REGIONAL DISTRICT
NORTH OKANAGAN

Mabel Lake Water (MLW) Utility Water Quality Report for June 2025

The following is the water quality summary for the Mabel Lake Water Utility (MLW).

1. Source

The MLW system draws raw water from Mabel Lake through a screened intake line to a clear well. Water from the clear well is chlorinated and pumped into a 526-meter-long pipe which provides chlorine contact time. Water then flows into the distribution system. Table 1 summarizes the results for bacterial and turbidity for the untreated water at the treatment plant.

Table 1 Mabel Lake Intake

Parameter	Laboratory		# of Samples	# of Deviations	Min	Max	Average
E.coli[3]	RDNO Lab	CFU/100 mL	4	-----	<1	1	<1
Total Coliform	RDNO Lab	CFU/100 mL	4	-----	1	5.1	2.8
Turbidity[2]	SCADA[1] Daily Average	NTU	30	-----	0.36	0.64	0.50
Turbidity[2]	Operator Grab Sample	NTU	12	-----	0.34	0.76	0.59
UVT (unfiltered)	RDNO Lab	%	4	-----	88.7	90.1	89.5

[1]SCADA: Supervisory Control and Data Acquisition.
[2]Operation Guideline: As outlined in Deviation Response Plan, turbidity < 1 NTU
[3]Drinking Water Treatment Objectives_ BC (Sec 4.3): Determine number of raw water samples with E. coli >20 CFU. The number of E. coli in raw water does not exceed 20/100 mL in at least 90% of the weekly samples from the previous six months.

2. Treatment Plant

MLW utilizes chlorine disinfection only. Table 2 summarizes chlorine and turbidity levels from the pipe that flows into the distribution system.

Table 2 Mabel Lake Water Treatment

Parameter	Laboratory		# of Samples	# of Deviations	Min	Max	Average
Free Chlorine[2]	SCADA[1] Daily Average	mg/L	30	-----	1.35	1.75	1.66

[1]SCADA: Supervisory Control and Data Acquisition.
[2]Operation Guideline: As outlined in Deviation Response Plan, free chlorine >0.20 mg/L and <2.20 mg/L; turbidity <1.0 NTU

3. Distribution

MLW provides potable water to 3 commercial and 373 residential connections. The majority of connected residents and all 3 commercial connections are seasonally occupied, with approximately 20 connections considered year-round or permanent. A Water System Capacity Assessment in 2025 estimated the population increases to an estimated three thousand one hundred and forty-five (3145) persons during peak summer months.

Table 3 summarizes the results for chlorine, turbidity, and bacteria for the distribution system. The monthly water volume used at Mabel Lake this month was 12027 m^3.

Table 3 Mabel Lake Distribution Parameters

Parameter	Laboratory		# of Samples	# of Deviations	Min	Max	Average
Free Chlorine[1]	Operator Grab Sample	mg/L	41	-----	0.49	1.53	0.92
Total Chlorine	Operator Grab Sample	mg/L	41	-----	0.54	1.64	1.01
Turbidity[1]	Operator Grab Sample	NTU	41	-----	0.34	0.87	0.59
E.coli	RDNO Lab	MPN/100 mL	7	-----	<1	<1	<1
Total Coliform	RDNO Lab	MPN/100 mL	7	-----	<1	<1	<1

[1]Operation Guideline: As outlined in Deviation Response Plan, free chlorine >0.20 mg/L and <2.20 mg/L; turbidity <1.0 NTU

4. Water Quality Customer Calls and Notifications

Customer calls within the Mabel Lake Water Utility service area are tracked and recorded.

There were seven customer calls this month.

Table 4 Water Quality Customer Calls for the month

# of Calls	Issue/Inquiry	Investigation	Comments
5	Universal Metering Enquiry	None	RDNO spoke with the customer explaining the letter.
1	Leaking Standpipe	Yes	Operator repaired standpipe when next onsite.
1	Connection Fee and Water Bill Enquiry	None	Customer enquiring about connection fees and annual MLW bill.

5. Operational or Maintenance Activity

Operational activities within the Mabel Lake Water service area are tracked and recorded in Table 5. There were seven operational activities this month.

Table 5 Monthly Operational Work and Maintenance

NUMBER OF LOCATIONS	TYPE OF WORK
6	Standpipe Maintenance
0	Water Service Locate
0	Water Main Break Repair
0	Water Service Install/Inspection
0	Water Turn On/Off
0	Water Service and/or Curb Stop Repair
1	Water Meter/ERT Install
0	Water Meter/ERT Inspection
0	Water Meter/ERT Maintenance
0	Water Meter/ERT Replacement
0	Water Meter Manual Read
0	Water Investigation
0	Reservoir Cleaning