

# 2021 Business Plan 108 Mile Water (1884)

Charles Boulet, P.Eng.

Manager of Environmental Services

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 (108WS).

# **Background Information**

- The 108 Mile Water function was established in 1988 and approximately 1,403 land parcels are taxed.
- Currently, 1142 developed land parcels are connected to the water system and charged annual user fees.
- The system is comprised of two wells, a well house, associated booster pumps, distribution piping, fire hydrants and three reservoirs.
- In addition to meeting domestic/commercial needs, the system provides an adequate quantity of water to aid community fire protection.

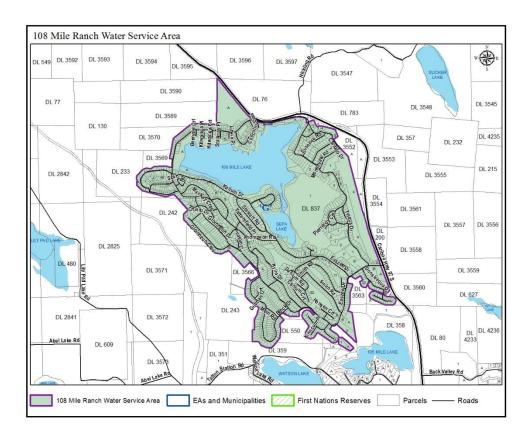
#### **Operations**

The water quantity and quality is 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 as requested.

Taxation is collected by way of a parcel tax of \$252, and a residential rate user fee of \$284. Function authority is provided by the 108 Mile Water Local Service Area Bylaw No. 2436.

New water reservoirs were constructed in 2010 at a cost of \$800,560.

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

WorkSafe BC has a recent mandate targeting municipalities and regional districts focusing on confined space entry plans, policies and procedures as well as general occupational health and safety requirements. In response to inspections by WorkSafe, hazard assessments were completed for all utilities owned by the Cariboo Regional District to identify all confined space locations and subsequently procedures were developed for each. In order to strictly meet WorkSafe requirements, some of the procedures recommended cannot be implemented with existing infrastructure layout. Staff are currently investigating how other jurisdictions are approaching these requirements and looking for alternative procedures acceptable to WorkSafe.

In 2017 the Interior Health Authority conducted inspections of CRD water systems and made recommendations to achieve compliance with the Drinking Water Protection Act and Regulation. Recommendations for the 108 Mile water system were:

1) Increased monitoring frequency

- 2) Updated GUDI/GARP assessment
- 3) Disinfection.

The Public Sector Accounting Board now requires local governments to report and record tangible capital assets. At some time in the future local governments may be required to amortize these assets over their useful life.

The Cariboo Regional District is a signatory on the Province of BC/UBCM Climate Action Charter and has committed to continuing work towards carbon neutrality in respect of corporate operations.

One issue is the 75 HP well pump which was oversized at design and causing operational issues when in use. As such the pump remains offline and may only be used if the regular pumps are not available.

Another issue is poor communication between well pumps and reservoirs due to an ageing infrastructure.

#### **Moving Forward:**

- 1) Change out the 75 HP well pump to a 30 HP well pump to allow all pumps to work in a harmonious and non-destructive manner.
- 2) Study the communications issues within this system.

#### **Business Plan Goals, Objectives & Strategies**

**1. Goal:** Change out the 75 HP well pump to a 30 HP well pump.

**Rationale:** To allow all pumps to work in a harmonious and non-destructive manner.

**Strategy:** Cost estimates have been provided by the pump supplier.

**2. Goal:** Update GUDI/GARP assessment.

NB: Ground water under direct influence of surface water (GUDI) Groundwater at Risk of Containing Pathogens (GARP)

Rationale: Update GUDI/GARP assessment to meet IHA recommendations.

**Strategy:** Retain consultant to update the assessment.

**3. Goal:** New SCADA system for 108 Mile Ranch water system.

**Rationale:** The current SCADA system is in excess of 20 years old and is in need of replacement. A new SCADA system will provide more reliable communication between the WTP and other system components such as well pumps and reservoirs.

**Strategy:** New SCADA system study for 108 Mile Ranch water system.

# **Overall Financial Impact**

Project funding through local property parcel taxes was obtained through a public assent process and grants. The parcel tax was increased from \$135 to \$250 in 2016. The user fee was increased from \$220 to \$284 in 2017.

The projected capital reserve as of December 2020 is \$698,037. The system has numerous debt issues that retired in 2018. Currently the amount to a yearly debt payment (principal and interest) for the new treatment plant is \$175,000. Capital reserves are being contributed from the function on an annual basis. \$100,000 per year.