



2025 Business Plan 108 Mile Water (1884)

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Working in partnership with communities large and small to offer local, sub-regional, and regional services to ensure that the Cariboo Chilcotin is a socially, economically, and environmentally desirable region.

Department Services

- The Cariboo Regional District (CRD) owns and operates the 108 Mile Community Water System.

Background Information

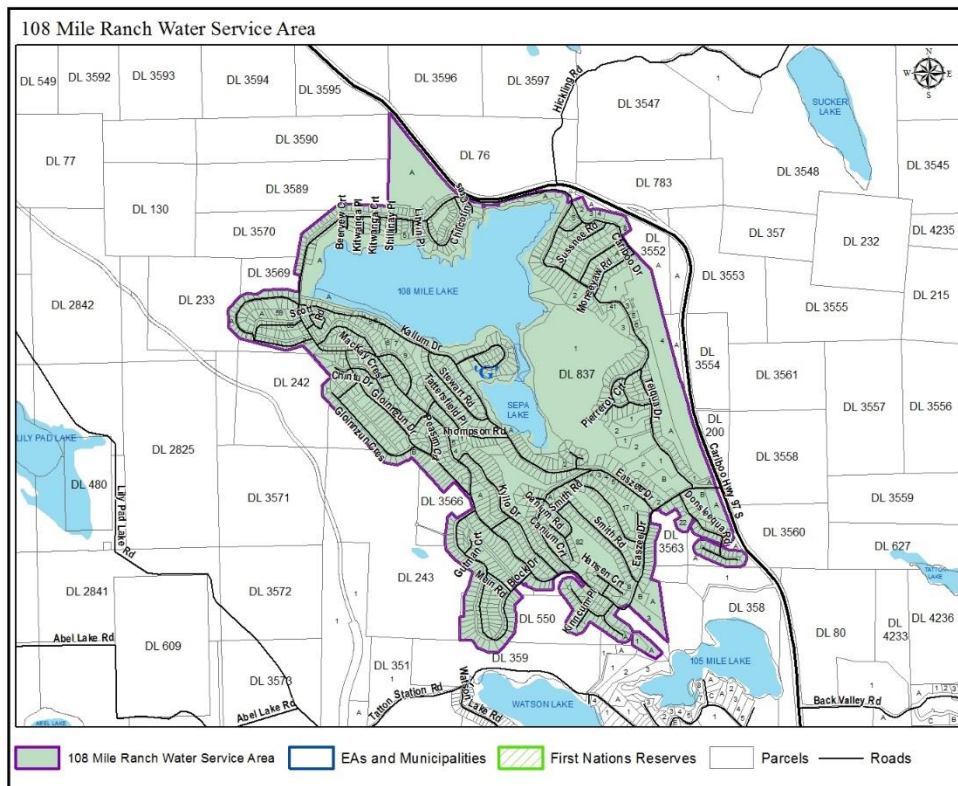
- The 108 Mile Water function was established in 1988 and approximately 1,414 land parcels are taxed.
- Currently, 1,348 developed land parcels are connected to the water system and charged annual user fees.
- The system is comprised of three wells, a manganese treatment facility, associated booster pumps, 50.2 kilometres of distribution piping, three reservoirs, and 127 fire hydrants.
- In addition to meeting domestic/commercial needs, the system provides an adequate quantity of water to aid community fire protection.

Operations

The water quantity and quality are tested on a regular basis and adjustments to the system are made as required. Regular inspection and maintenance to the system components is undertaken to ensure continuous operations. As well, new connections are provided to residents in the service area as requested.

Taxation is collected by way of a parcel tax of \$275, and a residential rate user fee of \$295. Function authority is provided by the 108 Mile Water Local Service Area Bylaw No. 2436.

As Electoral Area G is the only stakeholder, and the *Local Government Act* requires more than one vote, the entire Board is responsible for the governance of this service.



Significant Issues & Trends

Local governments are mandated by the Public Sector Accounting Board to report and record tangible capital assets. In the future, there may be a requirement to amortize these assets over their useful life, which is reflected in several of the goals outlined below.

A Cross Connection Control Program has been initiated to comply with permit requirements set forth by Interior Health. This program will start with a survey of all CRD facilities in the 108 area to identify potential cross connections before extending to commercial and industrial stakeholders.

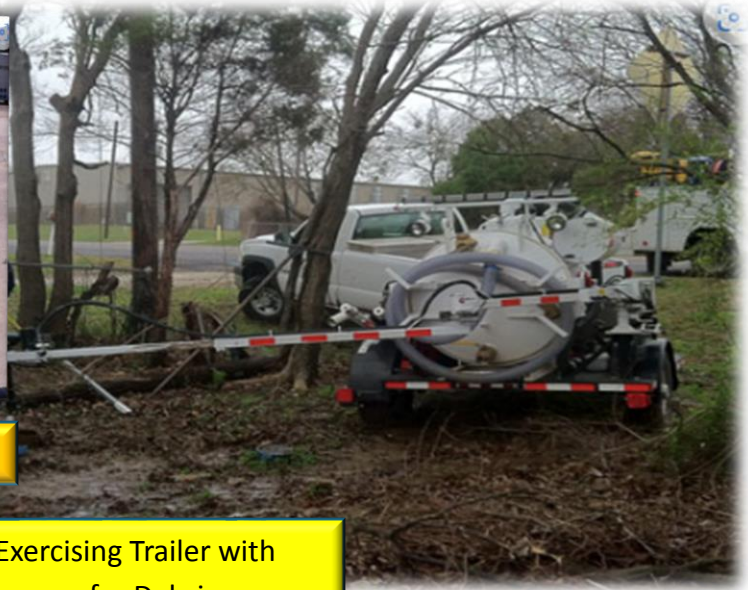
Interior Health is in the process of drafting an updated permit that will address the "low pressure" zone. Rectifying this issue is one of our primary goals for 2025.

Business Plan Goals, Objectives & Strategies

- 1. Goal:** Eliminate low-pressure areas in the 108 Mile Water System.
Rationale: Addressing low-pressure areas will enhance water pressure for users, safeguard residents against potential cross-contamination, and ensure compliance with drinking water health standards, maintaining a minimum pressure of 20 psi.
Strategy: Complete the ongoing feasibility study and proceed with the design for the selected solution, which is likely to involve the installation of a booster station near the Telqua Reservoir.
- 2. Goal:** Develop a Water System Master Plan.
Rationale: Establishing a systematic plan for the 108 Mile Water System will prioritize infrastructure replacement over time, aligning with our asset management program and facilitating access to future infrastructure grants.
Strategy: Engage a third-party consulting firm to initiate the drafting of the Water System Master Plan.
- 3. Goal:** Maintain and flow test all 108 Mile Water System hydrants.
Rationale: Regular servicing of fire hydrants is essential for protecting the CRD from liability and ensuring resident safety. A comprehensive service has not been performed on hydrants for many years.
Strategy: Contract a hydrant service company to conduct a full servicing and flow testing of all hydrants. Following this, our Operators will use the compiled asset list and statistics to maintain the hydrants effectively.
- 4. Goal:** Implement a valve exercising program for the 108 Mile Water System.
Rationale: Approximately 20% of valves in the 108 Mile Water System are currently inoperable due to inadequate maintenance and residue buildup. Establishing a maintenance program will protect these assets from further deterioration and enable Operators to assess the condition of the valves effectively.
Strategy: Acquire a valve exercising trailer or bumper mount. This equipment, depending on the model, will torque valves to specifications that prevent damage while allowing for the recording of valve positions and conditions in a cloud-based system.
- 5. Goal:** Enhance remote operating and monitoring capabilities.
Rationale: The booster station on the west side of the 108 Mile Water System currently lacks operational SCADA (remote monitoring), leading to frequent outages and low pressure in the area. Operators often learn about these issues through resident reports.
Strategy: Install a PLC (Programmable Logic Controller) and HMI (Human Machine Interface) with telemetry at the booster station, connecting it to our new SCADA system for improved monitoring and response.



Bumper Mounted Valve Exerciser



Valve Exercising Trailer with Vacuum for Debris



“Hydrant Hysteria” Competition hosted by the AWWA (American Water & Wastewater Association). Hydrant teardown winning crew. (Yes, believe it or not, there are very competitive Operator Competitions).

Overall Long-Term Goal for the 108 Mile Water System

The primary objective for the 108 Mile Water System is to transition from a reactive maintenance approach to a proactive model focused on ongoing maintenance and timely replacement. This strategic shift will ensure the long-term viability of the system while minimizing future expenses. Although short-term costs may rise to facilitate essential upgrades and replace aging infrastructure, this investment will ultimately lead to significant savings and enhanced reliability for our community.

Overall Financial Impact

Funding for the 108 Mile Water System has been secured through a public assent process involving local property parcel taxes and various grants.

The parcel tax is set at \$275 per year for each property. In 2024, the residential user fee is established at \$295 annually; however, an increase may be necessary in 2025 to ensure the system's integrity and address inflationary pressures.

As of December 2024, the projected capital reserve stands at \$1,123,553. Currently, the annual debt payment (including principal and interest) for the new treatment plant is \$170,533.