North Shore Water Utility Nelson Ltd. Monthly Report

To: Jennifer Beverly, Large Water Systems Environmental Health Officer, Interior Health Authority
From: AquaDiversities Waterworks Inc.
Date: October 21st, 2025
Re: Monthly Report for North Shore Water Utility - **September 2025**

This document includes the following items as part of the monthly report for the North Shore Water Utility Nelson Ltd. (NSWU):

1.0 Daily Water Consumption
2.0 Microbiological Test Results
3.0 Operator Log Sheets and Water Quality Events
4.0 Major Operational Events
5.0 Records of Customer Feedback and Response

Submission of this report is to enhance communication with the local Environment Health Officer (EHO) and meet requirements for status compliance on the conditions summarized in the Operating Permit.

1.0 Daily Water Consumption

Total water consumption in September was 5,011m^3; average daily consumption was 167.0m^3/day. The average flow was 6.960m^3/hr.

2.0 Microbiological Test Results

A sample from both ends of the distribution system is collected and submitted to an accredited laboratory for bimonthly microbiological testing.

All monthly testing results satisfy the Maximum Allowable Concentration (MAC) standard as set out by the Guidelines for Canadian Drinking Water Quality (GCDWQ).

See **Appendix A** for Laboratory Results

3.0 Operator Log Sheets and Water Quality Events

NSWU continues to be tested on an every-other-day schedule as specified by the EHO. The log sheets include comments on the source, treatment, and distribution system events. Log sheets also include information on the weather for the corresponding test date, which helps correlate weather events to turbidity levels.

Throughout the month of September, chlorine residuals were maintained above 0.2 mg/L across the distribution system.

See **Appendix B** for Operator Log Sheets.

4.0 Major Operational Events

Two “brookes” boxes were installed this month. One box was installed at the junction of Johnston and Whitmore to facilitate a flushing point, and one was installed at the Sutherland reservoir. Additional time by staff in September was spent searching for curb stops as time permitted.

5.0 Records of Customer Feedback and Response

A resident from 683 Whitmore Road inquired about a water leak on September 3rd. The property curb-stop valve was closed, the leak was determined to be on the resident’s property, and he was advised to contact a plumber. The curb-stop valve was left closed for repairs. No other customer comments or complaints were received in the month of September.

Report Reviewed by:



Nicole Ward, BSc.P.Ag. Project Manager

Appendix A
Laboratory Results

PASSMORE LABORATORY LTD.

Report# 8536
Filename 250909AD.pdf

ANALYTICAL RESULTS

Sample ID Main Jet — Sample # 1
Date/Time Sampled 2025-09-09 10:37 AM Matrix TW — Temperature on Receipt 11 °C
Date/Time on Test 2025-09-09 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID 570 Johnstone Rd — Sample # 2
Date/Time Sampled 2025-09-09 10:25 AM Matrix TW — Temperature on Receipt 11 °C
Date/Time on Test 2025-09-09 4:46 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Public Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.

Report# 8592
Filename 250923AD1.pdf

ANALYTICAL RESULTS

Sample ID Main Jet Sample # 1
Date/Time Sampled 2025-09-23 11:00 AM Matrix TW Temperature on Receipt 5 °C
Date/Time on Test 2025-09-23 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Public Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

Appendix B
Operator Log Sheet

Month: Sep-25

Date	Time	Cl2 Pump Setting	CL2 pump duration	CL2 pump frequency	Water Turbidity (Res.)	CL2 Residual (Res.)	Cl2 Pump Setting	Raw Water Turbidity (Res.)	CL2 Residual (Res.)	CL2 Residual (Dist.) MainJet	CL2 Residual (Dist.) 570 Johnstone Rd	Flow Meter Reading	Comments	Weather	
MM/DD/YYYY	24:00:00	Isaac Cr. (1-10)			Isaac Cr. NTU	Isaac Cr. mg/L	Sutherland Cr.(1-10)	Sutherland Cr. NTU	Sutherland Cr. mg/L	mg/L	mg/L	m3/Hr	Microbiological Sample Taken/Filter Change/Etc.	Precip./Temp.	Sampled By
9/1/2025															
9/2/2025	2:00									0.9	0.47			30C	JG/ FD
9/3/2025															
9/4/2025	10:00	40%	9.00	12.00	0.215	0.82	4	0.65	0.31	0.81	0.68	140330	weak CL2, topped up with fresh, batch dosed 300ml	24C	JG
9/5/2025															
9/6/2025	8:00	40%	9.00	12.00	0.22	0.71	3	-	-	-	-				
9/7/2025															
9/8/2025													tested at .50 fcl. bacth dosed sutherland 270ml 12% cl solution		
9/9/2025	8:50	40%	9.00	12.00	0.24	0.74	3	0.51	0.64	0.56	0.47	141260	microbac sample, sutherland to 4 in the pm	16C cloudy	JG
9/10/2025													batch dosed sutherland 250ml cl, stenner pump to 5		
9/11/2025															
9/12/2025	9:26	40%	9.00	12.00	0.3	0.8	5	0.57	1.16	0.51	0.62	141849	turned sutherland down to 3.5	29C	JG
9/13/2025	8:00	40%	9.00	12.00	0.86	0.74	3.5	-	-	-	-	142473	W.S. adjusted turbidity meter in AM	30C	JG
9/14/2025															
9/15/2025															
9/16/2025	8:33	40%	9	12	0.23	0.64	4	0.34	0.58	0.61	0.49	142700		24C	JG
9/17/2025															
9/18/2025															
9/19/2025	9:06	40%	9	12	0.2	0.82	4	0.43	0.83	0.89	0.37	143344		16C	JG
9/20/2025	7:44	40%	9	12	0.19	1.03	3.5	-	-	-	-		Isaac turned down to 8/12 duration frequency	25C	JG
9/21/2025															
9/22/2025															
9/23/2025	8:51	40%	8	12	0.2	0.75	3	0.54	0.91	0.76	0.41	144064	Microbac samples taken today, sutherland pump to 3	12C	JG
9/24/2025															
9/25/2025	8:55	40%	8	12	0.19	0.66	2.5	0.42	0.98	0.94	0.61	144491	Turned sutherland pump downt o 2.5 as fcl was still hig	15C	JG
9/26/2025															
9/27/2025	9:13	40%	8	12	0.21	0.81	-	-	-	-	-				
9/28/2025															
9/29/2025	9:06	40%	8	12	0.2	0.7	3.5	0.46	0.41	-	0.48	145341	turned sutherland up to 3.5	21C	JG
9/30/2025															

Reading of flow meter for Sunny Side trailer court (to be recorded once a month) 172419 gallons Date: September 15th

total flow 5011

Appendix C
Field Memos

FIELD WORK MEMO

DATE: Sept 3 2025 TIME: 0.5 hours VEHICLE: PERSONAL ☐ COMPANY ☒ DISTANCE: 1 Km

PROJECT: NSWU TYPE OF WORKS: O&M

WORKS REQUESTED: Investigate underground leak on NSWU

FIELD TECH: JG, FD, WS SITE REP: ☐ YES / ☒ NO

MATERIALS: IN STOCK ☒ PURCHASED ☐ RECEIPTS: ☐ YES / ☒ NO

Curbstop Key

DESCRIPTION OF WORKS COMPLETED: PICTURES: ☐ YES / ☒ NO

Resident of 683 whitmore road called to report water coming from underground on his property/at property line. Wes Shippey responded first and dug a quick trench to keep water from damaging the home. Curb stop key was used on property's valve. Leak stopped after valve shut off indicating leak was on the customer line not the NSWU. Informed property owner of this and advised him to contact a plumber/investigate his infrastructure. Customer asked that the water be left ON. Informed customer that legally we must operate our curbstop valve. Told him that there was a fee for valve operation. WORKS COMPLETED: ☒ YES / ☐ NO Asked him to call us and inform for valve operation during the maintenance process.

ANTICIPATED RETURN DATE: In the next week.

FUTURE WORKS: Operate curb stop as needed for future works.

MATERIALS REQUIRED: DO PARTS NEED TO BE ORDERED? ☐ YES / ☒ NO

Curbstop Key.

ADDITIONAL NOTES/SKETCHES:



Ø curbstop
△ leak to surface
‖ Quick drainage trench location

Sketch is rough approximation of the incident

FIELD WORK MEMO

DATE: Sept 2025 **TIME:** 16 billable total **VEHICLE:** PERSONAL ☐ COMPANY ☐ **DISTANCE:** 5km

PROJECT: NSWU brooks boxes **TYPE OF WORKS:** O &M

WORKS REQUESTED: NA

FIELD TECH: FD/JG **SITE REP:** YES ☐ / NO ☑

MATERIALS: IN STOCK ☑ PURCHASED ☐ **RECEIPTS:** YES ☐ / NO ☑

2 Brooks Boxes
2x 43$ for boxes (Sheret)
2x 78 dollars for lid (sheret)
1 x 10$ forestry fitting dust cap from farmers for stand pipe
total: 252$

DESCRIPTION OF WORKS COMPLETED: **PICTURES:** YES ☑ / NO ☑

To familiarize JG with the operation of the NSWU JG +FD went around and exercised all the main gate valves to 3/4 closed and back to fully open. O&M not billable.

Stand Pipe 14 : A brooks box was installed at the junction of Johnstone and Whitmore to facilitate a flushing point. (sp14) Time includes initial dig time to locate the valve in question.

1 additional box was installed up at the Sutherland reservoir. box was put in place by Jared Gill in the summer and fill was transported and spread by JG in the fall.

WORKS COMPLETED: YES ☑ / NO ☐

ANTICIPATED RETURN DATE: NA

FUTURE WORKS:

MATERIALS REQUIRED: **DO PARTS NEED TO BE ORDERED?** YES ☐ / NO ☑

valve key, digging materials

ADDITIONAL NOTES/SKETCHES:

Aqua Diversities Inc.

Nelson, BC
www.aquadiversities.com

FIELD WORK MEMO

DATE: 16/9/2025 **TIME:** 4 hours each **VEHICLE:** PERSONAL ☑ COMPANY ☐ **DISTANCE:** 2km

PROJECT: NSWU **TYPE OF WORKS:** Operation & Maintenance

WORKS REQUESTED: Cleaning Isaac intake + Clean out drain line

FIELD TECH: FD/JG **SITE REP:** ☐ YES / ☑ NO

MATERIALS: IN STOCK ☑ PURCHASED ☐ **RECEIPTS:** ☐ YES / ☑ NO

Gasoline for pressure washer, no other consumables

DESCRIPTION OF WORKS COMPLETED: **PICTURES:** ☐ YES / ☑ NO

-Dug out and reinstalled lid of lower gate valve to reservoir.
-Cleaned Isaac Spring Reservoir in alignment with SOP.
-Brought the pressure washer up with crawler nozzle and successfully flushed out drain line that had presented as clogged earlier in the year.
-Attempted to send the crawler down the reservoir line to clean but met resistance
-Intake pvc screen was cleaned of sediment
- Developed plan for reservoir overflow volume/rate
-fixed hinges on Isaac reservoir lid
-Brushed out small trees and shrubs that would threatened the reservoir long term.

WORKS COMPLETED: ☑ YES / ☐ NO

ANTICIPATED RETURN DATE: sept 18th

FUTURE WORKS:

More brushing + shrub killing

MATERIALS REQUIRED: **DO PARTS NEED TO BE ORDERED?** ☐ YES / ☑ NO

Chainsaw + industrial strength vinegar

ADDITIONAL NOTES/SKETCHES:

FIELD WORK MEMO

DATE: sept 17th -oct 9th **TIME:** 2 techs x 26 hours **VEHICLE:** PERSONAL ☐ COMPANY ☑ **DISTANCE:** ~30km

PROJECT: NSWU **TYPE OF WORKS:** O&M

WORKS REQUESTED: Searching for missing curbstops

FIELD TECH: JD + FD **SITE REP:** ☐ YES / ☑ NO

MATERIALS: IN STOCK ☑ PURCHASED ☐ **RECEIPTS:** ☐ YES / ☐ NO

Locator and pin finder, blue spray paint, shovels and rakes, blue marking pegs, nipples and couplings to bring up to grade.

DESCRIPTION OF WORKS COMPLETED: **PICTURES:** ☐ YES / ☑ NO

-When possible the locator was hooked up to ferrous basement water inlet on residents property and traced back to the property line. Pin finder was used to narrow down the locations before digging.
-Curbstops were successfully found at the following addresses; 664, 502, 485, 590 Johnstone road. 591 & 569 Goddard. 677 Highway 3 A.
-Time was spend searching unsuccessfully at the following addresses; 553 Goddard, 598 Johnstone, 690 Bridgebay and 703, 709 & 721 Stromme.
-All successfully found curbstop photos were updated in the NSWU valve locate google sheet, those that were not found have detailed photos of where searching was undertaken.

WORKS COMPLETED: ☐ YES / ☑ NO

ANTICIPATED RETURN DATE: Open ended

FUTURE WORKS:

Still roughly 10 curbstops to find

MATERIALS REQUIRED: **DO PARTS NEED TO BE ORDERED?** ☐ YES / ☑ NO

Maybe more nipples and fittings to bring further stops up to grade.

ADDITIONAL NOTES/SKETCHES: