

## Outback Water System - Water Quality Report for April 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	Min	Max	Average
E.coli <sup>2</sup>	Caro	CFU/100 mL	1	-----	<1	<1	<1
Total Coliform	Caro	CFU/100 mL	1	-----	1	1	1
Turbidity	GVW grab sample	NTU	1	-----	0.32	0.32	0.32

<sup>1</sup>Operation Guideline: As outlined in Deviation Response Plan, turbidity < 1 NTU

<sup>2</sup>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 <sup>2</sup> (Reservoir)	GVW grab sample	mg/L	4	-----	1.53	1.63	1.58
Free Chlorine <sup>2</sup> (Reservoir)	SCADA <sup>1</sup> Daily Average	mg/L	30 Days	-----	1.24	1.66	1.48
Total Chlorine (Reservoir)	GVW grab sample	mg/L	4	-----	1.70	1.92	1.80

<b>E.coli (Reservoir)</b>	Caro	CFU/100 mL	4	-----	<1	<1	<1
<b>Total Coliform (Reservoir)</b>	Caro	CFU/100 mL	4	-----	<1	<1	<1
<b>Turbidity<sup>2</sup> (Reservoir)</b>	GVW grab sample	NTU	4	-----	0.25	0.30	0.27
<b>Turbidity <sup>2</sup> (Reservoir)</b>	SCADA <sup>1</sup> Daily Average	NTU	30 Days	-----	0.15	0.24	0.19
<b>UVT<sup>3</sup> (Unfiltered) Booster</b>	SCADA <sup>1</sup> Daily Average	%	30 Days	-----	88.81	92.30	90.54

<sup>1</sup>SCADA: Supervisory Control and Data Acquisition

<sup>2</sup>GVW WQ Deviation Response Plan - Free Chlorine >0.20 mg/L Turbidity < 1 NTU

<sup>3</sup>Outback UVT online results after UV treatment are being reported as of July 2018.

### 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
<b>Min (ML/Day)</b>	0.00
<b>Max (ML/Day)</b>	0.36
<b>Average (ML/Day)</b>	0.10
<b>Monthly Total (ML)</b>	3.11

### 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 April.