Bishop's Falls
THE EXPLOITS ADVENTURE STARTS HERE

Town of Bishop's Falls
Capital Program

2022 to 2026

The preparation of this project was carried out with assistance from the Government of Canada and the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them.

Executive Summary

This document provides the basis for capital programming strategies from an asset management perspective.

A detailed breakdown of service areas, location of infrastructure, and risk values can be found in the appendix of this report and on the mycivitas.ca website, a GIS integrated Asset Management platform.

The capital program focuses on short-term planning and long-term capital targets. Short-term planning includes selecting capital projects that target the community's highest-risk assets first. Long-term planning considers future infrastructure demand and expected revenue to identify potential infrastructure deficits on a medium-term (20 years) and generational scale (80 years or more).

Bishop's Falls is committed to developing capital programs that identify capital priorities in a transparent and accountable process. Capital decisions will be based on risk management.

1. Asset Inventory

The Town of Bishop's Falls manages infrastructure in the following service areas:

- Water Treatment and Distribution
  - Approximately 31 kilometers of water pipe, 111 hydrants, and 235 valves are captured in the town's asset inventory. The town does not have a water treatment plant (water is supplied from an external source) but owns two above-ground water tanks and a booster station. The original system was installed in the 1960s with some extensions in the late 1990s and early 2010s.
- Wastewater Collection and Treatment
  - Bishop's Falls owns and operates a wastewater collection including an Abydoz wastewater treatment system.
  - Approximately 33.5 kilometers of wastewater pipe and 347 manholes are captured in the town's asset inventory. Most of the networks were installed from 1960 to 1980 with updates in 2013.
- Stormwater Collection
  - Approximately 15 km of pipe, 23 manholes, 314 catch basins are captured in the town's asset inventory.
- Transportation Network
  - Bishop's Falls owns and maintains 31 kilometers of asphalt road and approximately 0.5 kilometer of gravel road.
- Buildings, Parks, and Recreation
  - The town owns several high-value buildings including the arena, fire hall, and town hall/library.
- Fleet and Equipment
  - The town's fleet assets include fire trucks, loaders, and other support vehicles and equipment.

The total estimated renewal cost of Bishop's Falls' asset inventory is almost $75 million. The town's water distribution system has an estimated renewal cost of $12.5 million; wastewater treatment and collection account for $24.5 million; and buildings, parks and recreation account for almost $9 million. Fleet and equipment are estimated at almost $3 million. Transportation, including roads and sidewalks, accounts for $11.5 million, and stormwater collection is estimated at $14 million.

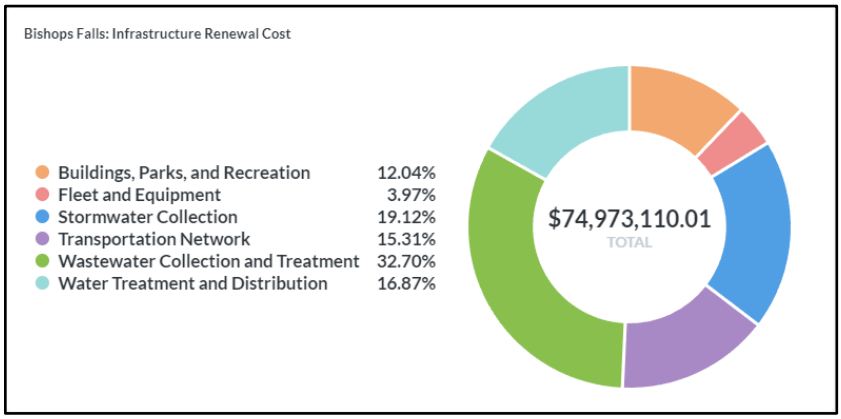


Figure 1: Asset Register Value

2. Policy and Governance

This capital program has been developed in accordance with applicable community plans and asset management principles with reference to the following guidance documents:

- Municipal Plan 2015 -2025
- Asset Management Policy (Resolution # 81/2022)

3. Revenue Structures

Bishop's Falls generates revenue for capital maintenance, renewal and upgrades through general revenue from rate payments and taxes, reserves, borrowing, and grant funding.

I. Rate Payments and Taxation

Bishop's Falls has a flat rate structure for water and sewer services as approved by the Council. By tracking long-term infrastructure requirements, Bishop's Falls safeguards against sudden, unexpected rate increases. Rates are set based on yearly budgets and projections of sustainable infrastructure investment. The remainder of the services provided by Bishop's Falls is supported by general tax revenue from property tax, utility tax, business tax, and vacant land tax. Tax rates are set based on yearly budgets and projections of sustainable infrastructure investment.

A detailed Tax Schedule is available on the town's website. Here is a summary of the 2022 tax rates below:

Tax description	**Rate**
Residential property	8.25 mills/minimum $500
Commercial property	7.75 mills/minimum $500
Vacant land	$650
Residential water and sewer	$475
Commercial water and sewer	6.83 mills/minimum $500
Crown water and sewer	6.83 mills/minimum $500
Poll	$250
General Business Tax	1.00%/minimum $300
Utility Tax	2.5%

II. Debt Strategy

Debt strategies will consider the long-term life-cycle cost of infrastructure which will include initial capital requirements less funding, debt servicing requirements, allowance for maintenance cost over the life of the infrastructure, annual operations cost required to provide the service desired from the infrastructure, and decommissioning or replacement cost at end of life. Debt spending will be used to maintain infrastructure services if:

a) a level of service assessment has been completed for the existing or proposed infrastructure,
b) the service has been deemed essential for the community,
c) the community, via the council, is aware of the lifecycle cost of infrastructure, and
d) the analysis has considered impacts on other essential service areas.

The town has the following long-term loans (2022 to 2026):

Current Loans	**2022 ($)**	**2023 ($)**	**2024 ($)**	**2025 ($)**	**2026 ($)**
BMO (CIBC 06-64057 retirement)	49,458	48,059			
BMO 6999 592 (Consolidated)	191,337	186,777			
BMO 6999 680 (Centre Access Road)	7,243				
BMO 6041 587 (Sewer Infiltration)	27,863				
BMO WWTP	213,318	208,595	203,873	199,150	194,427
BMO Sweeper	9,507	9,507	7,130		
BMO Riverside Drive/Newton Road Booster Pumps	21,911	21,911	21,911	21,911	21,911
BMO Loader	37,950	37,950	22,138		
BMO F550	9,668	9,668	9,668	1,611	
BMO Hampton's Hill Water Tower	19,967	19,967	19,967	19,967	19,674
TD 2021 Main Street Upgrade/Greenridge Road Waterline Loop	13,993	13,993	13,993	13,993	13,993
TD Backhoe and Sewer Jet/Vac Truck	30,178	30,178	30,178	30,178	30,178
	632,393	**586.605**	**328,858**	**286,810**	**280,183**

III. Funding Potential

Capital infrastructure works funding is supplemented by applications to provincial and federal levels of government, as well as governmental agencies and non-profits that direct funding to municipal government to support capital works projects. Funding from these sources is not typically released according to long-term plans, so the availability of funding used in this planning document is, by

necessity, speculative and based on historical availability. Sources of funding that can be pursued to support capital-works projects are:

- Gas Tax Agreements
- Municipal Operating Grants
- Debt Servicing Grants and Subsidies
- Special Assistance Funds
- Community Enhancement Employment Program
- Municipal Capital Works and Cost-Shared Funding Programs
- Federation of Canadian Municipalities Green Municipal Fund.

Bishop's Falls has a target funding threshold of (on average) 70% of capital project spending over the long term. This percentage is used in combination with the town’s projected annual infrastructure demand to set capital investment targets.

4. Regulatory Environment

Bishop's Falls' regulatory environment relates to drinking water and facility regulations. A placeholder for climate change regulations exists to record their expected introduction in the upcoming years.

I. Drinking Water

Drinking water testing and limits are set based on the *Drinking Water Treatment Standards for Newfoundland and Labrador*, *Guidelines for Drinking Water Quality in Newfoundland and Labrador* and *Guidelines for Monitoring Public Drinking Water Supplies*. Town staff take chlorine measurements daily and Provincial staff monitor water quality on a regular basis. The town complies with all regulatory requirements.

II. Wastewater Effluent

No regulatory service gaps for wastewater treatment have been identified.

III. Stormwater

Currently, there are no adopted guidelines in Newfoundland and Labrador that regulate stormwater management. Stormwater will be managed in accordance with Bishop's Falls' policies, planning documents and guidelines.

IV. Facilities

Municipally owned and operated facilities are to (at a minimum) be maintained in compliance with the National Building Code (NBC) at the time that they were constructed. Continuous updates to the NBC related to safety and accessibility occur over time and require significant funding. Bishop's Falls' hierarchy of performance for facilities is as follows:

- Facilities will be upgraded for code compliance issues that pose an imminent risk to life and safety as soon as possible;
- All new construction will comply with the latest version of the NBC;
- Existing facilities will be maintained such that performance meets at a minimum the code requirements at the time they were built; and
- Existing facilities or parts of facilities that require renovation to continue providing services, will incorporate the latest NBC requirements.

V. Climate Change

Currently, there are no adopted guidelines in Newfoundland and Labrador that regulate climate change adaptation or mitigation. Climate change adaptation and mitigation will be managed in accordance with Bishop's Falls' policies, planning documents and guidelines.

5. Capital Investment Strategy

The focus of public commentary and complaints is often based on the condition of visible, above-ground infrastructure and, due to the political nature of local government, can have a large impact on capital investment. It is necessary to strategically allocate Bishop's Falls' finite capital funds with respect to all infrastructure.

Bishop's Falls has adopted a risk management approach in prioritizing infrastructure capital investment. This approach is based on the principle that risk cannot be eliminated but can be managed to an acceptable level. This risk-based approach seeks to balance the continuation of high-priority services with a capital investment that is acceptable to residents and stakeholders. Capital investment will prioritize high-risk assets first.

I. Defining Risk

Risk is defined by two factors: Probability of failure (PoF) and Consequence of failure (CoF).

Probability of Failure

PoF is related to the estimated remaining life of an asset shown in this table:

Table 1: Probability of Failure

PoF Rating	PoF Description	Estimated Remaining Life
1	Rare	More than 30 years
2	Unlikely	Between 15 and 30 years
3	Possible	Between 5 and 15 years
4	Likely	Between 0 and 5 years
5	Almost Certain	Less than 0 years

The estimated remaining life is calculated using a combination of condition values, age values, and expected lifespan values. PoF values automatically update with each passing year, and as infrastructure renewal and condition values are updated in Bishop's Falls' asset register.

Consequence of Failure

CoF is based on the potential environmental, legal, economic, and social impacts of an asset failing.

Table 2: Consequence of Failure

CoF Rating	CoF Description
1	Minor
2	Moderate
3	Significant
4	Major
5	Catastrophic

CoF values were defined by staff and approved by elected officials for all Bishop's Falls' assets. CoF values should be reviewed by staff and elected officials regularly.

Risk Matrix

A risk value is obtained by combining the probability of failure and consequence of failure values as per the following matrix. It is common asset management practice to shift the matrix in favour of the consequence of failure, as seen below.

Table 3: Risk Table

Probability of Failure	Minor (1)	Moderate (2)	Significant (3)	Major (4)	Catastrophic (5)
5 Almost Certain	11 Low	16 Medium	20 High	23 Extreme	25 Extreme
4 Likely	7 Minimal	12 Low	17 Medium	21 High	24 Extreme
3 Possible	4 Minimal	8 Low	13 Medium	18 Medium	22 High
2 Unlikely	2 Minimal	5 Minimal	9 Low	14 Medium	19 High
1 Rare	1 Minimal	3 Minimal	6 Minimal	10 Low	15 Medium

Consequence of Failure

II. Priority of Capital Projects

Bishop's Falls has assigned a risk value to each asset in its asset register. Five-year capital plans are created by allocating the expected budget to capital projects, which address infrastructure in this order:

1. **Extreme-risk**
2. **High-risk**
3. **Medium-risk**
   In the event that there is budget remaining and no more unallocated extreme-risk or high-risk assets, medium-risk projects may be accelerated to prevent unsustainable infrastructure deficits in the future.
4. **Reserve contributions**
   In the event that there is a budget remaining after all extreme, high, and accelerated medium risk assets have been allocated, Bishop's Falls may contribute to reserve targets.
5. **New infrastructure**
   If all reserve and spending targets are met, there may be an opportunity to invest in new infrastructure. Bishop's Falls will evaluate infrastructure investments from a life-cycle cost perspective to ensure that decisions are sustainable.

III. Continuous Risk Management

Capital investment is about managing risk. On one hand, overall infrastructure risk is reduced by completing infrastructure renewal on extreme, high and medium risk assets. On the other hand, overall infrastructure risk continually increases as infrastructure ages because the probability of failure increases. By meeting capital spending and reserve targets that match the level of infrastructure demand, Bishop's Falls ensures that infrastructure deficits do not create unmanageable infrastructure risk levels for future generations.

IV. Level of Service

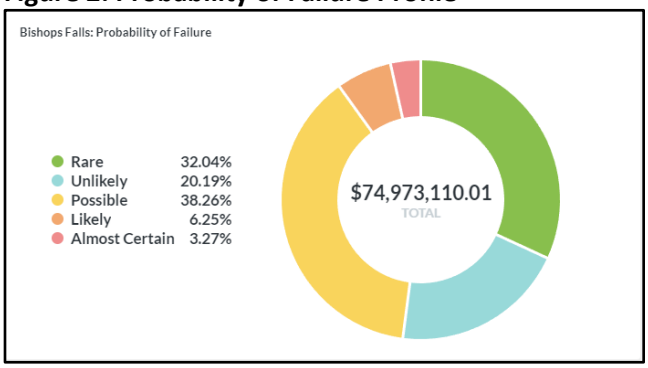
The levels of service currently provided by the town are considered to be at an acceptable level. No required increase or decrease of service levels or level of service gaps related to regulatory requirements were identified. The Council and staff will reassess the level of service annually and take into account any changes when a risk assessment is done. Increasing levels of service beyond current levels will require an increase in capital spending and reserve funding beyond that identified in this report.

Service Area	Level of Service Statement
Water Treatment and Distribution	Some services have been formally defined through policy and regulation (i.e., *Snow Clearing Service Standard Policy)*; however, others are informal. The Town will continue to evaluate and meet existing levels of service for all service areas.
Wastewater Collection and Treatment	
Stormwater Collection	
Transportation Network	
Buildings, Parks, and Recreation	

6. Risk Profile

As mentioned in Section 4 (Short-Term Capital Investment Strategy), investment will prioritize high-risk infrastructure through an assessment of the probability of failure (PoF) and consequence of failure (CoF). This section gives a brief overview of the risk profile of assets captured in Bishop's Falls' asset management system. Bishop's Falls' PoF, CoF, and risk maps and graphs are available on mycivitas.ca.

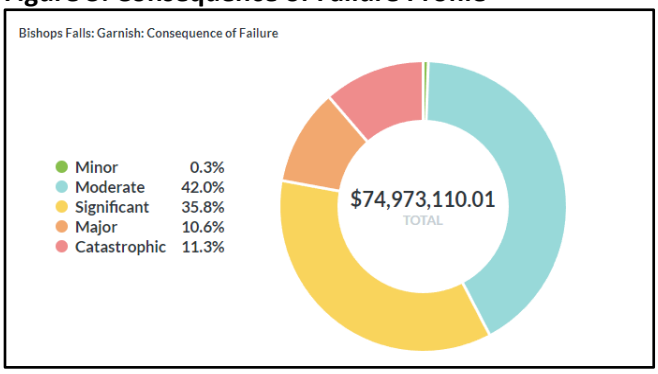
Figure 2: Probability of Failure Profile



Probability of Failure

About 52% of Bishop's Falls' asset inventory has a PoF of rare or unlikely, 38% has a PoF of possible, while 10% of the infrastructure is assigned likely or almost certain. This is a favourable PoF profile, and is expected due to the water and wastewater network being only 40 years old.

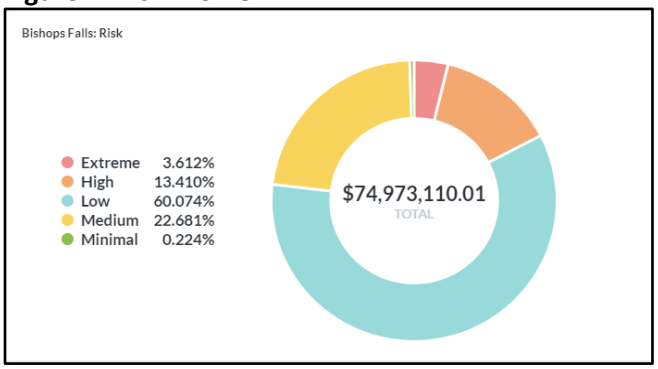
Figure 3: Consequence of Failure Profile



Consequence of Failure

10% of the town's assets are marked with a catastrophic consequence of failure. This is mainly due to the water transmission main from the reservoir to the Exploits Avenue/Main Street intersection. Approximately 11% is assigned major. The 36% that is assigned as significant, includes valves, underground water pipes, and sewer pipes, hydrants, and a variety of other assets. 42% of the asset register is assigned a moderate or minor consequence of failure.

Figure 4: Risk Profile



Risk

Bishop's Falls has a favourable risk profile with over 60% of the asset register classified as low or minimal risk. Almost 23% are classified as medium risk, 13% are classified as high-risk, and less than 4% are classified as extreme-risk. The extreme-risk assets identified are mainly due to the town's ageing water transmission line that connections to the town's water supply.

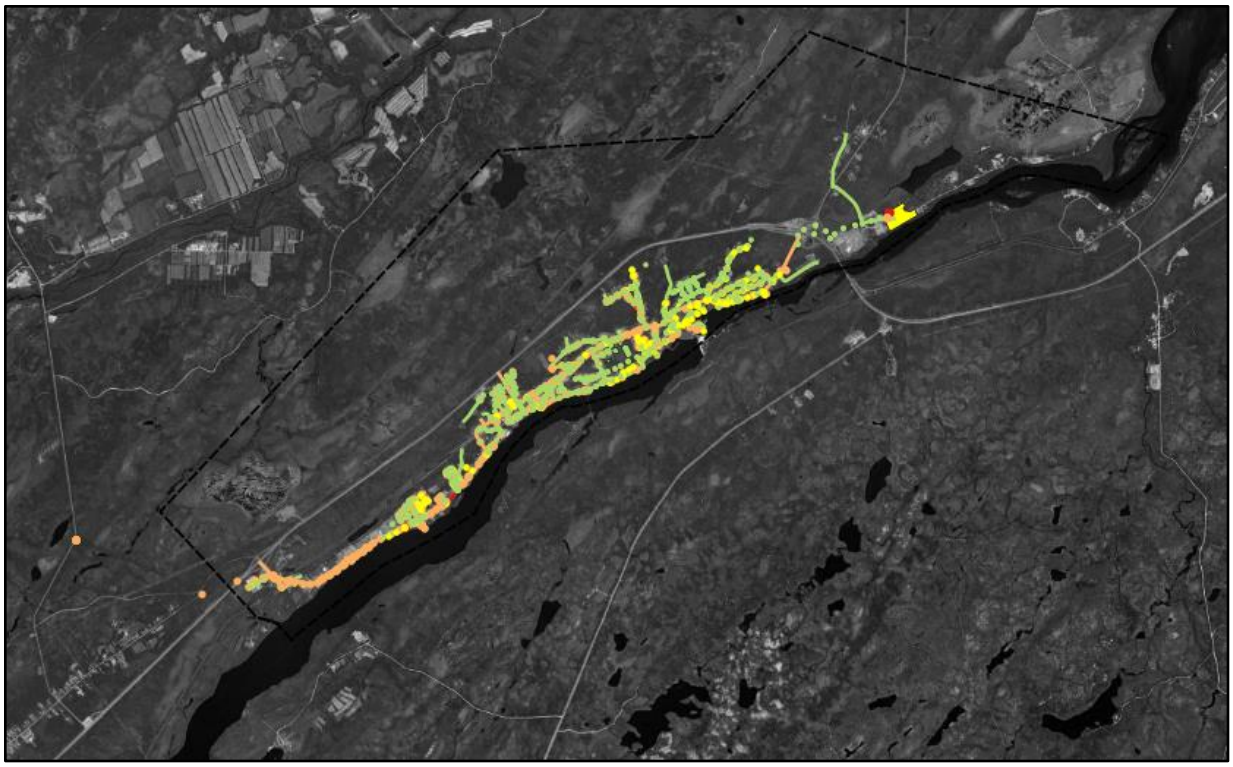


Figure 5: Risk Map

Figure 5 is a screenshot of a heat map showing the risk associated with the various assets. Detailed interactive maps of the town's PoF, CoF, and risk available on mycivitas.ca.

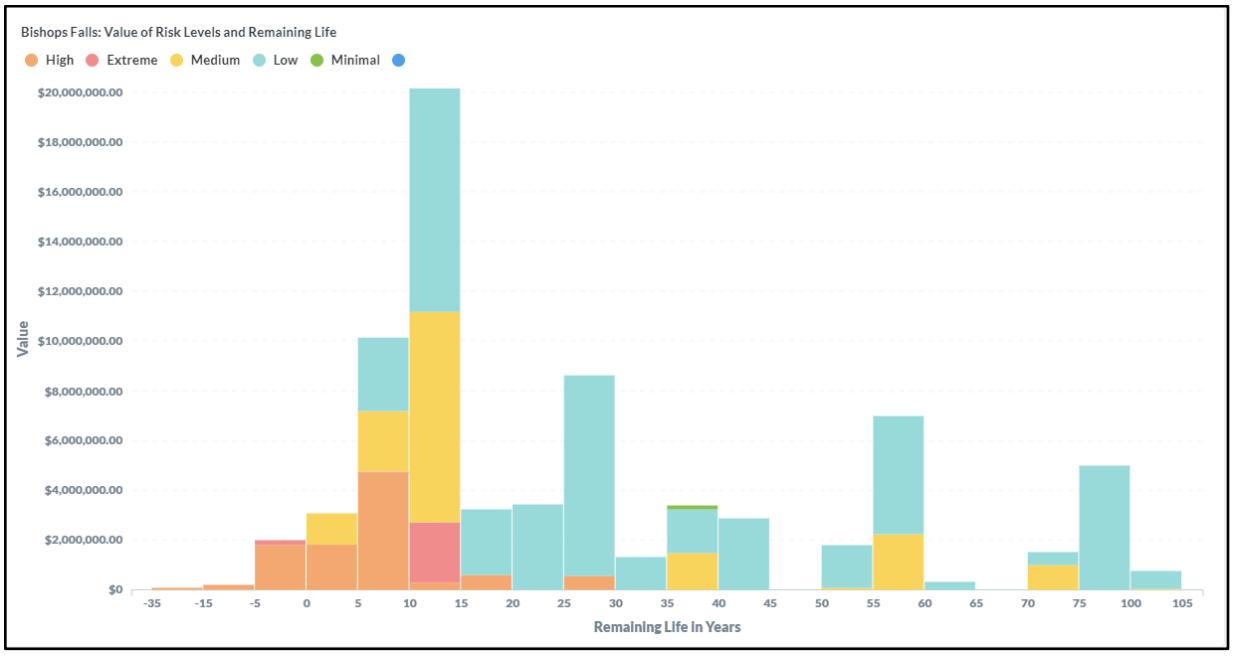


Figure 6: Value of Risk Levels and Remaining Life

Figure 6 shows the remaining life of assets and their renewal value. The assets are grouped by risk level. Bishop's Falls has a desirable risk profile distribution with a low number of extreme-risk and high-risk assets reaching their end of life in the next five or ten years.

7. Capital Demand Projections

I. Long-Term

Figure 7 shows a projection of Bishop's Falls' long-term infrastructure demand over the next 100 years. An annualized long-term infrastructure demand of $1.8 million is estimated from available data.

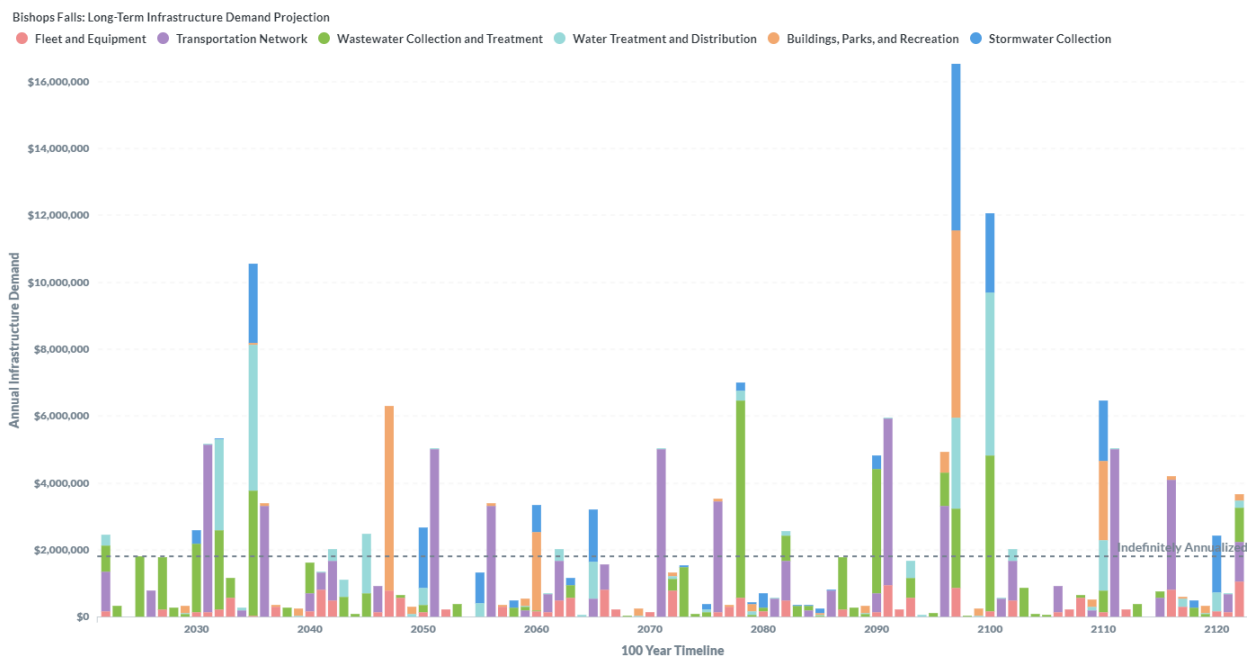


Figure 7: Long-Term Infrastructure Demand Projection

This annualized value is obtained by dividing the renewal cost by lifespan for each asset in the database and then summing the total. Generally, the annualized long-term infrastructure demand should be used as a target for annual capital investment. Assuming 70% funding, the target municipal contribution for capital infrastructure investment for Bishop's Falls is $540,000 ($1.8 x 30%) annually. As lifespan and renewal cost data are updated, the annual capital infrastructure demand will update. As such, the town may lower the annual infrastructure demand by committing to operations and maintenance programs to extend lifespans, deciding to rehabilitate versus replace, and more.

II. Medium-Term

Figure 8 shows Bishop's Falls's medium-term infrastructure demand over the next 20 years. An annualized medium-term infrastructure demand is estimated at $2.1 million from available data. Notice that the 20-year annualized demand is slightly more than the long term annual demand of $1.8 million calculated over 100 years. This indicates that the town is not expected to experience a major increase in its infrastructure demand over the long term.

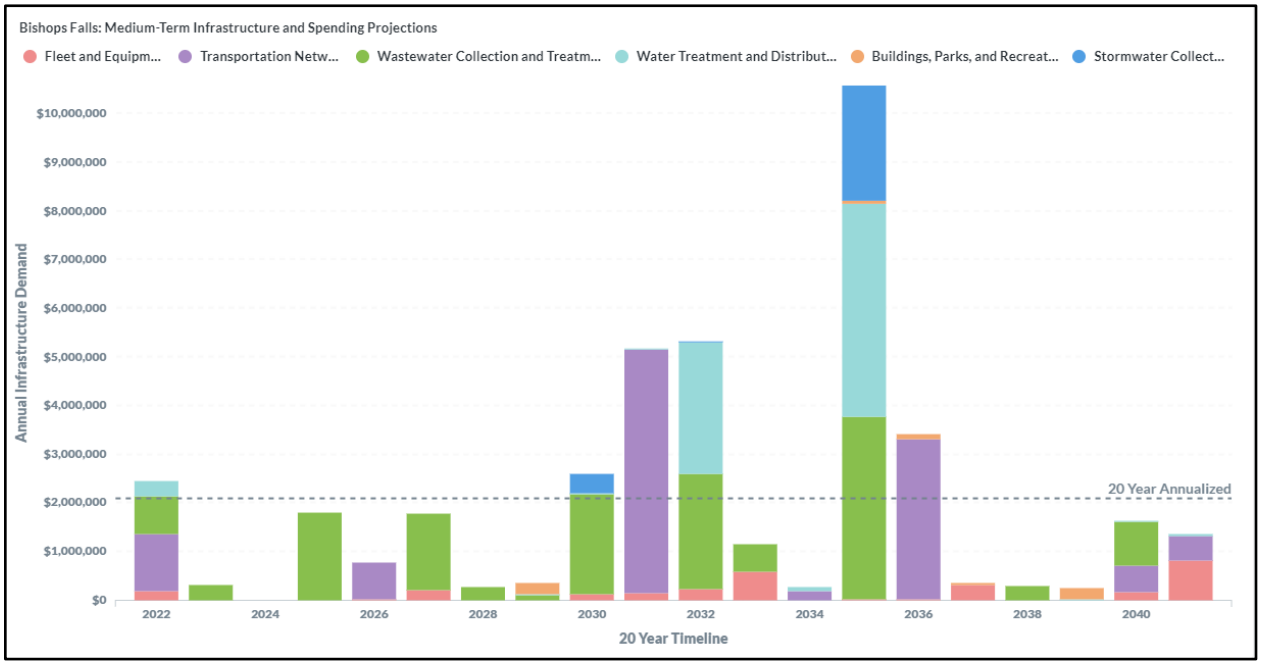


Figure 8: Medium-Term Infrastructure Demand Projection

8. Capital Works Recommendations

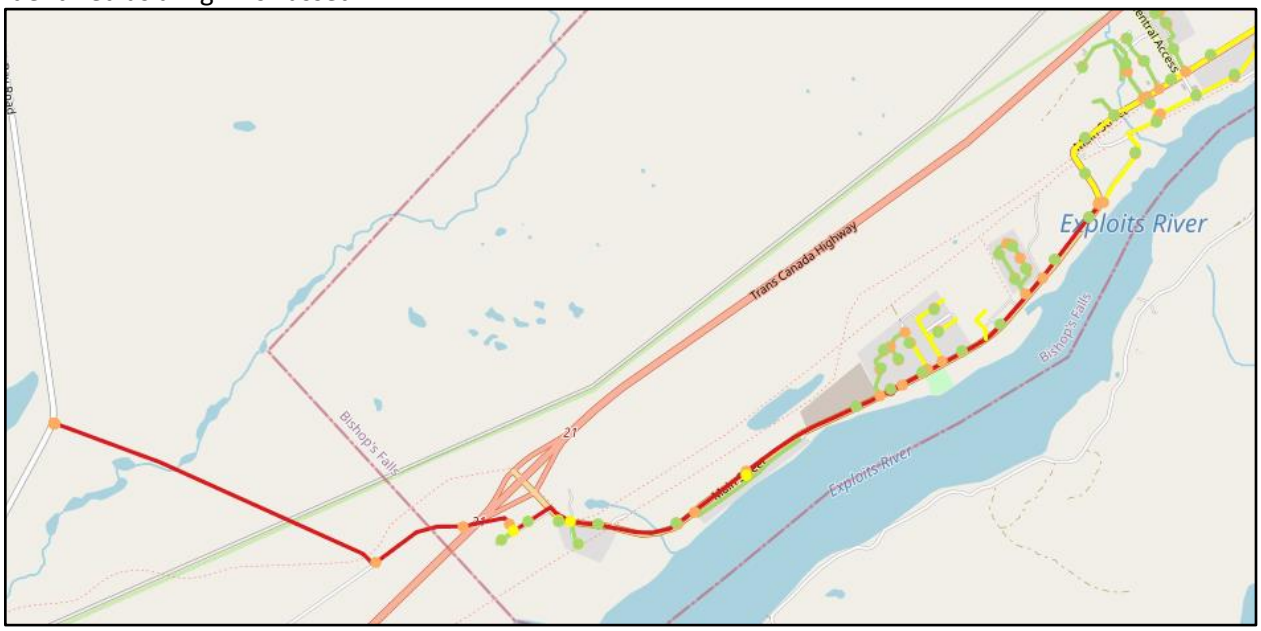
Water Treatment and Distribution

The estimated renewal cost of the water treatment and distribution system is $12.6 million, which equates to an estimated annual infrastructure demand of $210,000. Projecting 80% funding, the town's annual infrastructure investment target for water is $42,000. In years when no capital projects are occurring, the town should consider contributing to a water reserve fund to prepare for future capital projects.

For cost-savings, the town will attempt to align water, sewer and road projects. Water and wastewater service connection breakage is common in small towns with aging infrastructure. It can be an expensive challenge for small towns to keep up with service connection renewal from their operational budgets, therefore, the town will ensure to include service connection replacements in capital improvement projects as far as possible.

Transmission Main

The transmission line that feeds water into the town (indicated in red in the image below), was identified as a high-risk asset.



Assuming a life expectancy of 65 years, it is estimated that this transmission line will reach the end of its design life within approximately 13 years. This is a conservative estimate and the transmission line can potentially last longer. It is therefore not recommended to replace these mains in the next 13 years but rather to monitor water breaks and any maintenance issues for this section of the water main to guide future replacement decisions. If minimal water breaks occur, the replacement of this section of the main can be delayed.

It is also recommended that the town looks into developing a contingency plan to fix water breaks if it occurs. This will mitigate risk by lowering the consequence of failure and enable the town to extend the life of the main without taking unnecessary risks.

Water Main Valves
Isolating main breaks throughout the town are largely dependent on properly functioning main valves. If main valves are left unexercised for several years, they may seize and not function as expected. A plan for annually exercising functioning valves, and identifying inoperable valves, is recommended.

Wastewater Collection and Treatment

The renewal cost of the wastewater system is estimated at over $24.5 million, which equates to an annual infrastructure demand of $430,000. Assuming 80% funding, an annual infrastructure investment target for the town's wastewater system is $86,000.

No high-risk or extreme-risk wastewater mains were identified. However, the town should consider contributing to a reserve fund annually to prepare for future capital projects.

Stormwater Network

The renewal cost of the stormwater system is estimated at over $14.3 million, which equates to an annual infrastructure demand of $215,000. Assuming 80% funding, an annual infrastructure investment target for the town's wastewater system is $43,000.

No high-risk or extreme-risk wastewater mains were identified. However, the town should consider contributing to a reserve fund annually to prepare for future capital projects.

Transportation Network

The town's 31 kilometers of road has an estimated replacement cost of $11.5 million, which equates to an annual infrastructure demand of $560,000. Assuming 67% funding, the town's annual road investment target is $184,800.

Approximately 750 m of Main Road, between Eltero Park and Green Ridge Road, indicated in red below, was identified as high-risk. An infrastructure renewal project is already underway and is included in the capital program.

Buildings, Parks, and Recreation

The town's buildings, parks, and recreational facilities have an estimated renewal cost of almost $9 million, which equates to an annual infrastructure demand of $196,000. Assuming 60% funding, the town's annual buildings, parks, and recreation investment target is $78,400.

No high-risk or extreme-risk buildings, parks, or recreational structures were identified. However, the town should consider contributing to a reserve fund annually to prepare for future capital projects.

Fleet and Equipment

The total value of the town's fleet and equipment is estimated at almost $3 million, which equates to an annual infrastructure demand of $185,000. It is assumed that the town will not receive any grant funding for fleet and equipment.

No high-risk or extreme-risk fleet or equipment was identified. However, the town should consider contributing to a reserve fund annually to prepare for future capital projects.

9. Financial Programs and Pro-Forma Budgets

All financial estimates are gross values that do not consider funding from outside sources. Where applicable, the cost basis of capital projects is based on estimations consisting of:

65%	Capital Costs
15%	Contingency
10%	Design
10%	Inspections and Removal

In some cases, where this general formula is not applicable, or a project requires significantly less or more effort in one of the above areas, a custom cost is applied to the project components in the capital program and in the inventory database.

I. Five-Year Capital Plan

Capital Projects

The following capital projects were identified for the next 5 years

Projects in progress

- **Beaumont Heights Brook infrastructure improvements** (Upgrades to existing infrastructure): This project should be completed in 2022. The total budget for this project is $45,573 (less HST rebate) and the town's share is $9,115.
- **Main Street Road replacement** (750 meters) (Restoration of existing infrastructure): This project will be completed in 2022. The total budget is $344,680 (less HST rebate) and the town's share is $114,882.
- **Riverside Drive tourism development project** (kayak/canoe access): This is a new infrastructure project that should be completed in 2022. The total budget is $567,212 (less HST rebate) and the town's share is $189,052.
- **Main Street Linear Park**. This is a new infrastructure project and is expected to be completed in 2022. The total budget is $233,256 (less HST rebate) and the town's share is $101,450.

New projects (not approved yet)

- **Pat O'Reilly Memorial Stadium Dressing Rooms** The is a new infrastructure project. The total project cost is $473,211 (less HST rebate) and the town's share is $88,677 paid over the next 5 years.
- **Greenridge Road Water Distribution System Upgrades**. This is for the restoration of existing infrastructure. The total budget is $473,211 and the town's share will be $54,700 over the next 5 years.
- **Newtown Road Water Distribution System Upgrades**. The is project to restore existing

infrastructure. The total budget is $215,979 and the town's share will be $24,965 over the next 5 years.

Reserve Transfers

In years when capital projects are less than the target investment, the town should consider transferring to reserve funds to prepare for future infrastructure demand. Reserve funds should be set up to ensure that they are used for their intended purpose. A separate account with a binding statement for their purpose may be useful. Proposed reserve fund allocations are set out in Table 4.

Table 4: Short-Term Capital Plan

Capital Projects	Total Budget (less HST Rebate)	Gov. Funding	Town Share of Capital project				
			2022	2023	2024	2025	2026
Beaumont Heights brook infrastructure improvements	45,573	36,458	9,115				
Main Street Road replacement (750 meters)	344,680	229,798	114,882				
Riverside Dr tourism proj (kayak/canoe access)	567,212	378,161	189,052				
Main Street Linear Park	233,256	131,806	101,450				
Pat O'Reilly Memorial Stadium Dressing Rooms	462,885	334,779	39,895	12,193	12,193	12,193	12,193
Greenridge Road Water Distribution System Upgrades	473,211	378,569	10,940	10,940	10,940	10,940	10,940
Newtown Road Water Distribution System Upgrades	215,979	172,783	4,993	4,993	4,993	4,993	4,993
Total Capital Projects	**$2,342,796**	**$1,662,354**	**$470,327**	**$28,126**	**$28,126**	**$28,126**	**$28,126**

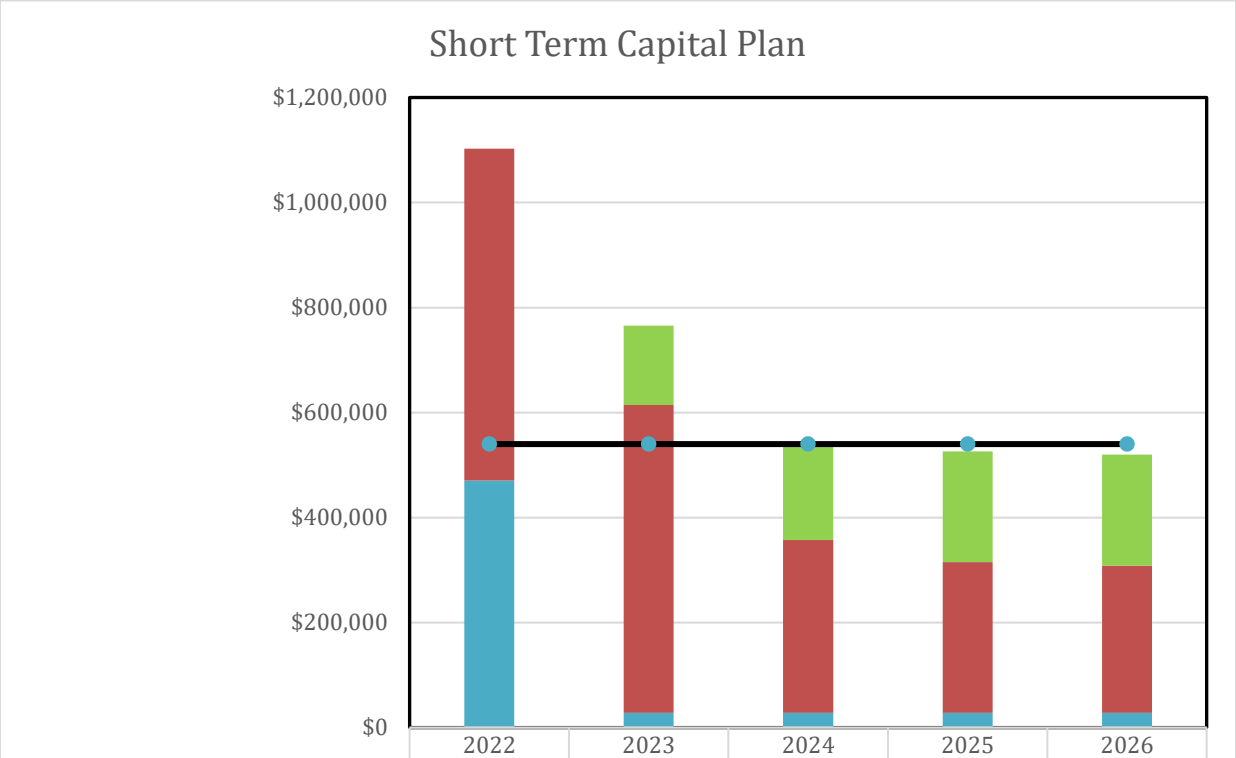
Current Loans			Annual loan payment				
			2022	2023	2024	2025	2026
BMO (CIBC 06-64057 retirement)			49,458	48,059			
BMO 6999 592 (Consolidated)			191,337	186,777			
BMO 6999 680 (Centre Access Road)			7,243				
BMO 6041 587 (Sewer Infiltration)			27,863				
BMO WWTP			213,318	208,595	203,873	199,150	194,427
BMO Sweeper			9,507	9,507	7,130		
BMO Riverside Drive/Newton Road Booster Pumps			21,911	21,911	21,911	21,911	21,911
BMO Loader			37,950	37,950	22,138		
BMO F550			9,668	9,668	9,668	1,611	
BMO Hampton's Hill Water Tower			19,967	19,967	19,967	19,967	19,674
TD 2021 Main St Upgrade/Greenridge Rd Waterline Loop			13,993	13,993	13,993	13,993	13,993
TD Backhoe and Sewer Jet/Vac Truck			30,178	30,178	30,178	30,178	30,178
Total Loan Payments			**$632,393**	**$586,605**	**$328,858**	**$286,810**	**$280,183**

Reserve Transfers			Annual reserve allocated				
			2022	2023	2024	2025	2026
Water network			0	5,250	6,300	7,350	7,350
Wastewater network			0	10,750	12,900	15,050	15,050
Stormwater network			0	5,375	6,450	7,525	7,525
Transportation network			0	63,750	76,500	89,250	89,250
Buildings and Structures			0	19,600	23,520	27,440	27,440
Fleet and Equipment			0	46,250	55,500	64,750	64,750
Total Reserve Allocation			**$0**	**$150,975**	**$181,170**	**$211,365**	**$211,365**

Total Capital Investment			**$1,102,720**	**$765,706**	**$538,154**	**$526,301**	**$519,674**

Target annual infrastructure investment			**$540,000**	**$540,000**	**$540,000**	**$540,000**	**$540,000**

Figure 9: Short-Term Capital Plan



	2022	2023	2024	2025	2026
Total Reserve Allocation	$0	$150,975	$181,170	$211,365	$211,365
Total Loan Payments	$632,393	$586,605	$328,858	$286,810	$280,183
Total Capital Projects	$470,327	$28,126	$28,126	$28,126	$28,126
Target annual infrastructure investment	$540,000	$540,000	$540,000	$540,000	$540,000

II. Operations and Maintenance

Existing operational and maintenance activities occur frequently to ensure service delivery and have not been exhaustively listed in this section.

Water Main Valve Exercising

Properly functioning water main valves are vital to isolate sections of water mains in the case of breaks or upgrades. The mapping tools available to the town should help staff record the status of valves and determine the best ways to isolate sections of the water network. Opening and closing valves annually can reduce the chance of seized valves and alert staff to any critical valves that may be inoperable.

Stormwater Ditch Maintenance

It is recommended that stormwater ditches be cleared every 3 to 5 years to prevent flooding.

Continuous Improvement Program

The following tasks will be completed annually and are certified completed in support of this Short-Term Capital Program:

Update Asset Register	An asset database has been created and updated by Tract and LandInfo. Visit mycivitas.ca for the recent data with support from Bishop's Falls staff and Council.
Review Risk Assessment and Level of Service	Risk assessment was performed with support from Bishop's Falls staff and Council.
Update Capital Plan	An asset management capital plan was created by Tract and LandInfo with support from Bishop's Falls staff and Council.
Review Asset Management Policy	An asset management policy was drafted by Tract and LandInfo with support from Bishop's Falls staff and Council.

Last completed on:	April 2022
Person responsible:	
Signature of completion:	
Next asset management update due on:	April 2023