Attachment A



Village of Gold River 499 Muchalat Dr. Gold River, BC VOP 1G0

Operations Department 2023 Annual Water Distribution Report

Date: June 19, 2023

1. Introduction

BC Drinking Water Protection Act

The *Drinking Water Protection Act* and <u>Drinking Water Protection Regulation</u> replace the former Safe Drinking Water Regulation.

The *Drinking Water Protection Act* covers all water systems, except single-family dwellings (and systems excluded through the regulation). It sets out requirements for drinking water operators and suppliers to ensure the provision of safe drinking water to their customers:

- Water system construction proposals must be approved by public health engineers.
- Water system operators must operate their systems in compliance with the requirements
 of the *Drinking Water Protection Act* through operating permits, which may contain
 specific conditions and are set and approved by the drinking water officer.
- Minimum water treatment and water quality standards are to be met, and monitoring and testing carried out, as required.
- Water suppliers must have microbiological samples analyzed by a <u>laboratory that has</u> <u>been approved by the Provincial Health Officer</u>.
- Operators of water systems serving more than 500 individuals must be certified as operators through the <u>Environmental Operators Certification Program</u>.
- Public notification must be made in case of water quality problems.

The *Drinking Water Protection Act* also helps to ensure safe and potable drinking water for British Columbians by assigning the following duties to the Provincial Health Officer:

- Monitor compliance of drinking water officers by way of guidelines and directives.
- Prepare and deliver an annual report to the Minister of Health regarding activities under the act.
- Report about all drinking water issues that threaten public health.
- Make recommendations to the minister with regard to drinking water protection planning.
- Oversee, review, and make amendments to drinking water protection plan.

The act ascended in April 11, 2001

In this very act a yearly distribution report is required to be submitted and reviewed by local council.

2. Authority to Operate

The Village of Gold River is authorized to operate under the Ministry of Health, Vancouver Island Health Authority Water Operating Permit # 1410222 and is required to comply with the BC Drinking Water Protection and Regulations. The Gold River water utility is a Level 11 Water Distribution System as classified by the Environmental Operators Certification Program (EOCP).

3. Non-compliance Issues

During the year of 2022 the Village of Gold River had zero (0) reported issues.

4. Water Reduction Efforts

The Village of Gold River shall continue to follow and implement strategies in the Water Conservation Plan (2019-2023) as approved by council.

5. System Improvements

The Village of Gold River will continue to follow and implement strategies as approved by council in the Water Conservation Plan (2019-2023).

2021 System Improvements

- Metered portable back flow preventor procured in 2020, deemed to be defective and returned back to the manufacturer where the Village were credited. The Village to procure a different model to ensure water removed for portable purposes from Village fire hydrants are tracked, regulated effectively and safely.
- Well #1 Rehabilitation Project. During the inspection of the well, the engineer recommended a new well to be drilled within the next 8-10 years, due to its poor condition. As a result, the project was rescoped (complete with a new design, specifications, tendering and award) to undertake a temporary repair to obtain the 8-to-10-year life expectancy of the well. Due to scheduling challenges the repairs are to be completed in 2022.
- Well #3 Redevelopment, Motor Replacement and Pump Rebuild Project. Completed the
 design, specifications, tendering and awarded to lowest bidder. Due to scheduling challenges
 the repairs to be completed in 2022, while continuing to use the loaner pump.

2022 System Improvements

- Received a replacement portable back flow preventor meter. The Village continue to monitor its
 effectiveness as previous meters have been inaccurate.
- Well #1 Rehabilitation Project., undertake a temporary repair to obtain an 8-to-10-year life expectancy of the well.
- Well #3 Redevelopment, Motor Replacement and Pump Rebuild Project.
- The Village dealt with several watermain breaks mostly brought on by fibre installation within community. Except for two rather large/challenging breaks. First being at the intersection of Eagle Crescent (S.Leg) and Nimpkish Dr during the Christmas holidays, with the other located in front of the high school along Muchalat Dr., each being carried out by staff.

6. Water Use

Water consumption statistics from the 2016 BC Municipal Water Survey (UBC) indicate that the estimated municipal water use per person in BC in 2016 to be 312 litres person/day. In Gold River our 2022 water consumption was 1113 litres per person per day based on a population of 1246 (2021) which remains higher than the provincial average. The Village of Gold River Annual Water Report estimates the daily-monthly average flows for Gold River at 1,387 m³ (1,387,000 litres) or 305,050 imperial gallons. Peak usage was the month of April at 2,181 m³ (2,181,000 litres).

Water Flows • Daily - Monthly Average - Imperial Gallons

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Jan	222,530	200,759	229,934	192,119	268,586	210,040	183,544	247,052	280,590	336,475	310,599
Feb	220,928	196,332	245,891	182,663	210,376	182,199	196,813	291,520	247,648	328,536	258,205
Mar	209,601	202,850	244,680	195,671	204,864	184,109	259,343	311,921	267,703	337,779	255,177
Apr	220,631	198,821	256,510	180,849	191,136	178,647	197,258	265,838	297,548	338,211	479,745
May	259,377	244,670	241,315	276,741	350,438	197,761	347,115	376,325	298,319	274,600	246,954
Jun	228,851	260,385	338,510	421,777	297,528	267,200	381,120	423,613	316,524	348,525	289,835
Jul	358,179	416,978	424,953	430,264	294,550	327,839	368,826	356,283	448,974	516,056	367,987
Aug	367,142	359,813	418,932	405,507	389,588	360,710	385,246	348,091	384,149	481,327	471,786
Sep	302,880	247,751	275,348	298,850	215,767	243,566	241,663	284,545	340,399	310,551	360,373
Oct	198,984	216,561	162,317	212,729	173,102	172,890	199,324	238,917	273,779	250,942	237,482
Nov	192,391	209,469	184,586	224,355	180,295	170,420	188,839	252,735	193,700	261,994	171,690
Dec	196,025	219,167	203,377	243,676	262,428	200,981	239,587	260,508	342,083	254,321	210,771
Avg	248,127	247,796	268,862	272,100	253,221	224,696	265,723	304,779	307,618	336,606	305,050
m3	1,128	1,126	1,221	1,237	1,150	1,020	1,206	1,386	1,399	1,530	1,387

Respectfully submitted,

Glenn Morphy Director of Operations Village of Gold River