

## 2024 Annual Water System Report

### Introduction

The District of Fort St. James has prepared this 2024 Annual Water System Report in accordance with the Drinking Water Protection Act and the Northern Health Authority Operating Permit requirements. The Report provides information to the public and government agencies regarding drinking water quality and the operation of the water system.

The District operates the Fort St. James Community Water System, which supplies potable water and fire protection to most homes, businesses, and institutions in Fort St. James and Nak'azdli Reserve No. 1.

### Northern Health Authority Operating Permit

The *Drinking Water Protection Regulation* requires that the District obtain an Operating Permit from the local health authority before providing water to users. Northern Health Authority issues the Operating Permit and its conditions.

The Fort St James CWS Operating Permit was last revised in 2024 and has the following conditions:

- Maintain a minimum of four water bacteriology samples per month unless a greater frequency is requested by the Drinking Water Officer. Rotate sampling between each location.
- Submit water chemistry data every 5 years unless the Environmental health Officer requests a greater frequency.
- Inspect the water storage reservoir on an annual basis & clean & disinfect the reservoir as required.
- Maintain an up-to-date Emergency Response and Contingency Plan.
- Operator must be trained and certified to the level specified by the Environmental Operators Certification Program.
- Maintain an up-to-date Annual Report of the water system.

### Community Water System

There are 1,035 service connections serving approximately 2100 residents in the municipality with a daily demand ranging from 323 m<sup>3</sup>/day to 1800 m<sup>3</sup>/day depending on time of year. The system also serves approximately 250 connections (approximately 700 residents) on Nak'azdli.

The source of water supply is an artesian well No. 1338. The water pumping station is located on the north side of Birch Street east of 7th Avenue West. Water is pumped to a 2,278 m<sup>3</sup> reinforced concrete reservoir at the east end of Stuart Drive East. A lift station on Pineridge Way provides additional pressure.

The water system is untreated and enclosed which distributes water through 14 kilometres of distribution mains. In 2021, total usage was 228,247 m<sup>3</sup> compared to 217,840 m<sup>3</sup> in 2024.

### Staff Qualifications

The District employs a Water/Wastewater Operator with a Level I Water Distribution classification, supported by a Public Works Foreman who also holds Level I certification and supervises operations. Certification is overseen by the Environmental Operators Certificate Program (EOCP) and requires operators to earn educational units each year to maintain their standing.

### Water Quality Sampling

The District is required to sample water from 4 test sites once per month. In 2023, the District voluntarily increased its frequency to weekly sampling at 5 sites. This is not required under the permit but reflects a precautionary approach due to the untreated water source, ensuring early detection and response to potential issues.

During 2024 water samples were collected weekly at 5 different locations for a total of 120 samples, which were forwarded to Northern Health for analysis. One sample was frozen, and one sample showed 1 background coliform, due to human error while taking the sample. The site was re-sampled and confirmed to be less than 1 (LT1). The quarterly water reports are available at [www.healthspace.ca/nha](http://www.healthspace.ca/nha) (Click "Water Sample Results", then "Fort St James", and then "Fort St James CWS").

### Preventative Maintenance

Public works crews maintained and serviced several hydrants and valves in 2024, and will continue servicing, maintaining and replacing hydrants and valves as required to bring infrastructure to a reliable and operational state.

The Public Works crew perform checks of the water system daily to ensure the public Water Supply is safe for all users. The Public Works Department flushes all main lines and hydrants in the spring and fall of each calendar year.

## Emergency Response Plan

The District has prepared an Emergency Response Plan for the Fort St James Community Water System. District staff review the Plan and update it when required. The District updates residents with emergency response situations through the District of Fort St. James Website, Facebook Page, and in accordance with Communications Policy No. 1.5 Revision C.

## Community Water System Upgrades

The District of Fort St. James has been upgrading water service lines and curb stops in the District, which found the project starting at Heathmont in 2023. 2024 found the completion of Heathmont, Fir, Grove and Elm street water service line and curb stop replacements. Stones Bay water line extension was also completed in 2024, which allowed water to be delivered to residents between Forestry and to Douglas Lodge Road, and the addition to 2 new fire hydrants.

## Future Plans for the Community Water System

For the future of the Fort St. James Community Water System, the District is in the process of:

- Sourcing grant funding for building of a water treatment plant, as identified within the 2023 Water Master Plan, to improve the water's quality, aesthetics (odour) and lower levels of iron, arsenic, and manganese.
- Continuing the waterline and valve replacement project.

For questions or comments regarding the Report, please contact the Director of Operations at 250-996-1472 or by email through [district@fortstjames.ca](mailto:district@fortstjames.ca).