



building communities together

2019 Business Plan Red Bluff Sewer (1775)

*Peter Hughes, P.Eng.
Manager of Environmental Services*

Working in partnership with communities, large and small, to make the Cariboo Chilcotin a socially, economically and environmentally desirable region to live, work and play.

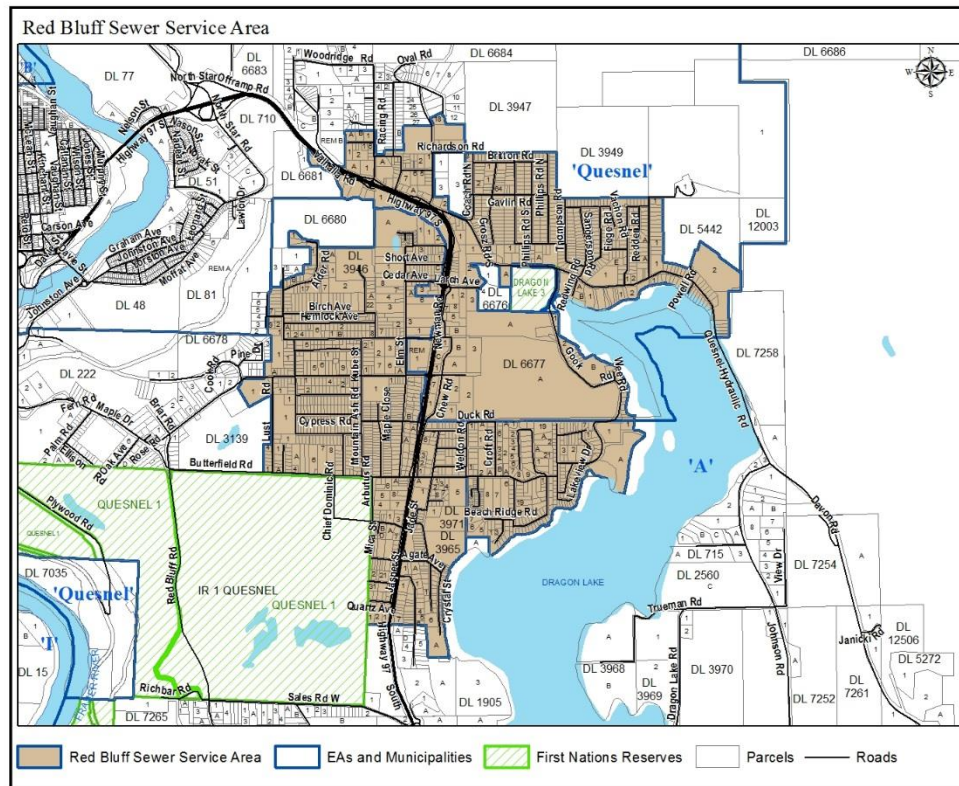
Department/Function Services

The Red Bluff Sewer System was established in 1982 and services approximately 2,145 land parcels, including a portion within the City of Quesnel boundaries. The system collects sewage through the provision of numerous lift stations, several kilometres of sewer piping and a pre-treatment plant. Once collected, the sewage is discharged to sewage treatment lagoons owned and operated by Cariboo Pulp. Treatment of the sewage by Cariboo Pulp occurs under a long-term contractual arrangement.

Establishment Bylaw No. 1486 authorizes the CRD to cover the costs of the service by way of taxation of assessed property, parcel tax and user fees. No limit has been set on the level for taxation by assessment. The current residential user fee is \$155/year, under Bylaw No. 4563, and is adequate for the next five years.

Historical capital purchases include five lift station pumps and a utility truck with crane in 2008 for \$117,267, two lift station pumps in 2006 for \$27,223, two lift station pumps in 2010 for \$13,000, SCADA improvements in 2012 for \$65,000, and two lift stations pumps for \$9,300 in 2013. For 2014, grit chamber \$53,750, generator \$49,534, plastic removal system \$36,039, and SCADA system for \$238,868.

As Electoral Area A 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.



Business Plan Goals, Objectives & Strategies

2019 Goals

1. **Goal:** Undertake capital improvements.
Rationale: Improvements are required to ensure continuous operations by replacing/repairing aging infrastructure.
Strategy: Undertake the following improvements:
 - Completion of install of generators for lift stations 5-2 and 7-1 to provide emergency power.
 - Re-design the hoist system at treatment plant to accommodate equipment changes that have occurred in recent years and ensure staff safety during maintenance tasks (not completed in 2018).
 - Repair/rehabilitation of sewer manholes along Hydraulic Road.
 - Continued repairs and/or replacement of key electrical components at select lift station locations.
2. **Goal:** Update confined space entry and other safety equipment.
Rationale: Ensure confined space entry and other safety equipment meets current WorkSafe BC requirements.
Strategy: Inspect equipment and replace out-dated with new.

Overall Financial Impact

The projected capital reserve as of December 2018 is \$785,683. In 2018, \$126,000 was transferred out of reserve to purchase a new service truck. At this time, the user fee and taxation level is adequate to provide the necessary service. No increase in requisition is required in 2019.

Significant Issues & Trends

Development pressures in the past few years are putting into question the capacity of the sewer system and pre-treatment plant. There is significant commercial development occurring along the Hwy 97 corridor along with several proposed subdivision applications creating several smaller lots from the larger lots in the area. The recent approval of carriage houses within the CRD and anticipated approval of carriage houses by the City of Quesnel will add further flows to the system. An estimate of system capacity is being completed as part of the asset management planning currently underway.

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 the Red Bluff sewer system to identify all confined space locations and subsequently procedures were developed for each. In order to strictly meet legislative requirements, infrastructure re-design and re-build at each of the systems, 10 lift stations to install an above-ground valve chamber at an estimated cost of \$40,000 - \$50,000 each would be required. Staff are currently investigating how other jurisdictions are approaching these requirements and looking for alternative procedures acceptable to WorkSafe.

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.

Measuring Previous Years Performance

Goal: Undertake capital improvements.

- Design work and equipment selection completed to install generator for lift stations 5-2 and 7-1 to provide emergency power. Installation delayed until spring 2019.

- Continued use of BIOMAXX product to eliminate H₂S odors and stop corrosion. No odour complaints received since use of BIOMAXX implemented in 2016.
- Continuation of camera program to inspect the entire system from 2016 to 2018 in order to determine the state of all underground works. 2018 camera work was completed as scheduled.