

# Beaver Falls Waterworks District

## 2025 Annual Water Report



## **Contents**

Contents.....	2
Introduction.....	3
BFWD Water Distribution System.....	3
SCADA.....	3
Well #2.....	4
Reservoirs.....	4
Bath Creek.....	4
Routine Maintenance Program.....	4
Water Quality Complaints.....	5
Cross Connection Program.....	5
Water Consumption.....	5
Water Sampling and Testing.....	5
Emergency Response Plan.....	6
Water Sample Reports.....	6

**Introduction:**

This report is required by Interior Health Authority as part of the Beaver Falls Waterworks District Operating Permit. The Report provides an overview of the water system including water test results, maintenance, and improvements.

**Beaver Falls Distribution System:**

IHA Facility Number - 0210637

Water System Classification: Level II EOCP Class II-certificate #1187

EOCP Certification Level of Operator – Level 2, certificate #7046

The community of Beaver Falls lies within the Regional District of Kootenay Boundary (RDKB) in BC and forms a part of the RDKB Electoral Area “A”. Beaver Falls is primarily a residential community with minimal commercial. The population is approximately 600 people, with a total land area of about 7.5 km in length and less than 2km in width

The Beaver Falls District (BFWD) originated in 1959 under the provincial Letters Patent developed at that time. The water system was originally developed to be fed from Bath Creek via gravity fed system, however is now sourced from groundwater extracted from one (1) production well. The water supply distribution system includes one production well, 16 fire hydrants, one 67,000 Imp gal above ground steel reservoir and a 110,000 Imp gallon above ground steel reservoir and approximately 12 km of looped PVC and asbestos concrete watermains. Pipe sizes range from 35mm to 150mm. The BFWD consists of 200 parcels with 197 active connections. Other private domestic water wells also exist in Beaver Falls. Runoff and drainage is directed towards the Beaver Creek. Sewage disposal for all properties in Beaver Falls are serviced by individual septic systems.

*SCADA (Supervisory Control and Data Acquisition)*

The SCADA system is used to monitor and control the wells and reservoir.

SCADA is serviced by Mountain Logic of Rossland BC.

May 2024, SCADA working satisfactory with no major updates

*Well #2*

Well #2 is located inside a locked and secure masonry pump house with a concrete slab around the well. The well casing is approx. .33m above the pumphouse floor. The well was drilled in 1985 with a 10” casing with a 4” discharge pipe it produces clean drinking water pumping aprox 275GPM. This well was redeveloped in 2023 and new discharge pipe submersible pump and motor were installed.. Well 2 is located approx. 17 meter NW of Beaver Creek.

*Well #4*

Well 4 was drilled in 2023 and is non useable due to non-chlorination system in the Beaver Falls Waterworks District

### Reservoir I

The 67,000 Imp gallon above ground steel reservoir is located on the west side of Highway 3B on Deer Rd, on the hillside. It is situated on property of the Beaver Falls Waterworks . and is connected to the BFWD system by a 150 mm water main running down Deer Rd

### Reservoir II

The 110,000 Imp gallon above ground steel reservoir is located on the west side of Highway 3B, on the hillside It is situated on owned property of the Beaver Falls Waterworks . and is connected to the BFWD system by a 150 mm water main running down Deer Rd

### Bath Creek

Bath Creek is a small watershed which at one time was the supplier of water to the Beaver Falls Waterworks. Recorded data shows the majority of runoff occurs during spring freshet. The average flow in the creek during low flow times is in the range of 63L/s. The BFWD holds water licenses on Bath Creek.

### **Routine Maintenance Program:**

Fire Hydrants are maintained and inspected when necessary. And every 5 years service as advised by the manufacturer. Easy access to hydrants is maintained throughout the year; during winter months, hydrants are cleared of snow and during summer months, grass is cut.

Chlorine is injected into the system with a injection pump at the source of well 2 this pump was installed in 2025 it is a 2 week process and the system is flushed from numerous flushing points throughout the system this process is done Spring and Fall, and possibly any time during the year if a coliform or fecal matter is present.

Inventory and equipment count is done yearly at the beginning of January for the previous year.

A water meter located on well 2 discharge pipe shows the data, this is collected by the operator to make an average of water consumption to report to Interior Health Update mapping to show all, water lines, main valves etc.

Valve exercising to ensure valves are in proper working condition.

### **Water Quality Complaints:**

There were no issues with water quality in 2025 due to high coliform count or any other issues

### **Cross Connection Program:**

The BFWD Water System Operator completed Cross Connection Course through BCWWA. And is aware of cross connection issues can cause, they do their due diligence to make sure that BFWD drinking water is safe from cross contamination

### **Water Consumption:**

In 2025 the BFWD total water consumption was hard to complete due not collecting as much data that is required. It is difficult as our SCADA system is not capable of this . The consumption for June of 2025 is 19,585 cubic meters for the month which equals out to 729 gal/day/hh or 3.31 cubic meters

**Operational Costs:**

	<b>2025</b>	<b>2024</b>
Administration	58,370	61,353
Operating Costs	99,888	83,705
<b>Total Expense</b>	<b>158,258</b>	<b>145,058</b>

In 2025 the cost to deliver water was \$ per cubic meter

**Water Sampling and Testing:**

As required by the Interior Health Authority (IHA), the BFWD Water System Operator takes water samples for the purpose of testing for Total Coliforms and e-Coli. The samples are sent to Passmore Laboratory in Winlaw, results are emailed back to BFWD and Interior Health usually within 2 – 3 days then a monthly report from the Water Operator is emailed to IHA. Two samples are taken at different points within the system the 1<sup>st</sup> and 3<sup>rd</sup> Tuesdays of the month. In 2024 BFWD installed and sampling station on the HWY 3B and a yard hydrant at the Number 1 pumphouse this is insure that they are clear of any bacteria that could be on taps from other locations i.e. residential taps inside or out, a complete chemical analysis of Well 2 was completed in 2025 and it is requested by IHA that one be done every year going forward, these samples are shipped to Caro Analytical Services. These tests are requirements from IHA. You can view the results of these test on our website or a copy can be picked up at the office.

**Emergency Response Plan:**

The BFWD has an Emergency Response Plan in place. The Plan identifies potential emergencies and action plans. This ERP is available on our website and is updated each year, with any new contacts and other information important to any issues that could arise on the system.

**GARP Study**

Through 2025 Beaver Falls water operators worked closely with Western Water to complete the Ground Water At Risk of Containing Pathogens. This is required by IHA to try and move forward with Well 4

## Water Sample Reports for 2024

### Site: Sample Station Hwy 3B

Date	# of Samples	Total Coliform Results	E.Coli Results
January	1	<1	<1
February	1	<1	<1
March	1	<1	<1
April	1	<1	<1
May	1	<1	<1
June	0	<1	<1
July	1		
August	1	<1	<1
September	3	1/1/<1	<1
October	1	<1	<1
November	1	<1	<1
December	1	<1	<1

### Site: Well 2

Date	# of Samples	Total Coliform Results	E.Coli Results
January	2	<1	<1
February	2	<1	<1
March	2	<1	<1
April	2	<1	<1
May	2	<1	<1
June	2	<1	<1
July	2	<1	<1
August	3	<1	<1
September	3	<1	<1
October	2	<1	<1
November	2	<1	<1
December	2	<1	<1
<u>Site: Other</u>			

### Yard Hydrant 1620 Scout Rd

Date	# of Samples	Total Coliform Results	E.Coli Results
January	1	<1	<1
February	1	<1	<1
March	1	<1	<1
April	1	<1	<1
May	1	<1	<1
June	1	<1	<1
July	1	<1	<1
August 1	1	<1	<1
September	3	1/<1	<1
October	1	<1	<1
November	1	<1	<1
December	1	<1	<1

### Counts in the Water

---

In September we had a count of 1 on the Samples Station and the Yard Hydrant it was not enough to warrant a Water Quality Advisory and after retesting the results came back <1. We have noticed that sampling from a sample stations and not from fast flowing hydrants make a big difference, with the stations we are not disrupting the growth in the lines due to warmer temperatures