

## Outback Water System - Water Quality Report for February 2021

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(s)
<b>E.coli</b>	Caro	MPN/100 mL	1	-----	<1
<b>E.coli</b>	GVW	MPN/100 mL	1	-----	<1
<b>Total Coliform</b>	Caro	MPN/100 mL	1	-----	<1
<b>Total Coliform</b>	GVW	MPN/100 mL	1	-----	1
<b>Turbidity</b>	GVW grab sample	NTU	1	-----	0.18

<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):

The number of E. coli in raw water should 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	----	1.90	2.03	1.95
Free Chlorine <sup>2</sup> (Reservoir)	SCADA <sup>1</sup> Daily Average	mg/L	28 Days	----	1.72	2.08	1.90
Total Chlorine (Reservoir)	GVW grab sample	mg/L	4	----	2.06	2.2	2.1
E.coli (Reservoir)	Caro	CFU/100 mL	4	----	<1	<1	<1
Total Coliform (Reservoir)	Caro	CFU/100 mL	4	----	<1	<1	<1
Turbidity <sup>2</sup> (Reservoir)	GVW grab sample	NTU	4	----	0.16	0.21	0.18
Turbidity <sup>2</sup> (Reservoir)	SCADA <sup>1</sup> Daily Average	NTU	28 Days	----	0.12	0.14	0.13
UVT (Unfiltered) Booster	SCADA <sup>1</sup> Daily Average	%	28 Days	----	90.67	93.51	91.98

<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.

## 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 “stand alone 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>	0.29
<b>Average (ML/Day)</b>	0.07
<b>Monthly Total (ML)</b>	1.88

**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 February.