

North Shore Water Utility Nelson Ltd. Monthly Report

To: Jennifer Beverly, Large Water Systems Environmental Health Officer, Interior Health Authority
From: Aqua Diversities Waterworks Inc.
Date: June 3rd, 2025
Re: Monthly Report for North Shore Water Utility - **May 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 May was 5,673m³; average daily consumption was 183m³/day. The average flow was 7.625m³/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 May, 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

A leak was discovered in the Sutherland reservoir, and patching /repair efforts began at the end of May.

5.0 Records of Customer Feedback and Response

There were no customer inquiries in the month of May.

Report Reviewed by:

Nicole Ward, BSc.P.Ag. Project Manager

Appendix A

Laboratory Results

ANALYTICAL RESULTS

Sample ID	Main Jet				Sample #	1
Date/Time Sampled	2025-05-20	11:00 AM	Matrix	TW	Temperature on Receipt	5 °C
Date/Time on Test	2025-05-20	5:15 PM				
<u>Analyses</u>			<u>Result</u>	<u>Units</u>	<u>RDL</u>	
Coliforms, Total			less than 1	CFU/100mL	1	
Verified E.coli			less than 1	CFU/100mL	1	

Sample ID	NCCS 570 Johnstone Rd.				Sample #	2
Date/Time Sampled	2025-05-20	11:00 AM	Matrix	TW	Temperature on Receipt	6 °C
Date/Time on Test	2025-05-20	5:20 PM				
<u>Analyses</u>			<u>Result</u>	<u>Units</u>	<u>RDL</u>	
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

ANALYTICAL RESULTS

Sample ID	Main Jet				Sample #	1
Date/Time Sampled	2025-05-06	11:00 AM	Matrix	TW	Temperature on Receipt	9 °C
Date/Time on Test	2025-05-06	4:10 PM				
<u>Analyses</u>			<u>Result</u>	<u>Units</u>	<u>RDL</u>	
Coliforms, Total			less than 1	CFU/100mL	1	
Verified E.coli			less than 1	CFU/100mL	1	

Sample ID	NCCS 570 Johnstone Rd.				Sample #	2
Date/Time Sampled	2025-05-06	11:00 AM	Matrix	TW	Temperature on Receipt	8 °C
Date/Time on Test	2025-05-06	4:15 PM				
<u>Analyses</u>			<u>Result</u>	<u>Units</u>	<u>RDL</u>	
Coliforms, Total			less than 1	CFU/100mL	1	
Verified E.coli			less than 1	CFU/100mL	1	

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References

Appendix B

Operator Log Sheet

North Shore Water Utility Nelson Ltd. Monthly Report
14-017 May 2025 MR V1.0docx.

Appendix C

Field Memos

FIELD WORK MEMO

DATE: May 13th, 20th 2025 TIME: 1 hour VEHICLE: PERSONAL ☐ COMPANY ☐ DISTANCE:
PROJECT: NSWU TYPE OF WORKS: O&M
WORKS REQUESTED: water shut off

FIELD TECH: OH SITE REP: ☐ YES / ☐ NO
MATERIALS: IN STOCK ☐ PURCHASED ☐ RECEIPTS: ☐ YES / ☐ NO

DESCRIPTION OF WORKS COMPLETED: PICTURES: ☐ YES / ☐ NO
shut off water and turn back on for 695 Stromme lane on May 13th
Shut off water and turn back on for 570 Goddard road on May 20th

WORKS COMPLETED: ☒ YES / ☐ NO

ANTICIPATED RETURN DATE:

FUTURE WORKS:

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

ADDITIONAL NOTES/SKETCHES:

FIELD WORK MEMO

DATE: May 14 2025 TIME: 2 hours VEHICLE: PERSONAL ☐ COMPANY ☐ DISTANCE:
PROJECT: NSWU TYPE OF WORKS: O&M
WORKS REQUESTED: responding to low cl2 alarm

FIELD TECH: OH SITE REP: ☐ YES / ☐ NO
MATERIALS: IN STOCK ☐ PURCHASED ☐ RECEIPTS: ☐ YES / ☐ NO
chlorine analyzer membrane and electrolyte solution

DESCRIPTION OF WORKS COMPLETED: PICTURES: ☐ YES / ☐ NO
responded to low chlorine alarm at Isaac reservoir. tired calibrating the analyzer and was unsuccessful, next I replaced the membrane and electrolyte solution, I found that the electrolyte solution may have leaked out and that's why it failed, after replacing the membrane and calibrating the reading when back to normal operation.

WORKS COMPLETED: ☐ YES / ☐ NO

ANTICIPATED RETURN DATE:

FUTURE WORKS:

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

ADDITIONAL NOTES/SKETCHES:

FIELD WORK MEMO

DATE: May 30, 2025 TIME: 1 hour VEHICLE: PERSONAL ☐ COMPANY ☐ DISTANCE:
PROJECT: NSWU TYPE OF WORKS: new install
WORKS REQUESTED: plumb in existing turbidimeter to water line with chlorine analyzer

FIELD TECH: OH SITE REP: YES ☐ / NO ☐
MATERIALS: IN STOCK ☒ PURCHASED ☐ RECEIPTS: YES ☐ / NO ☐

1/2 inch SS tee PEX fitting
1/2 PEX to 1/2" treaded
1/2"-1/4" reducer
1/4" John guest valve
4"-1/2" PEX
1' of John guest tubing

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

Added tee in PEX tubing of the same line as the chlorine analyzer and installed fittings to plumb to turbidimeter.

WORKS COMPLETED: YES ☒ / NO ☐

ANTICIPATED RETURN DATE:

FUTURE WORKS:

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

ADDITIONAL NOTES/SKETCHES: