



Town of Eckville Wastewater Services Continuation Strategy

Public Engagement Presentation

October 5, 2023



Wherever business takes you

MNP.ca



KINCENTRIC
Best Employer
CANADA 2019

Overview

Project Background

Options Analysis: Key Considerations

Current State and Governance Options

Key Criteria Analysis

Financial Analysis

Additional Considerations

Overall Conclusion

Project Background

MNP was engaged by the Town of Eckville (the Town) to review, analyze and compare two wastewater service governance options to support a continuing strategy for their wastewater services.

The current wastewater treatment facility (WWTF) requires significant upgrades to meet current and anticipated environmental compliance standards, as well as future storage capacity demands. The Town had identified two potential options: continue operating a standalone wastewater service (status quo) or joining the Sylvan Lake Regional Wastewater Commission (the Commission).

The Town sought to understand the potential governance and financial impacts of both options. The Town expressed particular interest in gaining a comprehensive understanding of how each option could potentially impact the utility rates and bills of its residents, both in the present and in the future.

MNP conducted the following steps to support the Town's understanding of each option and captured the findings in a final report:



1. Data Collection and Initial Analysis

MNP reviewed background materials and previously completed reports.



2. Options Analysis

MNP developed and delivered a workshop to discuss implications of the governance models.



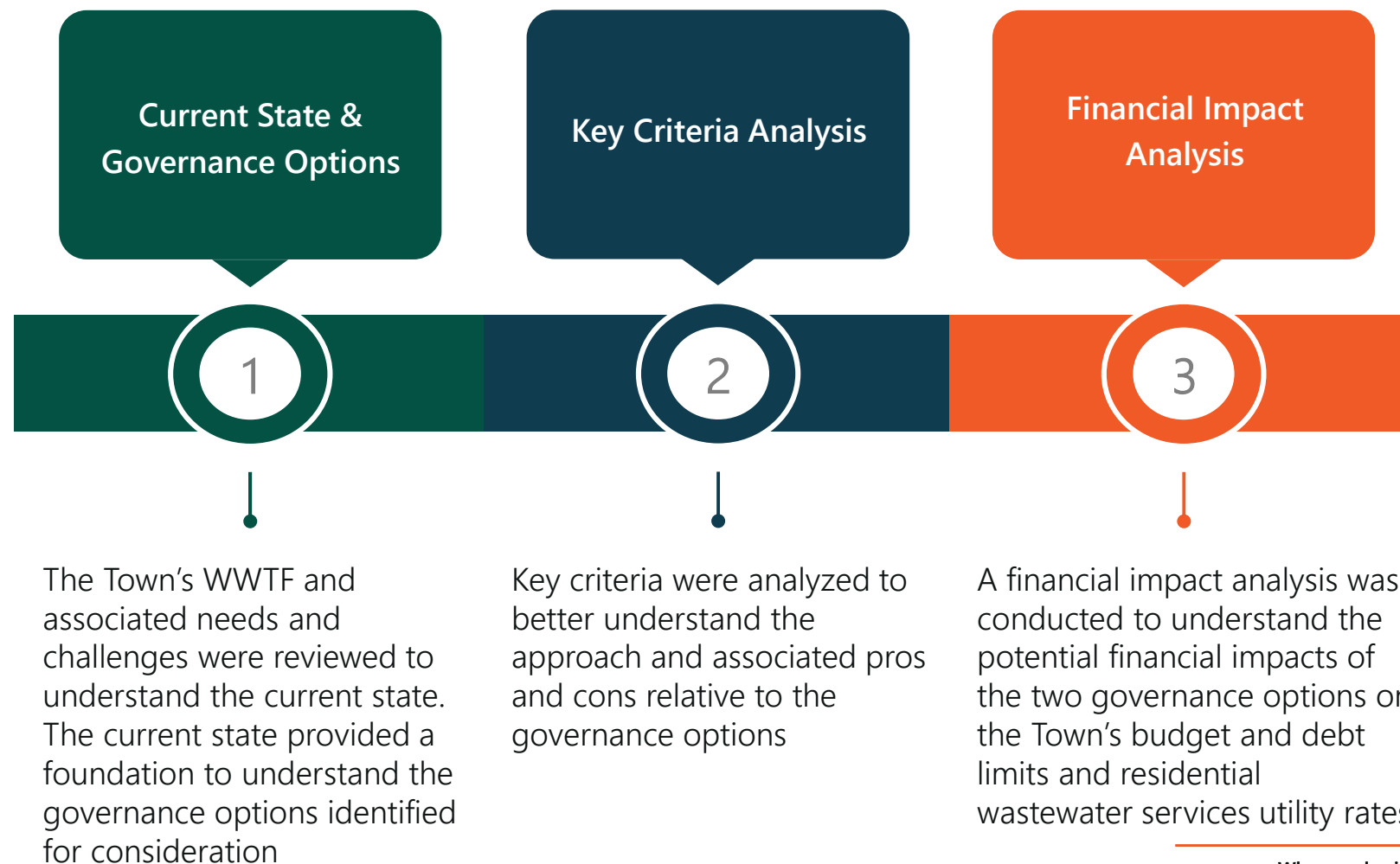
3. Recommendations and Reporting

MNP summarized the research and analysis and drafted a report with an analysis and key findings.



Options Analysis: Key Considerations

The following diagram summarizes the key considerations with reviewing potential governance models:



Current State and Governance Options

The following provides an overview of the Town’s current state that acts as a foundation to understanding the viability of the potential governance options to manage the Town’s wastewater services

Wastewater Infrastructure Current State

The Town currently operates a standalone wastewater service under existing regulations and is experiencing, anticipates and needs to address the following challenges:

- The facility’s current storage capacity falls short of projected demand.
- Infiltration and inflow (I&I) issues have been detected, leading to increased water volume in the system.
- New regulations also require the Town to conduct a Receiving Water Quality Assessment (RWQA) Study to set new AEP discharge limits that will reflect the Town’s specific context; it is anticipated these discharge limits will be stricter than current limits.

The Town needs to take action to meet current and anticipated environmental compliance standards as well as future storage capacity demands.

Governance Options Available to the Town

To address the current and anticipated WWTF needs, the below options have been identified:

Option 1: Standalone Wastewater Upgrade Options

- Option 1: Upgrade current lagoon, add storage cell*
- Option 2: Major lagoon upgrade with Sequencing Batch Reactor
- Option 3A: Option 2 with conversion of existing cells to storage
- Option 3B: Option 3A with additional storage

**Note: this upgrade may not comply to the discharge limit and as such, may not be feasible option.*

Option 2: Join the Commission

The Commission has informally engaged the Town to consider joining the Commission.

The Commission has recently developed infrastructure extension plans and included the Town as part of its planning. The plans include internal Town line upgrades, a line from the Town of Sylvan Lake to Half Moon Bay, connections to the Shores (on Sylvan) and Half Moon Bay with additional lift stations, and an extension to the Town with an Eckville Regional Lift Station (replacing the current Lift Station #2).

The proposed extension timelines include the Town joining the Commission in 2024; for scheduled construction to be underway by 2025; and for the Town to receive services by 2026.

Regardless of which governance option is selected, the following factors and results remain:

- *Environmental compliance standards must be met*
- *Infrastructure upgrades will need to be completed to address inflow and infiltration inefficiencies*
- *Wastewater utility rates will increase*

Key Criteria Analysis

Nine key criteria have been analyzed from the perspective of the Town with consideration of the two governance options and the associated pros and cons of those options:

Operational Autonomy: What level of independence will the operating entity have from the participating parties?

Borrowing Ability: Does the service provider have the ability to take on debt?

Liability/Risk: How does the governance model protect or expose participating parties to risk and liability?

Agility: How effectively does the model support resilient operations and flexible decision-making?

Asset Ownership: What agreements/arrangements will need to be in place to ensure effective asset ownership and management? Does the service provider need to own land and property? Will the service provider need to have the ability to expropriate land?

Legal Powers: Does the service provider need to have natural person powers?

Potential for Longer-Term Expansion: Are there limitations to the physical span of the services? How does the model accommodate the addition of new users/partners?

Relationships: What governance model would ensure the sustainable relationship of the involved parties?

Mandate: Will services be provided as a business? Should the service be a non-profit entity or a for-profit entity?

Key Criteria Analysis | Standalone Operation

The Town currently operates a standalone WWTF under existing regulations. The below provides the pros and cons of maintaining standalone services:

Pros

- As a standalone operation, the Town would retain full decision-making, ownership and operational control over all aspects of wastewater services. This would allow for:
 - Close monitoring of all operational services provided to ensure the Town's needs are reflected
 - Control over all decision-making to address emerging issues and maintain business continuity
 - Control over the decision of expanding/upgrading services
 - Retention of natural person powers, allowing for Town independence and control
 - Complete management over all relationships

Cons

- However, as a standalone operation, the Town would also:
 - Retain all asset and infrastructure responsibilities, risks and costs and liabilities.
 - Take on all debt incurred. While the Town can apply for grants, the Town would also bear the full burden of borrowing which would likely exceed debt limits.
 - Bear the financial, capacity, operations and maintenance, and governance risks
 - Experience potential capacity limitations to address emerging issues and maintain business continuity

Key Criteria Analysis | Commission

As an organization, the Commission currently operates on a 'cost-recovery' basis and has its own ability to borrow, take on debt and apply for grants. The below provides the pros and cons of becoming a Commission member:

Pros

- As a Commission member, the Town would:
 - Share risks with other members as per Commission's bylaws; the Commission assumes risks beyond the Town's custody points.
 - Have opportunity to collaborate and pool resources with other members.
 - Potentially have upgrades to infrastructure within the Town's custody points supported by government funding dedicated to regional organizations
 - Continue to exercise ownership and management over its own assets within its 'custody points' but would not need to own or manage overall Commission assets.
 - Have input towards new member additions and expansion of services and decision-making

Cons

- As a Commission member, the Town would also:
 - Share decision-making with other Commission members
 - Have limited influence over day-to-day operations and decision-making.
 - Have limited agility to respond to local priorities or emerging issues as per governing parameters set by Commission (ie. limited influence/involvement in day-to-day operations).
 - Share 3.8% of the total assets of the Commission, including the risks and costs associated with them
 - Share the Commission's debt with other members and if the Town withdrew its membership, it would remain accountable for its share of the debt.
 - Support capacity upgrades and increased debt to support an expansion; however, the increased debt would be proportional to each member and an expansion would likely be supported by significant grant funding.

Financial Impact Analysis

A financial impact analysis was conducted on the two governance options for the Town’s wastewater services including the upgrade options associated with the standalone operations. For reference, the below table describes the engineering outcomes associated with each option:

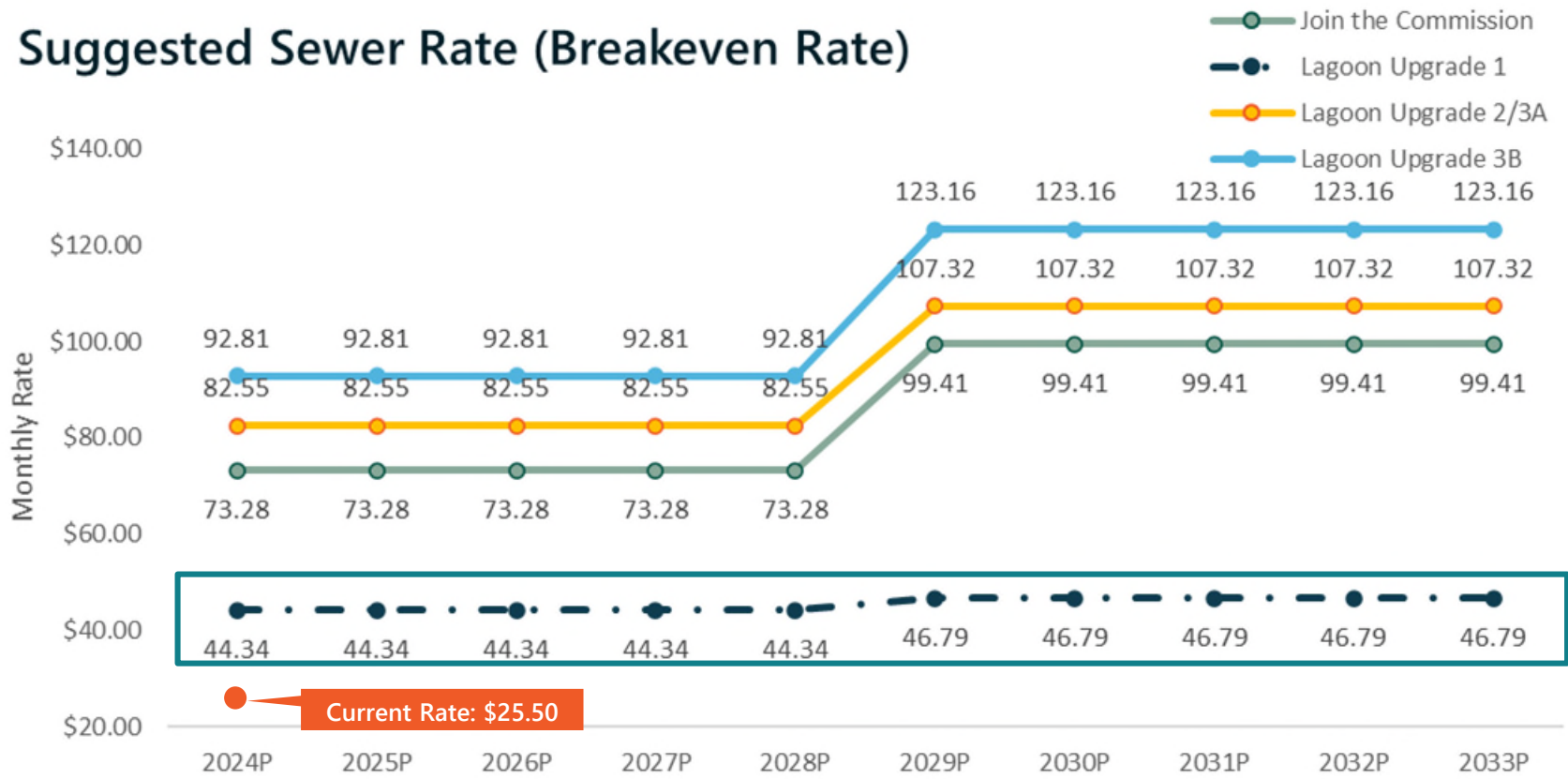
Governance Option	Joining the Commission	Standalone, WWTF Upgrade Option 1	Standalone, WWTF Upgrade Option 2	Standalone, WWTF Upgrade Option 3A	Standalone, WWTF Upgrade Option 3B
Engineering Outcome	<ul style="list-style-type: none"> Decommission Town lagoons and pass custody of wastewater to be treated at lift station to the Commission. 	<ul style="list-style-type: none"> Enhanced lagoon efficiency, safety and winter performance. An additional storage cell added. 	<ul style="list-style-type: none"> Major lagoon upgrade for stricter discharge limits. A Sequencing Batch Reactor (SBR) is added. Flow-through design is used. 	<ul style="list-style-type: none"> A storage cell is added to Option 2 and two aerated cells are converted to storage. 	<ul style="list-style-type: none"> Extra storage is added to Option 3A.

The following factors were considered when conducting the financial impact analysis on the governance options:

The Town’s financial metrics	The Town’s WWTF related metrics	Current State
Long-term Debt	Monthly Wastewater Service Rate	\$25.50 per household
Annual Debt Servicing	Current wastewater flow (measured)	523 m ³ Daily Flow
Remaining Debt Limit Available	Current lagoon storage volume	100,000 m ³

Financial Impact Analysis | Rate Change Overview

The figure below identifies the extent to which the monthly wastewater services utility rate changes for each option:



Variables:

- The analysis assumes that the Town and the Commission will adjust its sewer/wastewater rate every 5 years.
- The rate charged to the Town residents will cover 100% of the costs associated with providing the wastewater services.
- No capital reserve contribution has been included in the rate projections.

Note: Lagoon Upgrade 1 may not comply with the discharge limit and as such, may not be a feasible option.

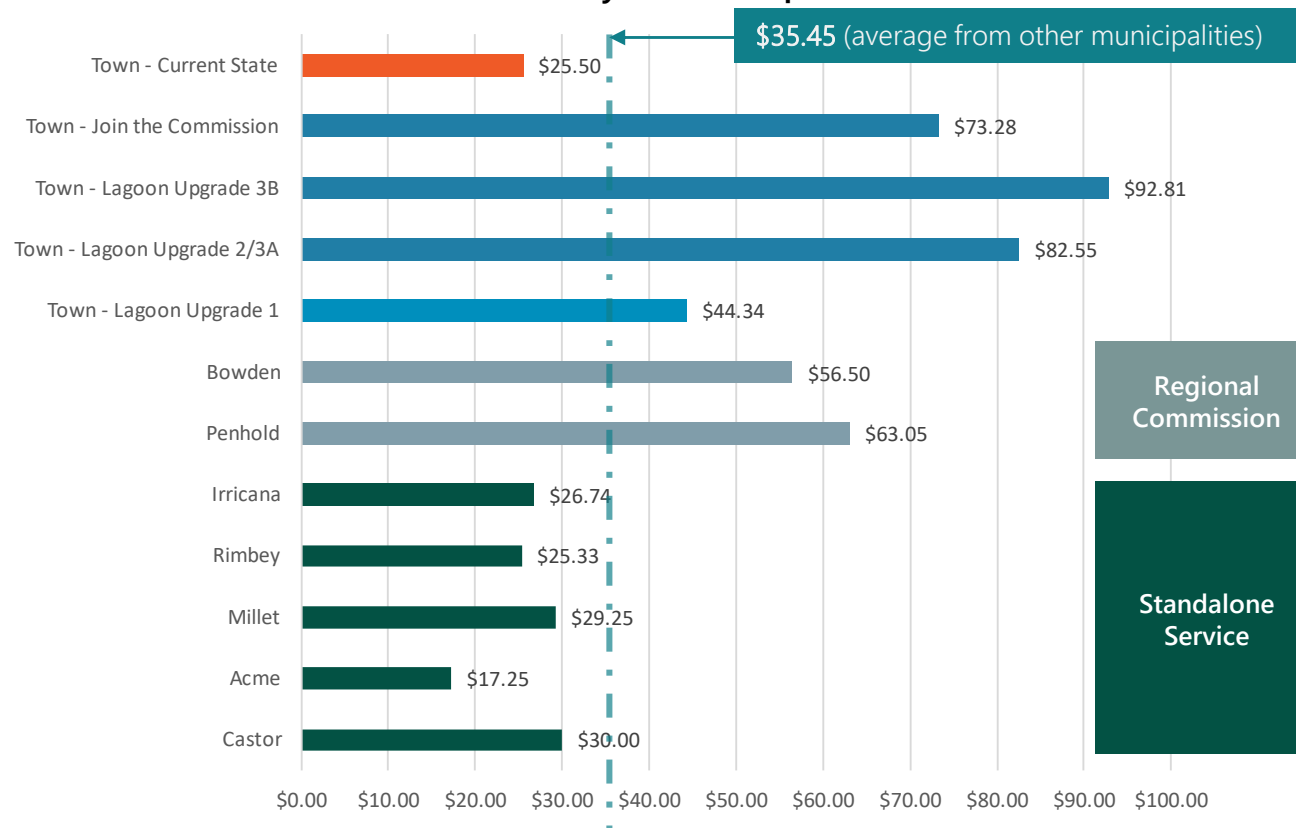
Financial Impact Analysis | Peer Comparison

The below provides a wastewater rate comparison with other municipalities with similar populations

Municipalities with similar population

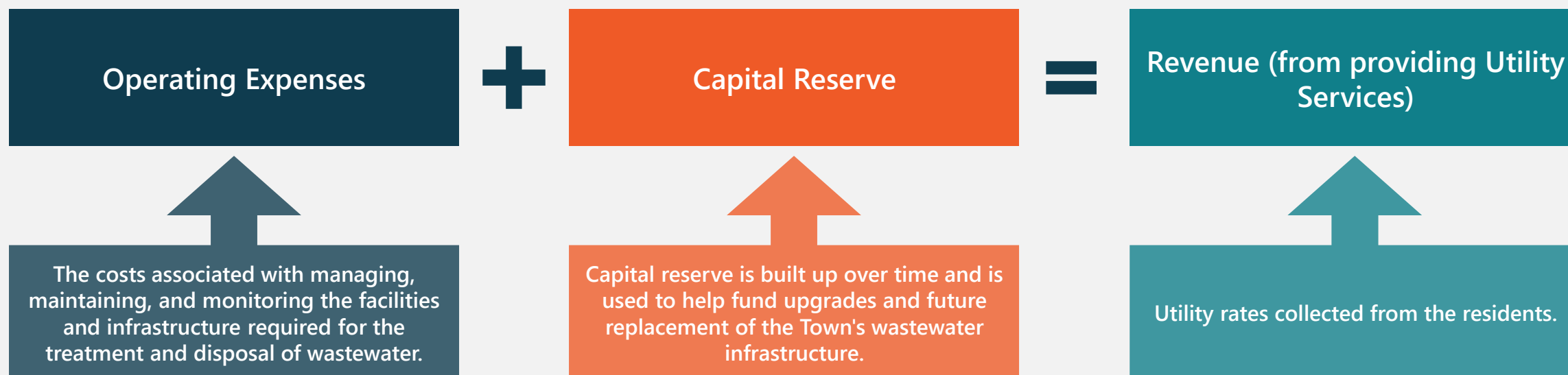
Town	Approx. Population	Fixed	Variable \$/m3 water	Estimated Per Unit Consumption
Castor*	1100	\$30.00	\$0.00	0 m3
Acme	600	\$9.00	\$0.55	15 m3
Millet	1900	\$29.25	\$0.00	0 m3
Rimbey	1500	\$4.69	\$2.10	15 m3
Penhold	1400	\$11.00	\$3.47	15 m3
Bowden	1240	\$18.40	\$4.72	15 m3
Irricana**	1200	\$10.00	\$1.12	15m3
Average				\$35.45

Estimated Monthly Rate Comparisons



Additional Considerations

Utility Services should be fully self sufficient, including fully funded capital reserve. The guiding principle is “user pays” – those who use the service pay for the service.



Overall Conclusion

Based on the due diligence exercises undertaken, joining the Commission appears to be a viable option for managing the Town's wastewater services. Joining the Commission would require the Town to share decision-making with other Commission members.

~VS~

In comparison, the **standalone WWTF** upgrade options may not satisfy environmental compliance standards and/or would require the Town to take on substantial debt / exceed debt limits. If sufficient debt / funding could be secured, standalone WWTF upgrade options would enable the Town to retain full control of decision-making.

Overall Conclusion

To support the overall conclusion, a summary of the Final Report key findings are available below:

1

The wastewater service rates will be higher

Regardless of which option the Town decides to pursue, the Town's wastewater service rate will need to be increased to cover the costs to comply with current and anticipated environmental compliance standards, which includes addressing current inflow and infiltration inefficiencies, and to establish and maintain a cost-recovery model.

2

Joining the Commission is a viable option

Joining the Commission requires the second lowest rate increase and less capital reserve funding relative to all other options. The Commission is currently compliant with regulatory requirements and will be responsible for maintaining compliance going forward.

3

Upgrade option 1 is the least costly but it will not meet the regulatory requirement

The lagoon upgrade option 1 offers the lowest wastewater service rate increase for residents, but it is not anticipated to meet the more stringent discharge requirements; thus, **option 1 is not viable.**

4

Upgrade options 2, 3A & 3B significantly increase the wastewater service rate

These options will lead to a more than 200% increase in the current wastewater service rate due to the combination of larger debt servicing and higher operating costs. These options will also meet the more stringent discharge requirements.

5

Upgrade options 2, 3A & 3B comply with the more stringent discharge requirements

The rest of the options (2, 3A, 3B) comply with the more stringent discharge requirements but the amount of funding required to fund these options will exceed the Town's debt limit.

6

Capital reserve fund should be considered

It is recommended to build and maintain a higher capital reserve to help fund upgrades and future replacement of the Town's wastewater infrastructure, as this is considered a best practice. Options 2, 3A, and 3B would necessitate a higher reserve as there is currently little to no utility capital reserve available. Furthermore, increasing the utility asset portfolio would increase the maintenance and replacement required which would necessitate a sufficient capital reserve fund to be built and maintained.



Questions?



KINCENTRIC
Best Employer

CANADA 2019



Wherever business takes you

MNP.ca