

Outback Water System - Water Quality Report for December 2025

1. Source

The Outback water system consists of raw water pumps from Okanagan Lake, a screened intake, a booster station and a two-celled reservoir. The booster station houses the ultraviolet (UV) reactor, sodium hypochlorite injection (chlorine), instrumentation, and booster pumps. A raw (untreated) water sample is taken at the lake pump station once a month. Table 1 summarizes the results for bacterial, turbidity and UV Transmittance (UVT) for the untreated water at the lake pump station.

Table 1 Outback Intake (untreated)

Parameter	Laboratory		# of Samples	# of Deviations	Result	Min	Max	Average ²
E.coli¹	RDNO Lab	MPN/100 mL	2 ³	-----	-----	<1	1	<1
Total Coliform	RDNO Lab	MPN/100 mL	2 ³	-----	-----	1	1	1
Turbidity	Operator Grab Sample	NTU	1	-----	0.46	-----	-----	-----

¹Drinking Water Treatment Objectives_ BC (Sec 4.3): The number of E. coli in raw water should not exceed 20/100 mL in at least 90% of the samples from the previous six months.

²Averages using non detect samples use ½ the reporting limit for the calculation.

³Samples include a duplicate sample taken for quality assurance purposes.

2. Treatment Plant

The Outback water system uses UV and chlorine disinfection to meet dual disinfection goals. Table 2 summarizes results for chlorine, bacterial, turbidity, and UVT.

Table 2 Outback Water Treatment Plant

Parameter	Laboratory	Units	# of Samples	# of Deviations	Min	Max	Average
Free Chlorine² (Reservoir)	Operator Grab Sample	mg/L	4	-----	1.04	1.29	1.18
Free Chlorine² (Reservoir)	SCADA ¹ Daily Average	mg/L	31 Days	-----	0.93	1.67	1.22
Total Chlorine (Reservoir)	Operator Grab Sample	mg/L	4	-----	1.19	1.35	1.26
E.coli (Reservoir)	Caro	CFU/100 mL	4	-----	<1	<1	<1
Total Coliform (Reservoir)	Caro	CFU/100 mL	4	-----	<1	<1	<1
Turbidity² (Reservoir)	Operator Grab Sample	NTU	4	-----	0.24	0.26	0.25
Turbidity ² (Reservoir)	SCADA ¹ Daily Average	NTU	31 Days	-----	0.14	0.15	0.14
UVT (Unfiltered) Booster³	SCADA ¹ Daily Average	%	31 Days	-----	90.05	91.96	90.85

¹SCADA: Supervisory Control and Data Acquisition.

²Operational guidelines based on GVW WQ Deviation Response Plan - free chlorine >0.50 mg/L turbidity <1 NTU.

³UVT (Unfiltered) is recorded continuously while booster is both on and off and is not always a representation of the raw water.

3. Distribution

The Outback water system is owned and operated by Greater Vernon Water, a service of the Regional District of North Okanagan. The water system supplies bulk water from the reservoir to the Outback Resort. The Outback Resort water distribution system is a “stand alone system” and the responsibility of the owner/ operator (Strata). Greater Vernon Water does not monitor the water quality within the Outback Resort water distribution system. Table 3 summarizes the daily flow rates for the month.

Table 3 Monthly Supply Volumes for Outback System over the Month

Volumes	Outback
Min (ML/Day)	0.00
Max (ML/Day)	0.22
Average (ML/Day)	0.03
Monthly Total (ML)	0.88

4. Water Quality Customer Calls and Notifications

There were no water quality customer calls from the Outback Resort this month.

Type of Call	Issue/Inquiry	Investigation	Comments
Issue	Chlorine Smell	No	The customer called stating the water had a high chlorine smell to it and they thought it was making them sick. RDNO staff responded that the chlorine in the water system is increased in the winter to maintain chlorine residual in the system during the lower flows. RDNO staff also informed the customer that they should seek medical treatment if they feel unwell. The customer also asked if a sample could be taken from the system. The RDNO advised that the customer contact their strata as the Outback system is supplied but not operated by the RDNO.