



building communities together

2022 Business Plan Red Bluff Sewer (1775)

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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 Red Bluff Community Sewer System.

Background Information

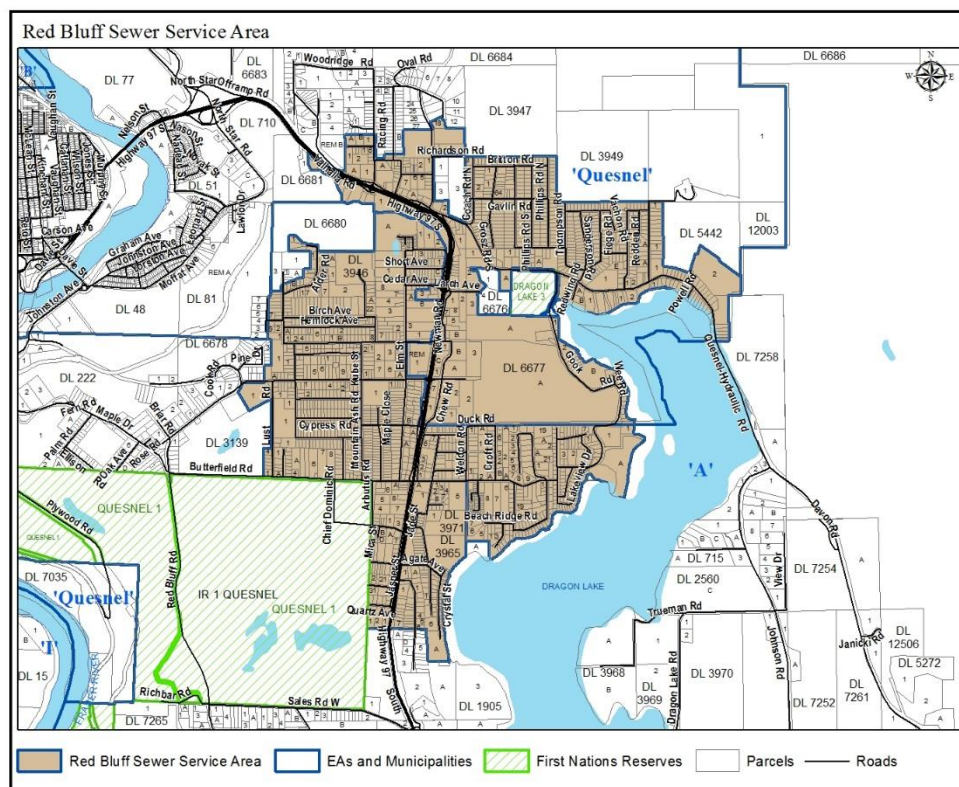
- The Red Bluff Sewer System was established in 1982 and services approximately 2,145 land parcels, including a portion within the City of Quesnel boundaries.
- The system collects sewage through the provision of numerous lift stations, several kilometres of sewer piping and a pre-treatment plant. Once 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.
- 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 in 2020, the inline channel comminutor at the CRD Red Bluff Dragon Lake Pre-treatment plant for \$65,252.
- In 2018, \$126,000 was transferred out of reserve to purchase a new service truck.
- In 2019, mechanical failures required the replacement of the second service truck. \$56,000 of reserves was used for this purpose.

Operations

Establishment Bylaws 4935 and 5308 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.

No parcel tax is currently being collected for this location. The current residential user fee is \$252/year and has been increased to \$271 for 2022 to match the growing needs of this service.

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.



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. A hydraulic capacity study is being proposed to determine hydraulic capacity in each region of the Red Bluff Sewer District, to determine the number of additional services that can be added to the system.

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. To strictly meet legislative requirements, 10 lift stations would require above-ground valve chambers.

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.

Business Plan Goals, Objectives & Strategies

- 1. Goal:** Determine Future Development Potential of Red Bluff Sewer District.
Rationale: A Hydraulic Capacity Study is required to determine the number of future developments the system can take, and which areas are getting close to overcapacity.
Strategy: Engage Hydraulic Engineers to study Red Bluff Sewer District.
Estimated Cost: \$85,000.
- 2. Goal:** Improve Employee Health & Welfare.
Rationale: Better employee conditions.
Strategy: Improve Health & Welfare by providing showers, locker room c/w lockers, laundry facility and computer workspace.
Estimated Cost: \$90,000.
- 3. Goal:** Upgrade SCADA.
Rationale: Improve work productivity.
Strategy: Upgrade (SCADA) Supervisory Control and Data Acquisition.
Estimated Cost: \$100,000.
- 4. Goal:** Enhance workplace safety.
Rationale: As per WorkSafeBC standards for confined spaces.
Strategy: Replace confined space with above ground access.
Estimated Cost: \$40,000 per year.

5. Goal: Undertake Capital Improvements.

Rationale: Improvements are required to ensure continuous operations by replacing/repairing aging infrastructure.

Strategy: Undertake the following improvements:

- Sewer Mainline replacement, flushing and cleaning.
- Manhole replacement.
- Use of BioMaxx: BioMass improves the sewer environment by decreasing toxins such as ammonia and nitrite and increasing the colonization and growth of beneficial bacteria, which decreases corrosive activity and objectionable odors.
- New Lift Station Pumps and Controls
- Right of Way brushing, tree removal, and general cleaning.

Overall Financial Impact

The projected capital reserve as of December 2021 is \$309,775.

No parcel tax is currently being collected for this location.

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