REGIONAL DISTRICT NORTH OKANAGAN

Outback Water System - Water Quality Report for May 2020

The following is the water quality summary for the Outback Water System.

1. Source

The Outback water system pumps raw water from Okanagan Lake through a screened intake line to a booster station. The booster station houses the Ultra Violet reactor, sodium hypochlorite injection, instrumentation and booster pumps to pump water to a two celled reservoir. A raw (untreated) water sample is taken at the intake lake pump station approximately once a month. Tables 1 summarize the results for bacterial, turbidity and UV Transmittance (UVT) for the untreated water at the lake pump station.

Table 1 Outback Lake Pump Station (untreated)

Parameter	Laboratory		# of Samples	# of Deviations	Reading
E.coli[2]	Caro	CFU/100 mL	1	-----	<1
Total Coliform	Caro	CFU/100 mL	1	-----	1
Turbidity	GVW grab sample	NTU	1	-----	0.63

[1]Operation Guideline: As outlined in Deviation Response Plan, turbidity < 1 NTU
[2]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 Plants

The Outback water system uses Ultra Violet (UV) and chlorine disinfection. Tables 2 summarize results for chlorine, bacterial, turbidity, and UV Transmittance (UVT).

Table 2 Outback Water Treatment Plant

Parameter	Laboratory		# of Samples	# of Deviations	Min	Max	Average
Free Chlorine[2] (Reservoir)	GVW grab sample	mg/L	4	-----	1.69	1.97	1.82
Free Chlorine[2] (Reservoir)	SCADA[1] Daily Average	mg/L	31 Days	-----	1.50	1.95	1.75
Total Chlorine (Reservoir)	GVW grab sample	mg/L	4	-----	1.95	2.20	2.10

E.coli (Reservoir)	Caro	CFU/100 mL	4	-----	<1	<1	<1
Total Coliform (Reservoir)	Caro	CFU/100 mL	4	-----	<1	<1	<1
Turbidity[2] (Reservoir)	GVW grab sample	NTU	4	-----	0.27	0.45	0.36
Turbidity [2] (Reservoir)	SCADA[1] Daily Average	NTU	31 Days	-----	0.19	0.42	0.32
UVT (Unfiltered) Booster	SCADA[1] Daily Average	%	31 Days	-----	87.46	92.80	90.62

[1]SCADA: Supervisory Control and Data Acquisition
[2]GVW WQ Deviation Response Plan - Free Chlorine >0.20 mg/L Turbidity < 1 NTU

Distribution

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

Table 3 Monthly Flows for Outback Supply System

Distribution Systems	Outback
Min (ML/Day)	0.00
Max (ML/Day)	0.25
Average (ML/Day)	0.10
Monthly Total (ML)	3.00

3. Outback resident Calls

The strata resort owns, operates and maintains the water distribution within its property. There were no water quality calls from the Outback Resort in May.