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WATER AND WASTEWATER SERVICE DELIVERY REVIEW

TOWNSHIP OF SOUTH STORMONT

SUBMITTED TO:
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LIMITATIONS OF THE REVIEW

This review does not constitute an audit or assessment from a legal, or engineering compliance perspective. As such, Aureus Solutions Inc. does not make any legal, or engineering recommendations.

EXECUTIVE SUMMARY

There are ever-increasing expectations for governments to make informed choices about the services they provide to their citizens. This is evident for municipalities whether facing times of positive economic growth or periods of fiscal constraint.

Service delivery review is an evaluation process in which a specific municipal service is systematically reviewed to determine the most appropriate way to provide it.

The service delivery review process focuses on setting priorities and, where possible, reducing the cost of delivery while maintaining or improving services and service levels. It's all about making informed, strategic choices that are affordable and reflect municipal values that draw on best practices in service delivery.

For water and wastewater services there many different management and operating models available for municipal consideration and they are discussed in this report. Some municipalities hire external contractors to operate their water and wastewater systems, whereas others own and operate their systems. Currently, most water and wastewater services in Ontario are provided through municipal departments, with oversight provided directly by municipal councils. While the municipal department model makes up the majority, there are differences between them, primarily to what degree outside support is required. It is only the large municipalities who can support all functions (engineering, trades, construction, management, and operations) internally.

After review of the various options, this report distills those considerations down to two (2) potential options for discussion and analysis. The first would be a shared services model formalized in a Joint Municipal Services Board (JMSB) with the Township of South Glengarry, another municipal partner(s), or , and secondly for the Township to continue the management and operations externally with contracted services provided by Caneau Water and Sewer Operations.

The financial review of the current service delivery model has been undertaken in the context of the Township's 2019 Water and Wastewater Rate Study. The 2019 Study considered the forecast capital and operating costs over the period to 2029 and recommended billing rates to fund the annual operating costs and average annual long-term capital costs of the systems to provide for

sustainable service delivery. For the purpose of this assessment, the 2019 rate study has been updated to include the Township's 2022 budgeted operating costs and updated operating budget inflation assumption (i.e. 3% per annum). Furthermore, in review of the changes in water and wastewater reserve balances between 2019 and 2022, it appears that the Township has not incurred the capital expenditures that were anticipated in the 2019 rate study as the reserve balances are greater than what was forecast. As such, the forecast reserve balances and capital needs have been included in this assessment so as not to understate the anticipated capital needs over the forecast period.

This analysis can be found in Appendix 1-Options Financial Analysis Forecast.

The report recommends the following for Council consideration:

- Facilitate discussions with South Glengarry staff and Council (and other neighboring municipal partners), as well as the current service provider (Caneau) for the potential to entering into a Joint Municipal Services agreement for the provisions of water and wastewater services; or
- Initiate discussions with the current services provider to update, refresh, and revise the original contract to address the concerns, gaps and realities of current and future realities.

Regardless of the model, the *Safe Drinking Water Act, 2002* sets out the legal responsibilities and duties of persons who oversee municipal drinking water systems. These responsibilities and duties are commonly described as "standard of care" and apply to any person who exercises decision-making authority over a municipal drinking water system or who oversees the accredited operating authority of such a system.

The statutory standard of care continues to apply to municipalities that contract out this role to a third party.

INTRODUCTION

Aureus Solutions, in partnership with Watson and Associates were retained to complete a service delivery review to identify and evaluate the options available to the Township for management and operation of the water and wastewater systems having regard for best practices identified within this sector, level of service, and cost.

The Project Team consisted of Doug Thompson (Aureus Solutions), Sean-Michael Stephens (Watson and Associates) and Town staff, including the Chief Administrative Officer and the Director of Public Works.

South Stormont is a township in eastern Ontario, Canada, in the United Counties of Stormont, Dundas and Glengarry. It is located 53 kilometres (33 mi) southeast of Ottawa. The township was established on January 1, 1998, with the amalgamation of the former Townships of Cornwall and Osnabruck.

South Stormont borders on but does not include the city of Cornwall. Cornwall and Osnabruck were two of the original eight "Royal Townships" established along the Saint Lawrence River in Upper Canada.

This area was first settled by members of Sir John Johnson's King's Royal Regiment of New York and became Stormont County in 1792.

The Lost Villages, ten ghost towns which were flooded by the construction of the Saint Lawrence Seaway in 1958, were located in the former Cornwall and Osnabruck Townships. The communities of Long Sault and Ingleside were newly built to accommodate displaced residents of the flooded villages. Due to this relocation, the towns were entirely planned from their inception – a rarity in Ontario. Several streets in the two communities are named for the flooded settlements.

In the 2021 Census of Population conducted by Statistics Canada, South Stormont had a population of 13,5700 living in 5,412 total private dwellings, a change of 1.4% from its 2016 population of 13,150. With a land area of 447.71 km^2 (172.86 sq mi), it had a population density of 30.3/km^2 (11.70/sq mi) in 2021.

Canada census-Township of South Stormont, Ontario community profile

	2021	2016	2011
Population	13,570	13,100	12,617
Land Area	447.71 km^2	447.58 km^2	447.50 km^2
Population Density	30.3/ km^2	29.3/ km^2	28.2/ km^2
Median age	44.8	46.8	45.5
Total private dwellings	5,412	5,277	4,991

The Township has for many years used a contract service delivery model with these services being provided by Caneau Water and Sewer Operations (Caneau). No one delivery model is inherently better than another, so the selection of one delivery model over another must be carefully evaluated. One important factor is the average cost of water per customer, but this must be balanced with other important factors such as compliance, risk, responsiveness, and long-term resilience.

STUDY APPROACH

- **Project Kick-off**

The Water and Wastewater Service Delivery project was awarded to Aureus Solutions May 19th, 2022. A project kick-off meeting was held June 9th ,2022 to introduce the stakeholders, confirm the scope, timelines, and project outcomes/ deliverables.

- **Site Visit- Current Status**

A visit to the Township June 20th to June 22nd included infrastructure tours and consultation with individuals responsible for the current delivery and maintenance of the treatment, distribution, and collection systems. An initial meeting was held with Township staff and representatives of Caneau. The Township's Director of Public Works; Ross Gellately led a tour of the Township infrastructure which included the water and wastewater treatment facilities.

Caneau staff provided an overview of their organization, current operational strategy, and relationship with the Township.

- **Document Review**

Following the initial site visit, the Township provided Aureus with plans, reports, contract documents, and drawings related to the existing treatment systems. Financial information, as needed was requested by Watson and Associates to conduct the financial analysis of the options.

- **Benchmarking**

A dedicated survey was not conducted of comparable municipalities for this report. Statistics from several current service delivery reviews were used as benchmarks. Population, treatment systems and complexity of distribution/ collection systems were the primary criteria.

- **The Objectives of the Service Delivery Review**

a. Identify current and future regulatory, operational, infrastructure, financial, and societal trends and influences that will impact the Township.
b. Review the current state of the Township's water and wastewater systems, service delivery including the management, operation, and maintenance practices used.
c. Identify water and wastewater service delivery models available to the Township.
d. Evaluate the possible service delivery models according to their ability to:
    i. Meet priority municipal service delivery criteria
    ii. Ensure Best Industry Practices are utilized.
    iii. Future-proof the Township water and wastewater services in the context of the trends and influences.
e. Recommend whether service delivery should continue under the existing model or whether the Township's water and wastewater services would be better delivered through another model.

- **Options Analysis**

The option analysis considered which type of organization and delivery model would be best suited to operate and maintain the Township's water and wastewater systems:

1. **Internal provider model** where a municipal department, municipal corporation, or public utilities commission of the municipality in question is the operating authority. Approximately 60% of municipalities in Ontario use this model to deliver water O&M services
2. **External provider model** where a quasi-public provider, another (typically larger) neighboring municipality or municipal corporation, or a private provider is the operating authority. In Ontario approximately 40% of municipalities use external providers which are split as follows:
   a. Municipalities where the Ontario Clean Water Agency (an arms-length Crown agency) is the operating authority. Approximately 30% of Ontario municipalities serving 4.5 million people use this option to deliver water O&M services
   b. Municipalities where another neighboring municipality, municipal corporation or a private sector provider is the operating authority. Approximately 10% of Ontario municipalities use this option to deliver water O&M services

- **Report and Recommendations**

The report, including an options financial analysis was presented to the project team December 21st 2022, followed by a Council presentation in January, 2023.

SECTOR ISSUES AND TRENDS

LEGISLATION & REGULATION

Under the Municipal Act, the Province has given municipalities the power to finance and provide water and sewage services.

In very general terms, municipalities may have sole responsibility, or the responsibility may be shared for the oversight, and delivery of these services.

The legislative and regulatory changes of the past 15 to 20 years have improved water and wastewater quality in Ontario and ultimately these utilities are recognized as global leaders in the management and delivery of these services. These changes however have significantly increased the role and responsibility of municipalities, who as owners, oversee the management and operation of these services.

Key Acts and Regulations which water system owners and operators are subject to include:

- ***Safe Drinking Water Act, 2002 (SDWA)***

Set's the framework for safe drinking water in Ontario. It is based on a multi-barrier approach to clean water including water source protection from contamination; effective treatment; frequent and comprehensive testing; vigilant monitoring and reporting; the training and competence of waterworks operators; a secure distribution system; and a quick response when problems are found. Key components include drinking-water quality standards, licensing for water-testing laboratories, approvals process for private water supply systems, duties of owners, operating authorities, and an annual drinking water report published by the Minister.

Regulations under the Act that must be adhered to by the Township include: Ontario Drinking Water Quality Standards (DWQMS) Regulation (O. Reg. 169/03), Drinking Water Systems Regulation (O. Reg. 170/03) as amended, Compliance & Enforcement (O. Reg. 242/05), Drinking Water Testing Services Regulation (O. Reg. 248/03), Certification of Drinking-water System Operators & Water Quality Analysts (O. Reg. 128/04), Financial Plans Regulation (O. Reg. 453/07) which includes requirement for water and wastewater system owners to move towards the goal

of sustainable financing of the full asset life-cycle, and Licensing of Municipal Drinking Water Systems (O. Reg. 188/07).

- ***Clean Water Act, 2006***

Together with the *Safe Drinking Water Act, 2002,* the *Clean Water Act, 2006* captures the multi-barrier response recommended by the Walkerton Inquiry. The Act seeks to protect sources of municipal residential drinking water systems by establishing multi-stakeholder, decision-making source protection committees which include municipalities. The committees are responsible for developing source water protection plans and for ensuring that activities (e.g., municipal planning decisions), conform to that source water protection plan.

- ***Water Opportunities and Water Conservation Act, 2010***

This Act intends to foster innovative water, wastewater and stormwater technologies, services, and practices in the private and public sectors; create opportunities for economic development and clean-technology jobs in Ontario; conserve and sustain water resources for present and future generations; and prepare sustainability plans for municipal water, wastewater and stormwater services.

- ***Infrastructure for Jobs and Prosperity Act, 2010***

Specifically, O. Reg. 588/17: Asset Management Planning for Municipal Infrastructure. Steps to incorporating responsible asset management include establishing strategic asset management policies and developing increasingly sophisticated asset management plans and technical service level targets. For the Township it also means adopting preventive and predictive maintenance procedures to protect those assets.

- ***Ontario Water Resources Act, 1990***

The purpose of this Act is to provide for the conservation, protection, and management of Ontario's waters and for their efficient and sustainable use, in order to promote Ontario's long-term environmental, social and economic well-being. Regulation 129/04 which requires licensing of sewage works operators.

These regulatory changes occurred in the drinking water sector following the completion of the Walkerton Inquiry and the implementation of the report's recommendations. With the passing of the *Water Opportunities Act, 2010* and the implementation of the Source Water Protection initiatives resulting from the *Clean Water Act, 2006* all recommendations from Chief Justice O'Connor's report have been addressed. While additional changes to water and wastewater legislation in Ontario are

always possible, this concern has diminished, and no major regulatory changes are anticipated which would add additional burden on constituents and communities.

As a result of these changes governing water and wastewater systems, Ontario municipalities have renewed their focus on investment, operations, maintenance and outcomes of their water and wastewater systems. Municipalities must decide for themselves how best to structure the delivery of water and wastewater services within the provincial regulatory framework. There is no one-size-fits-all solution.

In regard to the organizational approach and models used for providing water and wastewater services, the following observations were made from a 2010 survey by the Association of Municipalities of Ontario (AMO), of municipalities:

1. Approximately one-third indicated they had consolidated their water and wastewater operations into one service group.
1. One-third identified that they had previously purchased the service from a private contractor and have now brought the service in-house or are enhancing their services provided by in-house staff by purchasing certain services, such as technical and advisory services, from other municipalities. These municipalities cited an increase in the level of service while experiencing an overall cost reduction in providing the service due to economies of scale and better control of the systems.

"From the discussions held with each municipality, it was apparent that the councils sought opportunities for maximizing the service while minimizing the cost."

The same survey also indicated that "local responsibility for water and wastewater systems has resulted in local problem solving, ingenuity and responsiveness to local conditions as municipalities have adapted to a changing regulatory environment. It has meant Councils have been able to pursue the necessary changes while balancing wider needs for efficiency and affordability".

With that said, there are examples of municipalities recently purchasing contracted management and operational services from third party providers.

GOVERNANCE

Governance is generally accepted to mean the "process of decision-making and the process by which decisions are implemented (or not implemented). Good governance results when decisions and outcomes of those decisions are "good" for society or what is considered "good" by society. Although "good" is a subjective term, there is some consensus about the criteria that can be used to

measure good governance. Specifically, to be considered "good", governance should display a high degree of:

1. accountability,
2. responsiveness,
3. effectiveness and efficiency,
4. transparency,
5. participation; and,
6. respect for the rule of law (legislation).

For water and wastewater systems a Municipality measures "good" governance by ensuring they are meeting provincial operating requirements, are financially sustainable and are operated and maintained efficiently to maximize the life cycle of these significant municipal assets.

These requirements include:

1. Comply with Environmental Compliance Approval (ECA, previously a Certificate of Approval) requirements for performance and monitoring of water treatment and supply systems, wastewater treatment and collection/conveyance systems.
2. Ensure that a Financial Plan is completed under O. Reg. 453/07 every five years, or as required by the Drinking Water License issued by the MECP.
3. Comply with the Clean Water Act requirements to protect existing sources of drinking water and source water protection.
4. Implement best practices for management, operation and maintenance of all water and wastewater systems.
5. Comply with the applicable Surface Water Quality Management Act –Provincial Water Quality Objectives (PWQO) where these are applicable to a water or wastewater systems.
6. Comply with Ministry of the Environment, Conservation and Parks Design Guidelines for Sewage Works for operator licensing, system monitoring, reporting, spill prevention plans, public notifications and record keeping; and
7. Comply with Ministry of the Environment, Conservation and Parks Design Guidelines for Drinking Water Systems, including requirements for operator certification, system monitoring, reporting, public notifications, and licensing.

AGING INFRASTRUCTURE

Water and wastewater system owners continue to tackle a growing infrastructure replacement gap. Infrastructure has often deteriorated without the provision of sufficient funds for maintenance, rehabilitation, and replacement. This requires owners or operators to implement preventive and predictive maintenance practices as well as ongoing asset management strategies to extend the life of existing infrastructure and reduce the need for future premature capital investments. It will also require municipal councils to support full cost recovery and approve increases in water rates as required.

MAINTENANCE, REPAIR AND REHABILITATION

One of the key priorities of capital asset management is to safeguard the municipalities investment. Deferring maintenance can save money in the short term, but it creates a future liability which will continue to increase over time.

The optimal outcome involves doing the right thing, at the right time, consistently. In the case of managing existing infrastructure, doing the right thing, at the right time, involves knowing and actually doing the most cost-effective maintenance, repair, rehabilitation, or replacement activity at the right time throughout the entire life cycle of the asset.

As part of the full life cycle approach, Municipalities should adequately plan and budget for maintenance needs to ensure that capital assets meet or exceeds its expected economic life. This planning is based on current condition assessment and appropriate methodologies to estimate maintenance needs for various assets.

LABOUR MARKET

The aging of the water and wastewater workforce has led to reduced availability of talent and further exacerbated the existing shortage of certified operators in Ontario. In addition, this will lead to challenges in succession planning and cause upward pressure on salaries. Succession planning is already challenging for municipalities with small systems that depend on a small workforce.

ECONOMIC UNCERTAINTY

The impacts of the last number of years on financial markets and supply chains is likely to be characterized by long-term inflation, leading to difficulties procuring goods and services on a timely basis and an increase in water and wastewater related prices. The financial pressure on municipalities is multi-faceted;

- Managing priorities vs municipal revenues.
- The need to keep water and wastewater services affordable for financially stressed customers; and
- Increases in operating expenditures (e.g., salaries & benefits, energy, chemicals, telecommunication) and capital expenditures (e.g., building materials, mechanical equipment, IT & SCADA).

This means municipalities will need to find operational efficiencies in the delivery of these services.

FINANCIAL SUSTAINABILITY

On November 29, 2010, the Water Opportunities Act, 2010 received Royal Assent. The Act provides for municipalities to prepare sustainability plans for municipal water services, municipal wastewater services and municipal storm water services. The sustainability plans require the preparation of an Asset Management Plan along with a Financial Plan which will provide for full cost recovery of the systems.

A sustainable system is one where there are sufficient funds available to adequately cover the full range of current operating costs, maintain and repair the system's existing asset base, replace assets when appropriate, fund future growth and enhancements to services.

To receive or renew a municipal drinking water license for a drinking water system, the municipality needs to prepare a financial plan. Municipal councils have ultimate responsibility for approving any financial plans prepared for the ongoing management of their drinking water systems.

Financial plans for drinking water systems are required to forecast costs over a minimum period of six years as per *Ontario Regulation 453/07* under the *Safe Drinking Water Act, 2002*. In accordance with the asset management regulation, *Ontario Regulation 588/17*, municipalities are also required to identify life cycle activities that would need to be undertaken to maintain levels of service for drinking water systems and other assets they own.

Municipalities must conduct integrated financial planning that considers the water and wastewater systems as well as other municipal assets. Undertaking financial planning in this way can help

municipalities prioritize investments across their asset portfolio and achieve efficiencies, for example, by aligning water main replacement and road construction, where possible, to save on costs.

CAPITAL PLANNING & ASSET MANAGEMENT

Capital asset management planning is the process of identifying current and future capital needs and developing strategies and projects to address those needs.

The Capital Plan is an integral part of an Asset Management Plan. It is a tool to assess the long-term capital requirements of water and wastewater utilities to establish funding of high-priority projects in a timely and cost-effective way. While a Capital Plan may be designed to forecast any period, it generally extends beyond the current operating cycle and usually covers a five-to-ten-year time frame.

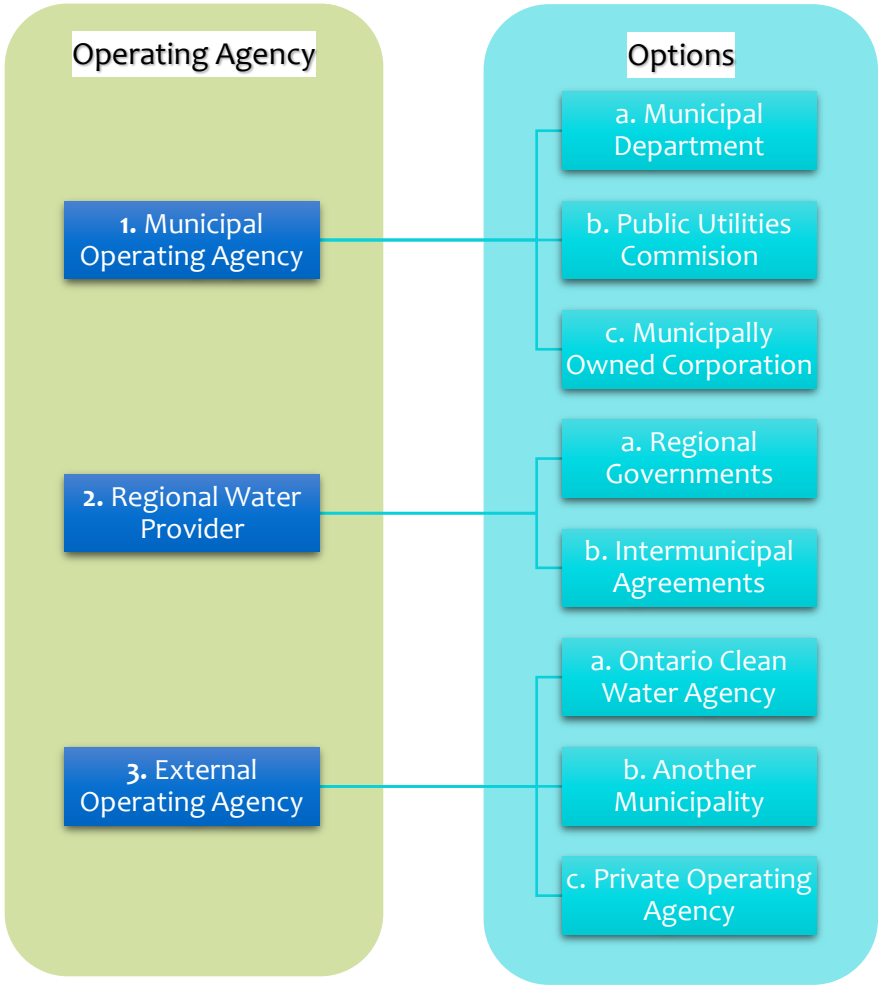
There are many different costs, both capital and operating, associated with planning, building, operating, and maintaining water and wastewater systems. This includes costs that reflect outputs not attributable to the provision of these services such as fire protection services, or environmental protection through the management of waste by-products from water and wastewater operations.

SERVICING OPTIONS

Options to consider include whether to operate the system through a municipally controlled operating agency, such as an internal department, or to engage an external operating agency, such as the Ontario Clean Water Agency (OCWA), another municipality, or a private company to run the system.

In Ontario there are approximately 450 municipal water and a similar number of wastewater systems serving the 444 municipalities. Today, most municipal systems are operated directly by the municipality. The Ontario Clean Water Agency (OCWA), a provincial Crown agency would be the largest contracted operating authority with a small percentage contracted to other private companies and an even smaller number to another municipality.

- **Summary of Options for Service Delivery**



1. Municipal Operating Agency

A municipality may decide to operate its own water system, either directly through the municipal administrative structure, or through an operating agency that the municipality owns and controls.

The areas where internal provider model scores higher than external providers include:

- **Responsiveness**, where water and wastewater staff in small municipal organizations often have a direct connection to senior management and sometimes to members of Council and are also more likely to live in the community. External providers will have to establish connections over time, and some try to have operations staff live close to or in the communities they serve.
- **Level of Control**, where a small municipality's executive administration has direct control over water and wastewater staff, and, together with Council, can make all decisions related to these services. With an external provider, the relationship is managed through and dependent on a Services Agreement, which guides the relationship and decision- making between the municipality and the provider's representatives

a. Municipal Department

Most water and wastewater systems in Ontario are operated by a department of the municipality. The strength of this model lies in the integration of decisions about the systems with other municipal functions, such as public health, land use planning, and economic development. A water and wastewater department may also be able to achieve greater economies of scale, by sharing administrative services with other municipal departments.

Since the municipality owns the water and wastewater systems, it is incumbent on the municipal council to ensure that its system is competently managed and operated.

b. Public Utilities Commission

Public utilities commissions (PUCs) were a major part of the water industry in Ontario for many years. They were governed by elected commissioners on behalf of the municipality. Since 1996, their role has declined dramatically as a direct result of provincial reforms and municipal decisions to disband local public utilities commissions.

c. Municipally Owned Corporation

Proponents of this model of a municipally owned corporation argue that it provides a means to ensure effective management of the water and wastewater systems. Under this model, the corporation (whether for-profit or non-profit) operates the systems on behalf of municipal council. Its directors are appointed by municipal council and normally consist of persons with relevant expertise. Peterborough Utility Services, and Lakefront Utility Services in Cobourg would be examples of this type of municipal operating agency.

2. Regional Government Service Delivery

a. Regions & Counties

A regional municipality (or region) is a type of government similar to, municipal government in a county, although the specific structure and servicing responsibilities may vary from place to place. Regional municipalities are formed in highly populated areas where it is considered more efficient to provide certain services, such as water, emergency services, and waste management over an area encompassing more than one local municipality.

In some cases where regional governments are established, the responsibility for water is shared between the regional government and the lower-tier governments. The regional government treats the water and sells it at a wholesale rate to the lower-tier governments, which in turn distribute it to consumers. The lower-tier governments also collect revenues from water rates.

Like regions, county government is a federation of the local municipalities within its boundaries. Counties are referred to as "upper tier" municipalities. Local municipalities (cities, towns, villages, townships) within counties provide the majority of municipal services to their residents. The services provided by county governments are usually limited to arterial roads, health and social services and county land use planning.

As you can see from the map below Western Ontario is the only area of the province where water and wastewater services are provided at the upper tier level, being the provincially designated regional governments.

Most Common Upper Tier Services (excluding EMS)

In January 2019, the provincial government announced a review of the eight regional municipalities in the province (Durham, Halton, Muskoka, Niagara, Oxford, Peel, Waterloo, and York) and Simcoe County, as well as their constituent lower-tier municipalities saying that the regional government model had been in place for nearly a half century, and that there was a need to look at the potential for improvements to governance, decision-making and service delivery.

Throughout this review, the province heard that local communities should decide what is best in terms of governance, decision-making and service delivery. Following this consultation process the province decided to leave the existing regional model in place.

Regionalization is an option to improve the quality of the overall management and planning for a water and wastewater systems. It functions within a framework that allows for public accountability across the entire service region. As importantly, increasing the overall size of the system allows for a higher level of expertise within the management and operation of the system. This can also lead to greater financial strength and the ability to allocate resources to where they are most needed,

whether to address infrastructure challenges or to improve source water and treatment requirements.

However, these would be matters to engage with municipal partners at a provincial and/or county level, and as mentioned above the province is not considering any changes to the current regional government structure. While regionalization is not an option for the United Counties of Stormont, Dundas and Glengarry intermunicipal agreements between the lower-tiers for the delivery of water and wastewater services should be explored.

b. Intermunicipal Agreements

Intermunicipal Agreements can be organized formally or informally. Partnerships would usually be informal agreements while shared service agreements tend to be formalized outlining in detail and through municipal bylaws how they will function. The goals for small municipalities when contemplating entering either arrangement could be:

- Addressing the pressures of new regulatory compliance requirements and lower levels of external funding
- Maintaining service levels, sustainably, and affordably
- Decreasing costs while maintaining service levels
- Providing new services and enhancing responsiveness to new citizen demands
- Building municipal capacity

Shared services are typically where two or more local municipalities jointly provide:

- **External citizen-facing services** - services that municipalities provide to the local community, such as, fire protection, public transportation, recreation and library services.
- **Back-office functions** - functions that support external services, such as information technology, finance, legal, payroll, and human resources; or,
- **Procurement** - purchase of goods and services.

Shared services may also include one or more municipalities partnering with other organizations outside of local government for the delivery of specific services. This is typically referred to as outsourcing.

Many municipalities explore the possibilities of shared services with the goal of reducing costs, increasing service quality, and providing better community outcomes. In addition to cost

savings, there are other financial and non-financial benefits associated with shared services, including:

- Increased efficiency through the reorganization and sharing of assets
- Improved service delivery and consistency across regions
- Economies of scale
- Reduced duplication of processes
- Improved quality of service through a larger and more skilled resource pool; and,
- Support of local economies by sustaining local employment.

Despite the potential benefits that arise from shared service arrangements, municipalities can sometimes be reluctant to identify and pursue these opportunities. Geography can play a major role in dictating the extent to which municipalities are candidates for shared service arrangements, it can also be used as an excuse for ruling out any form of service sharing. As well, concerns over the impact on existing service levels are often cited as reasons not to pursue shared service arrangements despite the actual potential to enhance the quality of services provided to the residents.

Shared service agreements require careful consideration of both the structure and governance to ensure the partnership achieves the level of cooperation required to implement an effective shared services model.

3. External Operating Agency

Where a municipality decides not to operate its water and wastewater systems directly or not in a regional arrangement, it has the option to contract with an external operating agency, including the Ontario Clean Water Agency, a private company, or another municipality.

a. The Ontario Clean Water Agency (OCWA)

The Ontario Clean Water Agency is a provincial Crown corporation established under the *Capital Investment Plan Act* of 1993. The Act sets out OCWA's objectives, including its mandate to provide operations and maintenance services to municipalities on a cost-recovery basis.

OCWA is the leading external provider of water and wastewater O & M services in Ontario with over 500 certified operations staff. In water and wastewater service they bring more than 25+ years of safely and efficiently operating treatment and distribution/ collection systems across Ontario.

b. Another Municipality

A municipality can enter into an agreement with another municipality to operate its water and/or wastewater systems. For some small municipalities it may be an attractive option to exchange direct local control for the assurance of a more effective operation.

Managers of large water systems are often receptive to working out arrangements with smaller municipalities for the operation of the water systems in those communities. Such arrangements have the potential to benefit the larger municipality in terms of cost recovery, and the smaller municipality in terms of reduced overhead, greater technical skill set and reliability.

c. Private Operating Agency

The private sector offers an option for municipalities seeking to contract with an external operating agency. There are only a small number of companies in Ontario that can operate all or part of municipal systems.

ANALYSIS FOR SOUTH STORMONT OPERATIONS

CURRENT STATE-CONTRACT MANAGEMENT AND OPERATIONS

The Township of South Stormont has 5 separate systems:

- Ingleside and Long Sault regional water distribution and treatment system
- Ingleside wastewater collection and treatment system
- Long Sault wastewater collection and treatment system
- Newington water distribution and treatment system
- Rosedale Terrace, water distribution and treatment system (owned and operated by City of Cornwall)

The operation of the water and wastewater treatment plants are contracted to Caneau Water and Sewage Operations ("Caneau"), with the Township assuming responsibility for the water distribution and collection systems.

The Township of South Stormont has a long history with working with Caneau a local family-owned company. The current contract expired August 31st, 2022 but has been extended to 2024 pending the outcome of this report.

The scope of the contract between the Township of South Stormont and Caneau is to operate, maintain and manage the municipal water supply and wastewater treatment facilities in a cost-effective manner, and additionally on an annual basis prepare technical and financial plans for the maintenance, care, and improvements of these plants. The general requirements to provide these services in the contract are:

- Compliance with Certificates of Approval and government acts and regulations using licensed operators;
- Maintain necessary DWQMS certification for all water treatment facilities. (The cost of external operational audits and investigations required under the DWQMS system shall be paid by the Township);
- Proper operation and maintenance of equipment and facilities to industry standards and manufactures specifications;
- Provisions of an Operations and Maintenance Plan for the facilities;
- Development of Contingency Plans and management of emergencies;
- Development of short and long term technical and financial plans for the maintenance, care and improvement of the water and sewage treatment plants;

- Production and delivery of an annual operational report in an accurate and timely manner;
- Production and delivery of reports in accordance with the requirements of the Drinking Water Protection Regulation(s);
- All necessary sampling, field testing and coordination of laboratory analysis and reporting to ensure plant compliance, adequate process control and good operating performance of all systems and equipment;
- Responding to alarms and addressing problems as required;
- Carrying out and documenting routine corrective and preventative maintenance to ensure that equipment is operated in accordance with suppliers and manufacturers recommendations, to ensure that typical service life is achieved and to ensure that maintenance histories are documented;
- Sludge handling including monitoring, loading and maintenance of all equipment in good operating condition;
- The preparation of sludge production and disposal records and maintaining an inventory of sites approved for utilization and disposal and the agricultural fields utilized;
- Administration and management of the overall operations;
- Coordination of local purchasing and delivery of supplies (consumables) and equipment required for the operation and maintenance of the facilities, pursuant to the Township of South Stormont Procurement Policy;
- Snow removal around doorways and sidewalks at all sites;
- Provision of technical and operations expertise to properly operate, maintain and monitor the facilities twenty-four (24) hours per day, seven (7) days per week;
- Provision of training program for personnel in the areas of operation, maintenance, and safety. Ontario Regulation requires that each licensed operator receive a minimum of 40 hours of training per year;
- Management of human resources including payroll, recruitment, termination, employee relation and Health and Safety Act.

Caneau manages and arranges for the acquisition of all consumables (electricity, natural gas, heating fuels, chemicals etc.) and the haulage and disposal of sludge with the Township responsible for the invoices related to these purchases.

Caneau's current staffing compliment consists of three (3) dual licensed operators who act as the Operator(s)-in-Charge, an Overall-Responsible-Operator (ORO), and the President who manages compliance and regulatory reporting and the Quality Management System

(DWQMS). Facilities are staffed Monday-Friday, with alarm call-out, and emergency response as required.

Water meter reading is currently contracted to a private contractor.

By all accounts this long-term relationship between South Stormont and Caneau has been beneficial for both parties. The annual Ministry inspections provide evidence that the systems are (and have been) operated to ensure they are meeting provincial operating requirements, and interviews with municipal staff indicate for the most part confidence in the day-to-day operations of the systems.

There was a willingness by both parties (Township and Caneau) to renegotiate the existing contract which is basically a legacy document from the initial relationship. This would provide an opportunity for the Township to address the sustainability guarantees, enhanced Municipal participation and contractor accountability concerns, while also providing the contractor an opportunity to clarify roles and responsibilities, update the agreement in terms of liability and risk, and commit to the continued relationship.

PARTNERSHIPS, SHARED SERVICE AGREEMENTS

SHARED SERVICES

Given the increasing financial pressures on small municipalities and the various issues and trends identified earlier, it will force Councils and staff to look for more opportunities to collaborate with others.

The South Stormont Water and Wastewater Service Delivery review is being conducted parallel to a similar review for South Glengarry Township. As such the obvious tendency is to consider partnerships, and/or shared service agreements between these two (2) parties. With that said the agreements could be with South Glengarry, another neighboring party, or include multiple participants.

The Ontario Municipal Act Section 20(1) allow for Joint Undertakings- "A municipality may enter into an agreement with one or more municipalities or local bodies, as defined in section 19, or a combination of both to jointly provide, for their joint benefit, any such matter which all of them have the power to provide within their own boundaries. 2001, c.25, s20(1)"

Further, Section 202(1) Joint municipal service boards- "Two or more municipalities may enter into agreements to establish a joint municipal service board and to provide for those matters

which, in the opinion of the participating municipalities, are necessary or desirable to facilitate the establishment and operation of the joint municipal service board. 2001, c. 25, s. 202(1)

There are a wide range of potential delivery models available for shared service delivery for municipalities to consider:

- Resource Sharing- contractual arrangements between local municipalities to share key resources (plant equipment or personnel) to achieve efficiencies and lower costs. Typically, one municipality employs the resource and hires out to the other(s) on a "time and material" basis
- Centralized Services- relocation of multiple delivery sites or services to one centre that serves across the participating municipalities.
- Joint Venture- establish stand-alone incorporated entity to share costs and risk of providing those municipal services and infrastructure.
- Outsourcing- Key municipal services outsourced to the private sector or external public sector entities.

➢ Sharing of Physical & Human Resources

Resource sharing refer to arrangements between local municipalities to share financial, human or physical resources to achieve common objectives. The typical main drivers behind resource sharing are efficiency and reduced costs. One municipality may own a resource and hire it to another municipality during off peak periods. Alternatively, two or more municipalities may jointly own a resource and share it on an agreed basis.

In Ontario, many resource sharing arrangements are informal agreements based on the quality of relationships between the municipalities. There may be an opportunity to formalize the process of resource sharing to gain greater savings as well as to ensure the highest utilization of an asset.

➢ Centralization of Services

Centralized services require the relocation of multiple delivery sites to one centre which then serves across multiple municipalities. It tends to generate efficiencies from increased specialization and improved infrastructure.

Best practices show that back-office functions are best suited to centralization. A significant majority of back-office or administrative services can be delivered electronically, and the volume of digitized data is expected to only grow in the future.

Some of the back-office functions that may be candidates for centralization include:

- Professional services such as legal, internal audit, financial accounting and information technology ("IT")
- Procurement; and,
- Human resources and payroll.

➢ Joint Venture (Municipal Services Corporation)

Local municipalities may overcome revenue constraints through the creation of private companies whose purpose is to undertake critical infrastructure projects that are judged to be in the best interests of the community. The municipality is often not a contracted party itself but rather it establishes a company, with potentially other municipal joint ventures through which the enterprise is conducted.

The Municipal Service Corporation Act O. Reg. 599/06 provides for a municipality may use the power referred to in paragraph 1 of subsection 203 (1) of the Act to establish a corporation only if the municipality by itself, or together with one or more other public sector entities, establishes the corporation and,

(a) the corporation's purpose is to provide a system, service, or thing that the municipality itself could provide; or

(b) the establishment of the corporation is expressly authorized by this Regulation. O. Reg. 599/06, s. 3.

Joint ventures have many benefits including the opportunity to share costs and risk. They have proven to deliver value for money for ratepayers as well as a consistent and responsive private entity to complement municipal operations. Parties often gain from the different expertise and perspective brought by other parties to the project.

Joint ventures are among some of the potential options for delivering:

- Waste services
- Water supply and sewerage services; and,
- Engineering and works services.

It is important to acknowledge that certain joint venture structures can allow employees to be engaged on terms and conditions outside local government enterprise agreements. Depending on the legal structure of the organization, different taxation and regulatory reporting functions may vary from typical local municipal entities. In Ontario, these joint ventures are typically conducted through the creation of a Municipal Services Corporation under Section 203 of the Municipal Act and associated regulation 599.

- **Outsourcing**

Outsourcing occurs when a municipal government chooses an outside company to provide a particular service on its behalf. Municipalities often shift certain services to private companies to provide a diverse range of services to citizens, from trash collection to parking lot management and even facility management.

There are many reasons government may choose to outsource a service rather than providing it themselves (or 'in-house'). Sometimes a company has more specialist skills and particular experience and is able to provide the service more efficiently and quickly, or in some cases at a higher quality level. Municipal government delivers multiple services and is often not able to be an expert in the delivery of all types of services. Accordingly, it turns to the private sector or in some cases other governments or non-profit agencies for assistance.

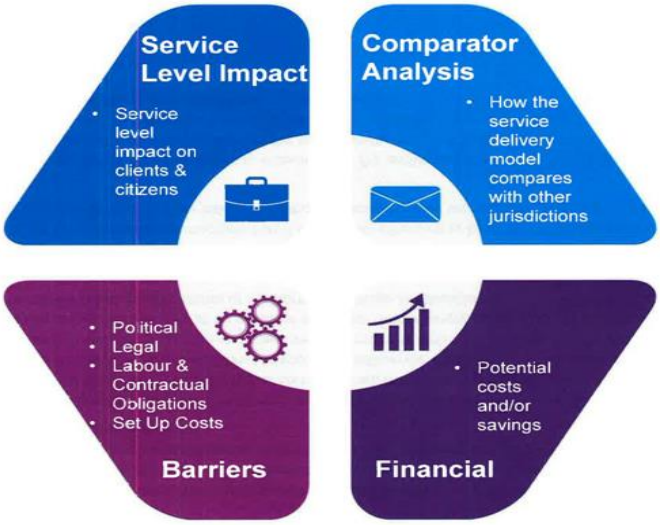
In some situations, government usually provides the services themselves, but they lack the capacity at present. In these cases, it may be easiest and quickest to use an outside company. In other instances, government decides that it is not cost-effective to build the capacity in-house to deliver the service and so they decide it is more efficient to use an outside company in the long- term.

There are also some disadvantages to outsourcing. By adding an additional organization to the delivery process, outsourcing distances the municipality from the residents who are receiving the service and therefore can reduce government's accountability. Service provision may be harder to monitor when it is being delivered by an outside company.

DETERMINING THE OPTIMUM MODEL

To understand the merits and challenges of each service delivery model, the following criteria are used to determine the preferred model.

1. Service Level Impacts
2. Comparator Analysis
3. Financial Impact
4. Barriers to Implementation



JOINT MUNICIPAL SERVICE BOARD

Municipal service boards are local bodies that may be established by an individual municipality, or by two (2) or more. They may, for example, manage and deliver basic services. A municipal service board must have at least two (2) members. Generally, former public utility commissions, parking authorities and boards of park management are municipal service boards.

Joint Municipal Service Boards are normally created by an agreement between two or more participating municipalities. Although not considered separate legal entities from the Board, municipalities can delegate the control and management of services including water and wastewater to a Board as they deem fit. However, with the delegated authority, the Joint Board can commit its constituent municipalities to decisions made by the Board, including financial commitments. Moreover, a Joint Board is often made up of elected officials from participating municipalities, however that does not appear to be a requirement and the Board could include technical members.

- **Structure**

The structure of a potential Joint Municipal Board is mostly straightforward and largely based on an agreement between the participating municipalities giving the Board control and management of services and activities the participating municipalities consider necessary. The agreement covers relevant Board-related guidelines and can include information on the following among others:

- The name, composition, quorum, and budgetary process
- Eligibility of persons to be board members
- Manner of selecting board members
- Term of office
- Number of votes of board members
- Rules, procedures, and policies the board must follow
- Relationship to the municipality (ites), including financial and reporting relationship.

This shared agreement model is used by other municipalities in the province for the delivery of water and wastewater service. The advantages of this structure are:

- Municipalities can delegate control, management, & authority to board
- Does not have significant regulatory requirements to implement
- Does not relatively require significant costs or time

The major challenge with this model is the potential to be hindered by political sensitivities, voting inequities, and/or Board member allocation issues as well as concerns about being obliged to deliver on financial agreements signed by the Joint Board, thereby limiting the autonomy of individual municipalities to control their own finances with respect to the Joint Board's domain of services.

The key to success, therein lies with the "agreement" which clearly outlines the board-related guidelines above, a strong board that is representative of the shared mutual interest and political will.

Successful relationships have been ones where there is freedom to adjust over time & continually improve operating and governance procedures, and there is strong technical expertise on a board.

To achieve the optimal outcome using this model it is recommended that a hybrid of the shared service options be utilized.

- **Outsourcing**- the operations, maintenance and management of the facilities would be contracted to a third-party. This could be the result of a combined RFP for delivery, or to provide a smoother transition could be an expansion of South Stormont's current service provider Caneau Water and Sewer Operations.

- **Sharing of Physical and Human Resources**- the linear infrastructure comprised of the distribution and collection systems could be jointly managed by Township Public Works crews (as is done independently) with the benefit of shared equipment, expertise, and resources. Meter reading and locate personnel would also be shared among the participating parties.

- **Centralization**- Some of the back-office functions that may be candidates for centralization include:

    - Professional services such as legal, internal audit, financial accounting and information technology ("IT"); and
    - Procurement

Provided that the board contained the relevant expertise, contract management, and intermunicipal coordination would be the primary role.

The financial analysis for this option used an estimated contract services cost. In addition, the following have been identified with potential cost implications, however the impacts are unknown at this time and have not been considered within the review:

- Shared service administration related to accounts payable, accounts receivable, and water billing;
- Operational savings on joint procurement and internal accountability;
- Cost to set up and run a Joint Municipal Services Board; and
- Any additional costs related to transitioning between service delivery models.

Inputs for Shared External Contracted Operations and Management of Systems

Description	Hourly Rate	Benefits Rate	Hours	Annual Cost	South Stormont Allocation	South Glengarry Allocation	Notes
Additional Costs							
Shared Contract	n/a	n/a	n/a	**1,100,000**	50%	50%	Shared
Cost Savings							
Current South Stormont Contract Costs	n/a	n/a	n/a	**718,200**	100%	0%	
Current South Glengarry Staffing Costs	n/a	n/a	n/a	**559,800**	0%	100%	Share of costs not replaced by contract ($75,000 for oversight, meter reading and operations of linear infrastructure)
Net Increase / (Decrease) in Costs vs. Current Service Delivery Model					**(168,200)**	**(9,800)**	

MUNICIPAL SERVICE CORPORATION (MSC)

An MSC is defined under O. Reg. 599/06 of the Municipal Act, 2001 as a corporation under which: 100 percent of shares owned by one or more municipalities or by a municipality and one or more other public-sector entities; shareholders have an entitlement to all the voting shares allocated to the members of the corporation; the system, service, or thing delivered by the corporation is something that the municipality itself could provide.

MSCs are therefore not required to be wholly owned by a single Township but can be used to provide a corporate structure that allows for the joint ownership and operation of assets and systems between municipalities, including those of water and wastewater systems. In addition, although water and wastewater service ownership, governance, operation, maintenance, and funding are the primary focus of this report, an MSC governance and management model allows for other services to be provided under the same structure. These additional services may either be provided under the same corporation or under a secondary corporation within the same holding corporation umbrella.

➢ Structure

Governance and Corporate Structure would involve the establishment of two MSCs:

- One MSC that acts as a holding company to hold the municipalities' equity ownership interest in Operating MSC. The shares of the Holding MSC would be owned by municipal partners. Although a Holding MSC is not required, it is beneficial for:
    - Creating additional operating MSCs in the future that are held by the Holding MSC; and
    - Extending service and/or ownership to other municipalities by limiting purchasing and voting powers to Holding MSC shares only.

- Another MSC to act as an operating company for the delivery of water and wastewater services. The Holding MSC would own all issued and outstanding shares of the Operating MSC.

Based on the decisions of the participating municipalities, and the outcomes of a detailed business case, a common board membership could be used to govern both.

The Board should be populated primarily by technical (i.e., skills-based) members that possess skills and knowledge in sectors necessary for the corporation's success, such as infrastructure engineering, finance, legal, planning, etc. Moreover, it is anticipated that in subsequent stages during and after the development of the business case and governance proposal that the following additional details on Board-related information be confirmed, clarified, and/or established:

- Number of board members in each MSC board and whether and how many municipal council members serve on each Board;
- The length of Board terms, reappointments, extensions, etc.;
- The operating standards, rules, and responsibilities of Board members and the ability to vote members on and off the Board; and
- Any other information necessary for formation and operation of the MSC Boards.

The mandatory regulatory requirements to establish an MSC as detailed in O. Reg. 599/06 under Ontario's Municipal Act, 2001, state that an MSC can be established to "…provide a system, service, or thing that the municipality itself can provide" if it meets the following:

- Development and Adoption of a Business Case Study
    - Expected and/or potential components of the Business Case Study may include, but are not limited to:
        - Legal Review: to determine and validate how an MSC should be lawfully established and what role the participant Townships play with respect to jurisdiction of water and wastewater powers (may be completed prior to the Business Case);
        - Operational Review: to provide options for obligations and requirements of the MSC;
- Corporate Structure Review: to determine setup functions with respect to holding and operating corporations and board compositions;

- Financial Review: to provide an analysis of the financial capacity to own and operate water and wastewater systems separate from municipalities (i.e., operating model; risks, assets, and liabilities; reserves and reserve requirements; separation of rate-setting by municipality; etc.); and
- Implementation Requirements: to provide information on the implementation of the model with respect to primary variable such as governance, responsibilities, share allocation, etc.
    - Adoption and Maintenance of an Asset Transfer Policy Adoption of an asset transfer policy is mandatory prior to any transfer of assets. It is recommended that an asset transfer policy be developed in conjunction with the business case such that any financial implications of the policy are incorporated in the assessment of the proposal's financial viability.
- Public Consultations – Consult with the public about the proposal to establish a corporation.

The advantages of a Municipal Services Corporation are that public ownership is retained, allows self-financing, and mitigates political fault-lines and political decision-making.

The disadvantages are that there are higher initial and operating cost, and the time and complexity to setup compared to the JMSB model. This is a relatively new model in the delivery of water and wastewater services.

Under this model, while management could be in-house, third-party, or municipally contracted, for this review it would be recommended that all necessary services would be provided in-house. This option may help mitigate the operations staffing challenges by circumventing the municipal salary constraints and compensating as necessary according to market factors.

The projected staffing levels for operations and management of the facilities are based perceived shared needs and best practices.

It should be noted that as required a detailed business case study, corporate structure review, financial review, and implementation requirement would need to be completed to provide a fulsome financial analysis.

Inputs for Shared Internal Operations and Management of Systems

Description	Hourly Rate	Benefits Rate	Hours	Annual Cost	South Stormont Allocation	South Glengarry Allocation	Notes
Additional Costs							
Municipal Service Oversight				**20,000**	50%	50%	Shared
2 Supervisor Water/Wastewater Treatmen	38	30%	2,000	**195,000**	50%	50%	Shared
5 FTE certified operators (operators Cross	31	30%	2,000	**403,000**	50%	50%	Shared
1 FTE Compliance/ QMS Coordinator	31	30%	2,000	**80,600**	50%	50%	Shared
1 FTE Locates, and meter reading	25	30%	2,000	**65,000**	50%	50%	Shared
2 PTE summer/ co-op student (4 months)	20	n/a	700	**13,333**	50%	50%	Shared
Overtime				**20,000**	50%	50%	Shared
Shift Premium	n/a	n/a	n/a	**15,000**	50%	50%	Shared
Training	n/a	n/a	n/a	**20,000**	50%	0%	Training costs would already be included in the South Glengarry budget
Communications	n/a	n/a	n/a	**8,000**	50%	0%	Communications costs would already be included in the South Glengarry budget
Fleet	n/a	n/a	n/a	**10,000**	50%	0%	Fleet costs would already be included in the South Glengarry budget
Cost Savings							
South Glengarry Current Staffing Costs	n/a	n/a	n/a	**579,000**	0%	100%	Assumption that $42,500 costs would not be covered by joint services (same as South Stormont)
South Stormont Current Staffing Costs	n/a	n/a	n/a	**91,002**	100%	0%	Share of current costs replaced by joint staffing model ($42,500 not replaced)
South Stormont Current Contract Costs	n/a	n/a	n/a	**718,200**	100%	0%	Replaced by shared model
Net Increase / (Decrease) in Costs vs. Current Service Delivery Model					**(384,235)**	**(173,033)**	

INTERNAL DEPARTMENT-TOWNSHIP MANAGEMENT AND OPERATIONS

For the most part, delivery of water and sewage works and services in Ontario is carried out by public entities, with varying degrees of private sector assistance. While the literature might suggest a myriad of alternative service delivery options, the main types can be distinguished by how they allocate responsibility for functions between the public and private sectors. Specific applications of different service delivery models necessarily vary according to local municipality conditions and requirements.

The strength of this model lies in the integration of decisions about the systems with other municipal functions, such as public health, land use planning, and economic development. A water and wastewater department may also be able to achieve greater economies of scale, by sharing administrative services with other municipal departments.

1. Operations Staff

Operation staffing levels are dictated by the requirement of legislation. The facility classifications are the determining factor in the level of certifications required by the operating group, while the DWQMS requires that a staffing contingency plan is in place to ensure qualified staff are always available.

In reviewing staffing requirements for continuous operations, comparator municipalities utilize cross training between water and wastewater facilities to ensure they have required staffing levels. Water treatment staff carry certifications to work on other systems (i.e. water distribution, wastewater treatment, and/or wastewater collection). The number of certified operators for these comparator municipally operated plants ranged from 3 to 5.

Operators are also responsible for preventative, predictive, and breakdown maintenance activities.

2. **Management**

The Township is required under the Safe Drinking Water Act (O. Reg. 128/04) and Licensing of Sewage Works Operators (O. Reg. 129/04) to have an Overall Responsible Operator (ORO) who has overall responsibility for the systems. The ORO position allows for a knowledgeable and experienced person to always be available to direct operators on the operations of the systems, and to respond immediately and effectively to emergencies.

The ORO must furthermore carry a certification that is equal to or above the class of the system being served.

3. **Regulatory**

As discussed earlier, legislative, and regulatory change of the last ten (10) years have significantly increased administration and reporting associated with the new requirements.

All municipal drinking water systems that provide water to residences in a community must have a license from the Ministry of the Environment, Conservation and Parks (MECP). The ministry's Municipal Drinking Water Licensing Program requires owners and operating authorities of drinking water systems to incorporate the concepts of quality management into system operation and management.

For a drinking water system to receive or renew its license, the owner and operating authority must have in place:

- Drinking water works permit
- Accepted operational plan
- Accredited operating authority
- Financial plan
- Permit to take water.

Licenses are valid for a five-year period and must be renewed.

Accreditation is intended to focus on the processes and systems that an operating agency puts in place at the corporate level to ensure that the entire organization is functioning effectively. To be accredited, operating authorities would be required to adopt a quality management system and would be subject to independent audits by a certified accrediting body.

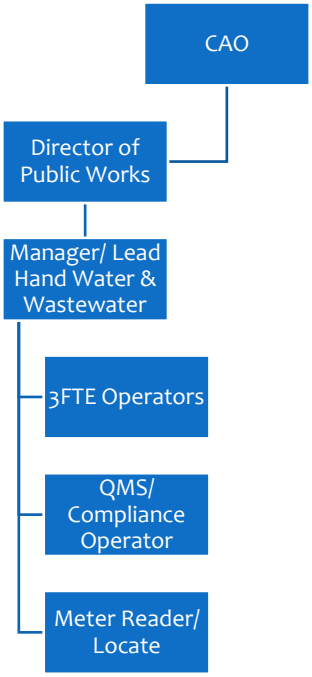
As part of its corporate quality management system, an operating authority needs to undertake operational planning at all their systems for which they are responsible. All municipalities are required to have an operational plan for their water system or, depending on the size and complexity, for each component of the system (e.g., the treatment plant, distribution system, and monitoring system). The operational plan is a mechanism for management and staff to carefully outline, and periodically revisit, the barriers and strategies they have put in place to ensure safety. The existence of an accessible operational plan will also facilitate reviews of a water system by outside personnel, including MECP inspectors and consulting engineers.

As such, most municipalities now employ a Compliance Coordinator/ QMS position in the departmental organizational structure.

It would be envisioned that a Compliance Coordinator/ QMS position (1FTE) would be required. Ideally, this position would also have treatment certification so that he/she could be utilized in the field and included in the on-call/ standby rotation.

Proposed Water and Wastewater Structure

This structure mimics the proposed structure for South Glengarry with a staffing cost in current dollars of $560,000



Challenges and Risks

The aging of the water and wastewater workforce has led to reduced availability of talent and further exacerbated the existing shortage of certified water operators in Ontario. Currently, there are approximately twenty-three thousand (23,000) certified operators in Ontario with only three thousand four hundred and fifty (3,450) with Class III licenses or higher. Further, there is an additional four thousand two hundred Class II (4,200). These numbers do not reflect those that hold dual certification in water and wastewater operations which would be required, so the talent pool to draw from would be considerably less.

In terms of Class II, and Class III licenses, this practical component for achieving the license is three (3) and four (4) years' (with two (2) years as OIC) experience respectively.

Additionally, given that the wage range (dependent on certification levels) should be both comparable to current industry standard, and in-line with the Township's salary grid this may be challenging. The operators and QMS Coordinator would likely be the highest compensated union staff, and even that doesn't guarantee successful recruitment. The Senior Operator/ Lead Hand would need a certificate equal to, or greater than the highest plant clasification and as such the Township might want to consider this position as an excluded staff member.

This challenge should be considered high risk unless a decisive strategy can be defined especially at the more senior operating levels, to addressing these staffing challenges.

CONCLUSION

Costs and improved level of service are the determining factors in decision-making on service delivery options.

While indicated through the financial analysis, the annual cost of internal shared services via a MSC would result in the greatest annual savings, as a result of the complexity to transitioning, combined with the unknown administrative oversight costs, this option is no being recommended.

A shared service provided by a JMSB provides annual operational savings, is easily setup and managed. As a result, it addresses the majority of preferred outcomes of a "good governance" in the provision of water and wastewater service delivery being:

1. accountability,
2. responsiveness,
3. effectiveness and efficiency,
4. transparency,
5. participation; and,
6. respect for the rule of law (legislation).

Should the Township choose to continue under a contracted service model, it would be recommended that the Township seek to enhance their relationship through a new contract which should incorporate mutually beneficial language that provide South Stormont staff and Council with increased confidence in the continued long-term operations of their water and wastewater facilities.

DEFINITIONS

"Asset management" is the process of planning and controlling the acquisition, operation, maintenance, renewal, and disposal of organizational assets. This process improves the delivery potential of assets and minimizes the costs and risks involved.

"Asset lifecycle" is the series of stages involved in the management of an asset. It starts with the planning stages when the need for an asset is identified and continues all the way through its useful life and eventual disposal.

"Full cost recovery" for water and wastewater services is meant to ensure municipalities provide for long-term operating and capital plans for maintaining all aspects of the water and wastewater systems, including a financial plan for the replacement of these assets.

"Operating Authority" of a municipal drinking water system is the person or entity that is given responsibility by the owner for the day-to-day operations of the drinking water system, its management, maintenance, or alteration. A municipality may take on this operational role through its own staff or it may choose to contract it out to a third party (e.g. by hiring an accredited operating authority).

"Owner" of a municipal drinking water system is often the municipality as a corporate entity. Members of municipal councils and municipal officials of this corporate entity are obligated to provide oversight and exercise decision-making authority in respect of the drinking water systems the corporate entity owns. They are responsible for having policies, management tools and processes in place so that the municipality meets all its legislative and regulatory requirements under the *Safe Drinking Water Act, 2002*.

APPENDIX A: OPTIONS FINANCIAL FORECAST

To	Doug Thompson, Aureus Solutions Inc.
From	Sean-Michael Stephen, Watson & Associates Economists Ltd.
Date	December 20, 2022
Re:	Township of South Stormont Service Delivery Review for Municipally Owned Water & Wastewater Systems– Financial Analysis

Fax ☐ Courier ☐ Mail ☐ Email ☒

1. Introduction

Watson & Associates Economists Ltd. (Watson) in collaboration with Aureus Solutions Inc. (Aureus) have been retained by the Township's of South Stormont and South Glengarry to undertake a Service Delivery Review for municipally owned water & wastewater systems.

The objective of the Service Delivery review is to examine the effectiveness of existing water treatment and distribution and wastewater collection and treatment systems service delivery models in terms of the level of service and financial performance, identify potential alternative organization approaches to derive cost savings, and maintain/improve levels of service. Watson's role is to undertake the financial review of the current service delivery model and a comparative analysis of alternative service delivery options. As part of the current service delivery review, Watson will also review the current water and wastewater user fee structure within each municipality.

The alternatives considered within the service delivery review includes separate and shared operation and management of the systems between the two Townships. However, a separate memorandum has been prepared to review the financial impacts for each municipality.

South Stormont has five separate water and wastewater systems, including:

- Ingleside and Long Sault regional water distribution and treatment system
- Ingleside wastewater collection and treatment system
- Long Sault wastewater collection and treatment system
- Newington water distribution and treatment system
- Rosedale Terrace, water distribution and treatment system (owned and operated by City of Cornwall)

The water and wastewater plants are contracted to Caneau Water and Sewer Operations (Caneau), while the Township is responsibility for the water distribution and sewage collection systems.

2. Current Service Delivery Review

The financial review of the current service delivery model has been undertaken in the context of the Township's 2019 Water and Wastewater Rate Study. The 2019 Study considered the forecast capital and operating costs over the period to 2029 and recommended billing rates to fund the annual operating costs and average annual long-term capital costs of the systems to provide for sustainable service delivery. For the purpose of this assessment, the 2019 rate study has been updated to include the Township's 2022 budgeted operating costs and updated operating budget inflation assumption (i.e. 3% per annum). Furthermore, in review of the changes in water and wastewater reserve balances between 2019 and 2022, it appears that the Township has not incurred the capital expenditures that were anticipated in the 2019 rate study as the reserve balances are greater than what was forecast. As such, the forecast reserve balances and capital needs have been included in this assessment so as not to understate the anticipated capital needs over the forecast period.

The impacts of the alternative service delivery options considered in Section 4 of this memo, have been presented in the context of the updated 2019 rates study forecast.

For comparative analysis to the alternative service delivery scenarios, the costs per cubic metre of treated water and wastewater has been assessed over the period to 2032 in Tables 2-1 and 2-2, respectively.

Table 2-7
Cost per m^3 of Treated Water

Cost per m3 of Treated Water	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Water										
Net Operating Costs (Net of Capital Related Costs)	1,555,958	1,602,700	1,650,800	1,700,400	1,751,400	1,804,000	1,858,200	1,914,000	1,971,400	2,030,700
Annual Lifecycle Costs	1,403,061	1,445,153	1,488,508	1,533,163	1,579,158	1,626,533	1,675,329	1,725,589	1,777,356	1,830,677
Annual Costs	**2,959,019**	**3,047,853**	**3,139,308**	**3,233,563**	**3,330,558**	**3,430,533**	**3,533,529**	**3,639,589**	**3,748,756**	**3,861,377**
Treated Flows (m3/year)	1,277,818	1,285,947	1,294,076	1,302,204	1,310,333	1,318,462	1,326,591	1,334,770	1,342,999	1,351,279
Cost per m3 of Treated Water	**2.32**	**2.37**	**2.43**	**2.48**	**2.54**	**2.60**	**2.66**	**2.73**	**2.79**	**2.86**

Table 2-7
Cost per m^3 of Treated Wastewater

Cost per m3 of Treated Wastewater	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Wastewater										
Net Operating Costs (Net of Capital Related Costs)	2,582,400	2,659,900	2,739,700	2,821,800	2,906,500	2,993,700	3,083,500	3,176,100	3,271,400	3,369,600
Annual Lifecycle Costs	1,846,709	1,902,110	1,959,173	2,017,948	2,078,487	2,140,841	2,205,067	2,271,219	2,339,355	2,409,536
Annual Costs	**4,429,109**	**4,562,010**	**4,698,873**	**4,839,748**	**4,984,987**	**5,134,541**	**5,288,567**	**5,447,319**	**5,610,755**	**5,779,136**
Treated Flows (m3/year)	446,929	452,861	458,793	464,725	470,657	476,588	482,520	488,526	494,606	500,762
Cost per m3 of Treated Wastewater	**9.91**	**10.07**	**10.24**	**10.41**	**10.59**	**10.77**	**10.96**	**11.15**	**11.34**	**11.54**

3. Water and Wastewater Rate Structure Review

3.1 Introduction

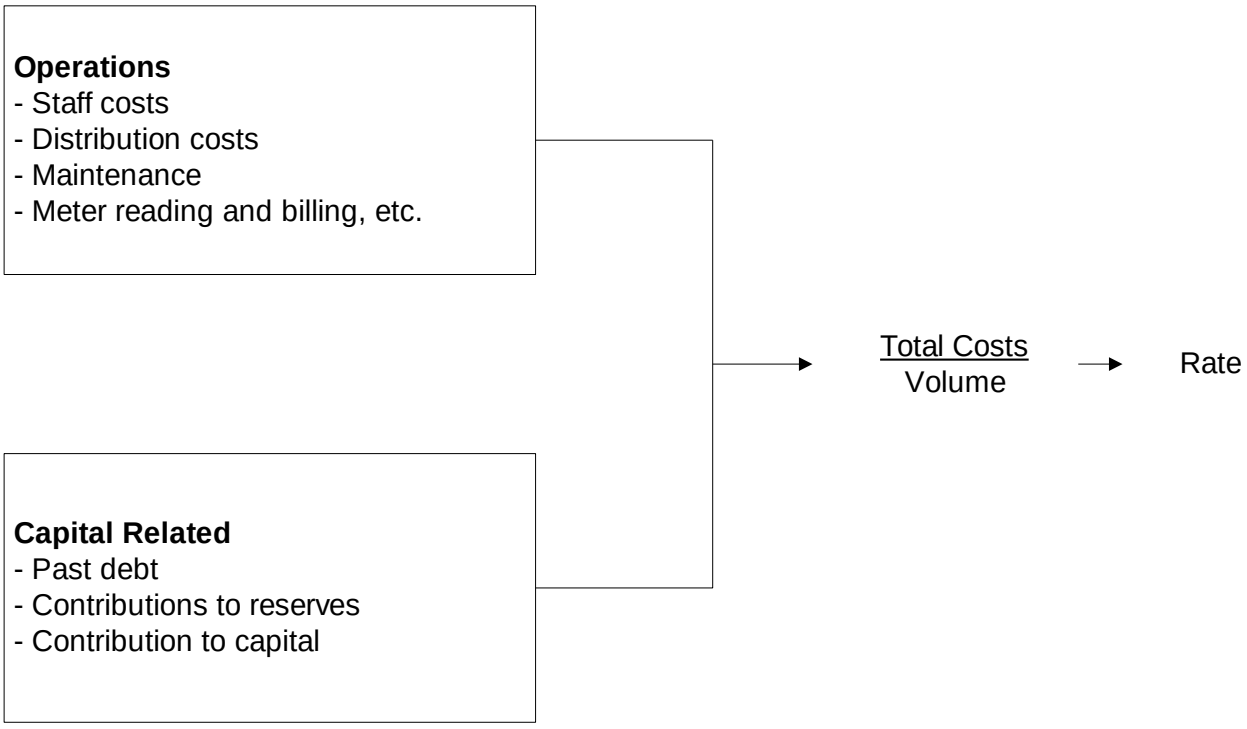
This chapter summarizes the different rate structure alternatives or pricing mechanisms that could be utilized to recover the long-term capital and operating costs of providing water and wastewater services within a municipality. The rate structure alternatives have also been assessed with regard for:

- Cost recovery and revenue stability implications;
- Administration and ease of implementation;
- The ability to allocate costs of service to customers in an equitable fashion;
- Promotion of water conservation; and
- The prevalence of different rate structures employed by Ontario municipalities.

Section 3.5 also summarizes South Stormont's current water and wastewater rate structure.

Rates in their simplest form can be defined as total costs to maintain the utility function divided by the total expected volume to be generated for the period. Total costs are usually a combination of operating costs (e.g., staff costs, distribution costs, maintenance, administration, etc.) and capital-related costs (e.g., past debt to finance capital projects, transfers to reserves to finance future expenditures, etc.). The schematic below provides a simplified illustration of the rate calculation for water services.

"ANNUAL COSTS"



These operating and capital expenditures will vary over time. Examples of factors that will affect the expenditures over time are provided below:

- Operations
  - Inflation
  - Increased maintenance as system ages
  - Changes to provincial legislation
  - Service delivery changes
- Capital Related
  - New capital will be built as areas expand
  - Replacement capital needed as system ages
  - Financing of capital costs is a function of policy regarding reserves and direct financing from rates (pay as you go), debt and user pay methods (development charges, *Municipal Act*)

3.2 Alternative Pricing Structures

Throughout Ontario, and as well, Canada, the use of pricing mechanisms varies between municipalities. The use of a particular form of pricing depends upon numerous factors, including Council preference, administrative structure, system capacities, and economic/demographic conditions, to name a few.

Municipalities within Ontario have two basic forms of collecting revenues for water and wastewater services, those being through incorporation of the costs within the tax rate charged on property assessment and/or through the establishment of a specific water and wastewater rate billed to the customer. Within the rate methods, there are four basic types of rate structures employed:

1. Flat Rate
2. Constant Rate
3. Declining Block Rate
4. Increasing (or Inverted) Block Rate.

These types of rates may be employed independently or in combination. The definitions and general application of the various methods are set out in the following subsections.

3.2.1 Property Assessment

This method incorporates the total costs of providing water into the general requisition or the assessment base of the municipality. This form of collection is a "wealth tax," as payment increases directly with the value of the property owned and bears no necessary relationship to actual consumption or demand for service. This form is easy to administer as the costs to be recovered are incorporated in the calculation for all general services, normally collected through property taxes.

3.2.2 Flat Rate

This rate is a constant charge applicable to all customers served. The charge is calculated by dividing the total number of user households and other entities (e.g., businesses) into the costs to be recovered. This method does not recognize differences in actual consumption but provides for a uniform spreading of costs across all users. Some municipalities define users into different classes of similar consumption patterns, such as a commercial user, residential user, and industrial user, and charge a flat rate by class. Each user is then billed on a periodic basis. No meters are required to facilitate this method, but an accurate estimate of the number of users is required. This method ensures a set revenue for the collection period but is not sensitive to consumption, hence may cause a shortfall or surplus of revenues collected.

3.2.3 Constant Rate

This rate is a volume-based rate, in which the consumer pays the same price per unit consumed regardless of the volume of water consumed. The price per unit is calculated by dividing the total cost of the service by the total volume used by all consumers. The bill to the consumer climbs uniformly as the consumption increases. This form of rate requires the use of meters to record the volume consumed by each user. This method closely aligns the revenue recovery with consumption. Revenue collected varies directly with the consumption volume.

3.2.4 Declining Block Rates

This rate structure charges a successively lower price for set volumes, as consumption increases through a series of "blocks." That is to say that within set volume ranges, or blocks, the charge per unit is set at one rate. Within the next volume range, the charge per unit decreases to a lower rate, and so on. Typically, the first, or first and second blocks cover residential and light commercial uses. Subsequent blocks normally are used for heavier commercial and industrial uses. This rate structure requires the use of meters to record the volume consumed by each type of user. This method also requires the collection and analysis of consumption patterns by user classification to establish rates at a level that does not over or under collect revenue from rate payers.

3.2.5 Increasing or Inverted Block Rates

The increasing block rate works essentially the same way as the declining block rate, except that the price of water in successive blocks increases rather than decreases. Under this method the consumer's bill rises faster with higher volumes used. This rate structure also requires the use of meters to record the volume consumed by each user. This method requires, as with the declining block structure, the collection and analysis of consumption patterns by user classification to establish rates at a level that does not over or under collect from rate payers.

3.3 Assessment of Alternative Pricing Structures

The adoption by a municipality or utility of any one particular pricing structure is normally a function of a variety of administrative, social, demographic, and financial factors. The number of factors and the weighting each particular factor receives can vary between municipalities. The following is a review of some of the more prevalent factors.

3.3.1 Cost Recovery

Cost recovery is a prime factor in establishing a particular pricing structure. Costs can be loosely defined into different categories: operations, maintenance, capital, financing, and administration. These costs often vary between municipalities and even within a municipality, based on consumption patterns, infrastructure age, economic growth, etc.

The pricing alternatives defined earlier can all achieve the cost recovery goal, but some do so more precisely than others. Fixed pricing structures, such as property assessment and flat rates, are established on the value of property or on the number of units present in the municipality, but do not adjust in accordance with consumption. Thus, if actual consumption for the year is greater than projected, the municipality incurs a higher cost of production, but the revenue base remains static (since it was determined at the beginning of the year), potentially providing a funding shortfall. Conversely, if the consumption level declines below projections, fixed pricing structures will produce more revenue than actual costs incurred.

The other pricing methods (declining block, constant rate, increasing block) are consumption based and generally will generate revenues in proportion to actual consumption.

3.3.2 Administration

Administration is defined herein as the staffing, equipment and supplies required to support the undertaking of a particular pricing strategy. This factor not only addresses the physical tangible requirements to support the collection of the revenues, but also the intangible requirements, such as policy development.

The easiest pricing structure to support is the property assessment structure. As municipalities undertake the process of calculating property tax bills and the collection process for their general services, the incorporation of the water costs into this calculation would have virtually no impact on the administrative process and structure.

The flat rate pricing structure is relatively easy to administer as well. It is normally calculated to collect a set amount, either on a monthly, quarterly, semi-annual, or annual basis and is billed directly to the customer. The impact on administration centers mostly on the accounts receivable or billing area of the municipality, but normally requires minor additional staff or operating costs to undertake.

The three remaining methods, those being increasing block rate, constant rate, and declining block rate**,** have a more dramatic effect on administration. These methods are dependent upon actual consumption and hence involve a major structure in place to administer. First, meters must be installed in all existing units in the municipality and units to be subsequently built must be required to include these meters. Second, traditional meter readings must be undertaken periodically. Hence staff must be available for this purpose, or a service contract must be negotiated. Alternatively, Advanced Metering Infrastructure (AMI) can be utilized to eliminate the need for manual meter reading. Third, the billings process must be expanded to accommodate this process. Billings must be done per a defined period, requiring staff to produce the bills. Lastly, either through increased staffing or by service contract, an annual maintenance program must be set up to ensure meters are working effectively in recording consumed volumes.

3.3.3 Equity

Equity is always a consideration in the establishment of pricing structures, but its definition can vary depending on a municipality's circumstances and based on the subjective interpretation of those involved. For example: Is the price charged to a particular class of rate payer consistent with those of a similar class in the surrounding municipalities? Through the pricing structure, does one class of rate payer pay more than another class? Should one pay based on ability to pay or on the basis that a unit of water costs the same to supply no matter who consumes it? There are many interpretations. A further consideration that is relevant to municipalities providing

service through multiple separate systems is the cost to rate payers within each service area. Equity, therefore, must be viewed broadly in light of many factors as part of achieving what is best for the municipality as a whole.

3.3.4 Conservation

In today's society, conservation of natural resources is increasingly being more highly valued. Conservation continuously focuses on the preservation of non-renewable resources and on the proper management of renewable resources. Conservation is also a concept that applies to a municipality facing physical limitations in the amount of water that can be supplied to an area. As well, financial constraints can encourage conservation in a municipality where the cost of providing each additional unit is increasing.

Pricing structures such as property assessment and flat rate do not, in themselves, encourage conservation. In fact, depending on the price that is charged, they may even encourage resource "squandering," either because consumers, without the price discipline, consume water at will, or the customer wants to get their money's worth and hence adopts more liberal consumption patterns. The fundamental reason for this is that the price paid for the service bears no direct relationship to the volume consumed and hence is viewed as a "tax," instead of being viewed as the price of a purchased commodity.

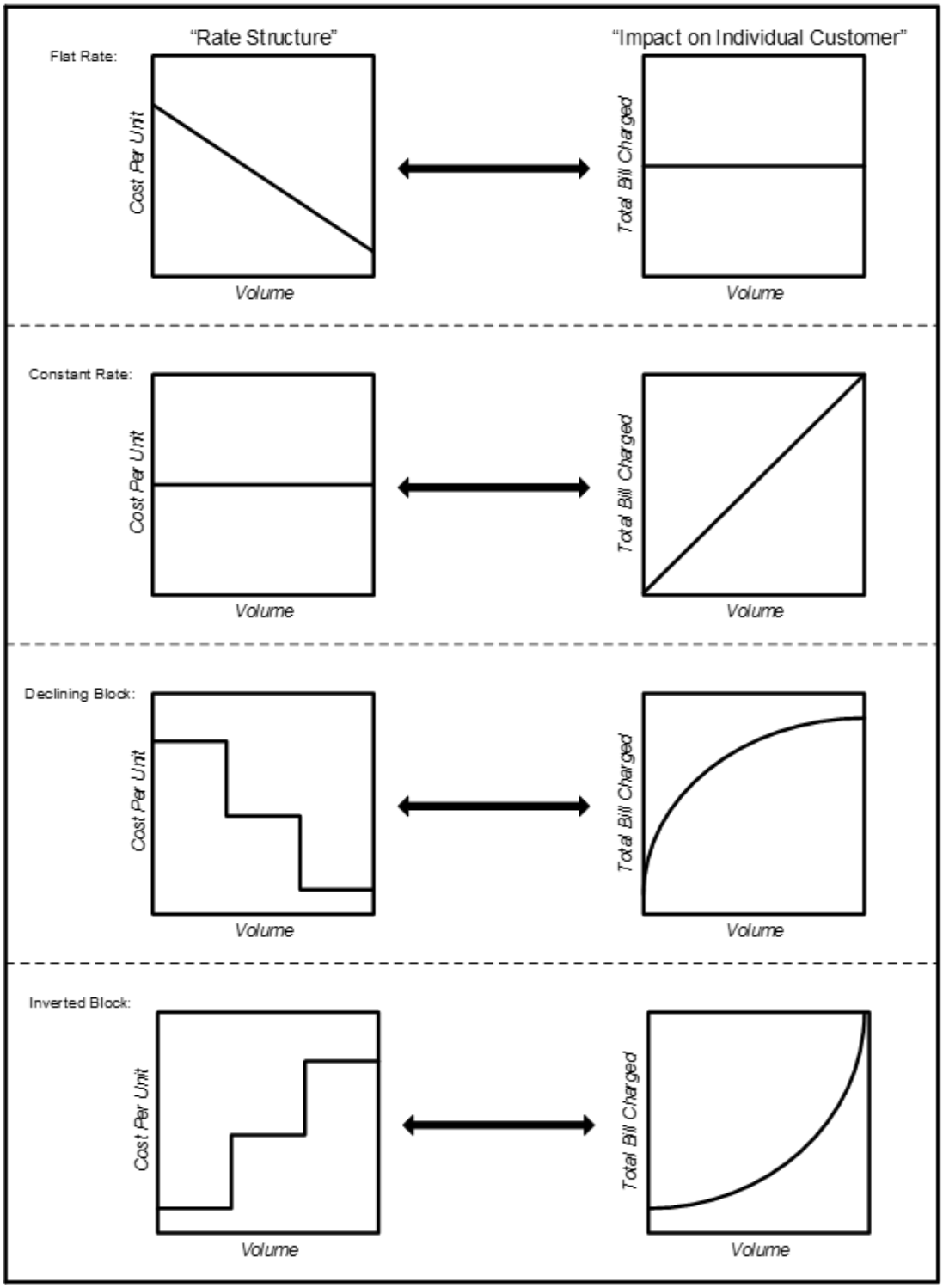
The declining block rate provides a decreasing incentive towards conservation. By creating awareness of volumes consumed, the consumer can reduce their total costs by restricting consumption; however, the incentive lessens as more water is consumed, because the marginal cost per unit declines as the consumer enters the next block pricing range. Similarly, those whose consumption level is at the top end of a block have reduced incentive to lower consumption.

The constant rate structure presents the customer with a linear relationship between consumption and the cost thereof. As the consumer pays a fixed cost per unit, their bill will vary directly with the amount consumed. This method presents tangible incentive for consumers to conserve water. As metering provides direct feedback as to usage patterns and the consumer has direct control over the total amount paid for the commodity, the consumer is encouraged to use only those volumes that are reasonably required.

The increasing block method presents the most effective pricing method for encouraging conservation. Through this method, the price per unit consumed increases as total volumes consumed grow. The consumer becomes aware of consumption through metering with the charges increasing dramatically with usage. Hence, there normally is an awareness that exercising control over usage can produce significant savings. This method not only encourages conservation but may also penalize legitimate high-volume users if not properly structured.

Figure 3-1 provides a schematic representation of the various rate structures (note property tax as a basis for revenue recovery has not been presented for comparison, as the proportion of taxes paid varies in direct proportion to the market value assessment of the property). The graphs on the left-hand side of the figure present the cost per unit for each additional amount of water consumed. The right-hand side of the figure presents the impact on the customer's bill as the volume of water increases. The schematic is summarized below for each rate structure.

Figure 3-1
Water Rate Pricing Structures



Rate Structure	Cost per Unit as Volume Consumption Increases	Impact on Customer Bill as Volume Consumption Increases
Flat Rate	Cost per unit decreases as more volume consumed	Bill remains the same no matter how much volume is consumed
Constant Rate	Cost per unit remains the same	Bill increases in direct proportion to consumption
Declining Block	Cost per unit decreases as threshold targets are achieved	Bill increases at a slower rate as volumes increase
Increasing (Inverted) Block	Cost per unit increases as threshold targets are achieved	Bill increases at a faster rate as volumes increase

3.4 Rate Structures in Ontario

In a recent survey of municipalities providing municipal water services in Ontario (271 municipalities), all forms of rate structures that have been identified are in use by Ontario municipalities in some manner. The most common rate structure is the constant rate (for metered municipalities). Most municipalities (approximately 88%) who have meters and volume rate structures also impose a base monthly charge (as shown in Figure 3-2). Monthly base charges could include billing charges, meter charges, or minimum charges as summarized in the following sections.

Recently, many municipalities have started to establish base charges based on ensuring a secure portion of the revenue stream that does not vary with volume consumption. Selection of the quantum of the base charge is a matter of policy selected by individual municipalities.

When examining the practice in eastern Ontario, the City of Cornwall and Township of North Stormont are the only municipalities to not impose rates comprised of a monthly base charge and a consumptive rate per volume of water consumed.

3.4.1 Billing Charges

Historically, the development of a base charge often reflected the billing charge approach, where either the recovery of meter reading/billing/collection costs plus administration, or those costs plus certain fixed costs (such as capital contributions or reserve contributions) were calculated. Billing charges can be calculated on a uniform basis by customer or account or differentiated by customer class if these costs vary. Billing charges are relatively easy to calculate, administer, and to communicate to customers.

Compared to other types of base charges, billing charges are typically lower as the costs they are meant to recover represent a fairly small share of the costs of service.

3.4.2 Meter Charges

Many municipalities set base charges such as meter charges to recover the minimum costs associated with making the service available, as these costs are incurred regardless of the water used in a given period. Approaches to establishing these costs could involve a minimum system requirement analysis or by assessing the long-term annual capital replacement costs that would be incurred to maintain the capital infrastructure through which services are provided.

Meter charges consist of a monthly base charge that varies by meter size. Because meter charges vary by customer or account based on meter size, they can be more difficult to explain than billing charges or minimum charges.

3.4.3 Minimum Charges

Minimum billing charges are designed such that customers are charged a minimum amount regardless of water consumption and the minimum is often set at a low level of water consumption that typically most customers would consume.

3.5 Current Rate Structure

South Stormont currently employs separate water rates for in each of the three water systems and uniform rates for customers in the Long Sault and Ingleside wastewater systems.

Water rates in each area are imposed per cubic metre of water consumed with a minimum charge per 38.5 cubic of water consumed each quarter. The rates in Long Sault/ingleside and St. Andrew's/Eamers Corners are being transitioned such that uniform rates will be in place by 2029. Wastewater rates are also imposed per cubic metre of water consumed with a minimum charge per 38.5 cubic of water consumed each quarter. Industrial users with an annual water consumption greater than 6,000 cubic metres annually are charged a lower water and wastewater rate in Long Sault and Ingleside.

Uniform rate structures are recommended in part to address equity and affordability issues of providing service through multiple systems with differing economies of scale and levels of service. Imposing uniform water and wastewater rates will allow the Township to balance the ability to pay of water customers with expected levels of service, provide a sustainable funding source for all systems, and improve the administrative billing process.

The uniform water and wastewater rates have been forecast such that they will be sufficient to fund the long-term capital needs of the systems by 2029, providing for the sustainable replacement of infrastructure and ongoing operation and maintenance of the systems.

4. Comparative Service Delivery Review

Two alternative service delivery options have been considered by Aureus that involve the joint operation of the water and wastewater systems in South Glengarry and South Stormont through internal management and operations (Scenario 1) or external contracted management and operations (Scenario 2).

Tables 4-1 and 4-2 summarize the inputs that have been considered for each alternative in the financial assessment and how those costs have been allocated between South Stormont and South Glengarry.

For both scenarios and municipalities, the shared management and operations would result in a significant decrease in annual costs. However for South Stormont, the economies of scale of moving to shared internal management and operations of the systems would result in a $623,100 decrease in annual costs.

In addition to the items summarized in Tables 4-1 and 4-2, the following have been identified with potential cost implications to each Township, however the impacts are unknown at this time and have not been considered within the review:

- Shared service administration related to accounts payable, accounts receivable, and water billing;
- Operational savings on joint procurement and internal accountability;
- Cost to set up and run a Joint Municipal Services Board or Joint Municipal Services Corporation; and
- Any additional costs related to transitioning between service delivery models.

Table 4-1
Inputs for Shared Internal Operations and Management of Systems

Description	Hourly Rate	Benefits Rate	Hours	Annual Cost	South Stormont Allocation	South Glengarry Allocation	Notes
Additional Costs							
Municipal Service Oversight				**20,000**	50%	50%	Shared
2 Supervisor Water/Wastewater Treatmen	38	30%	2,000	**195,000**	50%	50%	Shared
5 FTE certified operators (operators Cross	31	30%	2,000	**403,000**	50%	50%	Shared
1 FTE Compliance/ QMS Coordinator	31	30%	2,000	**80,600**	50%	50%	Shared
1 FTE Locates, and meter reading	25	30%	2,000	**65,000**	50%	50%	Shared
2 PTE summer/ co-op student (4 months)	20	n/a	700	**13,333**	50%	50%	Shared
Overtime				**20,000**	50%	50%	Shared
Shift Premium	n/a	n/a	n/a	**15,000**	50%	50%	Shared
Training	n/a	n/a	n/a	**20,000**	50%	0%	Training costs would already be included in the South Glengarry budget
Communications	n/a	n/a	n/a	**8,000**	50%	0%	Communications costs would already be included in the South Glengarry budget
Fleet	n/a	n/a	n/a	**10,000**	50%	0%	Fleet costs would already be included in the South Glengarry budget
Cost Savings							
South Glengarry Current Staffing Costs	n/a	n/a	n/a	**579,000**	0%	100%	Assumption that $42,500 costs would not be covered by joint services (same as South Stormont)
South Stormont Current Staffing Costs	n/a	n/a	n/a	**91,002**	100%	0%	Share of current costs replaced by joint staffing model ($42,500 not replaced)
South Stormont Current Contract Costs	n/a	n/a	n/a	**718,200**	100%	0%	Replaced by shared model
Net Increase / (Decrease) in Costs vs. Current Service Delivery Model					**(384,235)**	**(173,033)**	

Table 4-2
Inputs for Shared External Contracted Operations and Management of Systems

Description	Hourly Rate	Benefits Rate	Hours	Annual Cost	South Stormont Allocation	South Glengarry Allocation	Notes
Additional Costs							
Shared Contract	n/a	n/a	n/a	**1,100,000**	50%	50%	Shared
Cost Savings							
Current South Stormont Contract Costs	n/a	n/a	n/a	**718,200**	100%	0%	
Current South Glengarry Staffing Costs	n/a	n/a	n/a	**559,800**	0%	100%	Share of costs not replaced by contract ($75,000 for oversight, meter reading and operations of linear infrastructure)
Net Increase / (Decrease) in Costs vs. Current Service Delivery Model					**(168,200)**	**(9,800)**	

Summarized in Table 4-3 are the impacts to the required debt financing and interim funding requirements over the 2023 to 2032 period as well as the impact on the forecast water and sewer rates to reach sustainable full cost funding levels and the change in cost per m^3 per year of water and wastewater flows in the Township.

Table 4-3
South Stormont Financial Review Summary

Description	Current Service Delivery Model	Scenario 1 (Shared Internal)	Scenario 2 (Shared Contract)
Water			
Required Debt Financing (2023-2032)	-	-	-
Reserve Fund Balance	6,571,168	7,388,226	7,022,128
Impact on Required Rates	n/a	-6.0%	-3.9%
Cost per m3 of Treated Water (2032)	2.86	2.59	2.79
Wastewater			
Required Debt Financing (2023-2032)	12,679,052	10,731,339	11,646,354
Reserve Fund Balance	736,887	617,830	626,874
Impact on Required Rates	n/a	-6.8%	-3.3%
Cost per m3 of Treated Wasewater (2032)	11.54	10.36	11.27

The decrease in annual operating costs under Scenario 1 has the greatest positive impact on the financial position of the Township's water and wastewater systems as result of a $384,300 decrease in annual operating costs across both the water and wastewater systems. In comparison to the current service delivery model, a $1.9 million decrease (-15%) in debt funding would be required for wastewater capital needs, thereby providing further debt funding capacity for other municipal capital needs. The annual operating cost savings would also allow for a 6.0% and 6.8% decrease for water and wastewater rates, respectively, in comparison to the current service delivery model.

Lastly the cost per cubic metre to treat water and wastewater with the Township would also decrease in comparison to the current service delivery model. The cost per cubic metre of water would decrease by 10% (from $2.86 to $2.59 per cubic metre) and the cost per cubic metre of wastewater would decrease by 10% ($11.54 to $10.36).

5. Conclusion

Based on the inputs and analysis summarized above, the cost savings achieved under the alternative internal shared operations and management service delivery model would provide the greatest net benefit to the Township's ratepayers. Furthermore, the decreased operating costs would also allow the Township to provide greater contributions to reserves for future capital needs, mitigating additional debt funding requirements.