



*building communities together*

## **2018 Business Plan Lac La Hache Sewer (1770)**

*Peter Hughes, 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 Lac La Hache Sewer function was established in 1976 and now services approximately 153 land parcels;
- The Main and Hamilton Lift stations were refurbished in 1998. The Beach and McKinley lift stations were upgraded in 1999;
- Regular inspection and maintenance to system components is undertaken to ensure continuous operations.

Taxation is collected by way of a parcel tax of \$282 per year and has remained unchanged since 2006. A variable rate user fee of \$198 per year is collected and has remained unchanged since 2006. Function authority is provided by the Lac La Hache Specified Area Sewer Management Bylaw No. 1905.

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.

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

No significant goals planned for 2018.

### **Overall Financial Impact**

The 2018 requisition remains the same as the 2017 requisition.

The capital reserves as of December 2016 were \$432,895. At this time, the current user fee and parcel tax rate is adequate to maintain the financial needs of the service. The existing user fee should be sustainable for the next five years. The system has a yearly debt payment of \$23,023 that will expire in 2018.

### **Significant Issues & Trends**

The concrete wet well at the McKinley lift station is in need of repair/rehabilitation and a re-build of the spare lift station pump is needed. Staff will investigate costs to complete these tasks.

The Public Sector Accounting Board now requires local governments to report and record tangible capital assets. At some future date local governments may be expected 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.



*building communities together*

## **2018 Business Plan Pine Valley Sewer (1772)**

*Peter Hughes, 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 Pine Valley Sewer function was established in 1979 and now services approximately 70 land parcels.
- The system is comprised of two sewage lagoons, a mechanical treatment plant, one lift station and associated sewer piping.
- Regular inspection and maintenance to system components is undertaken to ensure continuous operations.

Operational costs are collected by way of a variable rate user fee, which was raised in 2008 to \$485. Previously, user fees were set at \$388 and had remained unchanged since 1999. Function authority is provided by the Pine Valley Specified Area Sewer Management Bylaw No. 1806.

As Electoral Area D 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.

In 2007, \$280,000 in capital improvements for a new lift station and refurbished treatment plant were completed. In 2015, a backup power generator was added at a cost of \$75,000.

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

No significant goals planned.

### **Overall Financial Impact**

The 2018 requisition remains the same as the 2017 requisition.

The capital reserves as of December 2016 were \$29,281. Residential user fees for the system total \$485 per year. Capital reserve contributions are \$2,000 per year in order to build up the reserve fund.

### **Significant Issues & Trends**

The lift station pumps were in need of replacement/repair. In 2017, one new pump was purchased and installed. Useful parts from the two old pumps were re-used to fabricate one re-furbished pump. Surplus was used to fund the pump replacement/repairs.

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.



*building communities together*

## **2018 Business Plan Wildwood Sewer (1773)**

*Peter Hughes, 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 Wildwood Sewer function was established in 1979 and now services approximately 162 land parcels.
- The system is comprised of sewage treatment lagoons, two lift stations and associated sewer piping.
- Regular inspection and maintenance to system components is undertaken to ensure continuous operations.

Taxation is collected by way of a parcel tax set at \$94 and has been unchanged since 1999. A variable rate user fee of \$127 had been unchanged since 1998. In 2017, the user fee was increased to \$200. Function authority is provided by the Wildwood Specified Area Sewer Management Bylaw No. 2141.

As Electoral Area D 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.

A new lift station and backup power supply was added in 2013, capital cost \$253,000.

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

No significant goals identified for 2018.

### **Overall Financial Impact**

The 2018 requisition remains the same as the 2017 requisition.

The capital reserves as of December 2016 were \$59,078. Residential user fees and parcel taxes for the sewer system are currently set at \$294 per year. Operating reserves had been declining; however, with the 2017 user rate increase the budget should be sustainable for the next five years.

### **Significant Issues & Trends**

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**

No significant goals identified in 2017.



*building communities together*

## **2018 Business Plan Alexis Creek Sewer (1774)**

*Peter Hughes, 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 Alexis Creek Sewer function was established in 1982 and now services 55 land parcels.
- The system is comprised of sewer mains, manholes, and an aerated lagoon. Regular inspection and maintenance to system components is undertaken to ensure continuous operations.

Operational costs are collected by way of a variable rate user fee set at \$94.00 and has been unchanged since 1999. Function authority is provided by the Alexis Creek Specified Area Sewer Management Bylaw No. 2240.

As Electoral Area K 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**

No significant goals identified in 2018.

### **Overall Financial Impact**

The 2018 requisition remains the same as the 2017 requisition.

The capital reserves as of December 2016 were \$308,497. The current user fees provide adequate funds to operate the function. The existing user fees should be sustainable for the next five years at which time a review should be undertaken.

## **Significant Issues & Trends**

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.

Future revenues are projected to decline as the Ministry of Forests has removed several trailers from the system. Current surplus funds can be used for the next few years to offset lost revenue.

## **Measuring Previous Years Performance**

No major goals identified.



*building communities together*

## **2018 Business Plan Red Bluff Sewer (1775)**

*Peter Hughes, 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.

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.

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 \$238,868.

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

#### **2018 Goal**

**Goal:** Undertake capital improvements.

**Rationale:** Improvements are required to ensure continuous operations by replacing aging equipment.

**Strategy:** Undertake the following improvements:

- Install generator for lift stations 5-1 and 5-2 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.
- Repairs and/or/replacement of key components at select lift station locations.

## **Overall Financial Impact**

No increase in requisition is required in 2018.

The capital reserves as of December 2016 were \$1,212,441. At this time, the user fee and taxation level is adequate to provide the necessary service.

## **Significant Issues & Trends**

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:

- Replace lift stations pumps at station 3-1 to higher capacity units to accommodate increased flows at this station. Completed.
- Repair manholes impacted by H<sub>2</sub>S degradation and sealing to prevent water intrusion. Approximately half of the repairs were completed in 2016 with all remaining repairs completed by summer 2017.
- Repaired lift station pumps at three lift stations. Remainder to be repaired in 2018.
- Continued use of BIOMAXX product to eliminate H<sub>2</sub>S odors and stop corrosion.
- Continuation of camera program to inspect the entire system from 2016 to 2018 in order to determine the state of all underground works. 2017 camera work completed as scheduled.
- Install new backup power generator for stations 5-1 and 5-2 to improve performance during electrical power outages. Not completed, carried forward to 2018.



*building communities together*

## **2018 Business Plan Lac La Hache Water (1880)**

*Peter Hughes, 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 Lac La Hache water function was established in 1981 and now services approximately 180 land parcels.
- The system is comprised of two wells, two well houses, associated pumps and distribution piping, fire hydrants and a water reservoir. In addition to meeting domestic needs, the system provides an adequate quantity of water to aid community fire protection.

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.

Operational costs are collected by way of a variable rate user fee of \$164 as of 2012. The Lac La Hache Local Service Establishment Bylaw No. 2885 provides function authority.

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.

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

**Goal:** Investigate future capital improvements.

**Rationale:** The existing “Community well” and associated pumphouse are nearing the end of their useful life and should be replaced.

**Strategy:** Staff plan to investigate the need and costs associated for a replacement well and pumphouse at the location of the existing Community well.

## **Overall Financial Impact**

The 2018 requisition remains the same as the 2017 requisition. The capital reserves as of December 2016 were \$197,626. An annual capital reserve contribution of \$2,000 is being committed at this time.

## **Significant Issues & Trends**

The Interior Health Authority has been conducting inspections of CRD water systems and making recommendations to achieve compliance with the Drinking Water Protection Act and Regulation. Recommendations for the Lac La Hache system are increased monitoring frequency, updated GUDI/GARP assessment and 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.

## **Measuring Previous Years Performance**

No goals were identified for 2017.



*building communities together*

## **2018 Business Plan Gateway Water (1881)**

*Peter Hughes, 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 Gateway water function was established in 2014 and now services 27 land parcels.
- The system is comprised of one well, a well house, associated pumps, water treatment and distribution piping.
- The system meets domestic needs only and does not provide water for community fire protection.

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.

Operational costs are collected by way of a user fee set at \$477. Taxation is collected by way of a parcel tax of \$530. The Gateway Water System Specified Area Establishment and Loan Authorization Bylaw No. 4892, provides function authority.

The water system was constructed in 2014 at a cost of \$701,725.

As Electoral Area H 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, Rationale & Strategies**

No significant goals identified for 2018.

## **Overall Financial Impact**

The requisition remains the same as 2017.

## **Significant Issues & Trends**

The Interior Health Authority has been conducting inspections of CRD water systems and making recommendations to achieve compliance with the Drinking Water Protection Act and Regulation. Recommendations for the Gateway system are increased monitoring frequency, iron/manganese treatment and residual chlorine monitoring.

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**

Water quality was improved by providing more frequent flushing of the water main.

Water sampling station installed to increase reliability of routine testing.



*building communities together*

## **2018 Business Plan Forest Grove Water (1882)**

*Peter Hughes, 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 Forest Grove water function was established in 1981 and now services 107 land parcels.
- The system is comprised of two wells, a well house, associated pumps and distribution piping, fire hydrants and two reservoirs.
- In addition to meeting domestic needs, the system provides an adequate quantity of water to aid community fire protection.

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.

Operational costs are collected by way of a variable rate user fee set at \$280 and it has been unchanged since 1999. The Forest Grove Water System Specified Area Establishment and Loan Authorization Bylaw No. 1096, provides function authority.

A new well was constructed in 2008 at a cost of \$78,000.

As Electoral Area H 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, Rationale & Strategies**

No significant goals identified for 2018.

## **Overall Financial Impact**

The 2018 requisition remains the same as the 2017 requisition.

There is no taxation levied for this service. Current user fees are adequate at this time for the next five year period.

The capital reserves as of December 2016 were \$206,641.

## **Significant Issues & Trends**

The Interior Health Authority has been conducting inspections of CRD water systems and making recommendations to achieve compliance with the Drinking Water Protection Act and Regulation. Recommendations for the Forest Grove system are increased monitoring frequency, updated GUDI/GARP assessment and 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.

## **Measuring Previous Years Performance**

**Goal:** Ensure wells do not get contaminated from poor land use practices.

- A well head protection plan was created in 2008, however due to a significant number of capital projects, associated with infrastructure funding; staff has not been able to proceed with implementation of the land use component. This goal will be moved forward to 2018.

Sample monitoring stations added to the system to improve reliability of routine testing.



*building communities together*

## **2018 Business Plan Alexis Creek Water (1883)**

*Peter Hughes, 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 Alexis Creek water function was established in 1982 and now services 30 land parcels.
- The system is comprised of one well, a well house, associated pumps and distribution piping, reservoir and hydrants.
- This system meets domestic needs and now has adequate capacity to aid community fire protection.

Operational costs are collected by way of a variable rate user fee set at \$300, and it has remained unchanged since 2001. The Alexis Creek Water System Specified Area Establishment Bylaw No. 1433 provides function authority.

As Electoral Area K 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, Rationale & Strategies**

No significant goals identified in 2018.

### **Overall Financial Impact**

The 2018 requisition remains the same as the 2017 requisition.

The capital reserves as of December 2016 were \$12,713. Capital reserves are being contributed from the function at a rate of \$1,000 per year.

## **Significant Issues & Trends**

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**

Sampling stations added to improve the reliability of routine testing.



*building communities together*

## **2018 Business Plan 108 Mile Water (1884)**

*Peter Hughes, 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 108 Mile Water function was established in 1988 and approximately 1,414 land parcels are taxed.
- Currently, 1075 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.

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 \$135 and has remained unchanged since 1998, and a variable rate user fee of \$220 has remained unchanged since 1999. 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.

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

### **2018 Goal**

**Goal:** Commission the new treatment plant in March 2018.

**Rationale:** The treatment plant is required in order to reduce the manganese levels.

**Strategy:** Monitor manganese reduction and efficiency.

### **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 capital reserves as of December 2016 were \$559,507. The system has numerous debt issues that will retire in 2018. Currently the amount to a yearly debt payment (principal and interest) is \$47,469. Capital reserves are being contributed from the function on an annual basis.

### **Significant Issues & Trends**

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:** Re-assess plan to convey water from new well to Sepa Pump House.

- After review of hydrogeological consultants re-assessment of hydrogeological data, it was concluded that declining water levels were likely the result of a combination of climatic conditions and withdrawal of water from the aquifer, however additional monitoring was recommended. Conveyance of water from the new well in the north aquifer was postponed and further monitoring of lake levels recommended.

**Goal:** Construct treatment plant.

- A qualified contractor was secured and the project is currently underway with construction completion and system commissioning scheduled for early in 2018.



*building communities together*

## **2018 Business Plan Central Alexis Creek Water (1885)**

*Peter Hughes, 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 Central Alexis Creek water function was established in 2009 and services 32 land parcels.
- The system is comprised of one well, a well house, associated pumps and distribution piping, fire hydrants, one reservoir and chlorination equipment.

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

Taxation is collected by way of a parcel tax set at \$224 and a user fee set at \$480. The Central Alexis Creek Water System Specified Area Establishment and Loan Authorization Bylaws No. 4340 and 4342 provide function authority.

The construction of the new water system was completed in 2010 for a total cost of \$1,616,786.

As Electoral Area K 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, Rationale & Strategies**

No significant goals identified for 2018.

## **Overall Financial Impact**

The 2018 requisition remains the same as the 2017 requisition.

Current user fees and parcel tax are adequate at this time for the next five year period. The capital reserves as of December 2016 were \$24,451. An annual reserve contribution of \$3,500 is anticipated.

## **Significant Issues & Trends**

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**

Improvements to the well was completed in 2016. No significant goals were identified for 2017.



*building communities together*

## **2018 Business Plan Russet Bluff Water (1886)**

*Peter Hughes, 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 Russet Bluff water function was established in 2009 and services 90 land parcels.
- The system is comprised of two wells, two well houses, associated pumps and distribution piping, fire hydrants and one reservoir.

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

Operational costs are collected by way of a user fee set at \$380 per year. The Russet Bluff Water System Specified Area Establishment Bylaw No. 4407 provides function authority.

As Electoral Area E 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, Rationale & Strategies**

#### **2018 Goal**

**Goal:** Assess groundwater quality to determine potential requirement for treatment of Total Organic Carbon (TOC) and chlorination by-products. (*Carried forward from 2017*)

**Rationale:** At the time of this report, the work is ongoing. Consultants are waiting for a major rain event to facilitate further sampling to confirm previous water quality results.

**Strategy:** Review water quality data and select treatment options.

## **Overall Financial Impact**

The 2018 requisition remains the same as the 2017 requisition.

There is no taxation levied for this service.

The established user fee is adequate at this time for the five year period. The capital reserves as of December 2016 were \$31,241. An annual reserve contribution of \$5,500 is anticipated.

## **Significant Issues & Trends**

The Interior Health Authority has been conducting inspections of CRD water systems and making recommendations to achieve compliance with the Drinking Water Protection Act and Regulation. Recommendations for the Russet Bluff system have not yet been provided by IHA; however, it is anticipated that increased monitoring frequency, iron/manganese treatment and residual chlorine monitoring will be recommended.

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:** Assess groundwater quality to determine potential requirement for treatment of Total Organic Carbon (TOC) and chlorination by-products.

- At the time of this report the work is ongoing. Consultants are waiting for a major rain event to facilitate further sampling to confirm previous water quality results. No significant rainfall events occurred this past summer. Goal carried forward to 2018.



*building communities together*

## **2018 Business Plan Canim Lake Water (1888)**

*Peter Hughes, 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 Canim Lake water function was established in 2009 and services 71 land parcels.
- The system is comprised of one well, a well house, associated pumps and distribution piping, fire hydrants and two reservoir.
- In addition to meeting domestic needs, the system provides an adequate quantity of water to aid community fire protection.

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 parcel tax set at \$120 and a user fee set at \$663. The Canim Lake Water System Specified Area Establishment and Loan Authorization Bylaws No. 4409 and 4410 provide function authority.

As Electoral Area H 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, Rationale & Strategies**

No significant goals identified at this time.

### **Overall Financial Impact**

The 2018 requisition remains the same as the 2017 requisition.

Current user fees are adequate for the next five years. The capital reserves as of December 2016 were \$20,844. Annual capital reserve contributions of \$3,500 are scheduled.

### **Significant Issues & Trends**

The Interior Health Authority has been conducting inspections of CRD water systems and making recommendations to achieve compliance with the Drinking Water Protection Act and Regulation. Recommendations for the Canim Lake system are increased monitoring frequency and chlorine residual monitoring.

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**

Sample monitoring stations added to the system to improve reliability of routine testing.



*building communities together*

## **2018 Business Plan Horse Lake Water (1889)**

*Peter Hughes, 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 Horse Lake water function was established in 2009 and services 167 land parcels.
- The system is comprised of two wells, a well house, associated pumps and distribution piping, fire hydrants and one reservoir.
- In addition to meeting domestic needs, the system does provide some water to aid community fire protection, but the hydrants cannot be fully recognized by the Fire Underwriters Survey due to system inadequacies.

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 set at \$169 and a user fee set at \$250. The Horse Lake Water System Specified Area Establishment and Loan Authorization Bylaws No. 4411 and 4412 provide function authority.

In 2009, 285 meters of water main was constructed at a cost of \$71,000. In 2010, a new well was located and constructed for \$68,333. In 2011, a well house and chlorinated water main were constructed for \$241,228 and in 2012, 200 meters of water main was replaced for \$125,000. In 2015, 412 meters of water main was replaced for \$319,000.

As Electoral Area L 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, Rationale & Strategies**

No significant goals identified for 2018.

## **Overall Financial Impact**

The 2018 requisition remains the same as the 2017 requisition, and current user fees are adequate for the next 5 years. The capital reserves as of December 2016 were \$46,770.

## **Significant Issues & Trends**

The Interior Health Authority has been conducting inspections of CRD water systems and making recommendations to achieve compliance with the Drinking Water Protection Act and Regulation. Recommendations for the Horse Lake system are increased monitoring frequency, iron/manganese treatment and 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.

## **Measuring Previous Years Performance**

Sample monitoring stations added to the system to improve reliability of routine testing.



*building communities together*

## **2018 Business Plan 103 Mile Water (1890)**

*Peter Hughes, 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 103 Mile Water function was established in 2016 and now services 160 land parcels.
- The system is comprised of two wells, a well house, booster station, associated pumps, reservoir and distribution piping.
- The system meets domestic needs only and does not provide water for community fire protection.

The water quantity and quality is tested on a regular basis and adjustments to the system are made as required. Capital improvements are planned for 2017, following further technical assessments to be completed in 2016. Regular inspection and maintenance to the system components is undertaken to ensure continuous operations. As well, new connections are provided to residents as requested.

Operational costs are collected by way of a user fee set at \$300. Taxation will be collected by way of a parcel tax in 2017 up to \$148. The 103 Water System Specified Area Establishment and Loan Authorization Bylaw No. 4980 provides function authority.

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.

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

#### **2018 Goal**

**Goal:** Commissioning of the new pumphouse and wells.

**Rationale:** Several improvements were required for the system including, backup power, two new wells, pump house, electrical controls, disinfection and flow metering.

**Strategy:** Commission the new wells and pumphouse to provide improved water quality and remove the current boil water notice imposed by Interior Health.

### **Overall Financial Impact**

The 2018 requisition remains the same as the 2017 requisition. The annual user fee of \$300 is projected to be sufficient for the current five-year plan. The function has capital reserve funds of \$79,780 as of December 2016.

The Board allocated \$180,666 of Community Works Funds for a 1/3 contribution towards future improvements, and project funding through MFA has been obtained. Tendered construction costs exceeded the approved budget for project. The Board recently approved an additional contribution of \$130,000 from Community Works Funds to complete the project.

### **Significant Issues & Trends**

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:** Several improvements are required for the system including backup power, two new wells, pump house, electrical controls, disinfection and flow metering.

- Two new wells were successfully drilled and approved by IHA. The new pumphouse was designed and tendered and a contractor has been secured. The project is currently underway with completion and commissioning anticipated for early 2018.



*building communities together*

## **2018 Business Plan Lexington Water (1891)**

*Peter Hughes, 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 Cariboo Regional District in the process of acquiring the Lexington water system and it is anticipated the function will be established in 2018.
- The system is currently comprised of a lake intake, a pump house, associated pumps, reservoir and distribution piping that services 28 parcels.
- The system meets domestic needs only and does not provide water for community fire protection.

Capital improvements planned for 2018, following acquisition, are drilling of a well to replace the surface water intake, construction of a new pumphouse and associated electrical and mechanical requirements. Until the upgrades are completed the system will need to be operated as is with regular inspection and maintenance to the system components is undertaken to ensure continuous operations. The water quantity and quality will continue to be tested on a regular basis and adjustments to the system made as required.

Operational costs will be collected by way of a user fee set at \$1,000 per year. Taxation will be collected by way of an annual parcel tax of up to \$420 expected to begin in 2019. The Lexington Water Service Establishment Bylaw 5084 and Lexington Water Loan Authorization Bylaw No. 5085 will provides function authority, once approved by the Province.

As Electoral Area F 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, Rationale & Strategies**

### **2018 Goal**

**Goal:** Construction of a new well, pumphouse and associated electrical and mechanical requirements.

**Rationale:** Several improvements are required for the system including a new groundwater source (well), pump house, electrical controls, disinfection and flow metering.

**Strategy:** Construct and commission the new wells and pumphouse to provide improved water quality and remove the current boil water notice imposed by Interior Health.

### **Overall Financial Impact**

The annual user fee of \$1,000 per year is projected to be sufficient for the current five-year plan; however, the operating budget will need to be reviewed following commissioning of the new water source. The function currently has no capital reserve funds.

The Board allocated \$107,167 of Community Works Funds for a 1/3 contribution towards system improvements and approval for project funding via petition to borrow through MFA has been obtained.

### **Significant Issues & Trends**

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.