BEFORE THE

WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

UW-240151

CASCADIA WATER, LLC

January 13, 2025

Direct Exhibit of Matthew J. Rowell and Culley J. Lehman

CASCADIA WATER LLC'S RESPONSE TO PC IR 3

Exh. MJR-CJL-5

NW Natural®

Rates & Regulatory Affairs
UW-240151
Cascadia Water LLC Proposed General Rate Case
Data Request Response

Request No.: UW-240151 PC IR 3

For each of the following assets, please provide a description of the asset and any invoices associated with the asset's construction and implementation. Please explain why the asset was necessary, and if the asset was necessary for Department of Health compliance requirements, please specify which compliance requirements the asset fulfills.

1. CAL Pumphouse (Island) – In service 12/15/2023 at cost of $1,042,429;
2. Treatment and Res Projects (Island) [Consolidated] – 6/30/2024 at $1,760,780;
3. Booster and Res Projects (Estates) [Consolidated] – 3/31/2024 at $1,150,057;
4. Del Bay Project – New Mainline (Island) – 11/1/2023 at $793,082;
5. WB Creek Crossing / Mutiny Ln Project (Island) – 7/20/2022 at $178,655;
6. Mutiny Bay PRV (Island) – 9/30/2023 at $134,363; and
7. R.C. Worst Well (Pelican Point) – 8/15/2023 at $94,061.

Response:

Please see the confidential attachments for the requested invoices and other documents associated with the following assets.

1. *CAL Pumphouse (Island) – In service 12/15/2023 at cost of $1,043,429;*

New 80,000-gallon concrete reservoir, pumphouse, booster pump improvements, and system loop for the CAL Waterworks system in Island County.

The system loop was a required improvement since the Water System Plan showed that the system could not provide peak hour demand (PHD) or fire flow (FF) & maximum

day demand (MDD) while maintaining minimum pressures. See WAC 246-290-230(5) for pressure requirements for a closed system (such as CAL).

The Booster Pump Improvements: As shown in the Water System Plan, the system could not provide Fire Flow (FF) & Maximum Daily Demand (MDD) while maintaining minimum pressure requirements (WAC) 246-290-230(6). The issue was only exacerbated when trying to comply with DOH standards of providing FF & MDD with the largest pump out of service. The system also did not supply the recommended minimum standby storage volume (See DOH Design Manual Section 7.1.1.3) for the approved number of connections (WAC 246-290-235(3)).

The reservoir was necessary because the existing octagon tank had significant leaks coming from the seams. The pumphouse was necessary because the existing pumphouse would not handle the electrical load or provide enough space for the pumps.

2. *Treatment and Res Projects (Island) [Consolidated] - 6/30/2024 at $1,760,780;*

New 185,000-gallon concrete reservoir, pumphouse and treatment for the W&B Waterworks system in Island County.

The DOH has required the completion of the reservoir and treatment project in order to provide W&B Waterworks enough capacity to serve the current and committed number of ERUs.

3. *Booster and Res Projects (Estates) [Consolidated] – 3/31/2024 at $1,150,057;*

New 200,000-gallon concrete reservoir and variable speed drive booster pumps installed on the Estates water system in Clallam County.

This project was required due to the issues and directive that came about due to the sanitary survey and follow-up underwater reservoir inspection due to multiple cracks and root infiltration in the existing underground reservoirs. A corrective action plan was submitted and accepted by the Department of Health Southwest Regional Engineer. Since the reservoir was being replaced it was necessary to replace booster pumps. The old pumps were bolted to the old reservoir and would have been incompatible with the new reservoir.

4. *Del Bay Project – New Mainline (Island) – 11/1/2023 at $793,082;*

Approximately 1,650 linear feet of new 8”, 6” and 2” water mains for the Del Bay / W&B Waterworks system consolidation.

The mains had to be replaced due to existing poor water quality on the Del Bay system as well as aging infrastructure, leaks and inaccessible main line locations.

5. *WB Creek Crossing / Mutiny Ln Project (Island) – 7/20/2022 at $178,655;*

New pressure reducing valve (PRV) on Mutiny Ln on the W&B Waterworks system in Island County.

This was required due to the existing main line crossing the creek over a man-made dam. Temporary repairs made in the past were threatening the viability of the main line so we had to directional drill underneath the creek and install a PRV to keep customers within the pressure perimeters required by DOH.

6. *Mutiny Bay PRV (Island) – 9/30/2023 at $134,363*

New pressure reducing valve (PRV) on Mutiny Bay Rd on the W&B Waterworks system in Island County.

This was required due to the age of the previous PRVs that were no longer operational and capable of allowing Fire Flow.

Amended Response:

Please see the attachments for the requested invoices and other documents associated with the following assets. Confidentiality has been removed.

The Company is treating the contract as confidential.

UW-240151 PC IR 3 Attachment 1b
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Project Name	Date in ser	WUTC	Date
CAL Pumphouse	**12/15/23**	304	05/23/2022
CAL Pumphouse	**12/15/23**	304	08/31/2022
CAL Pumphouse	**12/15/23**	304	11/30/2021
CAL Pumphouse	**12/15/23**	304	09/14/2022
CAL Pumphouse	**12/15/23**	304	08/08/2022
CAL Pumphouse	**12/15/23**	304	11/11/2021
CAL Pumphouse	**12/15/23**	304	12/15/2021
CAL Pumphouse	**12/15/23**	304	02/17/2022
CAL Pumphouse	**12/15/23**	304	03/23/2022
CAL Pumphouse	**12/15/23**	304	04/19/2022
CAL Pumphouse	**12/15/23**	304	11/18/2021
CAL Pumphouse	**12/15/23**	304	07/14/2023
CAL Pumphouse	**12/15/23**	304	02/22/2023
CAL Pumphouse	**12/15/23**	304	04/14/2023
CAL Pumphouse	**12/15/23**	304	06/09/2023
CAL Pumphouse	**12/15/23**	304	11/30/2022
CAL Pumphouse	**12/15/23**	304	02/01/2023
CAL Pumphouse	**12/15/23**	330	03/02/2022
CAL Pumphouse	**12/15/23**	304	03/27/2023
CAL Pumphouse	**12/15/23**	304	09/16/2023
CAL Pumphouse	**12/15/23**	304	11/29/2023
CAL Pumphouse	**12/15/23**	304	10/30/2023
CAL Pumphouse	**12/15/23**	304	10/02/2023
CAL Pumphouse	**12/15/23**	304	07/31/2023
CAL Pumphouse	**12/15/23**	304	07/01/2023
CAL Pumphouse	**12/15/23**	304	06/01/2023
CAL Pumphouse	**12/15/23**	330	11/09/2023
CAL Pumphouse	**12/15/23**	311	09/20/2023
CAL Pumphouse	**12/15/23**	304	05/08/2023
CAL Pumphouse	**12/15/23**	304	09/29/2023
CAL Pumphouse	**12/15/23**	304	09/16/2023
CAL Pumphouse	**12/15/23**	304	06/01/2023
CAL Pumphouse	**12/15/23**	304	09/16/2023
CAL Pumphouse	**12/15/23**	304	11/10/2023
CAL Pumphouse	**12/15/23**	304	10/03/2023
CAL Pumphouse	**12/15/23**	304	06/01/2023
CAL Pumphouse	**12/15/23**	304	11/01/2023
CAL Pumphouse	**12/15/23**	304	08/08/2023
CAL Pumphouse	**12/15/23**	304	02/02/2022
CAL Pumphouse	**12/15/23**	304	02/04/2022
CAL Pumphouse	**12/15/23**	330	05/30/2023
CAL Pumphouse	**12/15/23**	304	11/15/2023
CAL Pumphouse	**12/15/23**	304	07/13/2023

CAL Pumphouse	**12/15/23**	304	07/15/2023
CAL Pumphouse	**12/15/23**	304	07/13/2023
CAL Pumphouse	**12/15/23**	304	07/28/2023
CAL Pumphouse	**12/15/23**	304	09/06/2023
CAL Pumphouse	**12/15/23**	330	10/01/2022
CAL Pumphouse	**12/15/23**	330	11/30/2023
CAL Pumphouse	**12/15/23**	304	09/26/2022
CAL Pumphouse	**12/15/23**	304	06/29/2022
CAL Pumphouse	**12/15/23**	304	07/20/2022
CAL Pumphouse	**12/15/23**	304	10/17/2022
CAL Pumphouse	**12/15/23**	311	06/01/2023
CAL Pumphouse	**12/15/23**	331	05/08/2023

Name

Davido Consulting Group, Inc.
Department of Health
Frazier Surveying, LLC
Palmer Geotechnical Consultants, Inc.
Palmer Geotechnical Consultants, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Land Title and Escrow
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Journal Entry
Davido Consulting Group, Inc.
Larry Brown Construction, Inc.
Larry Brown Construction, Inc.
Larry Brown Construction, Inc.
Larry Brown Construction, Inc.
Larry Brown Construction, Inc.
Larry Brown Construction, Inc.
Larry Brown Construction, Inc.
Edge Analytical, Inc.
B&W Pump Co
Frontier Building Supply
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Freeland ACE Hardware
Journal Entry
Bode's Precast, Inc
Bode's Precast, Inc
Bode's Precast, Inc
Double R Rental
Double R Rental
Skagit Farmers Supply
Journal Entry
Amazon.com

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Amazon.com
Amazon.com
Harbor Freight
Island County
Baker Silo, LLC
Rogers Family Landscaping
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
B&W Pump Co
Madsen Enterprise, Inc.

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Description	Amount
CAL Improvements engineering	3,519.75
CAL Pumphouse Plan review	947.00
CAL pumphouse surveying	5,807.50
CAL pumphouse upgrade geotech evaluation report	3,900.00
CAL pumphouse upgrade geotech retainer	1,000.00
CAL System Improvements engineering	1,294.50
CAL System Improvements engineering	517.50
CAL System Improvements engineering	1,384.00
CAL System Improvements engineering	4,590.25
CAL System Improvements engineering	4,642.25
Title report for survey for CAL pumphouse	326.70
[CAL Improvements] - Engineering	1,832.50
[CAL improvements] engineering	2,600.90
[CAL Improvements] engineering	5,159.70
[CAL improvements] engineering	1,702.50
[CAL improvements] engingeering	2,781.26
[CAL Project] - engineering(Inv dated 1/19/23, originally booked as accrued exp	1,604.25
[CAL project] - tank inspection	230.24
[CAL project] engineering	1,385.03
[CAL pumphouse project] Invoice for August work	146,170.27
[CAL pumphouse project] Invoice for November work	26,175.56
[CAL pumphouse project] Invoice for October work	37,061.13
[CAL pumphouse project] Invoice for September work(initially reported as accru	148,871.28
[CAL pumphouse project] July invoice for July work	179,941.07
[CAL pumphouse project] July invoice for June work	182,947.50
[CAL pumphouse project] June invoice for May work	206,716.28
[CAL Pumphouse/Reservoir] Coliforms sample	24.00
[CAL Pumphouse] 3hp 35gpm pump & parts	9,046.14
[CAL Pumphouse] Concrete mix	44.21
[CAL Pumphouse] engineering	1,533.75
[CAL pumphouse] engineering(inv dated 8/23/23)	2,298.00
[CAL Pumphouse] engineering(dated 5/26/23)	2,052.28
[CAL pumphouse] engineering/Island County permit(inv dated 8/24/23)	156.78
[CAL Pumphouse] generator set parts	426.82
[CAL Pumphouse] move Capital Labor from Salary to Capital (Payroll period 9/1	179.14
[CAL Pumphouse] Precast pumphouse building	10,200.00
[CAL Pumphouse] Precast pumphouse building final pymt	24,370.00
[CAL Pumphouse] Precast pumphouse building pymt 2	10,200.00
[CAL pumphouse] Pressure washer rental	333.64
[CAL pumphouse] Pressure washer rental reimburse	-75.54
[CAL pumphouse] propane for reservoir switchover	179.81
[CAL Pumphouse] reclassify Capital Labor from Salary to Capital (payroll period	451.20
[CAL Pumphouse] solar generator cases	43.51

[CAL Pumphouse] solar generator cases	79.41
[CAL Pumphouse] solar generators	978.11
[CAL pumphouse] tools for project - diagonal cutter, hamer, hercules 3.25" saw	135.03
[CAL Pumphouse] Utility permit	142.53
[CAL Reservoir] - Engineering(invoice dated 9/26/22)	5,000.00
[CAL Reservoir] Excavator/dump trailer/truck rental for inter-tie	1,414.40
[CAL System Improvements] - Engineering	7,902.00
[CAL System improvements] engineering	4,478.13
[CAL Waterworks System improvements] engineering	2,335.00
[CAL Waterworks upgrades] - engineering	1,286.50
[CAL Waterworks Valve assembly] parts	1,424.19
[CAL: Harbor Sands tie-in]	20,802.56
	1,080,550.52

The Company is treating the contract as confidential.

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STATE OF WASHINGTON
DEPARTMENT OF HEALTH
SOUTHWEST DRINKING WATER OPERATIONS
P.O. Box 47823 Olympia, Washington 98504-7823
PHONE (360) 236-3030 FAX (360) 236-3029

SANITARY SURVEY REPORT

Sanitary surveys are the Office of Drinking Water's (ODW) way to inspect public water systems through a field visit. We are also able to offer technical assistance to help improve system operations and ensure public health is protected.

This report documents the findings for the following water system.

January 12, 2022	Estates Inc. Water System ID #081669	
	County:	Clallam
Dale Metzger Estates Inc. Post Office Box 92 Sequim, Washington 98382	System Type:	Community
	Operating Permit Color:	Green
	Surveyor:	Jocelyne Gray
	Water System Attendees:	Dale Metzger Culley Lehman
	County Health Attendees:	Sue Waldrip Ben Majors
	Inspection Date:	December 8, 2021

Significant Deficiencies and Findings are assigned a due date. If you are not able to complete the work by the assigned date, you MUST submit a Corrective Action Plan describing how and when you will complete the work. Failure to respond by the date below will result in further compliance actions in accordance with WAC 246-290-050.

As you correct the items, send me documentation that demonstrates the items have been completed as directed. Include the system name, ID number, item #, and the date the deficiencies were corrected. You can send them to me by e-mail at jocelyne.gray@doh.wa.gov or by mail at PO Box 47823, Olympia, Washington 98504-7823.

SIGNIFICANT DEFICIENCIES* - COMPLETED DURING THE SURVEY

1. Electrical wires entering Well 1 needs to be sealed. Wires were sealed during inspection.

SIGNIFICANT FINDINGS - BY FEBRUARY 11, 2022**

2. Submit a corrective action plan for engineering design and construction of the proposed tank. Tank 2, the larger tank, has several locations on the north side and one on the east side that are leaking. ODW is aware Cascadia Water plans to replace both buried reservoirs with an above ground storage tank.

If a new tank is not proposed, hire a qualified structural inspector to evaluate the reservoir. Submit a copy of the inspection results and a corrective action plan describing how you will address the inspector's findings.

OBSERVATIONS

3. Update the Coliform Monitoring Plan to meet the Revised Total Coliform Rule and Ground Water Rule regulations, WAC 246-290-300 and -320. Contact Charese Gainor at (360) 236-3045 or by e-mail at Charese.gainor@doh.wa.gov for assistance.
4. Ensure cross connection control assemblies within the water system, including on the customer's side of the meter, are tested annually by a certified Backflow Assembly Tester, WAC 246-290-490. Ensure yard hydrants with weep holes have cross connection control assemblies.

RECOMMENDATIONS

5. Lead and copper regulations have changed. The water system is required to inventory all service line materials and determine if service lines were ever downstream of a lead component or lead water line. There are new tiering criteria from EPA so lead and copper sampling sites should be re-evaluated. See attached lead and copper documents.
6. If the water system does not expect to expand beyond the approved 480 connections, it can convert the Water System Plan (WSP) to a Small Water System Management Program (SWSMP). ODW is aware a WSP is under development. Please contact Mark Mazeski, Regional Planner, at mark.mazeski@doh.wa.gov or (360) 236-3038 to discuss planning requirements for this system.
7. Please develop an Operations & Maintenance Program along with an Emergency Response Plan.

SYSTEM INFORMATION

This is a community water system that currently serves 367 connections including one school and a park; the remaining connections are single-family residences. The system is approved to serve 480 connections. This approval was established through a water system plan in 1994 that defined the capacity-limiting factor as the available standby storage and the booster pump capacity.

The original water system was constructed in the 1970s to serve Mountain Park; and Well 2 was drilled. Dungeness Estates was later added. In 1982, the system expanded to serve Blue Ribbon Farms and County Park; and Well 1 was drilled. Well 2 was deepened in 1983. The two wells pump into the reservoirs that are intertied together. Booster pumps then move water to the distribution system. The distribution is made of 4- to 6-inch PVC and provides some fire flow.

SECTION 1: SOURCE

There are two wells that create a wellfield (S03). Well 1 (S01) is drilled to 607 feet deep with a 4-inch casing and located next to the small reservoir and access road. Well 2 (S02) is drilled to 436 feet deep and located behind Well 1 and next to the storage shed. A 6-inch casing from 0 to 437 feet below ground surface and a 5-inch casing from 433 feet to 436 feet below ground surface. Both wells pump into the reservoirs. Well 1 pumps into the smaller reservoir and Well 2 pumps into the larger reservoir. The access road is off Ridge View Drive and the site is not fenced. Each well has pump capacity of 180 gallons per minute (gpm).

There is a portable generator that can power either one of the submersible pumps or the fire pump or two of the distribution pumps. The operator manually switches it as needed.

The sanitary control area (SCA) includes a garage that houses various types of equipment, such as a lawnmower. The operator has moved all extra fuel to be stored somewhere else and is not storing any other chemicals in this garage for increased SCA protection. The homes in the area have septic systems.

Source ID #	Name	Description	Ecology Tag #	Listed on WFI Yes	Listed on WFI No	Approved by ODW Yes	Approved by ODW No
01	Well #1 WW	4-inch Casing Drilled In 1982 to 607 Feet, 180 GPM, Wellfield S03	ACA573	☒	☐	☒	☐
02	Well #2 WW	6-inch Casing Drilled In 1974, Deepened In 1983 to 436 Feet, 180 GPM, Wellfield S03, 7.5 HP	ACA574	☒	☐	☒	☐

WELLHEAD	Source ID #01 Yes	Source ID #01 No	Source ID #02 Yes	Source ID #02 No
*Wellcap sealed	☒	☐	☒	☐
*Openings sealed	☐	☒	☒	☐
*Vent screened	☒	☐	☒	☐
*Protected from flooding	☒	☐	☒	☐
**Raw water sample tap	☒	☐	☒	☐
**Protected from unauthorized access	☒	☐	☒	☐
Structure in good condition	☒	☐	☒	☐
Sanitary control area free of contaminants (*If no, is there an approved mitigation plan for the contaminant identified)	☒	☐	☒	☐
**Protected from physical damage	☒	☐	☒	☐

Electrical wires entering Well 1 need to be sealed. Wires were sealed during inspection.

WELL PUMP EQUIPMENT	Source ID #01 Yes	Source ID #01 No	Source ID #02 Yes	Source ID #02 No
*Pump control valve or vacuum relief valve with a protected air gap at discharge	☒	☐	☒	☐
Generator available	☒	☐	☒	☐
Generator has automatic startup	☐	☒	☐	☒

The generator is currently sized to run just the booster pumps for Tank 1, which requires water conservation during power outages. A larger generator is on order that can run both wells and booster pumps without conservation. This increases system reliability. Due to supply chain issues worldwide, delivery and installation are delayed.

SECTION 2: DISINFECTION

No long-term treatment is provided in this system. Chlorine bleach is available if the water system has a total coliform positive sample.

SECTION 3: OTHER TREATMENTS

There is no other treatment on this system. Cascadia Water is evaluating water quality to determine need for iron and manganese removal.

SECTION 4: DISTRIBUTION SYSTEM

The distribution consists of 4- to 6-inch PVC lines constructed in the 1970s and 1980s; the system provides limited fire flow. All customers are supplied by the booster pumps and there is only one pressure zone. The distribution has some looping. Pressures at the pump house vary between 40 and 60 pounds per square inch (psi). The highest distribution pressure is around 74 psi.

FEATURES	Yes	No
Service area and facility map	☒	☐
Service meters (reading frequency)	☒	☐
Water system leakage (%)	6.3%	

Annual water leakage has increased. The water operator repaired several leaks and a source meter this year so the 2021 leakage should decrease. The 3-year annual average is less than 10 percent, which meets the state standard.

CROSS CONNECTION CONTROL (Community Systems)	Yes	No
System has enabling authority	☒	☐
High hazards identified	☐	☒
High hazards protected	☐	☒
Annual testing	☐	☒
CCS on staff or under contract	☒	☐
Cross connections observed have been eliminated	NA	

Customer cross connection control survey is planned for 2022. All known non-sanitary (have a weep-hole drain) yard hydrants need backflow assemblies. Cascadia Water's cross connection control program allows for service disconnection if a customer does not have a backflow assembly tested annually. Testing is the responsibility of the customers.

SECTION 5: FINISHED WATER STORAGE

Two partially buried concrete tanks provide a total of 180,000 gallons of storage to the system. The tanks are tied together and have only one overflow. The tanks are connected to Cascadia Water's SCADA system, which allows for remote monitoring by the owner and operator.

Reservoir	Reservoir Name	Description	Year Built	Total Volume (Gal)
1	Tank 1	Partially Buried Concrete Tank	1972	30,000
2	Tank 2	Partially Buried Concrete Tank	1981	150,000

TOP OF RESERVOIR	Res #1		Res #2	
	Yes	No	Yes	No
**Hatch: Locked	☒	☐	☒	☐
*Hatch: Watertight seal or gasket	☒	☐	☒	☐
Hatch: Over-lapping cover	☒	☐	☒	☐
*Screened air vent	☒	☐	☒	☐
*Openings sealed/protected	☒	☐	☒	☐

FEATURES	Res #1		Res #2	
	Yes	No	Yes	No
Protected drain outlet	None		None	
*Protected overflow outlet	☒	☐	☒	☐
*Overflow line discharges into a sanitary sewer with an air gap	NA		NA	
**Protected from unauthorized entry	☒	☐	☒	☐

According to the system drawings, the reservoirs have drains, but they have never been located. Only Tank 1 appears to have a drain. The tanks can be emptied down to about a foot from the bottom with the booster pumps and there is an internal sump where a sump pump can be placed for emptying most of the water out.

MAINTENANCE	Res #1		Res #2	
	Yes	No	Yes	No
Frequency of cleaning	6 Years		6 Years	
Frequency of routine site visit	3x/Week		3x/Week	
**Structure in good condition	☒	☐	☐	☒

Tank 2, the larger tank, has several locations on the north side and one on the east side that are leaking. ODW is aware Cascadia Water plans to replace both buried reservoirs with an above ground storage tank. Submit a corrective action plan for engineering design and construction of the proposed tank. If a new tank is not proposed, hire a qualified structural inspector to evaluate the reservoir. Submit a copy of the inspection results and a corrective action plan describing how you will address the inspector's findings.

SECTION 6: PRESSURE TANKS

This system has two hydropneumatic tanks. One is 940 gallons and the other is 1300 gallons.

Site	Location	# and size of Hydropneumatic Tanks
1	Pump Station	1 – 940 gal, 1 – 1300 gal

HYDROPNEUMATIC	Site: 1	
	Yes	No
Pressure relief valve	☒	☐
Pressure gauge	☒	☐
Water level sight glass	☐	☒
**Oilless Air compressor	☒	☐

BUILDINGS/ENCLOSURE	Site: 1	
	Yes	No
**Facility secure	☒	☐
Structure in good condition	☒	☐

SECTION 7: BOOSTER PUMPS AND FACILITIES

The pump house has three 5-horsepower (hp) service pumps and one 10-hp fire pump controlled by the distribution system pressure. The pumps are attached to the top of the reservoirs. Two pumps draw water from each reservoir and are alternated manually. Pumps 1 and 2 pull from Tank 1. Pumps 3 and 4 pull from Tank 2.

Facility	Name	Description	Total Capacity (gpm)
1	Pump Station	(3) 5 HP, 100 GPM Service Pumps; (1) 10 HP, 250 GPM Fire Pump	550

BOOSTER PUMPS	Facility 1	
	Yes	No
Number of pumps	4	
Pressure relief valve	☒	☐
*Functional pump and pump controls	☒	☐
Equipment in good condition	☒	☐
Generator available	☒	☐
Generator has automatic startup	☒	☐

The existing generator only runs the booster pumps for Tank 1.

BUILDINGS/ ENCLOSURE	Facility 1	
	Yes	No
**Facility secure	☒	☐
Structure in good condition	☒	☐

SECTION 8: WATER QUALITY MONITORING AND REPORTING

Refer to the Water Quality Monitoring Schedule for your monitoring requirements and status. If you have any questions on source monitoring, please contact Sophia Petro at (360) 236-3046.

CHEMICAL	
Sample Point	**Description**
1	Wellfield S03 sample tap on the pressure tanks' inlet

CHEMICAL	Sample Point 1	
	Yes	**No**
Monitoring adequate	☒	☐
ODW WQ data reviewed	☒	☐
Sample collection sites correct	☒	☐
System has prior: ☐ Nitrate results above 5 mg/L ☐ Nitrite results above 0.5 mg/L ☐ Primary MCL ☐ Secondary MCL exceedance(s) ☐ Organic detections ☐ Other		

COLIFORM	Yes	No
Monitoring adequate	☒	☐
Monitoring plan adequate	☐	☒
Monitoring plan followed	☒	☐
# of Treatment Technique Violations (TTV)	0	
# of *E. coli* MCL Violations	0	

Update the Coliform Monitoring Plan to meet the Revised Total Coliform Rule and Ground Water Rule regulations. Contact Charese Gainor at (360) 236-3045 or by e-mail at charese.gainor@doh.wa.gov for assistance.

LEAD & COPPER	Yes	No
Monitoring adequate	☒	☐
Monitoring plan adequate	☒	☐
Monitoring plan followed	☒	☐
Results below action level	☒	☐

Lead and copper regulations have changed. The water system is required to inventory all service line materials and determine if service lines were ever downstream of a lead component or lead water line. There are new tiering criteria from EPA so lead and copper sampling sites should be re-evaluated. See attached lead and copper documents.

SECTION 9: SYSTEM MANAGEMENT AND OPERATIONS

The system is privately owned and managed by Cascadia Water. The ownership changed since the last survey.

If the water system does not expect to expand beyond the approved 480 connections, it can convert the WSP to a SWSMP. Please contact Mark Mazeski, Regional Planner, at mark.mazeski@doh.wa.gov or (360) 236-3038 to discuss planning requirements for this system. It is the understanding of ODW that a WSP is under development.

Please develop an Operations & Maintenance Program along with an Emergency Response Plan.

PROJECT/PLANNING	Yes	No
System approved	☒	☐
Current WSP	☐	☒
Year WSP approved	1994	

REPORTING	Yes	No	N/A
WFI reviewed and updated with purveyor	☒	☐	---
Consumer confidence report (Community only)	☒	☐	☐
Water use efficiency report (Municipal Water Suppliers)	☒	☐	☐
Cross connection control annual report (> 1000 conn)	☐	☐	☒

OPERATOR CERTIFICATION

This system is required to have one Water Distribution Manager (WDM1) certified operator. Dale Metzger fulfills this position. He assisted the previous owner with water system management. The current owners retained his services for system operations.

If you have any questions or this information is inaccurate, please contact Operator Certification at (800) 525-2536.

Name of Operator	Certification Number	Certifications	Mandatory Operator
Dale Metzger	011895	WDM2, CCS	☒

WDS-Water Distribution Specialist; WDM-Water Distribution Manager; WTPO-Water Treatment Plant Operator, BTO-Basic Treatment Operator; CCS-Cross Connection Specialist; BAT-Backflow Assembly Tester

OPERATIONS	Yes	No
Operational records maintained	☒	☐

OPERATIONS	Yes	No
Current survey has significant deficiencies identified	☒	☐
Previous survey deficiencies/findings corrected, if no list below	☒	☐

CLOSING

Your system has significant deficiencies identified in this current survey. You can qualify for the reduced frequency under WAC 246-290-416 of once every 5 years, if all the identified significant deficiencies are addressed by the due date in this report.

Regulations establishing a schedule of fees, including fees for sanitary surveys, were adopted March 18, 2012 (WAC 246-290-990). The amount due is $714. An itemized worksheet is enclosed with the invoice.

If you have any questions, please contact me at (360) 236-3034 or by e-mail at jocelyne.gray@doh.wa.gov.

Sincerely,

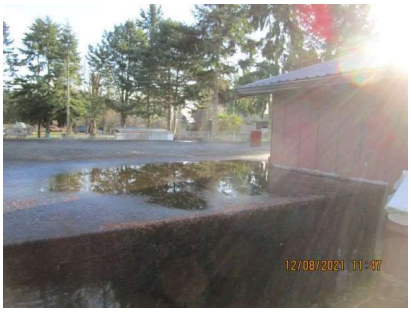
Jocelyne Gray

Jocelyne Gray, P.E.
Office of Drinking Water, Acting Assistance Regional Manager

Enclosures

cc: Culley Lehman, Cascadia Water
Jeff Tasoff, DCG Engineers
Clallam County Health & Humans Services


Water Facilities Site


Large Storage Tank - Ponding


Large Storage Tank Vent


East Side Large Storage Tank


North Side Large Storage Tank


North Side Large Storage Tank

Well 1 With Sealed Wires

Well 2

Pressure Tanks

Small Storage Tank Vent

Small Storage Tank Hatch Gasket

Booster Pumps for Small Storage Tank

Large Storage Tank Hatch Gasket

Oilless Air Compressor for Pressure Tanks

The Company is treating the contract as confidential.

UW-240151 PC IR 3 Attachment 4b
Sheet1 Page 1 of 8

Project Name	Date in ser	WUTC	Date
Del Bay project - New Mainline	**11/01/23**	331	12/20/2022
Del Bay project - New Mainline	**11/01/23**	331	07/14/2023
Del Bay project - New Mainline	**11/01/23**	331	11/01/2023
Del Bay project - New Mainline	**11/01/23**	331	06/01/2023
Del Bay project - New Mainline	**11/01/23**	331	08/03/2023
Del Bay project - New Mainline	**11/01/23**	331	09/16/2023
Del Bay project - New Mainline	**11/01/23**	331	06/26/2023
Del Bay project - New Mainline	**11/01/23**	331	07/27/2023
Del Bay project - New Mainline	**11/01/23**	331	05/18/2023
Del Bay project - New Mainline	**11/01/23**	331	05/30/2023
Del Bay project - New Mainline	**11/01/23**	331	05/01/2023
Del Bay project - New Mainline	**11/01/23**	331	05/01/2023
Del Bay project - New Mainline	**11/01/23**	331	03/14/2023
Del Bay project - New Mainline	**11/01/23**	331	04/04/2023
Del Bay project - New Mainline	**11/01/23**	331	06/13/2023
Del Bay project - New Mainline	**11/01/23**	331	08/31/2021
Del Bay project - New Mainline	**11/01/23**	331	01/01/2023
Del Bay project - New Mainline	**11/01/23**	331	12/20/2022
Del Bay project - New Mainline	**11/01/23**	331	03/01/2023
Del Bay project - New Mainline	**11/01/23**	331	06/29/2022
Del Bay project - New Mainline	**11/01/23**	331	10/18/2022
Del Bay project - New Mainline	**11/01/23**	331	07/25/2022
Del Bay project - New Mainline	**11/01/23**	331	11/29/2022
Del Bay project - New Mainline	**11/01/23**	331	02/01/2023
Del Bay project - New Mainline	**11/01/23**	331	05/10/2023
Del Bay project - New Mainline	**11/01/23**	331	05/10/2023
Del Bay project - New Mainline	**11/01/23**	331	05/10/2023
Del Bay project - New Mainline	**11/01/23**	331	04/17/2023
Del Bay project - New Mainline	**11/01/23**	331	03/27/2023
Del Bay project - New Mainline	**11/01/23**	331	04/17/2023
Del Bay project - New Mainline	**11/01/23**	331	09/27/2023
Del Bay project - New Mainline	**11/01/23**	331	09/16/2023
Del Bay project - New Mainline	**11/01/23**	331	06/01/2023
Del Bay project - New Mainline	**11/01/23**	331	05/10/2023
Del Bay project - New Mainline	**11/01/23**	331	05/16/2023
Del Bay project - New Mainline	**11/01/23**	331	07/20/2023
Del Bay project - New Mainline	**11/01/23**	331	09/26/2022
Del Bay project - New Mainline	**11/01/23**	331	03/24/2021
Del Bay project - New Mainline	**11/01/23**	331	04/22/2021
Del Bay project - New Mainline	**11/01/23**	331	01/13/2022
Del Bay project - New Mainline	**11/01/23**	331	02/18/2022
Del Bay project - New Mainline	**11/01/23**	331	08/29/2022
Del Bay project - New Mainline	**11/01/23**	331	03/04/2022

Del Bay project - New Mainline	**11/01/23**	331	09/30/2021
Del Bay project - New Mainline	**11/01/23**	331	06/16/2021
Del Bay project - New Mainline	**11/01/23**	331	11/13/2021
Del Bay project - New Mainline	**11/01/23**	331	03/24/2022
Del Bay project - New Mainline	**11/01/23**	331	02/01/2022
Del Bay project - New Mainline	**11/01/23**	331	11/10/2021

Name

Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Morley & Sons Construction
Morley & Sons Construction
Morley & Sons Construction
Morley & Sons Construction
Morley & Sons Construction
Morley & Sons Construction
Morley & Sons Construction
Morley & Sons Construction
Morley & Sons Construction
Morley & Sons Construction
Hanson's Building Supply
Journal Entry
Morley & Sons Construction
Davido Consulting Group, Inc.
Morley & Sons Construction
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Sebo's Do-It Center
Sebo's Do-It Center
Freeland Country Store
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Hanson's Building Supply
Hanson's Building Supply
Freeland ACE Hardware
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Frazier Surveying, LLC
Island County
Journal Entry
Island County
Frazier Surveying, LLC

Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Journal Entry

Description

[Davido Waterline] - engineering
[Del Bay construction support] engineering
[Del Bay project] engineeringinv dated 10/27/23
[Del Bay project] engineering(dated 5/26/23)
[Del Bay project] Final connections to houses, abandoned old system components
[Del Bay project] Finished punch list items + asphalt & patchwork.
[Del Bay project] House connections & service lines
[Del Bay project] House connections & service lines
[Del Bay project] Main line & hydrants
[Del Bay project] Main line & hydrants
[Del Bay project] Main line, hydrants
[Del Bay project] Main line, hydrants, tree removal(inv dated 4/21/23)
[Del Bay project] main line, valve clusters, hydrant, service connections, tie-in
[Del Bay project] Main line, valves, hydrant, boring
[Del Bay project] stakes
[Del Bay waterline communication] move Capital Labor from Salary to Capital (Payroll period 6/7-6/20/21)
[Del Bay Waterline Project] - deposit for parts
[Del Bay waterline project] - engineering
[Del Bay Waterline project] contractor invoice
[Del Bay Waterline Replacement] engineering
[Del Bay Waterline] - engineering
[Del Bay Waterline] engineering
[Del Bay Waterline] engineering
[Del Bay] - engineering(Inv dated 1/19/23, originally booked as accrued exp 1/31/23)
[Del Bay] 1" x 1" barb
[Del Bay] ball valve, 1" barb, 1.5" clamp
[Del Bay] brass ball valve
[Del Bay] construction engineering
[Del Bay] engineering
[Del Bay] engineering
[Del Bay] engineering
[Del Bay] engineering(inv dated 8/24/23)
[Del Bay] engineering(dated 5/26/23)
[Del Bay] stakes
[Del Bay] stakes
[Del Bay] tools for connections
[Del By Waterline] Engineering
35717 - Del Bay Waterline Replacement
Del Bay line extension: surveying
Del Bay line extension: WB service area expansion
Del Bay project: Payroll 1/31-2/13/22
Del Bay project: ROW permits
Del Bay project: WB pumphouse surveying

Del Bay Waterline Replacement
Del Bay Waterline Replacement - engineering
Del Bay Waterline replacement engineering
Del Bay Waterline Replacement engineering
Del Bay Waterline Replacement engineering (inv dated 1/17, postmarked 2/18/22)
Reclassify salary to capital labor [Del Bay line extension]

	Amount
$	277.00
$	1,334.25
$	864.00
$	507.50
$	18,670.08
$	84,870.52
$	20,643.71
$	21,731.71
$	28,614.40
$	42,432.00
$	45,674.24
$	52,490.57
$	48,013.44
$	92,085.60
$	56.40
$	90.12
$	208,896.00
$	2,057.00
$	65,519.36
$	1,910.00
$	1,432.25
$	348.00
$	1,808.00
$	692.25
$	11.96
$	76.39
$	73.96
$	1,328.00
$	1,367.75
$	665.00
$	598.00
$	576.00
$	919.00
$	19.42
$	41.32
$	44.77
$	5,098.75
$	797.50
$	8,972.50
$	600.49
$	355.30
$	232.27
$	5,935.00

$	17,062.00
$	2,061.50
$	2,089.75
$	1,637.00
$	1,455.00
$	45.06
$	**793,082.09**

UW-240151 PC IR 3 Attachment 5
Sheet1 Page 1 of 4

Project Name	Date in service	WUTC	Date
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	03/05/2021
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	06/21/2021
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	07/19/2021
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	08/01/2021
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	08/01/2021
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	08/09/2021
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	08/31/2021
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	08/31/2021
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	08/31/2021
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	11/18/2021
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	12/23/2021
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	02/17/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	02/28/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	03/01/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	03/01/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	03/01/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	03/02/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	03/04/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	03/04/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	03/08/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	03/16/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	03/22/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	03/23/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	03/30/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	04/01/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	04/21/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	06/29/2022
WB Creek Crossing / Mutiny Ln Project	7/20/2022	331	07/20/2022

Name
Frazier Surveying, LLC
Davido Consulting Group, Inc.
Island County
Trenchless Construction Services, LLC
Island County
Edge Analytical, Inc.
Journal Entry
Journal Entry
Journal Entry
Davido Consulting Group, Inc.
Journal Entry
Davido Consulting Group, Inc.

Davido Consulting Group, Inc.
Freeland ACE Hardware
Hanson's Building Supply
Freeland ACE Hardware
Journal Entry
Freeland Country Store
Edge Analytical, Inc.
Madsen Enterprise, Inc.
Journal Entry
B&W Pump Co
Davido Consulting Group, Inc.
Journal Entry
Freeland Country Store
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.
Davido Consulting Group, Inc.

Description

WB creek crossing: surveying
WB Waterworks - Mutiny Ln waterline replacement engineering
Right of Way permit: Mutiny Ln creek crossing
Mutiny Ln 6" HDPE creek crossing
online fee for permit application (goes with Mutiny Ln ROW permit)
21-29517 - Mutiny Ln Creek Crossing Coliform sample
[Mutiny Ln communication] move Capital Labor from Salary to Capital (Payroll period 6/7-6/20/21)
[Mutiny Ln waterline communication] move Capital Labor from Salary to Capital (Payroll period 7/19-8/1/21)
[Mutiny Ln Phase 1] move Capital Labor from Salary to Capital (Payroll period 8/2-8/15/21)
WB/Mutiny Lane Waterline replacement (creek crossing) engineering
Reclassify salary to capital [meet with contractor: Mutiny Ln project]
WB/Mutiny Lane Waterline replacement engineering
WB/Mutiny Lane Waterline replacement (creek crossing) engineering [balance from original invoice dated 11/18/21, incorrect amount initially entered then]
Mutiny Ln project parts
Mutiny Ln project parts (cement)
[Mutiny Ln] Hex bushing
[Del Bay project] - WB tank inspection & cleaning for Del Bay project
[Mutiny Ln PRV] Seed for Baer/neighbor
[Mutiny Ln] 22-07400 - PRV samples
Mutiny Ln PRV
[Mutiny Ln project] - capital labor
Mutiny Ln PRV parts
WB/Mutiny Lane Waterline replacement engineering
[Mutiny Ln project] capital labor
[Mutiny Ln] - panels for creek bank support
Mutiny Ln Waterline replacement engineering
WB/Mutiny Lane Waterline engineernig
[Mutiny Ln PRV] - project closeout engineering

Amount
$ 3,167.50
$ 13,060.29
$ 139.05
$ 47,262.76
$ 3.48
$ 19.00
$ 90.12
$ 177.28
$ 5,374.00
$ 499.50
$ 801.12
$ 407.00
$ 3,394.34
$ 47.78
$ 105.05
$ 16.28
$ 994.56
$ 406.48
$ 66.00
$ 86,208.23
$ 4,847.51
$ 3,652.32
$ 1,207.00
$ 158.52
$ 766.28
$ 1,547.50
$ 2,149.25
$ 2,087.00
$ 178,655.20

Madsen Enterprise , Inc.

PO Box 438
Clinton, WA 98236

Invoice

Date	Invoice #
9/30/2023	2753

Bill To
CASCADIA WATER PO BOX 549 FREELAND ,WA 98249

P.O. No.	Terms	Project

Item	Description	Est Amt	Prior Amt	Prior %	Qty	Rate	Curr %	Total %	Amount
	MUTINY BAY P.R.V								
02 Site ...	MACHINE TIME AND LABOR	48,290.00			1	48,290.00	100.00%	100.00%	48,290.00T
02 Site ...	MATERIALS	55,591.36			1	55,591.36	100.00%	100.00%	55,591.36T
02 Site ...	EXTRA MATERIALS				1	16,833.98			16,833.98T
	ALL PERMITS AND FEES BY OTHERS EROSION CONTROL T & M AS NEEDED								

Look foreword to working with you

Subtotal	$120,715.34
Sales Tax (8.8%)	$10,622.95
Total	$131,338.29
Payments/Credits	$0.00
Balance Due	$131,338.29

Frazier Surveying, LLC

611 SW Founders Dr
Oak Harbor, WA 98277
Phone # (360) 969-3886
E-mail: fraziersurveying@frontier.com

POSTED

Invoice

Date	Invoice #
1/27/2023	391

Bill To
Culley Lehman Cascadia Water PO Box 549 Freeland, WA 98249

P.O. No.	Terms	Project
		23-100

Quantity	Description	Rate	Amount
1	Topographic Survey and Mapping of a Portion of Mutiny Bay Rd	2,980.00	2,980.00

Cascadia Water Mutiny Bay Rd Topo

Total $2,980.00