection System), Project #7 (Estates System - Reservoir, Booster Pumps & Manganese Treatment), Project #10 (Diamond Point

System - Disinfection System), and Project #11 (Agate West System - Chlorination System). Since each of these projects was driven by unanticipated changes in circumstances, the documentation for these projects does not include a corresponding system plan. However, the changing circumstances that drove these projects are documented in the record through DOH notices, detailed engineering plans, and similar materials. We lay out the documentation corresponding to each project in Section III, below.

Q. How do cost estimates in the system plans relate to the amounts included in Cascadia Water's capital budget?

A. Projects identified in the system plans include cost estimates prepared by Mr. Tasoff's engineering firm based on industry experience. However, these estimates are preliminary only, based on past projects with similar scopes. These estimates may be impacted by factors such as site-specific installation limitations, inflationary pressures, and permitting needs. These factors are accounted for in the full project budget before the project is included in an initial capital budget.

Q. Once the General Manager has prepared a capital budget, what happens next?

A. Once the General Manager has prepared a capital budget, that information is provided to NWN Water. The identified projects are then evaluated for feasibility and need in an iterative, collaborative process with NWN Water as the parent company. NWN Water then determines the capital budget for Cascadia Water. To be clear, however, the General Manager determines which projects are identified for development.

Q. Has this capital budgeting process resulted in downward pressure on Cascadia Water's investments?

A. Yes. For instance, in 2024, Cascadia Water identified a need for approximately **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** in capital investments, reflecting a significant backlog of deferred maintenance on Cascadia Water's systems. Cascadia Water, in collaboration with NWN Water, was able to pare down this budget to approximately **[BEGIN CONFIDENTIAL** [redacted] [**END CONFIDENTIAL**]. This reduction demonstrates both the substantial quantity of deferred maintenance on the Company's systems, as well as its efforts to reduce the rate impacts on customers.

Q. Are there any constraints on Cascadia Water's ability to create and maintain more contemporaneous records of available alternatives and cost/benefit assessments?

A. Yes. Fundamentally, the quantity and detail of records depend on personnel time and resources. As demonstrated by Project #14 in this case (the Island County Unified Water System Plan project), rigorous planning and documentation is both labor intensive and costly. Moreover, even where such a planning document is created, complete with project prioritization, initial cost estimates, and system background, Parties and the Commission have described such documentation as inadequate.[7] At the same time, certain Parties contest the Company's request to recover the costs of project planning documentation by proposing to disallow full recovery of Project #14.

[7] Commission Order 06 ¶ 81; Gilles, Exh. BCG-1T at 33; Duren, Exh. SD-3CT at 3.

Thus, Cascadia Water is caught in a situation where the existing system-level planning and documentation processes are deemed inadequate, but substantially increasing the Company's planning and documentation efforts would increase costs.

Q. Despite these challenges, has Cascadia Water found opportunities to improve its recordkeeping practices based on feedback in this proceeding?

A. Yes. Based on the feedback received in this proceeding, Cascadia Water has clarified and formalized its documentation of the decision-making process for capital planning and budgeting. Moving forward, Cascadia Water anticipates documenting the capital planning and budget review process as follows:

- First, the General Manager will prepare the capital plan and overall budget for each year, including project descriptions, budgets, and alternatives considered. The degree of project detail, and whether consideration of alternatives is appropriate, will correspond to the type and scale of each project. **This capital planning submission will be a written document.**
- Second, NWN Water will provide technical resources and feedback to help assess the proposed capital projects' feasibility and rate impacts. For instance, NWN Water has the technical expertise to run rate impact scenarios for different budget levels. Based on this information, Cascadia Water may amend its capital budget request. Through this iterative and collaborative process between NWN Water and Cascadia Water, NWN Water will identify an approved investment budget. **This rate impact feedback and final budget approval will be a written document.**

We hope that enhancing documentation for these steps will mitigate Parties' and the Commission's concerns regarding the Company's documentation of project decision-making in future proceedings.

III. Capital Projects

Q. Please summarize Cascadia Water's position concerning the capital projects for which the Company seeks cost recovery in this case.

A. Since Cascadia Water's last general rate case and the filing in this proceeding, the Company invested over $7.6 million in projects necessary to safely and reliably serve customers. The bulk of these investments were designed to remediate and stabilize the Company's water sources through wells and reservoirs, and to address deficiencies in the water mains, booster pumps, and disinfection systems that ensure clean water is conveyed to customers. Additional investments, such as in generators and Supervisory Control and Data Acquisition ("SCADA"), enable closer monitoring of the Company's systems to provide advance warning of potential problems and to minimize service disruptions (such as by avoiding depressurization events and associated boil water notices).

Q. What is the status of the capital projects that you have previously described in testimony?

A. All but two of the 14 capital projects previously described in testimony have been completed and are currently serving customers. The Agate West System – Chlorination System project is in construction and will be placed in service by the end of September 2025. The treatment portion of the W&B Waterworks System #1 – Reservoir, Pumphouse, Treatment & Water Main Replacement project has

experienced delays associated with receiving electrical service from Puget Sound Energy, but the reservoir, pumphouse, and water mains were all completed in June 2024 and are currently serving customers. We discuss these projects in more detail below.

Q. Which Parties propose adjustments to Cascadia Water's capital projects?

A. Public Counsel and WCAW both propose adjustments to the Company's request to recover the costs of its capital projects in this case.

Q. Please summarize Public Counsel's proposed adjustment to Cascadia Water's capital projects.

A. Public Counsel proposes two types of adjustments. **First,** Public Counsel proposes to reduce Cascadia Water's cost recovery for *all* 14 capital projects to remove their cost of capital, on the basis that Cascadia Water has failed to provide adequate contemporaneous documentation for any of these projects.[8] Public Counsel claims that this adjustment would reduce Cascadia Water's revenue requirement to $933 thousand.[9]

Second, and in the alternative, Public Counsel proposes to reduce Cascadia Water's revenue requirement to reflect the presumed costs of delaying three of Cascadia Water's capital projects: the CAL Waterworks and Estates system reservoirs, and the standby generator installations (Projects #3, 7, and 12). Public Counsel calculates that the resulting adjustment would yield a revenue requirement of

[8] Public Counsel Post-Hearing Brief ¶ 83 (proposing to disallow certain capital costs associated with all 14 capital projects); *see also* Order 06 ¶ 56 ("Public Counsel recommends that the Commission should determine that Cascadia Water has failed to meet its burden to demonstrate that all 14 major capital projects were prudent[.]").
[9] Public Counsel Post-Hearing Brief ¶ 83.

between $1.12 million to $1.19 million, and recommends a midpoint of $1.15 million.[10]

Q. Has Public Counsel raised specific objections to the prudence of all 14 of Cascadia Water's capital projects in this case, other than general objections to the adequacy of Cascadia's documentation?

A. No. We understand that Public Counsel raised specific objections to the timing of three of the Company's capital projects in testimony, and contested two additional projects in briefing, namely:

- Project # 3: CAL Waterworks System – Reservoir Replacement & Booster Pump Improvements
- Project #7: Estates System – Reservoir, Booster Pumps & Manganese Treatment
- Project #8 W&B Waterworks System #1 – Reservoir, Pumphouse, Treatment & Water Main Replacement[11]
- Project #12: Generators for Multiple Systems
- Project #13: SCADA Remote Monitoring System for Multiple Systems[12]

[10] Public Counsel Post-Hearing Brief ¶ 83.
[11] Public Counsel first raised specific objections to this project in its Post-Hearing Brief. Public Counsel Post Hearing Brief ¶ 42 (discussing the W&B Waterworks #1 System reservoir project; *id.* ¶ 80 (broadly asserting that each of Cascadia Water's reservoirs were "over-sized and therefore imprudent").
[12] Public Counsel first raised specific objections to this project in its Post-Hearing Brief. Public Counsel Post-Hearing Brief ¶ 13 (speculating whether the SCADA project could have been delayed).

Q. Please summarize WCAW's proposed adjustment concerning Cascadia Water's capital projects in this case.

A. WCAW proposes a full disallowance of all of Cascadia Water's capital projects in this case on the basis that Cascadia Water has failed to provide adequate documentation to support any of the 14 projects.[13]

Q. Did WCAW raise project-specific objections to all 14 of Cascadia Water's capital projects in this case?

A. No. As with Public Counsel, WCAW raised specific objections to the same 5 projects identified above.[14] We describe and respond to these project-specific objections in more detail below.

Q. Both WCAW's and Public Counsel's global adjustments are premised on a lack of adequate contemporaneous documentation. How do you respond?

A. Cascadia Water strongly objects to the proposed global adjustments for two reasons. **First,** Cascadia Water has provided documentation to support each of the 14 capital projects in this case. The documentation corresponding to each project is clearly listed and described below in discussion of each of the Company's capital investments. Given the expansive and non-specific nature of these adjustments, which generally contest the Company's prudent capital decision-making, we address

[13] Gilles, Exh. BCG-1T at 26 (asserting that "Cascadia has not produced the capital improvement plans, cost benefit analyses, or analyses of alternative options necessary to demonstrate that its capital improvements were necessary"); WCAW Post-Hearing Brief ¶¶ 108-09 (claiming without exception that Cascadia "failed to demonstrate the prudence of investments" and that the Commission should "[e]xclude from the rate base all capital expenses not proven to be prudent").
[14] Gilles, Exh. BCG-1T at 30:15-33:15 (objecting to Cascadia's investments in reservoirs, generators, and SCADA); *see also* WCAW Post-Hearing Brief at 19-30 (addressing the same 5 projects).

the need for and benefits of each project, in addition to providing project status updates and addressing any project-specific concerns.

Second, a global disallowance—either the full disallowance proposed by WCAW, or the partial cost of capital disallowance proposed by Public Counsel—covering all of the Company's major capital projects, based on concerns over a select few, lacks adequate factual foundation. There is no rational basis for extrapolating the Parties' concerns regarding a handful of projects to cover the entirety of Cascadia Water's capital projects in this case.

The implications of these global adjustments, as well as alternative proposals, are discussed in more detail in the Rebuttal Testimony of Mathew J. Rowell (Exhibit MJR-11T).

Q. Do you have any additional comments regarding the Company's documentation of prudent decision-making for the capital projects in this case?

A. Yes. Fundamentally, we are concerned that Cascadia Water's investments in basic infrastructure needed to reliably and safely serve customers are being treated as definitionally imprudent merely because there is a perception that no specific document exists to record the Company's final triggering investment decision. We do not understand the Commission's contemporaneous documentation standard to be so rigid. Rather, it is our understanding that documentation is adequate when it allows the Commission to follow the utility's decision-making process.[15]

[15] *WUTC v. Puget Sound Energy*, Dockets UE-111048, *et al.*, Order 08 ¶409 (May 7, 2012).

Here, the Company has provided documentary and photographic evidence of the dilapidated state of the systems, has explained why each given project was needed, and has provided sworn testimonial evidence by the relevant decision-maker who prioritized the project, along with various other contextual records listed below. While Cascadia Water recognizes the need to improve the Company's documentation practices going forward, we believe that Cascadia Water has satisfied the functional purpose of the Commission's contemporaneous documentation standard: to allow the Commission to evaluate whether the decision to undertake each project fell within a reasonable range of prudence.[16]

1. Del Bay System – Waterline Replacement & Consolidation with W&B Waterworks #1 System

Q. Please briefly summarize this project.

A. This project involved replacing approximately 3,000 feet of leaking water mains in the Del Bay distribution system. This project also connected the Del Bay system with the W&B Waterworks #1 System, thus providing access to more reliable and better quality water.

Q. Is this project currently in service?

A. Yes. This project was placed in service in May 2023, and is currently used and useful for customers.

Q. Has any Party raised a specific concern regarding this project?

[16] *Id*. ("The utility must keep adequate contemporaneous records that will allow the Commission to evaluate the Company's decision-making process.").

A. No party has raised any specific concerns regarding this project. Nonetheless, both Public Counsel and WCAW continue to advance global adjustments that would reduce Cascadia Water's cost recovery for this project.[17]

Q. Why was this project needed?

A. This project was needed to fix leaks in the distribution system. The system leakage rate exceeded 10 percent, as reflected in annual water use efficiency reports.[18] These leakage levels triggered WAC 346-290-820's requirement to develop a responsive action plan. Importantly, the system had been repaired frequently in the past, creating a patch-on-patch situation. As a result, additional system patching was inadequate to address the distribution system's level of deterioration.

Q. What are the benefits of this project?

A. In addition to fixing leaks, the project also (1) facilitates fire suppression by installing appropriately-sized water mains; (2) reduces Del Bay system costs by linking the system with the W&B Waterworks #1 system, thereby avoiding the need to replace the Del Bay system's failing reservoir and older well; and (3) avoided the need to install direct disinfection, as the existing system had excessively high iron and manganese concentrations.[19]

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[17] Public Counsel Post-Hearing Brief ¶ 83 (proposing to disallow certain capital costs associated with all 14 capital projects); *see also* Order 06 ¶ 56 ("Public Counsel recommends that the Commission should determine that Cascadia Water has failed to meet its burden to demonstrate that all 14 major capital projects were prudent[.]"); Gilles, Exh. BCG-1T at 26; WCAW Post-Hearing Brief ¶¶ 108-09 (claiming without exception that Cascadia "failed to demonstrate the prudence of investments" and that the Commission should "[e]xclude from the rate base all capital expenses not proven to be prudent").
[18] Exh. CJL-JMT-5.
[19] Exh. CJL-JMT-5 (2022 Del Bay Water Quality Report) (showing iron and manganese concentrations in excess of maximum contaminant levels).

Q. Did Cascadia Water consider alternatives for this project?

A. Yes. Cascadia Water considered three types of alternatives to the selected project. **First,** Cascadia Water analyzed the relative costs and benefits of consolidating the Del Bay system with the W&B Waterwork #1 System as compared to maintaining and replacing the existing Del Bay infrastructure. This "maintain and replace" alternative was not selected because it was more expensive, without sufficient corresponding benefits.

Second, Cascadia Water considered design alternatives to the chosen water main route, including (a) under the edge of the asphalt surface; (b) under the existing ditch line; (c) along the west side of the roadway; and (d) within the existing right-of-way through landscaping. The Company determined that option (a) was the preferred alternative because it was the lowest cost and least risk by providing the greatest certainty regarding other underground operations. By comparison, for instance, running the line along the roadway under a drainage ditch had a higher risk of waterflow and erosion problems.

Third, Cascadia Water evaluated alternative bids for third-party contractors to implement this project. Cascadia Water selected the lowest responsive bidder, Morley and Sons, as the most affordable option for customers.

Q. Could Cascadia Water reasonably have delayed this project?

A. No. Cascadia Water could not reasonably have delayed this project because the line was leaking to the point of causing flooding into customers' yards.

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Q. Has Cascadia Water provided documentation to support the prudence of this project?

A. Yes. In addition to testimony from Mr. Lehman as the decision-maker, Cascadia Water provided the following documentation to support the prudence of this project:

- 2019 Del Bay Water Use Efficiency Annual Performance Report (Exhibit CJL-JMT-3).[20] This document shows that the distribution system leakage levels were in excess of 14 percent.
- 2021 Island County Unified Water System Plan (Exhibit CJL-8). As this document explains, the Del Bay system suffered from undersized water mains, water loss issues, and aging facilities.[21]
- 2021 Del Bay Engineering Specifications (Exhibit CJL-JMT-4).[22] This document details the project's engineering specifications, including detailed maps.
- 2022 Water Quality Report (Exhibit CJL-JMT-7).[23] This document shows the elevated iron and manganese concentrations in excess of maximum contaminant levels.

Q. What cost recovery is Cascadia Water requesting for this project?

A. Cascadia Water seeks to recover its capital investment of $793,082.

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[20] This document was previously provided to Parties as Cascadia Water's Response to WCAW Data Request ("DR") 75, Attachment 1.
[21] Exh. CJL-8 at 88.
[22] This document was previously provided to Parties as Cascadia Water's Response to WCAW DR 85, Attachment 1.
[23] This document was previously provided as Cascadia Water's Response to Public Counsel Informal Request 14, Attachment 1.

2. CAL Waterworks System – Distribution System Loop at Beachwood Drive

Q. Please briefly summarize this project.

A. This project installed pipelines and valves to create a distribution system loop at the intersection of Beachwood Drive and East Harbor Road, thereby alleviating inadequate service pressures to customers in the area. Previously, service pressures to customers were below DOH-required minimum levels.

Q. Is this project currently in service?

A. Yes. This project was placed in service in March 2023, and is currently used and useful for customers.

Q. Has any Party raised specific concerns regarding this project?

A. No. Nonetheless, both Public Counsel and WCAW continue to advance global adjustments that would reduce Cascadia Water's cost recovery for this project.[24]

Q. Why was this project needed?

A. This project was needed to address inadequate distribution service pressures, which fell below the minimum system standard set forth in WAC 246-290-230(5).[25] Thus, this project was needed to ensure adequate water flows to reliably serve customers.

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[24] Public Counsel Post-Hearing Brief ¶ 83 (proposing to disallow certain capital costs associated with all 14 capital projects); *see also* Order 06 ¶ 56 ("Public Counsel recommends that the Commission should determine that Cascadia Water has failed to meet its burden to demonstrate that all 14 major capital projects were prudent[.]"); Gilles, Exh. BCG-1T at 26; WCAW Post-Hearing Brief ¶¶ 108-09 (claiming without exception that Cascadia "failed to demonstrate the prudence of investments" and that the Commission should "[e]xclude from the rate base all capital expenses not proven to be prudent").

[25] WAC 246-290-230(5) reads as follows: "New public water systems or additions to existing systems shall be designed with the capacity to deliver the design PHD quantity of water at 30 psi (210 kPa) under PHD flow conditions measured at all existing and proposed service water meters or along property lines adjacent to mains if no meter exists, and under the condition where all equalizing storage has been depleted."

Q. What are the benefits of this project?

A. This project provides two key benefits. **First**, adequate system pressure protects the integrity of the water system by preventing contaminant infiltration. If water pressure is not maintained, then during large demand periods water velocity in the system can cause a siphoning effect, drawing contaminants into the system through any leaks.

Second, this project ensures that customers receive sufficient water for basic household functions. When water pressure falls below minimum levels, and particularly when multiple households engage in water-heavy activities, there is not enough water pressure and volume to supply systems like boilers, washing machines, and showers.

Q. Were there viable alternatives for this project that Cascadia Water considered?

A. No. Completing the distribution loop was the only viable option for improving system pressure. For instance, even installing booster pumps would have been insufficient to supply adequate system pressures through the existing 4-inch pipes. Similarly, Cascadia Water did not consider delaying this project as the system was already below minimum pressure standards and required immediate action.

Q. Has Cascadia Water provided documentation to support the prudence of this project?

A. Yes. In addition to testimony from Mr. Lehman as the decision-maker, Cascadia Water provided the following documentation to support the prudence of this project:

- 2021 Island County Unified Water System Plan (Exhibit CJL-8). This document discusses the pressure losses in the CAL Waterworks system associated with the incomplete distribution system loop between Beachwood Drive and Harbor Sands

Lane, and explains that the system is capable of providing adequate pressure once the loop is completed.[26] This document also addresses the relative priority of the project ("Immediate") and the preliminary cost estimate ($25,000).[27]

Q. What cost recovery is Cascadia Water requesting for this project?

A. Cascadia Water seeks to recover its capital investment of $29,263 for this project.

3. CAL Waterworks System – Reservoir Replacement & Booster Pump Improvements

Q. Please briefly summarize this project.

A. This project entailed replacing the 1968 concrete storage reservoir and associated pumphouse, water mains, and booster pumps.[28] Temporary storage was also provided to ensure continuity of service during construction.

Q. Is this project currently in service?

A. Yes. This project was placed in service in December 2023, and is currently used and useful for customers.

Q. What cost recovery is Cascadia Water requesting for this project?

A. Cascadia Water seeks to recover its capital investment of $1.307 million.

Q. Do any Parties raise concerns and corresponding adjustments specifically related to this project?

A. Yes. Public Counsel contests the timing and design of this project's reservoir and booster pumps, and proposes a $1.02 million adjustment on the basis that the project

[26] Exh. CJL-8 at 80-81.
[27] Exh. CJL-8 at 99.
[28] Exh. CJL-8 at 913 (showing reservoir installation date); Exh. MJR-CJL-6 at 7 (detailing project background).

could have been delayed by instead patching the existing reservoir for $75,000.[29] In the alternative, Public Counsel proposes an adjustment that would foreclose recovery of the Company's cost of capital for the entirety of the project's useful life, thereby reducing the Company's revenue requirement by $122,000.[30]

WCAW similarly contests the size of and need for the reservoir replacement, and proposes a full disallowance of project costs.[31]

a. Project Timing

Q. Has Cascadia Water established why this project was needed now?

A. Yes. This project was needed now for several reasons: **First,** the existing reservoir was leaking excessively, as seen in photos from inspection records.[32] This deteriorating condition was not unexpected, as the reservoir was first installed in 1968 and had been used for over 50 years.[33] **Second,** the existing 41,200 gallon reservoir[34] was already below the DOH minimum recommended value for the size of the system served.[35]

Q. Did Cascadia Water consider alternatives for this project?

A. Yes, Cascadia Water initially considered several alternatives for this project. Specifically, Cascadia Water considered alternate layouts on the limited site, as well as the option of installing a second reservoir as a stop-gap option to allow us to drain

[29] De Villiers, Exh. SDV-11Tr at 8; *see also* Public Counsel's Post-Hearing Brief ¶ 84 (advancing a delay-based adjustment).
[30] Public Counsel's Post-Hearing Brief ¶ 83.
[31] Gilles, Exh. BCG-1T at 31 (addressing reservoir size); WCAW Post Hearing Brief ¶ 61 (addressing need for and timing of the project as a whole); *id.* ¶ 65 (proposing full disallowance).
[32] Exh. CJL-6 (2023 DOH Sanitary Survey, including photos of leaking reservoir).
[33] Exh. CJL-8 at 913 (2021 Island County Unified Water System Plan)
[34] Exh. CJL-8 at 714 (summarizing preexisting storage volumes).
[35] Exh. CJL-8 (Island County Unified Water System Plan).

and repair the existing above-ground reservoir without undermining ongoing access to service. This latter option was not selected due to space constraints and increased costs. The chosen design alternative was the least-cost option to meet anticipated customer demand under DOH design standards.

In addition, Cascadia Water also considered alternative third-party contractor bids for this project, ultimately awarding the contract to the lowest responsive bidder.

Q. Has Cascadia Water provided documentation to support the prudence of this project?

A. Yes. In addition to testimony from Mr. Lehman as the decision-maker, Cascadia Water provided the following documentation to support the prudence of this project:

- 2021 Island County Unified Water System Plan (Exhibit CJL-8). This document provides a summary of the proposed project, including the preliminary cost estimate, and identifies the components of this project as highest priority for the CAL Waterworks system (after the Beachwood Drive loop project, described above).[36]
- 2022 CAL Waterworks Engineering Report (Exhibit MJR-CJL-6). This detailed report provides a careful assessment of project design alternatives, including the appropriate reservoir size, the size and number of booster pumps, and recommended materials and configurations.

[36] Exh. CJL-8 at 99.

- 2023 DOH Sanitary Survey (Exhibit CJL-6). This survey notes the deteriorating condition of the existing reservoir and provides contemporaneous photographic evidence of the worsening leaks.
- Photographs of the electrical systems (before: Exhibit MJR-CJL-9 and after: Exhibit MJR-CJL-10). These materials provide important context for the maintenance conditions of the existing pumphouse. As these photographs show, the existing electrical wiring for the pumphouse was woefully deficient, and was not amenable to additional patchwork fixes.

Q. Public Counsel claims that this project could have been safely delayed by merely lining the existing tank.[37] Do you agree?

A. No. We strongly disagree that this project could have been safely deferred by merely lining the reservoir, as this would not have addressed either the reservoir's structural issues or other deteriorating aspects of this system. Electrically, the associated pumphouse was highly precarious. As Mr. Lehman has previously explained, the demolished structure had exposed wiring, limited insulation, and inadequate space to safely perform standard operations.[38] The unsafe conditions are documented in photographs in Exhibit MJR-CJL-9. Exhibit MJR-CJL-10 shows the same equipment, after the project's completion. In short, it would have been wholly imprudent to delay addressing these unsafe conditions by trying to patch the cracked reservoir.

[37] Exh. SD-3CT at 10:13-11:4.
[38] Exh. MJR-CLT-8JT at 16.

Q. Public Counsel argues that the reservoir had not reached the end of its useful life since, as you note, reservoirs can last for 80 years.[39] How do you respond?

A. A reservoir's anticipated useful life has improved considerably over time as construction practices have evolved. For instance, the AWWA has noted that seismic code changes in particular mean that pre-1984 reservoirs are "likely non-compliant" with current code.[40] Designs have improved, moving away from octagonal reservoirs with edge seams and towards round reservoirs with improved structural resilience. Similarly, materials have improved, such as using rubber seals between seams to prevent leakage and reduce cracking. Thus, it is reasonable to expect modern reservoirs in good conditions to last much longer than reservoirs installed more than 50 years ago. In the case of the CAL Waterworks reservoir, this was a 1968 octagonal reservoir that had already begun to fail.

Q. Would delaying the project by lining the existing reservoir, and then replacing the reservoir in five years, have saved customers money?

A. No. On the contrary, Public Counsel's "phased" approach would have increased overall costs by approximately 15 percent.[41]

Q. Even if the project could have been delayed, is Public Counsel's proposed $1.02 million adjustment appropriate?

A. No. Even if the Company had been able to line the reservoir, which was not a reasonable alternative, that would not justify a wholesale disallowance of the

[39] Public Counsel Reply Brief ¶ 15.
[40] Exh. CJL-JMT-6 ("AWWA Seismic Options for New and Old Reservoirs (2015)").
[41] Exh. MJR-CJL-8JT at 15:21-17:2.

project's cost of capital for the entire 50-year life of the asset. Rather, a delay-based adjustment would logically delay the Company's cost recovery request—not permanently foreclose full cost recovery for the life of the project.

b. Reservoir Size

Q. Public Counsel argues that Cascadia Water failed to justify the reservoir's 79,000 gallon capacity size for the CAL Waterworks reservoir, since the Island County Unified Water System Plan called for a 60,000 gallon reservoir.[42] How was the reservoir capacity size determined?

A. To be clear, the 60,000 gallon capacity referred to in the Island County Unified Water System Plan was a preliminary value that was specifically intended to be "verified in design."[43] This is precisely what happened. The reservoir capacity size was determined according to a detailed design assessment conducted by Mr. Tasoff's engineering firm.[44] These calculations made allowance for operational storage, equalizing storage, dead storage, standby storage, and fire suppression storage, and recommended a final capacity of 79,400 gallons.[45]

Q. Public Counsel further claims that the previous storage tank size of 41,200 gallons would have been adequate, on the basis that only full buildout of the service area would require such capacity.[46] How do you respond?

A. We strongly disagree that a 41,200 gallon reservoir would have been adequate to serve even near-term expected growth in the CAL Waterworks system for two

[42] Exh. SD-1CT at 8:5-10.
[43] Exh. CJL-8 at 99.
[44] Exh. MJR-CJL-6 at 2 *et seq.* (2022 CAL Waterworks Engineering Report).
[45] Exh. MJR-CJL-6 at 15 (Table 3 "Storage Components").
[46] Duren, Exh. SD-3CT at 9:1-8.

reasons. **First,** the existing volume of standby storage was below the minimum recommended value for the size of the system served. Public Counsel's calculations rely on the bare minimum amount of standby storage on a per-equivalent residential unit ("ERU") basis. Specifically, Public Counsel Witness Scott Duren states that "recommended" standby storage is 200 gallons/ERU.[47] Yet as specified in the DOH Water System Design Manual, this amount is a minimum level; the DOH's recommended amount of standby storage is based on maximum daily demand, which in Cascadia Water's case for this system is 500 gallons/ERU—not 200.[48] Importantly, this minimum level applies to systems that have multiple sources of supply and other specified reliability measures in place, such as permanent automatic on-site back-up power sources, access to power from two electrical substations, and water sources in multiple watersheds.[49] In contrast, Mr. Tasoff's firm used a midpoint of 303 gallons/ERU to calculate the appropriate level of standby storage.[50] Adjusting Public Counsel's calculations to reflect DOH-recommended (rather than minimum) volumes, the reservoir would require 44,238 gallons of standby storage to support the existing 146 connections.[51] Thus, Public Counsel's proposed reservoir would not have been adequate to support even the existing number of approved connections.

[47] Duren, Exh. SD-3CT at 9 (Table 2 "Storage Needs").
[48] Exh. CJL-12 at 191 (DOH Water System Design Manual).
[49] Exh. CJL-12 at 192.
[50] Exh. MJR-CJL-6 at 14. Note, this report also includes a calculation to show that the proposed reservoir would exceed the DOH minimum recommended storage levels using the minimum 200 gallons/ERU figure. However, the proposed reservoir volume calculation used 303 gallons/ERU to yield the 58,480 gallon total proposed volume of standby storage. *Id.*
[51] 303*146=44,238.

Second, as Public Counsel has recognized, reservoirs are long-lived assets, and must reliably serve customers as demand grows. The number of approved connections can—and commonly does—increase over time. Here, Cascadia Water has already added 6 new residential connections since this case was filed—raising the number of ERUs from 114 to 121. At this pace, Public Counsel's proposed 41,200-gallon reservoir would be inadequate to serve customers in approximately 4 years. The engineering report appropriately planned for regional growth to allow the reservoir to provide adequate service over the life of the project.

Q. How was the reservoir storage size determined in this case?

A. In this case, when calculating the needed reservoir capacity, Mr. Tasoff's firm used the conservative value of approximately 300 gallons/ERU, in conjunction with the long-term forecast of 193 ERUs, to yield a reasonable estimate of total need.[52] This approach ensured that the reservoir's capacity would meet DOH's minimum capacity over the anticipated life of the project and not inhibit system growth. This calculation also provides operational flexibility in the event that (a) well production decreases, (b) there is an increase in average demands, or (c) there is a need to install water treatment at a later date.

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[52] Exh. MJR-CJL-6 at 14 (see the proposed reservoir volume of 58,480 gallons, which provides 303 gallons of standby storage for 193 ERUs).

Q. What would have been the cost difference associated with installing a smaller sized reservoir?

A. Based on our industry experience designing and installing reservoirs, reducing the capacity of the reservoir to the next size down (59,000 gallons) would have reduced the cost of the project from $185,000 to approximately $150,000-$160,000.

d. Booster Pump Sizes

Q. Public Counsel argues that 5 horsepower (hp) booster pumps would have been sufficient for this project rather than the 10 hp booster pumps that were installed, given that adding a loop to the distribution system would address existing pressure deficiencies.[53] Do you agree?

A. No. Adding the Beachwood loop to the distribution system did not eliminate the need for booster pumps. The Beachwood loop addressed a physical constraint on a downstream portion of the system where very small pipes limited system pressure to certain customers. In contrast, the booster pumps addressed pressure on the system as a whole. Here, the booster pumps' sizes were determined by Mr. Tasoff's engineering firm, which concluded that 10 hp pumps were appropriate.[54] This size of pump allows the system to meet current peak hour demand while providing reasonable pressure levels to all service connections, and ensures continuity of service if one pump is out of service.[55]

[53] Duren, Exh. SD-1CT at 8:11-21.
[54] Exh. MJR-CJL-6 at 17.
[55] Exh. MJR-CJL-6 at 17.

Q. Would reducing the size of the booster pumps have significantly reduced project costs?

A. No. If Cascadia Water had installed 5 hp booster pumps rather than 10 hp pumps, the cost difference would have amounted to approximately $1,000 per pump.[56]

Q. Do you have any final comments regarding the prudence of this project?

A. Yes. This project is used and useful and has been serving customers since December 2023. Cascadia Water replaced a leaking reservoir and decrepit electrical equipment to ensure the safe and reliable provision of drinking water. While we recognize the need to control costs where reasonably possible, this acquired system was substantially deteriorated precisely because necessary maintenance had been inappropriately delayed in the past. Further delays would not have been reasonable, as deteriorating systems become increasingly precarious over time. Thus, additional delay would have merely compounded the risks of earlier inaction.

4. W&B Waterworks #1 System – Water Main Replacement & Mutiny Lane Pressure Reducing Valve

Q. Please briefly summarize this project.

A. This project involved repair work associated with a water main failure. Specifically, a waterline located on a steep slope was disrupted when the slope itself shifted, fracturing the water main. While the Company was able to quickly restore temporary service by inserting a smaller line through the existing pipe, this temporary line was

[56] This figure is derived from listed costs for 10hp and 5hp Goulds pumps—the 10hp version of which was used at the CAL Waterworks project. *See* PumpCatalog.com, 10hp three-phase pump, available at https://www.pumpcatalog.com/goulds/e-sv-series-stainless-steel-vertical-multi-stage-pump-series/33sv21gj4f60/; *id.*, 5hp single-phase pump, available at https://www.pumpcatalog.com/goulds/e-sv-series-stainless-steel-vertical-multi-stage-pump-series/33sv21gj4f60/;

inadequate to meet higher summer month demands. As a result, the project replaced (a) the failed water main and (b) the associated pressure reducing valve.

Q. Is this project currently in service?

A. Yes. This project was placed in service in May 2022, and is currently used and useful for customers.

Q. Does any Party raise a specific objection or concern regarding this project?

A. No. Nonetheless, both Public Counsel and WCAW continue to advance global adjustments that would reduce Cascadia Water's cost recovery for this project.[57]

Q. Why was this project needed?

A. This project was needed because the existing line had been damaged beyond repair by the slope movement. While a temporary water line had been run inside the broken watermain, this line was too small to meet minimum pressure requirements, particularly during summer months.

Q. What are the benefits of this project?

A. This project restored reliable and sufficient service to the disrupted customers.

Q. Did Cascadia Water consider alternatives for this project?

A. Yes, Cascadia Water considered one major design alternative to this project. Specifically, Cascadia Water has already identified a medium-/long-term need to extend a water main from Mutiny Bay Road to the end of the waterline off Robinson

[57] Public Counsel Post-Hearing Brief ¶ 83 (proposing to disallow certain capital costs associated with all 14 capital projects); *see also* Order 06 ¶ 56 ("Public Counsel recommends that the Commission should determine that Cascadia Water has failed to meet its burden to demonstrate that all 14 major capital projects were prudent[.]"); Gilles, Exh. BCG-1T at 26; WCAW Post-Hearing Brief ¶¶ 108-09 (claiming without exception that Cascadia "failed to demonstrate the prudence of investments" and that the Commission should "[e]xclude from the rate base all capital expenses not proven to be prudent").

Road, thus creating a system loop and allowing the replacement line to be smaller. However, this alternative was not chosen because of the time-sensitive nature of the water main repair project and because the line extension would have been significantly more costly.

Cascadia Water also considered alternative third-party contractor bids for multiple portions of this project, including the directional drilling and installation of the pressure release valves. In each case, the contract was awarded to the lowest responsive bidder.

Q. Has Cascadia Water provided documentation to support the prudence of this project?

A. Yes. In addition to direct testimony from the General Manager as the decision-maker, Cascadia Water provided and is now supplementing the following documentation to support the prudence of this project:

- 2021 Island County Unified Water System Plan (Exhibit CJL-8). This plan includes a description of the project, project priority, and an initial project estimate.[58]
- 2021 W&B Water Main Replacement Engineering Specifications (Exhibit CJL-JMT-7).[59] This document provides a detailed project description, including maps.

[58] Exh. CJL-8 at 91-92 (including one PRV identified in project #1 ($20,000) and the waterline replacement in project #8 ($50,000).
[59] This document was previously provided to Parties as Cascadia Water's Response to WCAW DR 47, Attachment 7.

- Mutiny Lane PRV Vault Before/After Photographs (Exhibit CJL-JMT-8). This document shows the PRV portion of this project, including the preexisting condition of the underground vault.

Q. What cost recovery is Cascadia Water requesting for this project?

A. Cascadia Water seeks to recover its $178,655 capital investment in this project.

5. W&B Waterworks #1 System – Mutiny Bay Road Pressure Reducing Valve Replacement

Q. Please briefly summarize this project.

A. This project replaced and relocated pressure release valves and an associated storage vault, previously located at the intersection of Mutiny Bay Road and Woodward Avenue, and subsequently moved to the Mutiny Bay Road and Robinson Road intersection. As part of this replacement and relocation, Cascadia Water also installed additional fittings and valves to enable future extension down Robinson Road, which would create a system loop to stabilize system pressures.

Q. Is this project currently in service?

A. Yes. This project was placed in service in November 2023, and is currently used and useful for customers.

Q. Does any Party present specific objections concerning this project?

A. No. Nonetheless, both Public Counsel and WCAW continue to advance global adjustments that would reduce Cascadia Water's cost recovery for this project.[60]

[60] Public Counsel Post-Hearing Brief ¶ 83 (proposing to disallow certain capital costs associated with all 14 capital projects); *see also* Order 06 ¶ 56 ("Public Counsel recommends that the Commission should determine that Cascadia Water has failed to meet its burden to demonstrate that all 14 major capital projects were prudent[.]"); Gilles, Exh. BCG-1T at 26; WCAW Post-Hearing Brief ¶¶ 108-09 (claiming without exception

Q. Why were pressure release valve replacements needed?

A. The replacements were needed because the preexisting equipment had become largely inoperable due to the age and condition of the underground storage vault. Previously, the vault containing the pressure release valves was essentially an underground hole, lined with pressure-treated wood on the side, yet with an open dirt floor.[61] Not only did this sub-optimal set-up preclude access for appropriate maintenance, but the poor vault conditions had resulted in the pressure release valves seizing up—which in turn impacted flow and pressure to customer service lines and hydrants.

Rather than merely replacing the assets on-site, relocation was necessary because of the poor condition of the existing underground vault.

Q. What are the benefits of this project?

A. There are several benefits of this project. **First**, replacing the pressure release valves restored adequate flow and pressure to the system and avoided total equipment failure. **Second**, relocating the equipment helped optimize overall system pressures selecting a better location for the regulating equipment. **Third**, the new location and vault design also improved safety for Cascadia Water employees and contractors who will need to access the vault in the future.

Q. Did Cascadia Water consider alternatives for this project?

A. There were no viable alternatives for this project, aside from the consideration of alternative third-party contractors. Given that the pressure release valves had already

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that Cascadia "failed to demonstrate the prudence of investments" and that the Commission should "[e]xclude from the rate base all capital expenses not proven to be prudent").

[61] Exh. CJL-JMT-11 (Mutiny Road PRV Preexisting Vault Photographs).

seized up, the valves could not completely open and the system was not able to provide adequate fire flow without replacing these valves. Therefore, replacing the equipment was essential. Nor could Cascadia Water have reasonably replaced the equipment in the existing vault; thus, relocation was necessary. Cascadia Water appropriately relocated the equipment to a nearby location that simultaneously addressed broader system pressure issues. Under the circumstances, no alternative was reasonably viable.

Q. Has Cascadia Water provided documentation to support the prudence of this project?

A. Yes. Cascadia Water has provided and is supplementing the following documentation to support the prudence of this project:

- 2021 Island County Unified Water System Plan (Exhibit CJL-8). This document provides a project summary, prioritization, and preliminary cost estimate.[62]
- Mutiny Road PRV Preexisting Vault Photographs (Exhibit CJL-JMT-9). These photographs show the preexisting condition of the underground vault that this project replaced.
- 2023 Mutiny Road PRV Replacement Engineering Specifications (Exhibit CJL-JMT-10).[63] This document provides a detailed project description, including maps.

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[62] Exh. CJL-8 at 91.
[63] This document was previously provided to Parties as Cascadia Water's Response to WCAW DR 47, Attachment 9.

Q. What cost recovery is Cascadia Water requesting for this project?

A. Cascadia Water seeks to recover its capital investment of $146,837 for this project.

6. Rolf Bruun System – Disinfection System

Q. Please briefly summarize this project.

A. This project installed a disinfection system in an addition to an existing pumphouse in the Rolf Bruun distribution system.

Q. Is this project currently in service?

A. Yes. This project was placed in service in December 2024, and is currently used and useful for customers.

Q. Does any Party offer a specific objection concerning this project?

A. No. Nonetheless, both Public Counsel and WCAW continue to advance global adjustments that would reduce Cascadia Water's cost recovery for this project.[64]

Q. Why was this project needed?

A. This project was specifically mandated by DOH to address contamination findings. In 2022, DOH issued a corrective action notice finding repeated elevated bacteria levels without any indication of sanitary defects in Cascadia Water's operations. DOH therefore required Cascadia Water to design, install, and use a continuous disinfection treatment, to be prepared by a licensed engineer.[65] Since there was not

[64] Public Counsel Post-Hearing Brief ¶ 83 (proposing to disallow certain capital costs associated with all 14 capital projects); *see also* Order 06 ¶ 56 ("Public Counsel recommends that the Commission should determine that Cascadia Water has failed to meet its burden to demonstrate that all 14 major capital projects were prudent[.]"); Gilles, Exh. BCG-1T at 26; WCAW Post-Hearing Brief ¶¶ 108-09 (claiming without exception that Cascadia "failed to demonstrate the prudence of investments" and that the Commission should "[e]xclude from the rate base all capital expenses not proven to be prudent").

[65] Exh. CJL-JMT-13 (November 2022 DOH Notice of Corrective Action for Rolf Bruun System).

enough space to install this equipment in the existing pumphouse, the equipment needed to be placed in a building addition.

Q. Did Cascadia Water consider alternatives for this project?

A. No, there were no reasonably viable alternatives for this project. While Cascadia Water used valves that would allow for future installation of a manganese filter system, installing such a filter was not considered immediately necessary due to the increased costs. However, Cascadia Water did consider alternative third-party contractor options through the bidding process, and ultimately awarded the contract to the lowest responsible bidder.

Q. Has Cascadia Water provided documentation to support the prudence of this project?

A. Yes. Cascadia Water provided the following documentation to support the prudence of this project:

- November 2022 DOH Notice of Corrective Action for Rolf Bruun (Exhibit CJL-JMT-11).[66] In this document, DOH identified contamination findings, required a continuous disinfection treatment report, and directed system installation and certification.
- May 2023 Rolf Bruun Continuous Source Disinfection & Oxidation-Filtration Treatment Project Report (Exhibit CJL-JMT-12).[67] This report was prepared by Mr. Tasoff to address the DOH corrective action requirements. The report

[66] This document was previously provided to Parties as Cascadia Water's Response to WCAW DR 39, Attachment 1.
[67] This document was previously provided to Parties as Cascadia Water's Response to WCAW DR 4, Attachment 6.

provides relevant background on the project, analyzes treatment alternatives, and includes a detailed system design, which was subsequently installed.

Q. What cost recovery is Cascadia Water requesting for this project?

A. Cascadia Water seeks to recover its capital investment of $165,068 for this project.

7. Estates System – Reservoir, Booster Pumps & Manganese Treatment

Q. Please briefly summarize this project.

A. This project replaced underground storage reservoirs with a single above-ground reservoir, and installed compatible booster pumps. The two original reservoirs consisted of a 30,000 gallon partially buried concrete tank, installed in 1972, and a 150,000 gallon partially buried concrete tank, installed in 1981. As part of replacing these reservoirs, the Company also incorporated a treatment filter system for iron, manganese, and arsenic. To enable this filtration system, an old storage building was repurposed to house the new treatment filter system and booster pumps.

Q. Is this project currently in service?

A. Yes. This reservoir and booster pumps were placed in service in July 2024 and the treatment system was placed in service in February 2025. The entire project is currently used and useful for customers.

Q. What cost recovery is Cascadia Water requesting for this project?

A. Cascadia Water seeks to recover its capital investment of $1.571 million.

Q. Do any Parties raise concerns and corresponding adjustments specifically related to this project?

A. Yes. Public Counsel proposes a $1.45 million rate base adjustment because it believes this project could have been delayed, and therefore only approximately

$100,000 in costs were immediately necessary to drain, inspect, and seal the cracks.[68] Alternately, Public Counsel continues to advance a disallowance on Cascadia Water's capital costs for the life of the project due to a claimed lack of contemporaneous documentation.[69]

WCAW similarly contests the Company's decision to replace the reservoir and associated infrastructure, claiming that a lack of adequate contemporaneous documentation requires a full disallowance of project costs.[70]

Q. What contemporaneous documentation has Cascadia Water provided to support the prudence of the Company's investment in this project?

A. In addition to Mr. Lehman's testimony as the decision-maker for this project, Cascadia Water has provided and is supplementing the following materials that document the need for and design of this project:

- 2007 Inspection Report (Exhibit CJL-4). This document shows early-stage cracking and reservoir degradation.
- 2021 Water Quality Test (Exhibit CJL-5). This document provides water quality results and shows elevated manganese levels.
- January 2022 DOH Sanitary Survey (Exhibit CJL-2). In this document, DOH identified significant system deficiencies and required Cascadia Water to submit a Corrective Action Plan.

[68] De Villiers, Exh. SDC-11Tr at 8:3-5; Duren, Exh. SD-3CT at 13:5-9 (estimating between $75,000 and $125,000).
[69] Public Counsel Post Hearing Brief ¶¶ 82-83.
[70] WCAW Post-Hearing Brief ¶¶ 60-64; Gilles, Exh. BCG-1T at 26:7 – 32:9; Gilles, Exh. BCG-25T at 3:20 – 4:2.

- February 2022 Underwater Tank Inspection (Exhibit CJL-3). This underwater tank inspection report describes significant diagonal cracking with ¼-inch observed gaps, as well as other cracking and root infiltration.
- August 2022 Engineering Report for Manganese Treatment System (Exhibit MJR-CJL-4 at 12-130). This document discusses water treatment alternatives and describes the project's technical specifications.
- August 2022 Engineering Report for Reservoir & Booster Pumps (Exhibit MJR-CJL-4 at 131-260). This document provides significant context and detail regarding the specific project needs for the reservoir and booster pumps components.
- September 2022 Geotechnical Report for Estates Reservoir (Exhibit CJL-JMT-13). This document details the project location's underlying geotechnical attributes, including soil and seismic concerns, as well as the foundation parameters needed to safely support the new reservoir.
- July 2023 Estates Reservoir Bids (Exhibit CJL-JMT-14C). This document summarizes Cascadia Water's options for construction contractors on this project.

a. Project Timing

Q. Why was replacing the Estates reservoirs necessary now?

A. This project became necessary due to deficiencies identified in DOH's 2022 Sanitary Survey (Exhibit CJL-2). Previously, replacing these reservoirs was not part of Cascadia Water's near-term plan, as reservoirs can commonly last 50 years or more, under good conditions and with regular maintenance. However, underground reservoirs are a known hazard, as tree roots can infiltrate and weaken the structure,

and leaks are more likely to lead to intrusion and contamination from surrounding dirt. Indeed, DOH generally no longer authorizes underground reservoirs, due to these safety concerns.

In this case, as the Sanitary Survey described, the 150,000 gallon reservoir was leaking at several locations. The visible cracking in the storage tank can be seen in the photographic evidence already filed in this proceeding, showing breakage in the concrete structure and visibly seeping water.[71] As a result, DOH required Cascadia Water to promptly take action, and this project became an immediate priority to avoid potential catastrophic failure, flooding, and disruption to safe drinking water supplies.

Q. Please explain why the Estates reservoir replacement was not included in the Island County Unified Water System Plan or another system-specific plan.

A. This project was not included in the Island County Unified Water System Plan because the Estates system was not owned by Cascadia Water when the plan was prepared in 2021, and the system is not located in Island County. This project was not included in the Southwest region's master plan because that plan was not submitted until June 2024—after this project was already underway. As we note above, Cascadia Water will continue to integrate its system planning going forward, but was unable to wait for such a planning cycle before addressing the reservoir's deficiencies.

[71] Exh. CJL-2 at 10.

Nonetheless, Cascadia Water was aware of the cracking from the 2007 inspection report,[72] and subsequent water quality tests showed elevated manganese levels.[73] As a result, Cascadia Water was becoming increasingly aware that reservoir replacement would likely be necessary, but it did not intend to take action before completing another system plan. This timeline was shortened when Cascadia Water received the January 2022 sanitary survey report, which required the Company to take action to address the leaks.[74]

Q. Public Counsel claims that this project could have been safely delayed by repairing the existing reservoir. Please respond.

A. We strongly disagree that delaying this project by patching the existing reservoir would have been prudent, for three reasons:

First, the Company had already performed an underwater tank inspection, which observed significant cracking, including quarter-inch gaps in the internal support wall and plant root infiltration. Additional structural analysis of the buried portions of the reservoir would have been impossible to view without invasive, non-destructive testing. Such structural assessments are themselves expensive and, in our industry experience, would entail approximately $75,000 ($35/square foot).[75] This would be a cost incurred on behalf of customers to support the possibility of repair, even if the findings supported immediate replacement.

[72] Exh. CJL-4.
[73] Exh. CJL-5 at 7.
[74] Exh. CJL-2 at 1-2.
[75] This estimate was provided via a phone consultation with a third-party reservoir inspection specialist.

Second, patching the leaks would not address the underlying structural deficiencies in the deteriorating reservoir. This reservoir was installed well before modern seismic code, with unknown rebar reinforcement, and was visibly failing structurally. Under the circumstances, and given the dynamic and soil pressures on the underground portion of the reservoir during seismic activity, delaying replacement would have increased the likelihood of a catastrophic failure.

Third, delaying replacement by lining the reservoir would have been an imprudent use of utility resources, even if a five-year delay could have been achieved. Public Counsel's preferred approach neither adequately mitigates the immediate risk nor reduces customers' overall cost. On the contrary, such a "phased" approach entails a $125,000[76] cost for a fix that, optimistically, could last five years.

Fundamentally, we disagree that it is prudent utility practice to require future customers to pay more, simply to delay incurring necessary capital and maintenance costs today. Such deferred maintenance is precisely the pattern of behavior that has yielded the current system's significant volume of needed infrastructure investment.

Q. Is there evidence in the record to validate your judgment that the reservoir replacement could not have been reasonably delayed?

A. Yes. Evidence gathered during demolition of the reservoir confirms that Mr. Lehman's professional judgment regarding the project's urgency was not, as Public Counsel and WCAW seem to assert, excessive.

[76] Duren, Exh. SD-3CT at 13:9-19 (estimating $75,000 125,000 for the inspection and repair); however, we believe a more realistic estimate for inspection costs is $75,000, which would determine whether a repair would be possible. Thus, we use the high end of Public Counsel's estimate here.

- Exhibit MJR-CJL-12 shows photographs taken during the demolition process, depicting floor-to-ceiling cracking (page 8-9), intersecting crack webs (page 6-7), and a structural crack (and resulting subsidence) across the reservoir roof (page 4).

Obtaining even a portion of this evidence before proceeding with replacement would have entailed invasive structural testing that is, as we note above, extremely costly. Indeed, underground evidence would have been impossible to access before a decision was made. Thus, professional judgment based on industry experience is unavoidably necessary to some degree. Here, the documentary evidence indicates that the exercise of Mr. Lehman's professional judgment to prioritize the Estates reservoir replacement was appropriate and reasonable.

b. Reservoir Size

Q. Public Counsel claims that the reservoir portion of this project was oversized.[77] Please respond.

A. The installed reservoir has a capacity of 174,400 gallons—as compared to the previous reservoirs, which had a combined capacity of 180,000 gallons.[78] Thus, the project did not increase the reservoir capacity size, but decreased it.

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[77] Public Counsel Post-Hearing Brief ¶ 80 (arguing without citation that "each of the three reservoirs was oversized . . . by 28 percent, 46 percent and 11.7 percent," and declining to specify which alleged oversize was associated with which reservoir).
[78] Exh. MJR-CJL-4 at 138.

Q. How did Cascadia Water determine the appropriate capacity size for the new reservoir?

A. Cascadia Water determined the appropriate reservoir capacity using Mr. Tasoff's engineering firm, which provided a detailed report.[79] As extensively discussed in that report, the recommended storage levels to supply current and expected system customers was 158,600 gallons.[80] This volume was subsequently increased somewhat due to details identified by a geotechnical consultant, which examined the soil conditions and foundation parameters needed to safely support the new reservoir.[81] Based on the site's soil conditions and the region's seismic potential, a very large foundation was needed to support the new reservoir. However, in collaboration with the geotechnical consultant, Cascadia Water was able to reduce the amount of concrete in the foundation while also increasing the reservoir's overall storage capacity—yielding more storage while reducing the overall project costs. This geotechnical adaptation resulted in the final reservoir storage volume of 170,400 gallons.

Q. Does Public Counsel propose an alternative capacity level for the Estates reservoir?

A. No. Public Counsel's argument concerning the size of the Estates reservoir was limited to legal briefing, and no alternative capacity volume was proposed.

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[79] Exh. MJR-CJL-4 at 12 *et seq*.
[80] Exh. MJR-CJL-4 at 143.
[81] Exh. CJL-JMT-13.

c. Filtration System Need

Q. WCAW argues that the Company's investment in the filtration system for this project was imprudent.[82] Why was the filtration system needed?

A. The filtration system was needed because one of the Estates system's two source wells showed manganese levels well above the established limits.[83]

Q. Why was it important to install the filtration system as part of the reservoir replacement project?

A. It was important to install the filtration system as part of the reservoir replacement project in order to fit both the filtration equipment and booster pumps into the converted storage shed. As we explained above, this storage shed was repurposed to avoid the need to build a new pumphouse. However, the existing underground plumbing systems required the booster pumps to be located on one side wall of the converted shed. Based on that location, the filtration equipment needed to be installed first at the back of the shed to allow the plumbing sequence to operate: first from the well source, then through the filtration equipment, then to the storage reservoir, then back to the booster pumps, and finally out into the distribution system.

Q. If the Company had delayed replacing the reservoir, how much would it have cost to install the filtration system separately?

A. If Cascadia Water had waited to install the filtration system in the future, the separate installation would, based on similar project costs, likely have cost approximately $100,000 more in order to construct a separate building. Given that the filtration

[82] WCAW Reply Brief ¶ 39 (arguing for disallowance of all Estates-related equipment).
[83] Exh. CJL-5 at 2, 7.

system cost approximately $116 thousand,[84] a phased approach would have increased the total cost of the filtration system portion of the project by approximately 85 percent.

Q. Did Cascadia Water document the need for the filtration system?

A. Yes. Cascadia Water provided documentation demonstrating the need for the filtration system, including:

- 2021 Water Quality Test (Exhibit CJL-5). This document includes a report showing elevated manganese levels at the Estates system wells.[85]
- August 2022 Engineering Report for Manganese Treatment System (Exhibit MJR-CJL-4). This document summarizes the available water treatment alternatives and lays out proposed project specifications.

d. Booster Pump Sizes

Q. WCAW argues that Cascadia Water oversized the new booster pumps.[86] Please respond.

A. The previous 5 hp booster pumps were inadequate to supply water to preexisting fire hydrants during a July 2023 fire. Thus, while Cascadia Water did not install any new fire hydrants with this project, the Company deemed it prudent to ensure that existing fire hydrants had adequate water flow capacity to allow fire departments to use those systems in an emergency. Indeed, re-installing booster pumps at a size insufficient to supply adequate water flows to existing fire hydrants would have been imprudent.

[84] This value is derived from the low bidder's cost estimate before tax.
[85] Exh. CJL-5 at 7.
[86] Gilles, Exh. BCG-1T at 31:3-5.

Q. Is the need for a specific size of booster pump documented in the record?

A. Yes. The need for specific booster pump sizes is documented in the August 2022 Engineering Report for Reservoir & Booster Pumps (Exhibit MJR-CJL-4 at 145).

8. W&B Waterworks System #1 – Reservoir, Pumphouse, Treatment & Water Main Replacement

Q. Please briefly summarize this project.

A. This project involved installing a water storage reservoir, treatment system, and pumphouse, as well as replacing associated water mains and improving on-site electrical systems.

Q. What cost recovery is Cascadia Water requesting for this project?

A. Cascadia Water seeks to recover its capital investment of $1.622 million.

Q. What is the status of this project?

A. The reservoir, pumphouse, and watermain replacement portions of this project were placed in service in June 2024; the treatment equipment ($293 thousand) and booster pumps ($105 thousand) will be placed in service in September 2025. While these portions of the project pumps were installed at the same time as the rest of the project, an electrical system upgrade is needed to allow this equipment to operate off of the electrical grid. This electrical connection has been delayed because the new facilities required Puget Sound Energy to upsize the associated transformer. We understand from communications with the project's electrician that this electrical connection is expected to be completed in July, which will allow this final portion of the project to be finished in September. In the meantime, the Company can use the treatment systems and booster pumps using the on-site back-up generators, as necessary.

Q. Do any Parties raise concerns and corresponding adjustments specifically related to this project?

A. Yes. WCAW contests the Company's decision to replace the reservoir and associated equipment, claiming that a lack of adequate contemporaneous documentation requires a full disallowance of project costs.[87]

Similarly, Public Counsel asserts in briefing that this project was oversized,[88] but does not propose a project-specific adjustment.[89]

a. Project Timing

Q. Why was this project needed now?

A. This project was needed now to increase the available capacity of water to serve the number of current and committed customer connections. During high-use periods, the reservoir was dipping into available fire suppression storage—meaning that this 100,000 gallon reservoir was falling below 15,000 gallons. Since the new reservoir was relocated to a higher location, the reservoir enables Cascadia Water to provide service to all requests within the W&B Waterworks service area—something that had been lacking for over a decade. Moreover, the preexisting reservoir was leaking and had surpassed its anticipated useful life.

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[87] WCAW Post-Hearing Brief ¶¶ 60-64; Gilles, Exh. BCG-1T at 26:7 – 32:9; Gilles, Exh. BCG-25T at 3:20 – 4:2.
[88] Public Counsel Post-Hearing Brief ¶ 80 (arguing without citation that "each of the three reservoirs was oversized . . . by 28 percent, 46 percent and 11.7 percent," and declining to specify which alleged oversize was associated with which reservoir).
[89] De Villiers, Exh. SDC-11Tr at 8:1-8 (identifying specific proposed adjustments); Duren, Exh. SD-3CT at 3:1-15 (listing the projects of concern).

Q. What are the benefits of this project?

A. Aside from providing adequate storage capacity, the project also improved water quality and water pressure to system customers.

Q. Were there viable alternatives for this project that Cascadia Water considered?

A. No. This project had already been delayed excessively due to lack of available financing. Indeed, in Mr. Lehman's role as an officer for the previous owners, Lehman Enterprises, he was personally involved in an unsuccessful effort to obtain loan financing to replace this reservoir in 2008. The need for adequate water supplies to serve customers safely and reliably has been a pressing concern, and the ability to remedy this deficiency was hampered by the previous owners' inability to access adequate financing. There was no question that increasing the capacity of the reservoir was the only viable way of addressing the water access concern.

Q. What does the history of this project and the financing challenges say about Cascadia Water's relationship with its parent company, NWN Water?

A. The inability of the prior owners to obtain financing to address known operational deficiencies speaks to a key benefit of Cascadia Water's relationship with NWN Water: access to desperately needed capital. Without this financing, the existing reservoir would have continued to dip into the bottom of its capacity or could have even run dry during high-use periods—jeopardizing both water access and public health.

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Q. Has Cascadia Water provided documentation to support the prudence of this project?

A. Yes. In addition to direct testimony from Mr. Lehman as the General Manager, Cascadia Water has provided and is providing the following documentation to support the prudence of this project:

- 2021 Island County Unified Water System Plan (Exhibit CJL-8 at 91). This document summarizes the proposed project and identifies its priority as "immediate."
- 2022 Treatment System and Reservoir Design Report (Exhibit MJR-CJL-6 at 86 *et seq.*). This document describes the treatment project, discusses available alternatives and seawater intrusion risks, and includes recent water quality tests.
- 2023 W&B Waterworks Reservoir Bids (Exhibit CJL-JMT-15C). This document summarizes Cascadia Water's options for construction contractors on this project.
- 2024 DOH Sanitary Survey (Exhibit CJL-7). This document discusses the need for additional screens and filtration.
- South Whidbey Fire/EMS Community Risk Assessment and Standards of Cover.[90] This source lists Cascadia Water as one of the sources of water flows for fire suppression.

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[90] 2024 Community Risk Assessment and Standards of Coverage, South Whidbey Fire/EMS, page 32, available at: https://www.swfe.org/files/dcd38faa6/Community+Risk+Assessment+SOC+final.pdf

b. Reservoir Size

Q. How did Cascadia Water determine the appropriate reservoir size for this project?

A. Cascadia Water determined the appropriate reservoir capacity using Mr. Tasoff's engineering firm, which provided a detailed report.[91] As detailed in that report, the recommended storage volume was 185,000 gallons.

Q. Public Counsel claims that the booster pumps were not needed because of the height of the new reservoir, and because the connected water mains serve a small number of customers.[92] How do you respond?

A. The booster pumps were sized not according to the number of customers, but according to the needs of the filtration process. The connection between booster pumps and filter backwash supply is explained in the detailed 2022 Treatment System and Reservoir Design Report.[93] The booster pumps also supply pressurized water to 11 connections near the reservoir that are at higher elevations (near the reservoir) that would not have adequate pressure directly from the reservoir. Water systems are required to provide a minimum pressure of 30 psi to all service connections per WAC 246-290-230 (5).[94]

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[91] Exhibit MJR-CJL-6 at 87 *et seq.* (2022 W&B Waterworks 1 Arsenic Treatment System and Reservoir Design Report).
[92] Public Counsel Post-Hearing Brief ¶¶ 38, 42.
[93] Exh. MJR-CJL-6 at 97.
[94] WAC 246-290-230 (5) reads as follows: "New public water systems or additions to existing systems shall be designed with the capacity to deliver the design PHD quantity of water at 30 psi (210 kPa) under PHD flow conditions measured at all existing and proposed service water meters or along property lines adjacent to mains if no meter exists, and under the condition where all equalizing storage has been depleted."

Q. What were the costs associated with the booster pumps?

A. Each pump costs $6,000, including overhead costs.

9. Sea View System – Source Development

Q. Please briefly summarize this project.

A. This project developed a new groundwater source in the form of a new well and pump for the Sea View water system, including drilling, installation, and regulatory approvals for the new groundwater source.

Q. Is this project currently in service?

A. Yes. This project was placed in service in January 2025, and is currently used and useful for customers.

Q. Does any Party present specific objections or concerns regarding this project?

A. No. Nonetheless, both Public Counsel and WCAW continue to advance global adjustments that would reduce Cascadia Water's cost recovery for this project.[95]

Q. Why was this project needed?

A. The Sea View system previously had three wells, two of which (Wells 1 & 2) were not significant producers as both had poor water quality, despite existing iron and manganese treatment systems.[96] The third well (Well 3) served as the main supply

[95] Public Counsel Post-Hearing Brief ¶ 83 (proposing to disallow certain capital costs associated with all 14 capital projects); see also Order 06 ¶ 56 ("Public Counsel recommends that the Commission should determine that Cascadia Water has failed to meet its burden to demonstrate that all 14 major capital projects were prudent[.]"); Gilles, Exh. BCG-1T at 26; WCAW Post-Hearing Brief ¶¶ 108-09 (claiming without exception that Cascadia "failed to demonstrate the prudence of investments" and that the Commission should "[e]xclude from the rate base all capital expenses not proven to be prudent").
[96] Exh. MJR-CJL-4 at 269 (March 2024 Engineering Report).

source for the system, but iron bacteria formation had begun reducing the well's pumping capacity.[97]

Q. What are the benefits of this project?

A. This project improved water quality and reliability for the Sea View water system.

Q. Did Cascadia Water consider alternatives for this project?

A. Yes. Cascadia Water had previously attempted to rehabilitate the existing wells (as had the previous system owner), with limited efficacy. As a result, Cascadia Water concluded that a new reliable water source was necessary. As detailed in the March 2024 Engineering Report for this project, two aquifers were accessible for new well drilling: a shallow aquifer (Aquifer D) and a deep aquifer (Aquifer C).[98] The previously high-producing Well 3 is located in Aquifer C. Cascadia Water, therefore, chose to drill the new well (Well 4) in Aquifer C to access the relatively greater production capacity at this location. The well location was inspected and approved by Island County Public Health.[99]

Q. Has Cascadia Water provided documentation to support the prudence of this project?

A. Yes. Cascadia has provided and is supplementing the following documentation to support the prudence of this project:

[97] Exh. MJR-CJL-4 at 267 (March 2024 Engineering Report).
[98] Exh. MJR-CJL-4 at 271 (March 2024 Engineering Report).
[99] Exh. MJR-CJL-4 at 267 (December 13, 2022 Island County Public Health Inspection).

- 2021 Island County Unified Water System Plan (Exhibit CJL-8). This document explains the need for new source development and provides an initial estimate for drilling the well.[100]
- February 2024 Sea View Design Report (Exhibit CJL-JMT-16).[101] This report provides a detailed project map and design parameters.
- March 2024 Engineering Report (Exhibit MJR-CJL-4). This document details the project parameters and provides contemporaneous details regarding the need for the project.[102]
- November 2024 Competitive Bids (Exhibit CJL-JMT-17C). This document summarizes Cascadia Water's options for construction contractors on this project.

Q. What cost recovery is Cascadia Water requesting for this project?

A. Cascadia seeks to recover $140,000 in capital investment for this project. While the Company's actual installed project costs have risen to $363,000, Cascadia Water does not seek recovery of this increase at this time.

10. Diamond Point System - Disinfection System

Q. Please briefly summarize this project.

A. This project installed a chlorination system to address coliform bacteria findings in the distribution system.

[100] Exh. CJL-8 at 95, 131.
[101] This document was previously provided to Parties as Cascadia Water's Response to WCAW DR 47, Attachment 5.
[102] Exh. MJR-CJL-4 at 261-483.

Q. Is this project currently in service?

A. Yes. This project was placed in service in March 2025, and is currently used and useful for customers.

Q. Does any Party offer objections or concerns specific to this project?

A. No. Nonetheless, both Public Counsel and WCAW continue to advance global adjustments that would reduce Cascadia Water's cost recovery for this project.[103]

Q. Why was this project needed?

A. This project was needed to address a DOH notice of corrective action concerning coliform bacterial levels in the Company's Diamond Point system.[104] Specifically, in 2023 DOH required submission of a project report and construction document for a continuous disinfection system, to be installed and inspected on a specified schedule. The project was detailed in a February 2024 Chlorination Design Report, which set forth the underlying water quality issues (including *E. coli* and coliform findings) as well as detailed system design specifications.[105]

Q. Did Cascadia Water consider alternatives for this project?

A. Yes. Given that the coliform positives were located in the portion of the Diamond Point distribution system served by the elevated reservoir, the Company considered whether the most direct response would be to replace the reservoir, particularly since

[103] Public Counsel Post-Hearing Brief ¶ 83 (proposing to disallow certain capital costs associated with all 14 capital projects); *see also* Order 06 ¶ 56 ("Public Counsel recommends that the Commission should determine that Cascadia Water has failed to meet its burden to demonstrate that all 14 major capital projects were prudent[.]"); Gilles, Exh. BCG-1T at 26; WCAW Post-Hearing Brief ¶¶ 108-09 (claiming without exception that Cascadia "failed to demonstrate the prudence of investments" and that the Commission should "[e]xclude from the rate base all capital expenses not proven to be prudent").
[104] Exh. CJL-JMT-16 (2023 DOH Notice of Corrective Action for Diamond Point).
[105] Exh. CJL-JMT-17 (February 2024 Diamond Point Chlorination Design Report).

the reservoir and booster pumps already needed to be replaced. However, this alternative was both far more expensive and would have significantly delayed the project.

As with the other projects described here, the Company also considered alternative third-party contractor bids, and selected the lowest responsive bidder.

Q. Has Cascadia Water provided documentation to support the prudence of this project?

A. Yes. Cascadia Water provided the following documentation to support the prudence of this project, each of which is detailed above:

- May 2023 DOH Notice of Corrective Action for Diamond Point (Exhibit CJL-JMT-18).[106]
- February 2024 Diamond Point Chlorination Design Report (Exhibit CJL-JMT-19).[107]

Q. What cost recovery is Cascadia Water requesting for this project?

A. Cascadia Water requests cost recovery of $140,000 for this project, consistent with the Company's initial recovery request. While the Company's actual investment totals $162,323, Cascadia Water does not ask to recover these additional costs at this time.

[106] This document was previously provided to Parties in Cascadia Water's Response to WCAW DR 4, Attachment 5.
[107] This document was previously provided to Parties in Cascadia Water's Response to WCAW DR 4, Attachment 5.

11. Agate West System – Chlorination System

Q. Please briefly summarize this project.

A. This project is installing chlorination treatment systems and remote monitoring to address repeated negative bacteria testing results in the Agate West distribution system.

Q. What is the status of this project?

A. This project was submitted for DOH approval in January 2025, and received approval in April 2025. Cascadia Water received competitive bids for construction on May 23, 2025, and awarded the construction contract in late May. This project is on track to be placed in service in September 2025.

Q. Does any Party raise objections or concerns related to this specific project?

A. No. Nonetheless, both Public Counsel and WCAW continue to advance global adjustments that would reduce Cascadia Water's cost recovery for this project.[108]

Q. Why is this project needed?

A. This project is needed because the Company received three unsatisfactory bacteria test results in a 12-month period, resulting in a corrective action notice from DOH and requiring Cascadia Water to submit a plan for the design and installation of disinfection equipment.

[108] Public Counsel Post-Hearing Brief ¶ 83 (proposing to disallow certain capital costs associated with all 14 capital projects); *see also* Order 06 ¶ 56 ("Public Counsel recommends that the Commission should determine that Cascadia Water has failed to meet its burden to demonstrate that all 14 major capital projects were prudent[.]"); Gilles, Exh. BCG-1T at 26; WCAW Post-Hearing Brief ¶¶ 108-09 (claiming without exception that Cascadia "failed to demonstrate the prudence of investments" and that the Commission should "[e]xclude from the rate base all capital expenses not proven to be prudent").

Q. What are the benefits of this project?

A. This project improves water quality in the Agate West System and enables ongoing monitoring of chlorine levels.

Q. Did Cascadia Water consider alternatives for this project?

A. No. There were no viable alternatives to installing chlorination treatment in order to address coliform bacteria levels.

Q. Is Cascadia Water providing documentation to support the prudence of this project?

A. Yes. Cascadia Water provides the following documentation to support the prudence of this project:

- September 2024 DOH Corrective Action Notice for Agate West (Exhibit CJL-JMT-20). This notice specifically required Cascadia to submit a plan for designing and installing disinfection equipment.
- January 2025 Agate West Chlorination Design Report (Exhibit CJL-JMT-21). This document details the project background, configuration, and system design parameters.
- January 2025 Agate West Engineering Specifications (Exhibit CJL-JMT-22). This document provides granular details regarding the project design as well as photographs of the pre-existing facilities.
- April 2025 DOH Approval Letter for Agate West (Exhibit CJL-JMT-23). This letter confirmed that the disinfection treatment system was required because of excessive coliform levels and required ongoing disinfection and monitoring.

- May 2025 Agate West Competitive Bids (Exhibit CJL-JMT-24C). This document summarizes Cascadia Water's options for construction contractors on this project.

Q. What cost recovery is Cascadia Water requesting for this project?

A. Cascadia Water seeks to recover $110,000 in capital investment for this project, consistent with the Company's initial cost recovery request. While the actual contract costs for this project are somewhat higher, totaling $139,230, Cascadia Water does not seek to recover these increased costs at this time.

12. Generators for Multiple Systems

Q. Please briefly summarize this project.

A. This project is part of an ongoing effort from Cascadia Water's prior general rate case, which installs standby generators to maintain distribution system pressure during power outages. Standby generators both ensure that customers have safe and reliable water during power outages, and prevent infiltration issues caused by system pressure drops.

Q. What cost recovery is Cascadia Water requesting for this project?

A. Cascadia Water seeks to recover its capital investment of $582,685 associated with installing 19 generators and associated supplies across the Company's systems.

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System	Asset Description	Date in Service	Original Cost
Aquarius	Island Lake Generator	10/20/2023	$27,012
Aquarius	Diamond Point Generators (3 Sites)	7/24/2023	$50,446
Aquarius	Lynch Cove Generator	7/24/2023	$31,119
Discovery Bay	Discovery Bay Generator	7/24/2023	$25,212
Estates/Monterra	Monterra Generator	3/28/2023	$69,127
Estates/Monterra	Estates Generator	3/28/2023	$56,679
Island	TEL 10 Generator	6/21/2020	$27,598
Island	TEL 4 Generator	6/25/2020	$22,398
Island	TEL 11 Generator	2/1/2023	$12,533
Island	Tel 6 Generator	9/5/2023	$10,812
NWWS	Bacus Generator	11/29/2023	$43,781
NWWS	Cedarhearth Generator	12/1/2023	$60,845
NWWS	Lake Alyson Generators (2 Sites)	12/1/2023	$62,962
NWWS	Silver Lake Generators (2 Sites)	11/4/2023	$50,210
Peninsula	Lynch Cove (site 5A) Generator ID-34948	7/1/2024	$25,030
Misc	Propane Fills and Transfer Switch/Board	7/1/2024	$6,921
			$582,685

Q. Does any Party propose an adjustment related to this project?

A. Yes. Public Counsel proposes a $75,658 rate base adjustment to remove costs associated with two generator projects—Diamond Point and Discovery Bay—

identified as "not immediately necessary,"[109] and which Public Counsel therefore believes could have been delayed "for a few years longer."[110] WCAW proposes a full disallowance of the Company's investment based on its position that Cascadia has failed to provide sufficient evidence to support the need for standby generators.[111]

Q. Why are standby generators necessary?

A. Standby generators are necessary for several reasons. **First,** standby generators ensure that customers have access to safe and reliable water during power outages. **Second,** generators maintain system pressure during power outages. Indeed, this function is particularly crucial in older systems with distribution system leakage. When water pressures drop in leaky pipes, the low pressure creates a quasi-vacuum effect that sucks in surrounding contaminants. Thus, older systems are more likely to experience contaminant infiltration during power outages and the resulting water pressure drops. **Third,** generators ensure systems retain fire flow capabilities during outages, thus facilitating effective emergency response.

Q. WCAW asserts that Cascadia Water has not demonstrated the need for generators because the Company has not tracked power outages or boil notices.[112] How do you respond?

A. The Company has not historically tracked the underlying cause of system depressurization, such as power outages. Moreover, when an outage occurs and a

[109] De Villiers, Exh. SDV-11Tr at 8:6-7; Duren, Exh. SD-3CT at 14:6-20 (proposing the removal of costs for the Diamond Point and Discovery Bay generators).
[110] Public Counsel Reply Brief ¶ 12.
[111] Gilles, Exh. BCG-1T at 33:1-15.
[112] Gilles, Exh. BCG-1T at 33.

generator successfully avoids system depressurization, then this outage would also not register in our system.

Q. Public Counsel states that four generators are associated with systems that are fully or partially pressurized off of reservoirs, and that these systems could therefore have been reduced in priority and delayed.[113] Do you agree that delaying these systems would be appropriate?

A. No. As Public Counsel's witness has recognized, standby generators are "industry standard in the Pacific Northwest" due to our region's seismic activity, as well as frequent weather events and other natural disasters.[114] Cascadia Water disagrees that providing industry-standard service to some customers but not others would have been appropriate or reasonable.

Q. Do you agree that systems with elevated reservoirs should not be prioritized for generators?

A. No. For instance, Public Counsel identifies the Diamond Point system as one in which an elevated reservoir means that a generator install could be delayed. When an outage occurs on that system without a generator, those living in the higher elevation areas (approximately one-third of customers) would go without water. Meanwhile, those living at the bottom of the hill would indeed receive gravity-fed water—creating a neighborhood-level disparity in service. Moreover, these high-elevation customers would be more likely to experience water contamination due to pressure drops and infiltration. Any such contamination at the higher elevations would then be

[113] Duren, Exh. SD-3CT at 14:8-16.
[114] Duren, Exh. SD-1CT at 11:19-20.

distributed to the homes in the lower elevation area, creating a potentially unsafe condition for all users.

Q. Did Cascadia Water explore alternatives to installing generators in this case?

A. No, for three reasons. **First**, this project is a continuation of an existing generator installation project that was reviewed and approved as part of the Company's prior general rate case. **Second,** Cascadia believes it is important to provide consistent and reliable service across its service territory. Thus, installing generators in some portions of the Company's service territory but not others would result in different quality of service. As a result, Cascadia Water did not consider declining to install generators as a reasonable alternative. **Third**, Cascadia Water had successfully received competitive bids for the initial phase of generator installations, and had selected the lowest responsive bidders. Given that these contractors were performing successfully, the Company therefore did not seek bid alternatives for these subsequent equipment installations.

Q. Do you have any other comments regarding WCAW's objections to the generator installations in this case?

A. Yes. It is worth noting that it is still unclear who is a "member" of WCAW.[115] Each member of the group's executive committee—or more specifically, those who are Cascadia Water customers[116]—already have generators supporting their systems.

[115] Exh. CJL-JMT-25 (WCAW Response to Cascadia Water DR 001) ("Being a 'member' of WCAW simply means an individual has expressed support for the efforts of the WCAC executive committee to advocate before the UTC for fair reasonable water rates for Cascadia Water customers."

[116] Despite asserting that "all [WCAW] members are customers of Cascadia Water," only six of WCAW's seven executive committee members are Cascadia Water customers. WCAW Petition to Intervene at 2-4; Exh. CJL-JMT-25 (WCAW Response to Cascadia Water DR 001); Exh. CJL-JMT-26 (WCAW Response to

Thus, WCAW's objection to this project concerns Cascadia Water's decision to provide comparable service across its territory to that which certain customers already receive.

Q. Has Cascadia Water provided documentation to support the prudence of this project?

A. Yes. Cascadia Water provided the following documentation to support the prudence of this project:

- 2021 Island County Unified Water System Plan (Exhibit CJL-8). This document discusses both the overarching installation project, as well as system-specific needs for the Island County systems.

Q. Do you have any other response to the Parties' proposed adjustments to this project?

A. Yes. Even if the Commission were to believe that it would have been appropriate to delay a subset of the Company's generators for "a few years longer,"[117] Parties' calculation of that adjustment inappropriately forecloses cost recovery for these used-and-useful systems for the entirety of the assets' useful lives. Such a result is particularly inappropriate where, as here, Cascadia Water's investment decision was consistent with standard industry practice.[118] Thus, even if the Commission feels compelled to apply an adjustment associated with the timing of certain generators, this adjustment should delay cost recovery rather than foreclose it.

Cascadia Water DR 003) ("The members of the WCAW's 'executive committee' are those individuals identified in WCAW's Petition to Intervene.").
[117] Public Counsel Reply Brief ¶ 12.
[118] Duren, Exh. SD-1CT at 11:19-20.

13. SCADA Remote Monitoring System for Multiple Systems

Q. Please briefly summarize this project.

A. This project installed SCADA at each water system source in order to provide real-time readings on tank levels, water pressure, and pump controls.

Q. What cost recovery is Cascadia Water requesting for this project?

A. Cascadia Water seeks to recover its capital investment of $219 thousand.

Q. Do any Parties raise concerns and corresponding adjustments specifically related to this project?

A. Yes. WCAW proposes a full disallowance of Cascadia Water's SCADA investments on the basis that Cascadia Water has not provided contemporaneous documentation of the Company's investment decision process and need for the SCADA system.[119]

Public Counsel does not propose a project-specific adjustment for the Company's SCADA project,[120] nor does any Public Counsel witness contest Cascadia Water's SCADA investment. Nonetheless, Public Counsel argues (a) that this project "could have been delayed" for an unspecified amount of time,[121] and (b) that Cascadia failed to provide adequate contemporaneous documentation.[122]

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[119] WCAW Post-Hearing Brief ¶¶ 67-68; Gilles, Exh. BCG-1T at 32:11-19.
[120] De Villiers, Exh. SDC-11Tr at 8:1-8 (not including SCADA Project #13 in the proposed adjustments); Duren, Exh. SD-3CT at 3:1-15 (listing the projects of concern and not including SCADA Project #13).
[121] Public Counsel Brief ¶ 13.
[122] Public Counsel Post-Hearing Brief ¶ 83 (proposing to disallow certain capital costs associated with all 14 capital projects); *see also* Order 06 ¶ 56 ("Public Counsel recommends that the Commission should determine that Cascadia Water has failed to meet its burden to demonstrate that all 14 major capital projects were prudent[.]").

Q. Why was the SCADA system needed?

A. As an initial matter, SCADA is straightforwardly industry standard in today's water systems. SCADA monitors water tank levels, pressure settings, and pump controls—key aspects of the systems ongoing operations and maintenance that, without SCADA installed, would require in-person staff visits to maintain visibility into system performance. SCADA also provides information on system and equipment performance that is used to identify service or maintenance issues that can be addressed prior to failure.

Q. Did Cascadia Water consider alternatives for this project?

A. There were no viable alternatives for this project, for two reasons. **First,** where the Company has chlorination systems installed (such as the Agate West and Diamond Point systems, described above), continuous monitoring is required. This type of monitoring uses SCADA to ensure that water is neither over- nor under-chlorinated. **Second,** without SCADA, systems can malfunction and depressurize without the Company knowing—relying on customer phone calls to report outages. An equivalent degree of manual monitoring would require a dozen FTEs for around-the-clock monitoring. Such an option is so plainly expensive that it was not deemed a viable option to consider.

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Q. Public Counsel has dismissed the benefits of SCADA by claiming that a single SCADA alert that saved 45 minutes of response time does not justify the system's overall costs.[123] How do you respond?

A. Public Counsel's dismissal of SCADA's benefits does not account for (a) the time sensitive nature of a depressurizing system, which must be addressed promptly to avoid safety risks; or (b) the crucial visibility that SCADA provides where no customer call is made, but a depressurization event occurs. In this latter circumstance, Cascadia Water relies on SCADA to inform the Company that there has been an outage, and thus to ensure that customers are taking safety measures and that water quality tests are performed. Furthermore, we believe every minute counts to customers when service is interrupted.

Q. Has Cascadia Water provided documentation to support the prudence of this project?

A. Yes. Cascadia Water provided the following documentation to support the prudence of this project:

- Island County Unified Water System Plan (Exhibit CJL-8). This document identifies SCADA as an "immediate" need, with an equipment cost estimate of $100,000 for the eleven systems in that plan.[124]

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[123] Public Counsel Post-Hearing Brief ¶ 14. Public Counsel did not contest the prudence of the Company's SCADA investment in testimony.
[124] Exh. CJL-8 at 108.

Q. Do you have any other comments in response to the proposed adjustment for this project?

A. Yes. WCAW is the sole Party proposing a specific adjustment for this project, which would amount to a full disallowance of the project costs. This is an extreme result for a project that is both industry standard and currently used to serve customers. There was no realistic, viable alternative that provided the kind of needed visibility into the Company's ongoing operations. If the Commission were inclined to adopt Public Counsel's delay-based approach to this project, then such an adjustment should delay—not foreclose—full cost recovery.

14. Island County Unified Water System Plan

Q. Please briefly summarize this project.

A. This project involves preparing the consolidated Water System Plan, detailed above, for Cascadia Water's 11 water systems in Island County. This process provides a detailed assessment of the context and needs of each system, while allowing for a streamlined review process to minimize overall administrative demands.

Q. Does any Party raise an objection to or otherwise comment on this planning project in particular?

A. No. Nonetheless, both Public Counsel and WCAW continue to advance global adjustments that would reduce Cascadia Water's cost recovery for this project[125]—

[125] Public Counsel Post-Hearing Brief ¶ 83 (proposing to disallow certain capital costs associated with all 14 capital projects); *see also* Order 06 ¶ 56 ("Public Counsel recommends that the Commission should determine that Cascadia Water has failed to meet its burden to demonstrate that all 14 major capital projects were prudent[.]"); Gilles, Exh. BCG-1T at 26; WCAW Post-Hearing Brief ¶¶ 108-09 (claiming without exception that Cascadia "failed to demonstrate the prudence of investments" and that the Commission should "[e]xclude from the rate base all capital expenses not proven to be prudent").

despite the fact that WCAW specifically objects to the *lack* of detailed long-term capital planning.[126]

Q. Why was this project needed?

A. Consolidated system planning is required by WAC 246-290-100.[127] This project provided a valuable, consolidated assessment of the Company's Island County systems, including project-specific prioritization and equipment cost estimates.[128] Indeed, this process provided important contemporaneous documentation of the Company's decision making.

Q. What cost recovery is Cascadia Water requesting for this project?

A. Cascadia Water seeks to recover its capital investment of $151,212.

Q. Does this complete your Rebuttal Testimony?

A. Yes.

[126] Gilles, Exh. BCG-1T at 8:10-13.
[127] WAC 246-290-100 stablishes "a uniform process" for water utilities to "[d]emonstrate system capacity" and [d]emmonstrate how the system will address present and future needs in a manner consistent with other relevant plans and local, state, and federal laws, including applicable land use plans," among other provisions.
[128] Exh. CJL-8.

IV. List of Exhibits

Exh. CJL-JMT-2 – Cascadia General Manager Job Description

Exh. CJL-JMT-3 – 2019 Del Bay Water Use Efficiency Annual Performance Report

Exh. CJL-JMT-4 –2021 Del Bay Waterline Replacement Engineering Specifications

Exh. CJL-JMT-5 –2022 Del Bay Water Quality Report

Exh. CJL-JMT-6 – AWWA Seismic Options for New and Old Reservoirs (2015)

Exh. CJL-JMT-7–2021 W&B Water Main Replacement Engineering Specifications

Exh. CJL-JMT-8 – Mutiny Lane PRV Vault Before/After Photographs

Exh. CJL-JMT-9 - Mutiny Road PRV Preexisting Vault Photographs

Exh. CJL-JMT-10 –2023 Mutiny Road PRV Replacement Engineering Specifications

Exh. CJL-JMT-11 – November 2022 DOH Notice of Corrective Action for Rolf Bruun

Exh. CJL-JMT-12 – May 2023 Rolf Bruun Continuous Source Disinfection & Oxidation-Filtration Treatment Project Report

Exh. CJL-JMT-13- September 2022 Geotechnical Report for Estates Reservoir

Exh. CJL-JMT-14C - Estates Reservoir Bids (Nonconfidential)

Exh. CJL-JMT-14C - Estates Reservoir Bids (Confidential)

Exh. CJL-JMT-15C - W&B Waterworks Reservoir Bids (Nonconfidential)

Exh. CJL-JMT-15C - W&B Waterworks Reservoir Bids (Confidential)

Exh. CJL-JMT-16 –February 2024 Sea View Design Report

Exh. CJL-JMT-17C –Sea View Bids (Nonconfidential)

Exh. CJL-JMT-17C –Sea View Bids (Confidential)

Exh. CJL-JMT-18–May 2023 DOH Notice of Corrective Action for Diamond Point

Exh. CJL-JMT-19 – February 2024 Diamond Point Chlorination Design Report

Exh. CJL-JMT-20 – September 2024 DOH Corrective Action Notice for Agate West

Exh. CJL-JMT-21 – January 2025 Agate West Chlorination Design Report

Exh. CJL-JMT-22 – January 2025 Agate West Engineering Specifications

Exh. CJL-JMT-23 – April 2025 DOH Approval Letter for Agate West

Exh. CJL-JMT-24C - Agate West Bids (Nonconfidential)

Exh. CJL-JMT-24C - Agate West Bids (Confidential)

Exh. CJL-JMT-25 – WCAW Response to Cascadia DR 001

Exh. CJL-JMT-26 - WCAW Response to Cascadia DR 003