



Three Rivers

• WHERE HISTORY IS MADE •

Utility Rate Analysis Alternative Cost Recovery Structure



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1. Executive Summary

The Town of Three Rivers is extending its water and sewer utility service to 75 land parcels located in the community of Brudenell. In order to recover costs, as is the utility's right under the *Municipality Act*, the Town proposes to implement a recovery charge of \$5.12 per 1,000 square feet of serviceable property.

Costs for utility service extensions are usually recovered through frontage rates on PEI; however, the Town has determined that their proposed charge based on total square footage is a more equitable means of cost recovery for their specific residents and their specific situations. It is also a more cost-friendly option for the majority of impacted property owners.

In order to enact the new development charge, the Town's proposal must be approved by the Island Regulatory & Appeals Commission (IRAC). IRAC is responsible for ensuring the equity, legality, and appropriateness of utility charges on PEI, as legislated in the PEI *Water & Sewerage Act*. The Act requires them to consider the proposed rate change in the context of the municipality's "local conditions and circumstances."¹

The Town of Three Rivers is in the best position to understand what their residents need and how best to serve their needs. By prioritizing the financial well-being of their customers, they have come up with this new-to-them cost recovery method.

The practice of charging per total property area for special utility projects, such as extensions, is not novel. It is in practice in other municipalities across the nation. While no PEI utility currently has a rate/levy structure equivalent to the one Three Rivers is proposing, there are other PEI utilities that have rate structures and charges that differ from the frontage rates commonly applied by Island utilities. In light of this, nothing should prevent the consideration of this new charge. In fact, there are multiple reasons to approve the proposed rate structure for the benefit of the municipality's utility and its customers.

In order to provide IRAC with a full overview of the project's preferred cost recovery method, the Town of Three Rivers has commissioned a professional review of their financial calculations to detail the proposed rate structure's equitability and viability. These review findings have been compiled in

¹ Government of PEI. (2016). *Water and Sewerage Act*. Section 10.

<https://www.princeedwardisland.ca/sites/default/files/legislation/W-02-Water%20And%20Sewerage%20Act.pdf>

this report along with extensive research of rate structuring practices in other jurisdictions to detail the logical and justifiable reasoning that supports a square footage-based rate alternative.

As this report will further explain, the Town's proposed cost recovery method is supported by the following reasons:

1. The Town's calculations, showing that the proposed rate structure is a more cost-effective option for the majority of impacted property owners, are mathematically accurate.
2. The proposed charge adheres to the guiding principles of rate structuring, as set by IRAC and the Federation of Canadian Municipalities, which prioritize the fairness and appropriateness of charges unique to each community's situation. The Town has proposed this rate structure because they have determined it is in the best interest of their community and that it is the most equitable means of cost recovery.
3. There are variations in cost recovery methods across PEI utilities already, and there is implementation of equivalent cost recovery means in municipalities elsewhere in Canada. The presence of these alternate and equivalent rate structures further demonstrates that the proposed charge is reasonable.

Since the Town of Three Rivers knows their residents and their situations better than any other governing body, their expert opinion on the fairest manner of cost recovery for the utility infrastructure extension project should be valued and measured in any decision concerning cost recovery for this project. The motivation for the proposed charge is to recover necessary costs in a way that keeps charges as inexpensive as possible for most property owners, and the municipality believes that the fairest way of dividing costs is by considering actual property area and not just frontage lengths. As IRAC has allowed variances in rate structures and utility charges for other municipalities, the variance proposed by Three Rivers should be given due consideration for the benefit of their community.

2. Project Overview

Three Rivers Water & Sewer Utility's Brudenell Extension

The Town of Three Rivers is extending central water and sewer for the frontage between Robertson Road and MacDonald Road along the AAA MacDonald Highway (hereafter the development area will be referred to as the Brudenell Extension). The proposed project will encompass approximately 75 Parcel Identifier Numbers (PIDs) that will be deemed serviceable including commercial, residential, and vacant lands.

Proposed Cost Recovery Method

Currently, the standard cost recovery rate on PEI is based on a lot frontage calculation. However, the Town completed a financial analysis of the proposed project and is seeking to move forward with a different recovery rate for the new utility service that would be calculated on a basis of square foot per serviceable area. The Town believes this structure would be the most equitable approach for the majority of residential owners.

PEI Regulations for Cost Recovery

Currently, frontage rates are the standard means of rate determination for utility infrastructure projects. However, the Island Regulatory and Appeals Commission (IRAC) can and has approved variances to the standard. IRAC, as compelled by the *Water and Sewerage Act* of PEI,² has a key responsibility to approve rate structures that are "equitable and necessary;" and IRAC's relevant *General Rules & Regulations* grants them the authority to order other means of customer contribution to cost recovery. Section 6 of these rules states (emphasis added):

"Unless otherwise ordered by the Commission, property owners or customers shall, in cases where service is not available, contribute towards the cost of extending mains, including service laterals to the property line...Such contributions shall, in cases of developed, unserviced land, be based on property owner's lot frontage in relation to the total frontage of the service extension."³

² Government of PEI. (2016). *Water and Sewerage Act*. Section 10.

<https://www.princeedwardisland.ca/sites/default/files/legislation/W-02-Water%20And%20Sewerage%20Act.pdf>

³ Prince Edward Island Regulatory & Appeals Commission. *Prince Edward Island Municipal Water & Sewerage Utilities General Rules & Regulations*. Section 6.1. (July 27, 2010).

The wording, “unless otherwise ordered by the Commission,” allows for exceptions to the standard rate structure. Moreover, Section 10 of the *Water and Sewerage Act* entertains special considerations for rate structuring when it states (emphasis added):

“(1) The rates and charges shall be fixed and determined in accordance with the generally accepted public utility practices **after taking into consideration local conditions and circumstances**. (2) Where considered necessary by the Commission such rates and charges may be classified and prescribed as follows: (a) an initial charge for constructing and establishing connection from the main water or sewerage line of a public utility to any building or structure on the land and premises of any person for the purpose of supplying water or sewage disposal...”⁴

PEI legislation and IRAC’s own rules & regulations allow variation from the standard rate structures **when appropriate to specific community circumstances**, and as explored in Section 4 of this report, precedence exists for approval of alternate rate structures such as the total property area charge Three Rivers proposes.

Motivation for Cost Recovery Change

The Town of Three Rivers thoroughly knows its community’s unique circumstances and makes decisions based on their residents’ best interests. The decision to seek a different cost recovery method has been motivated by the Town’s desire for the utility charges to be fairly distributed to their residents. They propose to recover their costs through rates based on the actual size of affected properties and not just on the area of properties that front the road. Under the current method, a property owner with a 100x100 foot lot with a 100’ frontage is charged the same as a customer who has a 100x800 foot lot with a 100’ frontage even though the first property owner holds far less property.

The proposed method of cost recovery would result in a lower cost burden for the majority of residents affected by the project than if the standard frontage rate method of cost recovery was applied. The Town asserts that the most equitable method of recovering the necessary project cost is by a total property area rate.

⁴ Government of PEI. (2016). *Water and Sewerage Act*. Section 10.

<https://www.princeedwardisland.ca/sites/default/files/legislation/W-02-Water%20And%20Sewerage%20Act.pdf>

3. Summary of Three Rivers’ Financial Projections

The compilation report of Three Rivers’ financial projections for this project and its cost recovery is attached as an appendix to this report.

Calculations were prepared by the Town, with a detailed engineering and construction cost breakdown provided associated with a “Phase 1” expansion. In discussion with the Town, it was determined that the project will relate to a concurrent two-phase project. Detailed cost estimates were not available for the Phase 2 portion; however, the incremental estimated construction cost for Phase 2 is approximately \$1.281 million, which will be entirely paid for by the Town’s Canada Community-Building Fund (CCBF) contribution.

Phase 2 costs were allocated between water and sewer costs according to the proportion of total cost for each construction cost line item in Phase 1. In doing this, a forecasted financial statement for the Town of Three Rivers Water and Sewer service was prepared.

The total cost of this expansion is estimated at \$6.679 million, excluding applicable taxes. The cost breakdown is outlined in Table 1:

<i>Line</i>	<i>Value</i>
Construction Cost	\$6,343,203
Engineering Cost	336,000
Total Cost Pre-Tax	\$6,679,203
Tax	1,001,880
Total Cost Tax Included	\$7,681,083

Sources of funding are below in Table 2:

<i>Line</i>	<i>Value</i>	<i>Note</i>
ICIP – Provincial Portion	\$1,979,058	Amount confirmed by Town
ICIP – Federal Portion	2,375,107	Amount confirmed by Town
HST Rebate	333,960	HST rebate is 33.33% of tax
MCEG	667,920	10% of total cost pre-tax
CCBF	1,281,231	
Unfunded Capital	\$1,043,806	
Utility Portion (10%)	104,381	
Customer Portion (90%)	939,425	

Based on information provided by the Town of Three Rivers, the unfunded capital cost of the project is estimated at \$1.044 million. This estimate aligns with budget information provided and estimated sources of funding also provided by the Town of Three Rivers. The estimated allocation of the capital cost between water and sewer is 36.70% (water) and 63.60% (sewer).

Four payment scenarios for the 90% customer portion were prepared. Each scenario results in a total principal repayment by customers of \$939,425.

1. One-time charge per foot of frontage
2. One-time charge per square foot of serviceable land
3. 25-year annual charge per foot of frontage
4. 25-year annual charge per square foot of serviceable land

<i>Scenario</i>	<i>Per foot of frontage</i>	<i>Per 1000 square feet of serviceable land</i>
One-time charge	\$83.73	\$128.10
Annual charge (25 years)	\$3.35	\$5.12

The Town found that the least expensive method for the majority of impacted property owners was to seek cost recovery with an annual charge over 25 years based on square feet of serviceable land. The percentage of owners who will pay less under this rate structure than they would under the standard frontage rate structure are noted in the table below:

<i>Charging by Total Area instead of by Frontage</i>	<i>Cheapest Option (by percentage of owners)</i>	<i>Most Expensive Option (by percentage of owners)</i>
Residential (16 lots)	100%	0%
Vacant (19 lots)	68%	32%
Other (28 lots)	86%	14%

All residential lots were cheaper per square foot of serviceable land with an average annual charge of \$179.29 compared to the charges per foot of frontage which has a more expensive average

charge of \$550.51. This means that the average residential property owner will see a 67% decrease in annual charges if a charge by total area is implemented instead of a frontage charge.

The vacant lots had 13 cheaper and 6 more expensive charges per square foot of serviceable land with a skewed average cost of \$1,223.60. Please note: this average cost is skewed due to one outlier in the data set (land owned by a developer who plans to subdivide his land holdings). The majority of vacant land holders would see cheaper charges than they would if frontage rates were applied.

The remainder of all other lots had 24 cheaper and 4 more expensive charges when using a square foot of serviceable land rate with an average charge of \$409.28. This is compared to the average annual charge of \$614.56 determined by frontage rates. This means that the average property owner for these lots would see a 33% decrease in annual charges if total square foot area is used to calculate charges instead of frontage lengths.

In summary, these calculations demonstrate that the majority of PIDs would be charged a cheaper amount under the proposed per square foot area rate than they would if the standard frontage rate was charged.

4. Best Practices & Currently Implemented Utility Rate Structures

Overview of Cost Recovery Practices for Water & Sewer Utilities

Best Practices Set by The Federation of Canadian Municipalities

The particulars of water and sewer rate structures vary from municipality to municipality across Prince Edward Island and across Canada. However, common structures prevail overall. According to the Federation of Canadian Municipalities' long-standing best practice report, *Water and Sewer Rates: Full Cost Recovery*, best practice dictates that municipalities seek full cost recovery from their rate models. The Federation states the requirements of full cost recovery structures as:

Full cost recovery requires the generation of sufficient revenues through appropriate pricing of the services to cover the full cost of water and sewage services. These include operating, maintenance, administration, research and development expenditures, financial costs and capital investments in facilities (including depreciation, interest and equity return at a level sufficient to sustain the systems in perpetuity and achieve the mandated level of service as a minimum).⁵

The Federation of Canadian Municipalities (FCM) states that capital charges are a means of recovering costs for "system and/or site-specific capital costs of providing work for growth or to service previously unserved areas" and these costs should be met by "user pay related to system expansion built by utility." When evaluating a means of revenue for cost recovery, local objectives should be considered, and FCM advises special consideration to the charge's:

- fairness and equity (over space and time),
- legality,
- simplicity/customer comprehension, and
- ease of implementation.⁶

⁵ Federation of Canadian Municipalities. *Water and Sewer Rates Full Cost Recovery*. (2006).

<https://fcm.ca/sites/default/files/documents/resources/guide/infraguide-water-sewer-rates-full-cost-recovery-mamp.pdf>

⁶ Ibid

The Town of Three Rivers' proposed rate structure for capital cost recovery meets the recommendations of FCM by fairly distributing the cost of the extension to property owners based on the actual size of property possessed, by adhering to legal requirements as set by the Province of PEI and IRAC, by being an easily understood, straightforward charge, and by being easily implemented for all users.

Service Cost Recovery Overview

Most Canadian municipalities support full cost recovery for their regular water and sewer services by using metered rate structures, so users pay for what they consume. Another common rate structure across Canada is charging by assigned unit value which is referred to as proportionate rates on PEI and residential equivalency units (REUs) in some other provinces. For land capable of being serviced but not currently serviced, municipalities commonly set rates that are either a fixed flat charge or a flat charge based on assigned unit value or on the estimated meter size that would be used if property were developed. Some municipalities elect to charge a variable rate by property size such as lot frontage or square area. It should be noted that, generally across Canada, frontage rates for un-serviced properties appear uncommon outside of PEI.

Infrastructure Development Cost Recovery Overview

Throughout Canada, governing bodies have approved cost recovery methods for infrastructure development, maintenance, and improvement in a variety of ways according to what best suits the municipality's situation and needs. These ways include base and usage rates, levies, fixed infrastructure or development charges, and property type/property size-based charges. Certain rate structures employed in one municipality may not work for another municipality. For instance, it can make sense that a rural municipality charges a levy based on hectare size, but it likely would not make sense for a dense urban community to do the same. The following subsections outline different rate structures and cost recovery methods utilized in municipalities across Canada to show the variation of generally accepted practices.

Prince Edward Island – Current Water & Sewer Rate Structures

Common Water & Sewer Rate Structures

On Prince Edward Island, municipalities tend to employ either metered rates or proportionate rates based on unit value or a mix of the two for their regular service rates. Under the proportionate rate

structure, different building uses get assigned different unit values, and values tend to increase based on seat capacity for a restaurant, washroom quantity for businesses and community buildings, or relevant water usage for cleaning-focused infrastructure like laundromats or car washes. For example, one unit value equals a single-family dwelling. An individual apartment is valued less at 0.8 unit value. A store or community hall with one washroom facility has a base 1.00 unit value but 0.5 unit values added for each additional toilet or urinal the building contains. A laundromat with 5 washing machines would have a unit value of 5.75.⁷

Prince Edward Island municipalities often employ a lot frontage charge per lineal feet for road-adjacent land that is capable of being served but is not served currently. However, this is not the only method of charging these properties for potential access. Municipalities that have metered structures tend to set flat rates or apply proportionate rates for unmetered properties which can include undeveloped land.⁸

Unique Rates & Charges on PEI

Two unique water utility entities belonging to subdivision developments on PEI assign a flat fee for undeveloped land in their jurisdictions,⁹ and Victoria by the Sea issues a flat service availability charge for undeveloped land in their utility's jurisdiction.¹⁰ Also as a unique practice, Cavendish Sewer Utility sets an additional Seawood Estates Infrastructure Contribution Charge applied specifically to property owners of Seawood Estates to recover their subdivision's remaining infrastructure debt.¹¹

⁷ Proportionate Rate Tariff Examples. IRAC. *Alberton Sewer Tariff*. (2012). <https://irac.pe.ca/wp-content/uploads/ALB-Tariff-2021-07-01.pdf> & *Morell Sewer Tariff*. (2014). <https://irac.pe.ca/wp-content/uploads/MOR-Tariff-S-2014-04-01.pdf>

⁸ Metered Tariff Examples. IRAC. *Kensington Sewer Tariff*. (2021). <https://irac.pe.ca/wp-content/uploads/Order-UW21-01.pdf#KEN-S-Jan-01-21> & *Souris Sewer & Water Tariff*. (2021). <https://irac.pe.ca/wp-content/uploads/Order-UW21-04.pdf#SOU-Oct-01-21>

⁹ Granville on the Water Utility. *Water Tariff*. (2018). <https://irac.pe.ca/wp-content/uploads/GRA-Tariff-W-2018-01-01.pdf> & Seawood Water Utility. *Water Tariff*. (2012). <https://irac.pe.ca/wp-content/uploads/SEA-Tariff-W-2012-04-15.pdf>

¹⁰ Victoria by the Sea. *Sewer Rate Tariff*. (2022). <https://irac.pe.ca/wp-content/uploads/VIC-Tariff-S-2022-04-01.pdf>

¹¹ Cavendish Sewer Utility. *Sewer Tariff*. (2012) <https://irac.pe.ca/wp-content/uploads/Order-UW21-03.pdf#CAV-S-TARIFF>

Other Provinces – Water & Sewer Rate Structures

Nationally, the Federation of Canadian Municipalities has touted full cost recovery methods for water and sewer rates for decades.¹² Municipalities do not necessarily apply this method to their rate structures in practice, but utility managers are likely to trumpet the importance of adopting full cost recovery over historical rate structures due to the ever-increasing funds needed for maintenance of aging systems. These increasing maintenance costs are not adequately covered in if one bases rates only on inflation-adjusted, historical practices.¹³ Understanding the full cost of providing water and sewer services is important in order to set appropriate rates.

Local improvement projects such as water and sewer extension services tend to be subsidized by government funding and so do not seek full cost recovery from user pay alone. Affected property owners of improvement projects are normally responsible for covering the unfunded portion of the projects. The method of cost recovery for these projects varies from municipality to municipality.

Atlantic Canada

Atlantic Canadian provinces tend to mirror PEI in charging for regular water and sewage services based on metered rates, unit value rates, or a mix of the two. Other existing service charges in Atlantic Canada use a variation of mil rates or charge based on a percentage of assessed property value. Charges for undeveloped or unserved properties tend to look like rates on PEI with lots typically charged by flat rate, by assigned unit value, or by estimated water meter type.

Utility Improvement Fees & Charges

For water and sewer extension projects in New Brunswick, some municipalities seek cost recovery from impacted property owners using frontage rates. Examples of municipalities implementing this practice include **Riverview, New Brunswick** and **Rothsay, New Brunswick**. **Shediac, New Brunswick** applies an Environmental Improvement Fee, to support infrastructure upgrades and an environmental stewardship project,¹⁴ placed as a fixed fee per unit on annual sewer bills. **The Municipality of the County of Antigonish in Nova Scotia** charges a local improvement fee when it implements improvement projects like water and sewer extensions. The fee varies in structure

¹² Federation of Canadian Municipalities. *Water and Sewer Rates Full Cost Recovery*. (2006).

<https://fcm.ca/sites/default/files/documents/resources/guide/infraguide-water-sewer-rates-full-cost-recovery-mamp.pdf>

¹³ BMA. *Municipal Study 2023*. (2023). https://www.cambridge.ca/en/your-city/resources/BMA_Municipal_Studies/2023-BMA-Municipal-FINAL-Study-accessible.pdf

¹⁴ Greater Shediac. *Environmental Improvement Fee*. (nd). <https://gssc-cesb.ca/environmental-improvement-fee/>

depending on what the municipality deems the most appropriate for the project area, and options for the fee structure include a “uniform amount for each property, property frontage, property use, area, assessed value, or any combination of two or more methods.”¹⁵ **Halifax, Nova Scotia** enforces a Regional Development Charge for new buildings or expansions or for unserviced land with a building that existed prior to July 2014. The charge is a flat rate per unit for residential properties and a variable rate per square meter for non-residential properties. The purpose of the charge is to safeguard affordability and equity for users.¹⁶ **Paradise, Newfoundland** has a Water & Sewer Levy as a cost per gross hectare that supports relevant projects.¹⁷ They have a minimum cost set for new residences in serviced areas, and a special charge formula for condominiums, apartments buildings, and non-residential use buildings that is based on the ground floor area and front, rear, and side yards as a percentage of hectares. They also have specific levies set for certain development areas that include a cost per acre of benefited land. The **City of Mount Pearl** and the **Town of Conception Bay South** in Newfoundland also have levies using per acre rates to recover costs for area-specific infrastructure projects.¹⁸

Central Canada – Ontario

For Ontario water and sewer service charges, it is common for municipalities to use metered rate structures with base rates included by meter size. There is variation for usage charges in the metered rates ranging from one unified cost per usage unit for all water consumed to a varying cost per usage unit that is dependent on block usage levels.¹⁹ Pertaining to the process of rate-setting, Ontario has industry-level support for utilizing full cost recovery models in their utility rates. In 2017, the Ontario Sewer and Watermain Construction Association (OSWCA) pushed for all municipalities to use a full cost recovery rate structure instead of relying on government funding to cover costs.²⁰

¹⁵ Municipality of County of Antigonish. Local Improvement FAQs. (February 2021). <https://antigonishcounty.ca/wp-content/uploads/2021/02/Local-Improvement-FAQs.pdf>

¹⁶ Halifax Water. *Regional Development Charge*. (nd). <https://halifaxwater.ca/regional-development-charge>

¹⁷ Town of Paradise. *2024 Fee Schedule*. (2024). <https://www.paradise.ca/en/government-and-engagement/resources/Budget-2024/2024-Fee-Schedule.pdf>

¹⁸ Conception Bay South. *Schedule of Rates & Fees*. (2024). <https://cloud.rampinteractive.com/cbssoccer/files/2024%20Schedule%20of%20Rates%20and%20Fees.pdf>

¹⁹ BMA. *Municipal Study 2023*. (2023). https://www.cambridge.ca/en/your-city/resources/BMA_Municipal_Studies/2023-BMA-Municipal-FINAL-Study-accessible.pdf (p 398)

²⁰ OSWCA. *Full-Cost Recovery for Municipal Water and Wastewater Systems*. (2017). <https://www.gtswca.org/uploads/proposal-for-moi-on-mandating-full-cost-recovery-and-regionalizing-the-management-of-small-municipal-water-systems.pdf>

According to a 2023 Ontario study done on behalf of municipalities, water and sewer rates should be set in a way that support the realization of a municipality's goals and allow costs to be covered. For example, if conserving water is a goal, a volumetric charge should be the primary rate, but a municipality takes on the risk that lower water consumption might mean less revenue to meet the fixed costs of operation if the rate relies too heavily on volumetric charging.²¹ All this to say, the process of setting rates for water and sewer usage should consider a municipality's environmental goals and actual operating costs.

An example of a charge for water and sewer extension services, that conforms to the rate-setting principles mentioned above, is the **Regional Municipality of Peel's** current sewer extension work. According to Peel's website, when they undertake local improvement projects, "100% of the actual cost will be shared among the benefiting properties." The regional municipality uses lot frontage to determine cost sharing, but specifies, "If there are irregularly shaped lots, in interest of fairness, Peel will also use total property area to determine the division of the shared costs."²²

Western Canada

Western provinces tended to parallel the common practices seen in Atlantic Canada such as using metered rates, unit value rates (referred in western provinces as resident equivalency units or REUs), or a mix of the two for regular utility service charges. Municipalities set either estimated usage charges for unserviced property or flat charges for unmetered properties as other municipalities do across Canada. It is common for development and/or improvement charges to include special rates for water and wastewater specifically. In **Regina, Saskatchewan**, development charges for water and wastewater are set per hectare with different rates for residential & commercial versus industrial development.²³ In **View Royal, British Columbia**, a development charge is set as a flat rate for residential development and a variable rate for commercial development based on the square meterage of the gross floor plan.²⁴

²¹ BMA. *Municipal Study 2023*. (2023). https://www.cambridge.ca/en/your-city/resources/BMA_Municipal_Studies/2023-BMA-Municipal-FINAL-Study-accessible.pdf (p 402)

²² Peel Region, Ontario. (nd). <https://www.peelregion.ca/construction/projects/owner-initiated-local-improvement>

²³ Regina. *Development Charge*. (nd). <https://www.regina.ca/business-development/land-property-development/land-development/development-charges/>

²⁴ Town of View Royal. *Development Cost Charges Bylaw No. 1011*. (2019). <https://www.viewroyal.ca/assets/Town~Hall/Bylaws/1011-%20Development%20Cost%20Charges%20Bylaw.pdf>

Municipalities in the western provinces utilize additional fees/charges to recover special utility costs. In Manitoba and Alberta, it is common for municipalities to add rate riders to utility bills.²⁵ These riders are meant to recover debt or fund infrastructure improvements. In Saskatchewan, municipalities add infrastructure levies to rates for infrastructure maintenance and improvements.²⁶

Examples of levy structures for extension of services

Examples of levies and charges for extension of water and sewer services can be seen in various western municipalities:

- The **Rural Municipality of St. Andrews, Manitoba** charges a Local Improvement Fee for the cost of new public infrastructure serving a specific area of residents. The cost of the project has been equally divided amongst property owners. Each parcel owner received the initial option to pay their portion of the cost through a set fee divided annually through their property taxes over 20 years or to pay a one-time lump sum.²⁷
- Similarly, the **Rural Municipality of St. Clements, Manitoba** is currently extending sewer utility services and is charging a Local Improvement Levy. The municipality has offered impacted property owners the option to pay their determined, flat rate portion as a one-time fee or to divide the cost into annual payments over 20 years.²⁸
- Likewise, the municipality of **Comox Valley, BC** is extending sewer services to two areas and has sought cost recovery by charging each impacted property a set amount annually through their property tax bills.²⁹

²⁵ Rate Rider Examples. City of Flin Flon. *Notice of Application - Revised Water and Wastewater Rates*. (2024). <https://www.publicnow.com/view/F25EC202DD08C9B64B97EA59AF6A52E505294C42> & Utilities Consumer Advocate. *Rate Riders*. (nd). <https://ucahelps.alberta.ca/rate-riders.aspx>

²⁶ Infrastructure Levy Examples. RM of Edenwold. *Municipal Water & Sewer*. (2023). <https://www.rmedenwold.ca/p/water-sewer> & City of Melville. *Water & Sewer*. (nd). <https://melville.ca/p/water-sewer>

²⁷ Rural Municipality of St. Andrews, Manitoba. <https://www.rmofstandrews.com/p/faqs-1#four>

²⁸ Rural Municipality of St. Clements, Manitoba. January 30, 2023. <https://rmofstclements.com/wp-content/uploads/2023/02/2023-Henderson-Sewer-Connections-Open-House.pdf>

²⁹ Comox Valley, BC. Sewer Extension. January 1, 2024. <https://engagecomoxvalley.ca/sewerextension>

5. Takeaways from Other Municipal Utilities

For the purpose of this report, various municipalities on PEI and Atlantic Canada were contacted to discuss their cost recovery practices. The Chief Administrative Officers of Victoria-by-the-Sea, PEI and Cavendish, PEI were able to provide some additional insight into their unique cost recovery methods for comparison to Three Rivers. Elsewhere in Atlantic Canada, the Municipality of the County of Antigonish, Nova Scotia contributed by providing existing municipal website content pertaining to utility rate structures and cost recovery practices. The City of Mount Pearl, Newfoundland provided written feedback concerning the historicity of their rate structures.

Mount Pearl, Newfoundland

Stephanie Walsh, Legislative Officer for the Corporate Services Department, explained that the practice of charging levies for improvement projects using a “per acre” structure is a historical one, and no one she consulted at City Hall had an answer as to why it was implemented. The municipality is planning to review their levy practices as part of their planning for development under the *Housing Acceleration Project*. The rate structure may be revised following this review. It is not the “per acre” rate structure that has caused the review, but the practice of determining the cost contribution apportionment of projects – what percentage does the city pay, what does the developer pay, and what does the property owner pay – that has triggered the review.

Takeaway: Mount Pearl is not the only Newfoundland municipality who charges levies by per acre/per hectare rates. They are looking to review their levy charges, but not because of any dissatisfaction about the per acre rate structure. Three Rivers can reference various Newfoundland municipal levies, such as Mount Pearl’s, as examples of similar cost recovery methods.

The Municipality of the County of Antigonish

According to the Municipality of the County of Antigonish’s *Local Improvement By-law*, council can establish local improvement charges to fund infrastructure improvements in specific areas.³⁰ The public council minutes published on their website contain concrete examples of these applied charges.

³⁰ The Municipality of the County of Antigonish. *Local Improvement By-law*. (November 2023).

The municipality has the option to pass on local improvement charges (LIC) to property owners impacted by water and sewer extension projects. The LICs can vary in rate structure. The council has the power to set rates based on a “uniform amount for each property, property frontage, property use, area, assessed value, or any combination of two or more methods.”³¹

The municipality chooses a rate structure based on what they consider the fairest means for the affected location. Council records from recent water and sewer infrastructure projects show that all active LICs have been determined by dividing recovery costs equally amongst all impacted property owners. Owners impacted by the recent water and sewer extension projects were given the option to pay their cost portion as a lump sum or to pay it as an annual installment over 10 years.³²

Takeaway: The Municipality of the County of Antigonish’s bylaw for local improvement charges grants them the judgment of what cost recovery rate structure to apply to each capital improvement project. The council can consider frontage rates, property area, or other methods of measurement to calculate local improvement charges, and they choose based on what they feel is most appropriate for each project area. This demonstrates the importance of being adaptable in rate structure policy to best set rates for each situation and for any unique considerations existing in an impacted area.

Victoria-by-the-Sea, Prince Edward Island

Victoria-by-the-Sea, Prince Edward Island enacts a “Service Availability Charge” for water and sewer utility services for properties that can be serviced but are not currently serviced. This charge is the only unserviced property utility rate labelled as such on PEI. According to the former CAO, the charge was enacted because when they sought to implement a charge for vacant lots, there was a large subdivision that had one ownership, and the municipality felt that it would be too costly for the owner to have to pay frontage fees for all the lots. Through conversations with IRAC, the municipality determined to charge per parcel identifier numbers in order to distribute the charge in the manner they felt was fairest for Victoria’s unique situation and existing property owners.

³¹ Municipality of the County of Antigonish. *Local Improvement Charges FAQs*. (June 2018).
<https://antigonishcounty.ca/wp-content/uploads/2021/02/Local-Improvement-FAQs.pdf>

³² Municipality of the County of Antigonish. *Municipal Local Improvements Fees Policy*. (November 2020).

Takeaway: IRAC approved Victoria’s proposal to establish the best rate structure that met the needs of their particular situation and their particular residents. IRAC could do the same with Three Rivers for this project.

Rural Resort Municipality, PEI

The Rural Resort Municipality’s Cavendish Sewer Utility provides sewer services to residents of Seawood Estates. To recover costs associated with providing them service, the utility charges Seawood Estate property owners an “Infrastructure Contribution Charge.” This charge is a set rate of \$175 per lot, and the charge will remain relevant until the Seawood-related infrastructure debt has been recovered.

Takeaway: The variance of having an additional contribution charge for a specific area’s service is unique to the Cavendish Sewer Utility on PEI, and it shows, once again, that IRAC is able to accommodate the specific needs of communities by allowing variances in rate structures and cost recovery methods.

6. Conclusion

The Town of Three River's proposed cost recovery method for the Brudenell Extension is the rate structure they assert is fairest for the majority of affected property owners. They are motivated to share charges equitably amongst property owners using a method that prioritizes cost-consciousness as well as full recovery of the necessary capital costs. Most property owners—including all residential property owners—will pay less under the new rate structure than they would if the standard frontage rate was applied.

While the Town acknowledges that no PEI utility currently employs a total property area rate structure, similar rates exist elsewhere in Canada. Levies based on "per acre" rates for water and sewer infrastructure improvements are common practice in multiple Newfoundland municipalities. Moreover, the existing variation of cost recovery methods among PEI municipalities (such as uniform lot rates and special customer charges) gives precedence to alternate rate structure approval.

IRAC has the authority to order charges other than standard frontage rates and has approved alternate rate structures for other kinds of water and sewer charges in the past. Since IRAC is legislated to consider local circumstances when approving equitable and necessary utility charges, the Town's community-centric rationale for the alternate charge should be weighed and recognized appropriately in the commission's deliberations.

As it is the Town's intent to charge only what is necessary through equitable means, and as this goal aligns with IRAC's guidelines for rate setting, it is the recommendation of this report that IRAC consider approving the cost recovery rate per square foot area of PIDs for the Brudenell Extension.

7. Appendix – Compilation of Financial Projections

**TOWN OF THREE RIVERS
UTILITY RATE ANALYSIS
PROJECTED FINANCIAL STATEMENTS
FOR ONE YEAR ENDED
(Unaudited - See Notice to Reader)**

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NOTES TO THE PROJECTED FINANCIAL STATEMENTS	2

NOTICE TO READER ON THE COMPILATION OF A PROJECTION

We have compiled a financial projection of the Town of Three Rivers consisting of calculations related to scenarios for the recovery of the capital charges for the Brudenell Water and Sewer Extension Project, projected statements of income, funding breakdowns, long term debt calculations, and other calculations related to the project. including the hypotheses set out in Note 2, with an effective date of July 22, 2024, and other information provided by management. Our engagement was performed in accordance with the applicable guidance on compilation of a financial projection set out in the CPA Handbook – Assurance.

A compilation is limited to presenting, in the form of a financial projection, information provided by management and does not include evaluating the support for the assumptions including the hypotheses or other information underlying the projection. Accordingly, we do not express an opinion or any other form of assurance on the financial projection or assumptions including the hypotheses. Further, since this financial projection is based on assumptions regarding future events, actual results will vary from the information presented even if the hypotheses occur, and the variations may be material. We have no responsibility to update this communication for events and circumstances occurring after the date of this communication. This communication is intended to be used solely to support the Town's submission to Island Regulatory and Appeals Commission and is only to be referred to or distributed to Island Regulatory and Appeals Commission and Town of Three Rivers.

MRSB Chartered Professional Accountants Inc.

CHARLOTTETOWN, PE

JULY 22, 2024

**TOWN OF THREE RIVERS
UTILITY RATE ANALYSIS
PROJECTED STATEMENTS OF OPERATIONS AND NET ASSETS
FOR ONE YEAR ENDED
(Unaudited – See Notice to Reader)**

	YEAR 1
REVENUE	
Sales - Note 4(a)	<u>\$ 981,519</u>
EXPENDITURES	
Water expenses- Note 4(b)	311,385
Sewer expenses- Note 4(b)	<u>561,484</u>
	<u>872,869</u>
OPERATING SURPLUS	<u><u>\$ 108,650</u></u>

(The accompanying notes form an integral part of the projected financial statements.)

**TOWN OF THREE RIVERS
UTILITY RATE ANALYSIS
NOTES TO THE PROJECTED FINANCIAL STATEMENTS
FOR ONE YEAR ENDED
(Unaudited – See Notice to Reader)**

1. Basis of Preparation

Town of Three Rivers (“the Town”) was incorporated under the Municipalities Act of Prince Edward Island. Its principal activities include the provision of local government services to residents of the incorporated area. The Town is a non-profit organization under the Income Tax Act and accordingly is exempt from income taxes, provided certain requirements of the Income Tax Act are met. These projections do not include all assets, liabilities, revenues and expenses of the Town operations. These projections only include assets, liabilities, revenues and expenses of the water and sewage operations within the Town’s incorporated area.

In view of uncertainties inherent in predicting future conditions and actions, actual results achieved for the period will vary from the information presented and the variations may be material.

2. Hypotheses

The projection is based on the following hypotheses:

- Engineering costs will not change with the addition of Phase 2 construction to Phase 1 construction.
- 90% of unfunded capital will come from customer charges, while 10% will come from the utility.
- The total frontage to be serviced by the Town under Phase 1 & 2 construction will be 11,220 feet as provided by the client.
- The total square footage to be serviced under Phase 1 & 2 will be 7,333,593 square feet as provided by the client.

**TOWN OF THREE RIVERS
UTILITY RATE ANALYSIS
NOTES TO THE PROJECTED FINANCIAL STATEMENTS
FOR ONE YEAR ENDED
(Unaudited – See Notice to Reader)**

3. Significant Accounting Policies

The accounting policies of the Town are in accordance with Canadian Accounting Standards for the Public Sector and are applied on a basis consistent with that of the preceding year. Outlined below are those policies considered particularly significant.

a) Capital Assets

Tangible capital assets are stated at cost which includes all amounts that are directly attributable to acquisition, construction, development or betterment of the asset. The cost, less residual value, of the tangible capital assets is amortized over the estimated useful life on a straight-line basis as follows:

Land improvements	25 years
Buildings	40 years
Equipment	10 years
Motor vehicles	10 years
Computer hardware	5 years
Water and sewer system	1.2% and 2%
Pumping equipment	5%

Amortization rates for the Utilities were established using the estimated useful life of the asset in accordance with the Island Regulatory and Appeals Commission guidelines.

Tangible capital assets acquired during the year but not placed into use are not amortized until they are placed into use.

One-half of the annual rate is recorded in the year of acquisition; no amortization is recorded in the year of disposal

b) Contributions

Contributions are recognized using the deferral method. Under this method restricted contributions for which externally imposed restrictions remain unfulfilled are accumulated as deferred contributions in the statement of financial position. Restricted contributions for the purchase of capital assets that will be amortized are deferred and recognized as revenue on the same basis as the amortization expense related to the acquired capital assets.

c) Revenue recognition

Water and Sewer dues are charged based on rates approved by the Island Regulatory and Appeals Commission (IRAC). These charges are assessed quarterly for Montague Water and Sewer Utility and triennially for Georgetown Sewer Corporation and are recognized when billings come due.

The Town follows the deferral method of accounting for grants and contributions. Restricted contributions are recognized as revenue in the year in which the related expenditures are incurred, with recognition of excess amounts being deferred until the related expenditures are incurred. Unrestricted contributions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

**TOWN OF THREE RIVERS
UTILITY RATE ANALYSIS
NOTES TO THE PROJECTED FINANCIAL STATEMENTS
FOR ONE YEAR ENDED
(Unaudited – See Notice to Reader)**

4. Summary of Significant Assumptions

a) Revenue

Revenue figures have been provided by the client and are separated between Water and Sewage services offered.

Revenue	Year 1
Sewer revenue	\$ 596,292
Water revenue	<u>385,227</u>
Total	<u>\$ 981,519</u>

Sewer revenue- revenues have been provided by the client and reflect 2023 actuals plus the inclusion of the proposed changes including “Deemed Usage Sewer” revenue.

<i>Sewer revenue</i>	Year 1
Sewer Flat Rate Residential Revenue	\$ 276,759
Sewer Flat Rate Commercial Revenue	34,893
Sewer Metered Revenue	219,114
Sewer Other Revenues	21,869
Deemed Usage Sewer	6,642
Sewer Operational Fees	8,000
Municipal Capital Expenditure Grant	11,684
Sewer Delayed Payment Charge	5,332
Gax Tax Revenue	<u>11,999</u>
<i>Total Sewer revenue</i>	<u>\$ 596,292</u>

Deemed Usage Sewer: revenues have been estimated based on proportionate unit estimates provided by the client multiplied by the sewer rate per unit provided by the client.

Water revenue- revenues have been provided by the client and reflect 2023 actuals plus the inclusion of the proposed changes including “Deemed Usage Water”.

<i>Water revenue</i>	Year 1
Unmetered Water Residential Revenue	\$ 151,454
Unmetered Water Commercial Revenue	12,470
Metered Water Revenue	115,068
Deemed Usage Water	3,650
Fire Protection Revenue	63,391
Water Delayed Payment Charge	5,256
Water Other Revenues	2,255
Sewer Operational Fees	8,000
Municipal Capital Expenditure Grant	11,684
Gax Tax Revenue	<u>11,999</u>
<i>Total Water revenue</i>	<u>\$ 385,227</u>

Deemed Usage Water: revenues have been estimated based on proportionate unit estimates provided by the client multiplied by the water rate per unit provided by the client.

**TOWN OF THREE RIVERS
UTILITY RATE ANALYSIS
NOTES TO THE PROJECTED FINANCIAL STATEMENTS
FOR ONE YEAR ENDED
(Unaudited – See Notice to Reader)**

4. Summary of Significant Assumptions (continued)

b) Expenditures

Expenditures have been provided by the client and are separated between administrative expenditures and Operating Expenditures relating to the Sewer and Water services offered.

Sewer	Year 1
Administrative expenses	\$ 293,885
Operating expenses	<u>267,599</u>
Total	<u>\$ 561,484</u>

Administrative- Expenditures have been provided by the client and reflect 2023 actuals plus the inclusion of interest associated with the Long-Term debt discussed below.

<i>Administrative- Sewer</i>	Year 1
Contractual Expense - Audit	\$ 2,500
Administrative Fees	11,550
Insurance	5,116
Contractual Expenses - Legal	1,029
Miscellaneous Expense	2,784
Administrative Salaries	38,700
Administrative Office Expense	1,334
Administration Membership Dues	138
Interest & Bank Charges	845
Regulatory Commission Expense	5,152
Administration - Telephone	2,513
Amortization	159,946
Interest on Long-Term Debt (new)	41,443
Interest on Long-Term Debt	<u>20,835</u>
<i>Total</i>	<u>\$ 293,885</u>

Operating- Expenditures have been provided by the client and reflect 2023 actuals resulting from ongoing operations of sewer services provided.

<i>Operating- Sewer</i>	Year 1
Operational Power & Electricity	\$ 55,021
Operational Wages	106,359
Operational Materials & Supplies	51,202
Operational Training & Development	1,799
Operational Testing	3,565
Operational Repairs & Maintenance	43,720
Operational Vehicle Expense	3,085
Operational Sludge Trucking	<u>2,849</u>
<i>Total</i>	<u>\$ 267,599</u>

**TOWN OF THREE RIVERS
UTILITY RATE ANALYSIS
NOTES TO THE PROJECTED FINANCIAL STATEMENTS
FOR ONE YEAR ENDED
(Unaudited – See Notice to Reader)**

4. Summary of Significant Assumptions (continued)

Water	Year 1
Administrative expenses	\$ 177,517
Operating expenses	133,868
Total	<u>\$ 311,385</u>

Administrative- Expenditures have been provided by the client and reflect 2023 actuals plus the inclusion of interest associated with the Long-Term debt discussed below.

<i>Administrative- Water</i>	Year 1
Administration Dues and Fees	\$ 588
Contractual Expense - Audit	2,500
Administrative Fees	11,550
Insurance	8,049
Contractual Expenses - Legal	372
Miscellaneous Expense	3,098
Administrative Salaries	38,700
Administrative Office Expense	1,472
Interest & Bank Charges	798
Regulatory Commission Expense	5,152
Administration - Telephone	1,223
Amortization	67,736
Interest on Long-Term Debt (new)	24,029
Interest on Long-Term Debt	12,249
<i>Total</i>	<u>\$ 177,517</u>

Operating- Expenditures have been provided by the client and reflect 2023 actuals resulting from ongoing operations of sewer services provided.

<i>Operating- Water</i>	Year 1
Operational Power & Electricity	\$ 37,072
Operational Wages	60,814
Operational Materials & Supplies	8,844
Operational Training & Development	2,937
Operational Repairs & Maintenance	12,450
Operational Chemicals	3,477
Transportation Expense	-
Operational Vehicle Expense	3,364
Operational Testing	88
Operational Water Testing	4,821
<i>Total</i>	<u>\$ 133,868</u>

**TOWN OF THREE RIVERS
UTILITY RATE ANALYSIS
NOTES TO THE PROJECTED FINANCIAL STATEMENTS
FOR ONE YEAR ENDED
(Unaudited – See Notice to Reader)**

4. Summary of Significant Assumptions (continued)

c) Capital Expenditures

Capital expenditures include engineering and construction costs associated with the design and development of proposed plans. Costs have been provided for phase 1 of the project and is assumed that engineering costs will not change with the addition of phase 2. It is assumed the incremental cost of phase 2 will be equal to the cost allocation for water and sewer services determined in phase 1.

Cost Summary

Construction cost	\$ 6,343,203
Engineering cost	<u>336,000</u>
Subtotal	6,679,203
Tax	<u>1,001,880</u>
Total	<u>\$ 7,681,083</u>

Capital expenditures have been allocated based on the service applicable with proportions being used to determine applicable funding and financing further discussed below:

Category	Description	Water	Sewer	Total
Engineering Cost	Engineering	168,000	168,000	336,000
Construction Cost	Removals	-	312,024	312,024
Construction Cost	Accommodation of Existing System	-	-	-
Construction Cost	Locate + Accommodate Existing	21,929	21,929	43,859
Construction Cost	Connect Existing Watermain	12,531	-	12,531
Construction Cost	Connect Existing Sanitary	-	18,797	18,797
Construction Cost	Sanitary Sewer Main	-	820,129	820,129
Construction Cost	Sanitary Forcemain	-	226,873	226,873
Construction Cost	Sanitary Manhole	-	142,760	142,760
Construction Cost	Sanitary Sewer Services	-	386,321	386,321
Construction Cost	Submersible Pumping Station	-	1,075,658	1,075,658
Construction Cost	CCTV Inspection	-	14,808	14,808
Construction Cost	Watermain	1,220,692	-	1,220,692
Construction Cost	Water Valves	99,783	-	99,783
Construction Cost	Fire Hydrant + Valve	86,277	-	86,277
Construction Cost	Water Services	282,673	-	282,673
Construction Cost	Remove/Replace Unsuitable	26,629	26,629	53,257
Construction Cost	Reinstatement	481,127	962,253	1,443,380
Construction Cost	Environmental Protection	43,859	43,859	87,718
Construction Cost	Clear Stone Pipe Bedding	<u>7,832</u>	<u>7,832</u>	<u>15,664</u>
Total Cost		2,451,331	4,227,872	6,679,203
Tax		<u>367,700</u>	<u>634,181</u>	<u>1,001,880</u>
Total All-In Cost		<u>\$ 2,819,030</u>	<u>\$ 4,862,053</u>	<u>\$ 7,681,083</u>

Proportion

37%

63%

**TOWN OF THREE RIVERS
UTILITY RATE ANALYSIS
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(Unaudited – See Notice to Reader)**

4. Summary of Significant Assumptions (continued)

d) Funding

Fund	Amount	Water	Sewer	Total
ICIP - Provincial Portion	33%	\$ 726,333	\$ 1,252,725	\$ 1,979,058
ICIP - Federal Portion	40%	871,687	1,503,421	2,375,107
HST Rebate	33%	122,567	211,394	333,960
MCEG	10%	245,133	422,787	667,920
Gas Tax		470,224	811,007	1,281,231
Total Funding		<u>\$ 2,435,944</u>	<u>\$ 4,201,334</u>	<u>\$ 6,637,278</u>

ICIP - Provincial Portion: It is assumed that eligible project costs for the purpose of ICIP funding is the total construction cost plus tax less the HST rebate. It was indicated by the client that this funding is based on the Phase 1 construction costs only (not Phase 1 & 2). This funding is 33% of eligible costs from Phase 1 in the amount of \$5,937,769, resulting in a total contribution of \$1,979,056.

ICIP - Federal Portion: It is assumed that eligible project costs for the purpose of ICIP funding is the total construction cost plus tax less the HST rebate. It was indicated by the client that this funding is based on the Phase 1 construction costs only (not Phase 1 & 2). This funding is 40% of eligible costs from Phase 1 in the amount of \$5,937,769, resulting in a total contribution of \$2,375,107.

HST Rebate: It is assumed that a 33% tax rebate will be received on the \$1,001,880 during Phase 1 & 2 construction resulting in a rebate of \$333,960.

MCEG: It is assumed that 10% of capital costs from Phase 1 & 2 in the amount of \$6,679,203 will be received resulting in a total contribution of \$667,920.

CCBF (Gas Tax): The gross incremental cost of concurrent Phase 1 & 2 construction compared to Phase 1 only is for \$1,281,231. This amount is assumed to be funded by the CCBF.

The unfunded portion of capital costs will result in the Town incurring long-term debt in the amount of \$1,043,806.

	Water	Sewer	Total
Capital Cost	2,819,030	4,862,053	7,681,083
Total Funding	<u>2,435,944</u>	<u>4,201,334</u>	<u>6,637,278</u>
Financing required	<u>\$ 383,087</u>	<u>\$ 660,719</u>	<u>\$ 1,043,806</u>

e) Long-term debt

	YEAR 1
Term Loan: 6.32% term loan of \$1,043,805.75, 25-year term. Repayable in blended monthly installments of \$6,931.55.	<u>1,026,099</u>
Current portion	<u>18,859</u>
	<u>\$ 1,007,240</u>

**TOWN OF THREE RIVERS
UTILITY RATE ANALYSIS
NOTES TO THE PROJECTED FINANCIAL STATEMENTS
FOR ONE YEAR ENDED
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4. Summary of Significant Assumptions (continued)

f) Unfunded Capital

It is assumed the unfunded portion of capital costs will not change from phase 1 costs provided by the client with incremental costs being offset by MCEG funding. The unfunded capital portion of \$1,043,806 financed over a 25-year period will be funded by the utility itself and customers. It is assumed the utility will have a 10% impact on the total unfunded capital costs in the amount of \$104,381 and the customers will offset the remaining 90% of the total unfunded capital costs in the amount of \$939,425.

	Water	Sewer	Total
Unfunded Capital	\$ 383,087	\$ 660,719	\$ 1,043,806
Utility (10%)	38,309	66,072	104,381
Customers (90%)	344,778	594,647	939,425
Allocation	37%	63%	100%

Four scenarios have been provided using either a one-time rate or an annual rate to determine the required charge to customers to offset the remaining \$939,425 of unfunded capital.

Scenario 1- One time rate: A one-time rate billed to customers has been determined based on the frontage of serviceable land using total feet of 11,220 as provided by the client.

	Water	Sewer	Total
Customer allocation	\$ 344,778	\$ 594,647	\$ 939,425
Frontage	<u>11,220</u>	<u>11,220</u>	<u>11,220</u>
Rate per foot	<u>\$ 30.73</u>	<u>\$ 53.00</u>	<u>\$ 83.73</u>

Scenario 2- One time rate: A one-time rate billed to customers has been determined based on the square footage of serviceable land using the total square footage of 7,333,594 as provided by the client.

	Water	Sewer	Total
Customer allocation	\$ 344,778	\$ 594,647	\$ 939,425
Square footage	<u>7,333,594</u>	<u>7,333,594</u>	<u>7,333,594</u>
Rate per square foot	<u>\$ 0.05</u>	<u>\$ 0.08</u>	<u>\$ 0.13</u>

Annual payments- It is assumed the annual customer fee will offset principal payments relating to the unfunded capital. The annual payments have been allocated to each service (water and sewer) based on the allocation of the total unfunded balance identified above.

	Water	Sewer	Total
Total square footage	7,333,594	7,333,594	7,333,594
Allocation	<u>37%</u>	<u>63%</u>	<u>100%</u>
Annual Principal	13,791	23,786	37,577

**TOWN OF THREE RIVERS
UTILITY RATE ANALYSIS
NOTES TO THE PROJECTED FINANCIAL STATEMENTS
FOR ONE YEAR ENDED
(Unaudited – See Notice to Reader)**

4. Summary of Significant Assumptions (continued)

f) Unfunded Capital (continued)

Scenario 3- Annual rate: An annual rate has been determined based on the frontage of serviceable land using the total feet of 11,220 as provided by the client.

	Water	Sewer	Total
Principal charge	\$ 13,791	\$ 23,786	\$ 37,577
Frontage	<u>11,220</u>	<u>11,220</u>	<u>11,220</u>
	<u>\$ 1.23</u>	<u>\$ 2.12</u>	<u>\$ 3.35</u>

Scenario 4- Annual rate: An annual rate has been determined based on the square footage of serviceable land using the total square footage of 7,333,594 as provided by the client.

	Water	Sewer	Total
Customer allocation	\$ 13,791	\$ 23,786	\$ 37,577
Total square footage	<u>7,333,594</u>	<u>7,333,594</u>	<u>7,333,594</u>
Rate	<u>\$ 0.00</u>	<u>\$ 0.00</u>	<u>\$ 0.01</u>