

## North Shore Water Utility Nelson Ltd. Monthly Report

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**To:** Pouria Mojtahedi, Large Water Systems Environmental Health Officer, Interior Health Authority  
**From:** Aqua Diversities Inc.  
**Date:** March 16, 2024  
**Re:** Monthly Report for North Shore Water Utility - **February 2024**

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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 February was 5,682 m<sup>3</sup>; average daily consumption was 195.9m<sup>3</sup>/day. The average flow was 8.16 m<sup>3</sup>/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 February, chlorine residuals were maintained above 0.5 mg/L across the distribution system.

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

#### **4.0 Major Operational Events**

On January 21st, a Water Quality Advisory was posted due to heavy rain causing the turbidity  $\geq 1$  NTU.

The IHA Health Officer was notified of this action. The NSWU website was updated, a text alert notification to subscribers was sent out and community signage was posted.

On Feb 14th the Water Quality Advisory has rescinded ongoing, routine testing demonstrates that water quality is within the Canadian Drinking Water Guidelines with turbidity consistently below 1 NTU.

The IHA Health Officer was notified of this action. The NSWU website was updated, a text alert notification to subscribers was sent out and community signage was removed.

There were no other major events to report for the month of February.

Note that the pilot plant located in the Isaac Creek reservoir building continues to operate with the treated water going to waste (as per direction from EHE Marianne Crowe).

#### **5.0 Records of Customer Feedback and Response**

There were no customer inquiries in the month of February.

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	2024-02-13	10:00 AM	Matrix	TW	Temperature on Receipt	7
Date/Time on Test	2024-02-13	4:40 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	538 Johnstone Rd				Sample #	2
Date/Time Sampled	2024-02-13	10:00 AM	Matrix	TW	Temperature on Receipt	8
Date/Time on Test	2024-02-13	4:40 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	2024-02-27	1:00 PM	Matrix TW	Temperature on Receipt	8
Date/Time on Test	2024-02-27	5:05 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	538 Johnstone Rd			Sample #	2
Date/Time Sampled	2024-02-27	1:00 PM	Matrix TW	Temperature on Receipt	9
Date/Time on Test	2024-02-27	5:10 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	

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References

# Appendix B

## Operator Log Sheet

## NSWU Operator Log

Month: Feb-24		MainJet							538 Johnstone Rd			
Date	Time	CL2 pump run time	CL2 pump pulse rate	Raw Water Turbidity (Res.)	CL2 Residual (Res.)	CL2 Residual (Dist.)	CL2 Residual (Dist.)	Flow Meter Reading	Comments	Weather	Sampled By	
YY/MM/DD	24:00:00			Isaac Cr. NTU	Isaac Cr. mg/L	mg/L	mg/L	m3/Hr		Precip./Temp.		
2/1/2024	10:00	4.00	5.00	1.45	0.74	0.66	0.58		Microbiological Sample Taken/Filter Change/Etc.	3C rain	FD	
2/2/2024												
2/3/2024	6:53	4.00	5.00	1.37	0.54						Je	
2/4/2024												
2/5/2024									Topped up Chlorine-2 Carboy's, checked exhaust fan		JW	
2/6/2024	11:00	4.00	5.00	1.05	0.68	0.89	0.74		Return 13 empty carboy's	Sc, overcast	JW	
2/7/2024												
2/8/2024												
2/9/2024	3:00	4.00	5.00	1.29	0.69	0.74	0.62	19048		Sun OC	FD	
2/10/2024	7:00	4.00	5.00	1.09	0.77						Jw	
2/11/2024												
2/12/2024												
2/13/2024	10:00	4.00	5.00	0.86	0.56	0.93	0.75	19815	Verified analyzer reading correctly with hand held, Checked	3C Sunny	Jw	
2/14/2024												
2/15/2024	11:00	4.00	5.00	0.94	0.77	0.86	0.74	20173	Replaced John guest valve that wasn't opening enough	-5C clear	FD	
2/16/2024												
2/17/2024	13:00	4	5	0.81	0.75	-	-	-			JW	
2/18/2024												
2/19/2024												
2/20/2024	13:00	4	5	0.56	0.57	0.92	0.87	21241	Topped up chlorine carbouy	overcast, show	jw	
2/21/2024												
2/22/2024	10:00	4	5	0.57	0.74	0.68	0.46	21606		3C	FD	
2/23/2024												
2/24/2024												
2/25/2024												
2/26/2024	14:00	4	5	0.27	0.74	-	-	-			jw	
2/27/2024	14:00	4	5	0.2	0.56	0.86	0.8	22629	Took water samples to RDCK	Sunny, 1C	Jw	
2/29/2024	9:30	4	5	0.19	0.66	0.77	0.64	22991	Isaac-Topped up Cl, checked intake	Rain, 2C	jw	
Reading of flow meter for Sunny Side trailer court (to be recorded once a month) Feb. 13/24 - 9955996 Gallons												