# REGIONAL WASTE MANAGEMENT: A ROADMAP TO COLLABORATION

Executive Summary & Action Plan

# Regional Waste Management: A Roadmap to Collaboration
# Executive Summary & Action Plan

## A. Executive Summary

Solid waste management within the United Counties of Stormont, Dundas and Glengarry (SDG) is individually managed by the six local municipalities. Each municipality faces different challenges and opportunities resulting from changing waste diversion regulations, the need for modernization, organizational capacity and diminishing landfill space. Due to these continued challenges, SDG, in partnership with its municipalities, engaged *DFA Infrastructure International Inc.* (DFA) to provide a review and comparison of the waste management programs, and recommend short-, medium- and long-term opportunities that could improve efficiencies, increase collaboration, and provide potential solutions to the challenges facing each municipality.

As a result of the COVID-19 pandemic, shifting local waste management priorities and changing personnel, it proved challenging to complete the report within the original project timeframe. A further challenge is that each local municipality has varying levels of service, investments and expectations associated with waste collection and disposal, and rightfully wish to ensure that their respective taxpayers remain well-served. These competing interests create challenges in recommending changes to delivery of local services within a common regional model.

In response to these local concerns, some of the recommendations within DFA's report require further detailed financial analysis and business plans to demonstrate that they are viable alternatives when compared to current practices. This level of analysis was not considered in DFA's scope of work, and, given the continued changing landscape of waste management, should only be undertaken on a case-by-case basis when deemed appropriate by the affected parties.

A copy of the complete report prepared by DFA is attached. This executive summary and action plan, authored by the current *Steering Committee* (SDG, North Glengarry and South Glengarry) is intended to provide a high-level synopsis of the substantial findings and offer an implementation plan on actions which are both consistent with the direction advocated within the report and achievable by our local municipalities in the short to medium term.

**The Steering Committee is recommending four immediate actions by the County and six local municipalities. The four actions are:**

1. Obtain a commitment from the six local Councils to pursue a regional approach to solid waste management through the creation of a Regional Waste Management Working Group
2. Focus efforts on a collaborative transition strategy during the IPR transition instead of active involvement
3. Annually summarize and compare financial data on local solid waste management activities
4. Adopt a regional 'benchmark' level of service for solid waste management

# B. Existing Conditions in Local Solid Waste Management

## Existing Levels of Service

The local municipalities within SDG have varying levels of service for solid waste management. A summary of key service levels is provided in **Table 1**.

**Table 1. Existing Levels of Service within each Municipality (From Appendix D, DFA Report)**

| Item | NG | SG | ND | SD* | NS | SS |
|---|---|---|---|---|---|---|
| | | | | | | |
| **Collection Frequency** | Weekly (out by 6am) | Weekly (out by 7am) Special large item collection in spring | Weekly | Weekly (out by 7am) | Weekly (out by 7am) | Weekly (out by 7am) |
| **Bag/ Container Waste Limit** | Res – 2 bags, 50lbs max. Tags required for extra | Res – 3 bags[1] Farm – 5 bags Extra bags can be purchased | Res – 2 bags Active Farm – 4 bags Bus – 6 bags | Res – 2 bags Farm – 4 bags Extra bags can be purchased | Res – 2 bags Farm – 10 bags | Res – 2 bags Farm – 6 bags |
| **Bag/ Tag Fee** | $3.00 | N/A | N/A | $2.00 | $2.50 | $1.50 |
| **Collected By** | Contract | Contract | In-House | Contract | In-House | In House |
| **To Private or Public Landfill?** | Private | Public | Public | Public | Private | Both |
| **No. Curbside Stops (2020)** | 3650 | 5965 | 4300 | 4957 | 2700 | 5600 |
| **Waste Disposed (t) (2020)** | 3385 | 3000 | Curbside 2400 Landfill 760 | 5666 | 1700 | 3200 |
| **Unacceptable Materials** | List varies significantly between Municipalities | | | | | |
| **Curbside Recycling** | | | | | | |
| **Collection Frequency** | Weekly (Alt. stream each week) | Weekly[1] | Weekly (Alt. stream each week) | Weekly (Alt. stream each week) | Bi-Weekly | Bi-Weekly |
| **Single/ Dual Stream** | Dual | Single | Dual | Dual | Single | Single |
| **Collected By** | Contract | Contract | In House | Contract | Contract | In House |
| **Collected Separate from Waste?** | | | Split back truck (60/40) | | | |
| **MRF?** | Alexandria RARE | Cornwall | WMI Brockville (transfer at Boyne) | Cornwall | Cornwall | Cornwall |
| **No. Curbside Stops (2020)** | 3650 | 5965 | 4300 | 4957 | 2700 | 5600 |
| **Waste Diverted (t) (2020)** | 770 | 700 | 600 | 535 | 400 | 800 |
| **Acceptable Materials** | Differing lists/ detail between each municipality | | | | | |

| Item | NG | SG | ND | SD* | NS | SS |
|---|---|---|---|---|---|---|
| **Bulk Waste, Hazardous Waste & Composting** | | | | | | |
| **Collection Frequency** | Bulk (Landfill 2 pass) HW (Transfer Station 1/y) | Collected | Landfill Drop off | Landfill Drop off | Landfill Drop off (500kg pass provided) | Landfill Drop-off |
| **Leaf and Yard** | 2 times/ year for bulk | Spring and Fall | Spring and fall pickup in villages and hamlets | Drop off at facilities | 2/year (spring &fall) | Biweekly in October and November Free drop off at Trillium |
| **IC&I Accepted** | No | Yes (Limited) | Yes | Yes | N/A | no |
| **Tipping Fees** | 2 free passes provided | Free access 3 times / year | Yes – varies per material | Yes – varies by vehicle | No fee at Municipal yard, free pass to GFL up to 500kg | Yes -varies by vehicle. 2 free passes provided |
| **Composting** | None | Backyard<br><br>subsidized food cycler | Refer people to local suppliers for backyard composters | Subsidized food cycler ($150 plus HST), plus 6 Compost Depot Days (3 Morrisburg/3 Iroquois) plus free at Matilda Landfill Site | None | Backyard<br><br>subsidized food cycler |

* *Updated data not provided*

## Local Landfills

There are six active landfills within SDG that are owned and operated by local municipalities:

- Township of North Dundas: Boyne Road Landfill (at capacity, expansion underway)
- Township of South Dundas: Matilda Landfill (at capacity in 7.5 years)
- Township of North Glengarry: Glen Robertson Landfill (at capacity in 2056)
- Township of South Glengarry: North Lancaster Landfill (at capacity in 2028 and Beaverbrook Landfill (at capacity in 2033)
- Township of South Stormont: Trillium landfill (at capacity in 2029)
- Township of North Stormont: no active landfill

There are seven closed landfills within SDG which continue to be managed by the local municipalities (one in each municipality and two in North Stormont). The closed landfills are ongoing liabilities.

The Township of North Stormont is the geographic home of the Eastern Ontario Waste Handling Facility (EOWHF) - a state-of-the-art waste disposal facility that is owned and operated by a Canadian corporation. The location of the EOWHF is strategically favorable for municipalities within SDG and there is an opportunity to collaboratively engage the EOWHF to secure long term disposal contracts for regional waste. The City of Cornwall is also facing the same municipal landfill capacity issues and would benefit from being part of the discussion.

## Existing Staffing Levels

The municipalities also have a varying level of human resource capacity available to support solid waste management services. Staff resources could include directors, supervisors, administrative support, and equipment operators that are involved in broader public works, infrastructure or

environmental services functions that also include solid waste. Only one municipality in SDG has a separate waste management Department (North Dundas). A summary of current full-time-equivalent staff persons responsible for waste management is provided in **Table 2**.

**Table 2. Waste Management Staff Resources**

| Municipality | Contracted Collection? (Y/N) | Operate Landfill Facility (Y/N) | Shared Staff | | Dedicated SW staff | | Total |
|---|---|---|---|---|---|---|---|
| | | | Non-Union | Union | Non-Union | Union | |
| **North Dundas** | N | Y | | | 6 | | 6 |
| **South Dundas*** | | | 1 | | 1.5 | | 2.5 |
| **North Glengarry** | Y | Y | 3 | 2 | 10 | | 10 |
| **South Glengarry** | Y | Y | 2 | 1 | | | 3 |
| **North Stormont*** | N | N | 2 | | | | 2 |
| **South Stormont** | Y | Y | 4 | 3.5 | | | 7.5 |

*Updated data not provided

## Municipal Cost Comparisons

The information contained in the cost-comparisons is a best-attempt by DFA to provide a equivalent costing for the various services offered by each municipality (2020 dollars). Given the varied services, accounting and other factors which differ between the local municipalities (e.g. staff time allotments), reasonable assumptions were made. Details on how the costing was derived is provided in Appendix E of DFA's report.

**Table 3. Current Assets Held by Each Municipality (2020 Value)**

| Solid Waste Component | ND | SD | NG | SG | NS | SS | Total |
|---|---|---|---|---|---|---|---|
| Waste Collection Assets | $271,400 | | | | | $560,000 | **$831,400** |
| Disposal Assets[1] | $1,445,846 | $1,471,544 | $5,218,163 | $1,081,499 | $291,100 | $369,200 | **$9,877,353** |
| Recycling Collection Assets | $242,477 | | | | $168,000 | $280,000 | **$690,477** |
| MFR & Other Diversion Assets | $25,488 | | $4,693,640 | | | | **$4,665,128** |
| **Total** | **$1,985,210** | **$1,471,544** | **$9,857,804** | **$1,081,499** | **$459,100** | **$1,209,200** | **$16,064,358** |

[1] *Excludes the value of landfill capacity*

**Table 4. Annual Gross Operating Cost Estimates (2021, rounded)**

| Solid Waste Component | ND | SD | NG | SG | NS | SS | Total |
|---|---|---|---|---|---|---|---|
| Waste Collection Costs (in house) | $271,000 | | | | | $400,000 | **$671,268** |
| Waste Collection Costs (contract) | | $327,000 | $262,000 | $503,000 | $179,000 | | **$1,270,000** |
| Waste Disposal Costs (own landfill) | $209,000 | $363,000 | $239,000 | $273,000 | | $167,000 | **$1,252,000** |
| Waste Disposal Costs (contract landfill) | | | $198,000 | | $115,000 | $172,000 | **$485,000** |
| Recycling collection costs (in house) | $317,000 | | | | $100,000 | $207,000 | **$624,000** |
| Recycling collection costs (contract) | | $327,000 | $174,000 | $237,000 | | | **$738,000** |
| Recycling processing & other waste diversion costs | $128,000 | $202,000 | $792,000 | $271,000 | $137,000 | $264,000 | **$1,794,000** |
| Landfill closure & post closure costs | $15,000 | $111,000 | $26,000 | $2,600 | $37,000 | $34,000 | **$225,000** |
| **Total** | **$941,000** | **$1,330,000** | **$1,700,000** | **$1,286,000** | **$567,000** | **$1,245,000** | **$7,060,000** |
| **Total Tonnage Disposed (2020)** | **2,100** | **4,300** | **3,400** | **3,000** | **1,700** | **3,200** | **17,700** |
| **Total Tonnage Diverted (2020)** | **600** | **530** | **770** | **700** | **400** | **400** | **3400** |

Due to the delay between drafts of the DFI report, the gross operating numbers presented above are estimates based on 2020 actuals and information derived from known operational changes. They are provided for information and comparison purposes only.

## C. Legislative Landscape

The Resource Recovery and Circular Economy Act (RRCEA) is placing the responsibility for the life cycle of products on individual producers. They will be required to perform waste reduction activities in accordance with provincial policy. The transition from current practice, to making producers fully responsible for the life cycle of the products they produce is known as Individual Producer Responsibility (IPR). **It is anticipated that all municipalities within SDG will transition to IPR on January 1, 2025**; at which time municipalities will no longer have authority to operate a recycling program.

Local municipalities may choose to provide collection and/or processing services as a contractor within the IPR framework. The decision to operate as a contractor providing collection and/or processing services remains a local decision; however, from a cost and liability perspective, there is a significant risk that municipalities that elect to operate in this manner may be challenged in recovering the full cost of these services; meaning that taxpayers will be subsidizing a service which is intended to be fully paid by producers themselves.

## D. Recommendations and Action Plan

| Recommendation | | Rationale / Additional Information | Implementation Plan |
|---|---|---|---|
| 1 | **Obtain a commitment from the six local Councils to pursue a regional approach to solid waste management through the creation of a Regional Waste Management Working Group** | The 2022 Municipal elections and impending blue box transition to producer responsibility will provide local municipalities an opportunity to increase collaboration across the region. Without a formal framework and direction from each individual Council, it is likely that the status quo will continue and opportunities to improve efficiencies and meet common goals will remain unrealized.<br><br>The Steering Committee recommends that formal direction be secured from local municipalities to provide staff with clear direction that they are to participate in a RWMWG and regularly report back to their local Councils. To support this working group, the County can function as a non-voting secretary of the working group and provide support for all regional initiatives (e.g. coordinating and managing joint purchasing efforts). The chair position can annually rotate. It is suggested that the RWMWG meet every other month, with each member reporting progress of the working group quarterly to their respective Councils.<br><br>The City of Cornwall, City of Ottawa and other neighboring municipalities should be invited to participate as deemed appropriate by the working group. | 1) Present the findings of the implementation plan to local Councils and County Council. Request formal commitment from local municipalities to identify which staff person will be a member of the RWMWG and if there are other staff that can provide resource/ support to the *Working Group.*<br>**Action: All local Municipal Council and SDG Council**<br>**Complete by: November 1, 2022**<br><br>2) Develop a draft *Terms of Reference (ToR)* for the working group<br>**Action: SDG**<br>**Complete by: November 30, 2022**<br><br>3) Host inaugural meeting of the RWMWG. Agenda to include:<br>a. Review and acceptance of the ToR<br>b. Identify of immediate (less than 1 year) short (1-2 year), medium (2-5 year) and long term (5+ year) strategic collaboration goals (refer to DFA report for specific items which could be considered by the committee)<br>c. Create implementation plan and strategy for identified collaboration goals<br>**Action: SDG and Local Staff**<br>**Complete by: December 30, 2022** |
| 2 | **Focus efforts on a collaborative transition strategy during the IPR transition instead of active involvement** | Given the liability associated with maintaining municipal control / responsibility for recycling after the transition to the individual producer responsibility regime, it is recommended that all local municipalities abandon their programs when legislation permits. Although this is recommended, it is ultimately up to each local municipality to make the final decision in this regard.<br><br>To keep residents well informed of the transition and advised of the potential change of service associated with this provincial initiative, it is important that local municipalities adopt a common, efficient and effective communications strategy. Fortunately, SDG will be transitioning towards the end of the shift, and our region will be able to leverage the “lessons learned” from other areas within Ontario. Regardless, it is likely that external communications support will be necessary.<br><br>Given that this change is occurring regionally, subject to concurrence from the RWMWG, it is expected that the County will financially support this communications plan to ensure that efforts are equitably shared across the local municipalities. | 1) Report on the status of the transition to IPR for those transitioning January 1, 2023<br>**Action: TBD**<br>**Complete by: Q2 2023**<br><br>2) Identify challenges / successes of those that have transitioned and examples of desired communication templates<br>**Action: TBD**<br>**Complete by: Q3 2023**<br><br>3) Create a communications strategy and implementation plan for residents of SDG<br>**Action: TBD**<br>**Complete by: Q4, 2023. Roll out strategy in 2024.** |

| Recommendation | | Rationale / Additional Information | Implementation Plan |
|---|---|---|---|
| 3 | **Provide local financial data on solid waste management activities annually** | One of the most important outcomes of the Regional Waste Management report prepared by DFA Infrastructure was that it provided local municipalities within SDG an opportunity to truly compare the cost of waste management services they provide to their residents. This information ultimately allows municipalities with the opportunity to identify areas where they can work with neighbouring municipalities (and others) to create efficiencies and reduce costs. | 1) Create a standard form for local municipalities to update on an annual basis<br>**Action: SDG**<br>**Complete: Q4 2022**<br><br>2) Update the standard form based on year-end actuals<br>**Action: Local Municipalities**<br>**Complete: End of Q1 2023 (and annually thereafter)**<br><br>3) Report financial cost comparisons to RWMWG<br>**Action: SDG**<br>**Complete End of Q2 2023 (an annually thereafter)** |
| 4 | **Adopt a regional 'benchmark' level of service for solid waste management** | Although there is no obligation for local municipalities to implement a regional level of service; normalizing waste management activities to the 'benchmark' level of service (see **Section E**), would allow for collaboration across boundaries within a fair and equitable framework (e.g. joint waste collection contracts, regional household hazardous waste drop offs). Accordingly, it is recommend that the RWMWG formally recognize a 'benchmark' regional level of service.<br><br>A 'benchmark' level of service supported by the RWMWG may also compel local municipalities to gradually amend their existing levels of service to move towards the common benchmark. | 1) Review the regional 'benchmark' level of service and agree to the standards identified therein<br>**Action: RWMWG**<br>**Complete by: Q2 2023**<br><br>2) Regularly review the regional 'benchmark' level of service and amend the standards based on waste management best practices<br>**Action: RWMWG**<br>**Complete: Annually, in conjunction with the review of the RWMWG Strategic Plan** |

## E. Proposed Regional Benchmark Level of Service

For continued reference by the RWMWG, the following is the proposed regional benchmark level of service.

| Service | Proposed Benchmark Level of Service |
|---|---|
| **Curbside Waste Collection** | |
| Frequency | Weekly |
| Set-out Time | 7am & no earlier than 7pm the day prior |
| Container Limits | Residential – 2<br>Commercial – 2<br>Maximum weight of 23kg |
| Bag Tag Fees | Tags required for extra bags/ containers<br>Fee - $2.00 |
| **Recycling** | |
| Transition to producer responsibility and recommendation to not participate means local municipalities will no longer be involved in recycling (collection and processing). Maintain current levels of service until transition is complete. | |
| **Bulky Waste/ White Goods** | |
| Curbside Collection | Allow drop off at landfill for all residents<br>Municipalities can implement a tag system or roadside collection as an enhanced service (cost-recovery) |
| **Leaf and Yard Waste** | |
| Curbside Collection | Two roadside collections per year (spring and fall)<br>Municipalities can implement more frequent collection as an enhanced service |

| Service | Proposed Benchmark Level of Service |
|---|---|
| **Separated Organics** | |
| Curbside Collection | None recommended pending Provincial direction |
| Backyard Composter | Available for sale (common price) at local municipalities |
| In-kitchen composter | Provide common subsidy for *Food Cycler* if local trials confirm cost-benefit of this program |
| **Residential Drop Off** | |
| Location/ Operating Hours | At open landfill sites<br>8am-4pm on weekdays and Saturday<br>Closed Sunday and Holidays |
| IC&I Waste | Accept at open landfills. Consider cost-benefit in future |
| Tipping Fees | 2 free disposals per year (max 500kg. or 'vehicle equivalent') after which tipping fees apply |
| **Household Hazardous Waste and E-Waste** | |
| Frequency | Year round drop off at open landfills during operating hours |
| **Landfill Sites** | |
| Number | Minimize number of operating landfills and pursue a long-term contract with GFL |
| **Public Education & Public Service** | |
| Education and Communication | Implement uniform plan to optimize resources and technology without duplicating efforts |
| Customer Service | Establish one-call system and response tracking |

## F. Conclusions

All municipalities within SDG face unique challenges and opportunities related to solid waste management. **These challenges cannot be solved in isolation**. Ongoing and improved collaboration will benefit all our residents and, ultimately, will facilitate service harmonization across boundaries along with the ability to cooperate and work with larger regional players (e.g. GFL, City of Cornwall, City of Ottawa, Prescott Russell and Leeds and Grenville).

The attached report from DFA Infrastructure provides a summary of the research completed over the past several years. It also includes detailed examples of potential collaboration activities which will require further consideration and analysis by all stakeholders to confirm that they are universally palatable. Those collaboration activities which may not suit all municipalities have the potential to be considered by willing partners and can be implemented with the appropriate legislative mechanisms.

The lack of a formal process to compel local municipalities to work together to find common solutions to issues they each face is a strategic failing of our regional waste management process. There are many opportunities when municipalities commit to formally collaborating. Possibilities such as the communications, bulk purchase of blue boxes or countertop composting units, landfill monitoring services, securing long-term waste disposal rights with private landfills or cross-boundary collection can happen when we collectively work towards common goals; regardless if each respective municipality wants to benefit from the service or not. To that end, this *Steering Committee* strongly recommends that, at a minimum, all local Councils support our Recommendation #1 **to pursue a regional approach to solid waste management through the creation of a Regional Waste Management Working Group**. This working group would have regular reporting responsibility to each individual municipality and, subject to County Council approval, SDG can continue to provide support to this working group subject to the terms of reference.

Respectfully submitted,

**Benjamin de Haan, P.Eng.**
Dir. of Transportation Services

**Sarah McDonald, P. Eng.**
Gen. Manager – Infrastructure

**Timothy Wright, B.Eng.**
Dir. Of Public Works

# Appendix A:
# DFA Consolidated Waste Management Report (Phases 1-4)

# THE UNITED COUNTIES OF

# STORMONT DUNDAS AND GLENGARRY (SDG)

# Regional Waste Management

# A Roadmap to Collaboration

## PHASES 1 to 4

## CONSOLIDATED REPORT

## DRAFT FINAL

**APRIL 27 2022**

DFA Infrastructure International Inc.

**DFA Infrastructure International Inc.**
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April 27, 2022

Benjamin De Haan, P.Eng.
Director Transportation Services
United Counties of SDG
26 Pitt Street, Suite 223
Cornwall, ON, K6J 3P2

Dear Mr. De Haan:

**Re: United Counties of Stormont Dundas and Glengarry (SDG)**
**Regional Waste Management - A Roadmap to Collaboration**
**Phases 1 to 4 Consolidated Report - Draft Final**

We are pleased to submit the Consolidated Report (Draft Final version) which includes all phases of the study for presentation to and review by SDG and the Local Municipalities. Comments received will be incorporated into the final report.

Please let us know if you have any questions.

Respectfully Submitted by:

**DFA Infrastructure International Inc.**

Derek Ali, MBA, P.Eng.
President

# Table of Contents

## Letter of Transmittal

# 1 Background

The United Counties of Stormont Dundas and Glengarry (SDG) is assisting its six (6) partner local municipalities (LM) with coordinating a review of their solid waste management services. The LMs are facing a variety of challenges with delivering their respective services including changing waste diversion regulations, high levels of recycling contamination, declining landfill capacities, different service levels and limited organizational capacities to sustain services at desired levels into the future. Accordingly DFA Infrastructure International Inc. was retained by SDG to calculate the LMs' cost of service for their respective solid waste functions and identify opportunities for changes and collaboration among the LMs including possible roles for SDG and the City of Cornwall, to improve efficiencies and overall service delivery for all LMs.

## 1.1 Study Objectives

The main objectives of the review include the following:

- Identify the current levels of solid waste service delivered by each LM for each component and any potential changes that each LM may be considering in the future, and the differences among the LMs;
- Identify and assess the respective staffing levels and the roles and responsibilities of the respective staff involved in solid waste including any cross-functional duties that are unrelated to solid waste;
- Identify the services that are outsourced, the service provider and the contract expiry dates and costs;
- Identify the current status of the LMs' respective landfill sites (where applicable) and issues, any plans for extensions, etc.
- Consider all current and impending regulatory requirements and guidelines related to solid waste and particularly the impending policies and regulations under the Waste-Free Ontario Act, 2016 which is comprised of the Resource Recovery and Circular Economy Act (RRCEA), 2016 and the Waste Diversion Transition Act, 2016 and the Food and Organic Waste Framework, released on April 30, 2018;
- Identify and quantify the current and future cost of service for each LM by system component (waste collection, recycling collection, recycling processing, landfilling, etc.) to determine funding requirements for financial sustainability. This includes direct and indirect operating costs to support current and future service levels, capital costs (including asset replacement) associated with each component and landfill closure and post closure care costs. The study period is 2020 to 2044 inclusive (25 years) using 2020 as the baseline year for cost information and projections beginning in 2021;
- Develop a simple "tool" in MS Excel to assess and compare the cost of service by solid waste function and use the tool to evaluate the costs across all six (6) LMs and develop the "roadmap";
- Based on the cost assessment, an analysis of the levels of service and other relevant information:
  - Identify changes that may result in cost reduction and efficiencies;

  - Develop opportunities for one or more of the LMs to work collaboratively to reduce costs, achieve efficiencies and improve services;
  - Develop "regional" levels of service for each component and options for a region wide approach to solid waste management that may include roles for SDG and/ or the City of Cornwall;
  - Identify possible changes to the recycling program to reduce contamination as part of developing the regional level of service and positioning the LMs for transitioning to producer responsibility;
- Develop and assess the collaboration opportunities to identify a preferred option(s) for implementation based on:
  - potential cost savings and efficiencies;
  - long-term financial sustainability for solid waste services
  - ability to deal with the transition of recycling (2023 to 2025) and household hazardous waste (HHW) (2020 to 2021) from municipal to producer responsibility;
  - other benefits that may be realized
  - input from the Steering Committee and County Council
  - importance and achievability
- Develop and recommend an implementation strategy for the preferred option(s) indicating key activities budgets, responsible party and timelines over the short-term (1 year) medium-term (2-3 years) and long-term (beyond 3 years);
- Ensure transparency and defensibility of the review based on factual baseline information, reasonable assumptions and input from the Steering Committee;
- Utilize this study as a template that may be used by rural municipalities in other regional settings to assess current conditions, costs and options for cross jurisdictional collaboration and how to go about undertaking such reviews to implement 'regional' plans;
- Undertake the study with participation and input from the appropriate staff and Steering Committee to ensure that the best available information is used and acceptance of the results of the study; and
- Seek input from County Council and Local Municipal Councils on the assessment of the options for collaboration and the possible roles and responsibilities for SDG and Cornwall prior to making final recommendations.

# 2 Phase 1 - Background Data Collection

This phase involved collecting and reviewing available data from the LMs and developing baseline information by LM to determine current and future levels of service and the full cost of services over the study period. Meetings were also held with each LM to review current data and obtain an understanding of each LM's current operations and unique circumstances. These form the basis for the review including costs analyses and development and analysis of collaboration opportunities for service delivery.

## 2.1 Current Issues and Challenges

The current issues and challenges are based on telephone interviews with LM staff. These are tabulated in Appendix A, which is a 'living' document that will be modified as additional issues are identified and discussions occur. It will be used to inform development of the options for collaboration. Some of the main issues include:

- Waste management costs are increasing.
- Diminishing landfill capacity - need to secure future capacity sooner rather than later.
- Is sharing landfill capacity among the LMs acceptable?
- How should the LMs work together? The Municipal Act allows options.
- If SDG were to be involved, should all or only some waste management components be transferred?
- How should compensation for landfill capacity be addressed?
- There are limited staff and equipment resources at the LMs.
- Do any of the LMs wish to have a role in recycling after the transition to producers to maintain a particular level of service to customers?

## 2.2 Staff Resources

Information on the staff involved in delivering solid waste services for each LM is presented in Appendix B. This identifies the positions with shared roles between solid waste management and other departments for each LM. It also identifies the positions that are fully dedicated to solid waste management, the number of staff in each position and whether or not the positions are union or non-union. Brief descriptions of the roles and responsibilities for each position are also provided based on a review of current job descriptions (as available).

There are 18.5 full and part-time positions across the six (6) municipalities that have shared roles in solid waste management. These generally include directors, supervisors, administrative support and equipment operators that are involved in broader public works, infrastructure or environmental services functions that also include solid waste responsibilities. Twelve (12) positions are non-union and the remaining 6.5 are union positions.

There are 16.7 full and part-time positions across the six (6) municipalities that are fully dedicated to solid waste management functions. Most of these (16.2 positions) are non-union positions and 0.5 being a union position. Most of these are in North Dundas which has a dedicated solid waste department of 6.5 staff positions and at the North Glengarry's RARE facility with 8.2 positions, all being non-union. The remaining 2 positions are in North Glengarry's Public Works Department (0.5 union position) and South Dundas' Environmental Services Department (1.5 non-union).

This information is summarized in Table 2-1 and will be used to inform development of the options for regional collaboration particularly those that may require staff sharing or transfers from the LMs to SDG should a transfer of jurisdiction be the preferred option to achieve a regionalized approach.

**Table 2-1: Current Staff Resources**

| Local Municipality | Shared Staff | | Dedicated Solid Waste Staff | | Total |
|---|---|---|---|---|---|
| | Non-Union | Union | Non-Union | Union | |
| North Dundas | | | 6.5 | | **6.5** |
| South Dundas | 1 | | 1.5 | | **2.5** |
| North Glengarry | 3 | 2 | 8.2 | 0.5 | **13.7** |
| South Glengarry | 2 | 1 | | | **3** |
| North Stormont | 2 | | | | **2** |
| South Stormont | 4 | 3.5 | | | **7.5** |
| **Total** | **12** | **6.5** | **16.2** | **0.5** | **35.2** |

## 2.3 Legislative & Regulatory Review

The relevant legislation and regulations that affect waste management in the LMs that comprise the United Counties of Stormont Dundas and Glengarry (SDG) and how services might be delivered in a collaborative fashion include the following:

- Environmental Assessment Act, 1990 (EAA);
- Environmental Protection Act (EPA);
- Waste-Free Ontario Act, 2016;
- Waste Diversion Transition Act, 2016;
- Municipal Act, 2001;
- Local by-laws; and
- Requirements of existing Landfill Licences.

***Waste-Free Ontario Act, 2016***

The Waste-Free Ontario Act, 2016 is comprised of the Resource Recovery and Circular Economy Act (RRCEA), 2016 and the Waste Diversion Transition Act, 2016 (WDTA) and sets the policies and rules for waste reduction in Ontario. The intent of the "circular economy" is for products and packaging to be designed such that they can be recovered, reused, recycled and brought back into production instead of going to waste. Under the RRCEA individual producers will become fully responsible for the life cycle of their products and be required to perform waste reduction activities in accordance with provincial policy. Producers will be required to meet mandatory material collection and recycling targets under Individual Producer Responsibility (IPR) using in-house resources or contracted services supplied by Producer Responsibility Organizations (PROs). The Resource Productivity and Recovery Authority (RPRA) established under the RRCEA has responsibility for overseeing the transition to the circular economy and IPR enforcement. Producers must register with and report to RPRA on meeting the targets.

The transfer of responsibility from municipalities to IPR will be phased in to minimize any impacts to current programs as the transition occurs.

1. The Municipal Hazardous or Special Waste Program involves the recycling and proper disposal of materials such as batteries, antifreeze, fertilizers and other hazardous or special materials. Batteries transitioned to producer responsibility on July 1, 2020, while the remaining materials will transition on July 1, 2021. Batteries include single-use and rechargeable batteries weighing 5kg or less.

   All battery producers are required to register with RPRA between November 1 and November 30, 2020 and must begin submitting annual reports by April 30, 2021.

2. The Waste Electrical and Electronic Equipment Program deals with recycling and reusing electronics such as televisions, stereos and computers. This program will transition to the producer responsibility on January 1, 2021.

3. The current Blue Box Program provides recycling and reuse of printed paper, packaging and containers such as plastics, glass, aluminum and steel. First Nations and an initial group of municipalities will transition the Blue Box Program to producer responsibility on January 1, 2023. All municipalities across the province will transition by December 31, 2025.

The remaining programs, the Ontario Deposit Return Program (alcoholic and beverage containers) and the Used Tires Program have not been given transition windows; the Ontario Deposit Return Program has already been established for many years under the producer responsibility model. The last significant change occurred when liquor and wine bottles were added to the program. The Province's Used Tires Program was discontinued on December 31, 2018 and replaced by the Tire Collection Network, which already follows the producer responsibility model.

***Proposed Individual Producer Responsibility (IPR) Regulation***

On October 19, 2020, the Ontario government released a proposal detailing the transition of the Blue Box Program from municipalities to IPR. The proposal was open for public comment for a 45-day period until December 2, 2020. The stated goal of the transition is to improve recycling abilities province-wide and address various environmental issues associated with the current model, such as plastic pollution. The proposal includes that the transition to IPR will not disrupt current blue box services and allows for existing programs to be expanded. This will include allowing additional materials to be collected in the blue box (i.e. single-use items such as straws, stir-sticks, single-use packaging, etc.) and extending the blue box services to locations that do not have access under the current model. Overall, the objective is that under IPR producers will be able to develop more innovative solutions to reduce costs and increase diversion rates. This will aid in improving the environment while also supporting economic growth.

The proposal also states that producers with less than $2 million in annual sales will not be required to register with RPRA or provide collection/management services for their products. Producers with $2 million or more in annual sales will be required to register with RPRA, report and keep records, though they would be exempt from management requirements if they supply less than the following amounts for specific materials:

- 9 tonnes of paper
- 2 tonnes of rigid plastic
- 2 tonnes of flexible plastic
- 1 tonne of glass
- 1 tonne of metal
- 1 tonne of non-alcoholic beverage containers

The Blue Box Program is set to transition to the IPR model between 2023 and 2025 province wide, however registration with RPRA would begin as early as April 1, 2021. The proposed regulations contain a "Blue Box Transition Schedule" which indicates that the municipalities that make up SDG ***will transition on January 1, 2025***.

Once the transition to producer responsibility is implemented, it will be the sole responsibility of producers to manage their products and packaging throughout their respective life cycles (i.e. from production to disposal). Municipalities will no longer be required to operate a recycling program under Environmental Protection Act, O.Reg.101/94, which will become obsolete.

A Transition Plan is currently being reviewed by the RPRA which will, presumably, offer more details on the transition to full producer responsibility. The regulations detailing the transition requirements are discussed further in Section 4.2.

***Food and Organic Waste (Green Bin) Framework***

The Food and Organic Waste Framework, released on April 30, 2018, consists of two complementary components:

- Food and Organic Waste Action Plan, which outlines strategic commitments to be taken by the province to address food and organic waste, and
- Food and Organic Waste Policy Statement, which provides direction on increasing waste reduction and resource recovery of food and organic waste.

Ontario's Food and Organic Waste Policy Statement (2018) states that select municipalities in Southern Ontario are required to develop a food and organic waste collection program with a target of achieving "*50% waste reduction and resource recovery of food and organic waste generated by single-family dwellings in urban settlement areas by 2025*". The criteria set out in Policy 4(i) and Policy 4(ii) determine the type of program that municipalities must implement as follows:

- Policy 4(i) - Local municipalities with a population greater than 50,000 and population density greater than 300 persons/km$^2$ must provide *curbside green bin collection* to single-family dwellings in an urban settlement.
- Policy 4(ii) - Local municipalities with a population greater than 50,000 and a population density lower than 300 persons/km$^2$ or a population greater than 20,000 but less than 50,000 and a population density of 100 persons/km$^2$ or more must provide *collection options* for green bin waste to single-family dwellings in an urban settlement.

Table 2-2 summarizes the populations and population densities of each of the six (6) LMs and all of SDG as indicated by the 2016 census.

**Table 2-2.: Population and Density by Municipality**

| Municipality | Population | Density (Persons per km2) |
|---|---|---|
| North Dundas | 12,152 | 24.1 |
| South Dundas | 11,450 | 21.9 |
| North Glengarry | 10,595 | 16.5 |
| South Glengarry | 13,879 | 22.9 |
| North Stormont | 7,347 | 14.2 |
| South Stormont | 14,140 | 31.6 |
| **SDG Total** | **69,563** | **21.4** |

Based on the 2020 populations and densities, the six (6) LMs on their own would not be required to provide green bin collection options, as they do not individually meet the population or density requirements stated in Policy 4(ii). However, SDG as a whole meets the criteria with a combined population of 69,563 which exceeds the 50,000 threshold and a population density of less than 300 persons/km$^2$. The Statistics Canada 2016 Census Profile states SDG's population as 113,429. However, this is because Cornwall and the Mohawk Nation of Akwesasne are included as part of a larger census division used by Statistics Canada.

The criteria refer to the population and population density of local municipalities. However, if responsibility were to be transferred to the upper-tier municipality, then SDG would likely be required to provide green bin *collection options* to single-family dwellings in urban settlements (i.e. no curbside pickup would be necessary). However, the term "collection options" is not defined in the policy statement. These could potentially include having backyard composting program, drop off locations or other alternatives and technologies. ***The policy does not preclude the LMs or SDG from implementing a green bin curbside collection program for higher density areas if there is a desire to align with environmental stewardship and industry best practices and there is a supporting cost benefit analysis.***

***Policy Amendments***

Amendments to the Policy Statement are being considered to clarify the types of food and organic wastes to be collected while considering the current challenges facing processing facilities. The overall intent is to give the public businesses and municipalities clarity on the effort required to meet the targets and make better decisions about their respective programs. Proposed changes include:

- *"efforts **shall** be made with respect to food waste, inedible parts of plants and animals resulting from food preparation and pet food waste*
- *efforts **should** also be made with respect to several types of organic wastes, such as soiled paper and food packaging, coffee filters, tea bags, compostable coffee pods and compostable bags*
- *efforts are **encouraged** to be made with respect to several types of harder to manage organic wastes, such as diapers and pet waste"*

Other changes include requiring continuation of efforts after targets are met, making information available to the public, and encouraging pilot projects and new technology to improve the processing and recovery of compostable materials. The proposed changes are more fully described on the Environmental Registry of Ontario.

***New Landfill Legislation***

Bill 197, which was passed in July 2020, includes a new section that requires the approval of new landfill proposals by all impacted local municipalities. This includes obtaining approval from the municipality within which the landfill is proposed to be constructed, as well as any municipalities located within 3.5 kilometers of any of the property proposed for a landfill. This has implications to public sector and private sector landfill proposals.

There is no mention of what this means for two-tier municipalities such as SDG. This may be interpreted as meaning that a new landfill development proposed on land within one of the six (6) LMs, but that is within 3.5 kilometers of another Township's border, would require the approval of both the host Township and the Township within 3.5 kilometers. Further, if the upper-tier municipality (SDG) is recognized as a separate municipal entity, then under this new legislation, a new landfill proposed anywhere in the six (6) local municipalities would also require the approval of the upper-tier municipality as well as any bordering municipalities if the proposed landfill site is within 3.5 kilometers.

***This legislation states that it only applies to new landfill proposals; however some interpret this to mean that landfill expansions are also included. These interpretations remain unclear due to limited available information at this time.***

***The Municipal Act, 2001***

The Municipal Act, 2001 identifies the authority that the LMs and SDG may have to facilitate collaboration or a transfer of jurisdiction of some or all components of waste management to SDG from the LMs. The latter will require specific resolutions of the various Councils.

Currently, the LMs hold the power to manage solid waste as set out in the Municipal Act, 2001, Section 11 (4). The Municipal Act, 2001 also provides for two (2) or more municipalities to work together to deliver waste management services to its residents:

- LMs may offer services located in another LM provided that the other LM agrees (Section 19(2) and Section 74);
- LMs may have agreements with one another to provide joint waste management services anywhere within the participating municipalities (Section 20(1)); and
- LMs may delegate authority by by-law to a joint committee or board with representation from the participating Councils for the purpose providing a waste management service, subject to restrictions (Section 23.1(1) and(2))

Therefore, LMs may work together through a single or multiple agreements to use their collective authority under the Municipal Act, 2001 and share their assets to deliver waste management services to their residents.

The Council of SDG may, alternatively, pass a by-law under the Municipal Act, Section 189 to transfer the power to manage some or all of components of the waste management system to SDG. The transfer may be from one or more LMs. However, before the by-law can take effect, the support of the LMs would be required through resolution of their respective Councils. A "triple majority" of approval must be attained:

- A majority of SDG Council approves the transfer (Section 189 (2) (a));
- A majority of the Councils of the LMs that make up SDG approve the transfer (Section 189 (2)(b)); and
- The LMs that approve the transfer must represent a majority of the population within SDG. The respective LM populations shown in Table 2-2 suggest that any four (4) municipalities approving the transfer would provide this majority (Section 189 (2)(c).

The by-law may also provide for transitional issues to be addressed (e.g. interim operating arrangements such as waste collection, landfill operations, etc. until the transfer can be fully implemented). Once the by-law transferring power takes effect it cannot be repealed (i.e. the decision to transfer jurisdiction is irrevocable) and enables the following:

- All LM by-laws would remain in force under SDG for a maximum period of 2 years or until SDG established it own by-law for waste management and repeals the LMs by-laws whichever comes first (Section 190(1))
- Any works, initiatives, programs etc. in progress by the LMs may continue under SDG
- Existing contracts between an LM and a service provider must be assumed by SDG
- SDG can designate facilities to be used by each LM

The Municipal Act, 2001, R.R.O. 1990, REGULATION 815 - Waste management, Section 2 addresses the protection of employees and financial adjustments for assets and liabilities. However Regulation 815 which is still in force relates to the former Section 209 of the Municipal Act that was repealed in 2002. Because of this any transfer by-laws passed after December 31, 2002 are not subject to Regulation 815. Notwithstanding this view, the issues of staff transfers and compensation related to asset and liabilities must be addressed as if Regulation 815 is applicable, as evidenced in the transfer of powers between tiers in other municipalities. This can be accomplished through negotiation and agreement between SDG and the LMs.

Under Regulation 815 SDG would be required to offer employment to waste management staff currently employed by the LMs. The requirements include the following.

- Employees of the LM primarily involved in waste management for six (6) months or more prior to the transfer of jurisdiction must be offered employment by SDG
- Employees are not obligated to accept employment at SDG but if they do will be entitled to:
    - ✓ guaranteed employment for at least 1 year
    - ✓ at least the same salary as under the LM
    - ✓ the same seniority

- ✓ continuation of service (i.e. seamless uninterrupted employment)
- ✓ enrollment in OMERS
- ✓ sick leave credits accumulated
- ✓ equivalent vacation with pay

- Employees may be terminated or the above noted entitlements reduced for just cause

Regulation 815 also addresses the matter of compensation for assets and liabilities through Sections (3)(1) to (3)(5):

- If an asset is transferred to SDG from an LM then SDG would be required to pay compensation to the LM based on the market value of the asset.
- Similarly, if the market value of the asset is less than zero (i.e. a liability exists) then the LM would pay compensation to SDG an amount equal to the liability.

SDG and the LMs may agree on the list of assets and liabilities to be transferred and the terms of payment of the compensation. In the case of compensation for a liability, if there is no agreement then the compensation to SDG would be in equal installments over a 5-year period maximum.

Regardless of whether or not Regulation 815 is legally applicable the transfer of powers between the LMs and SDG must be based on fairness regarding the protection of staff and compensation for assets and liabilities. This can be achieved through discussion and agreement. There are examples of jurisdictional transfers that occurred in Ontario after Section 209 of the Municipal Act was repealed, that addressed staffing and asset and liability transfers. These are:

- Durham (Regional Municipality) v. Oshawa, [2012] O.J. No. 1558, (Court of Appeal). Although this deals with the transfer of responsibility for public transit services from lower tier municipalities to the Region, the by-law addresses staffing, asset and liabilities.
- Dufferin County transfer of waste management from local municipalities in 2010.

In summary, transferring waste management powers from the LMs to SDG must address staffing, asset and liabilities which can be accomplished through agreement by the parties.

***The Environmental Protection Act, 1990 (EPA)***

Regulation 347, Section 2 under the EPA addresses changes to the geographical service areas and rate of filling for landfill sites. Section 2(2) indicates that:

> "*a municipality that owns or operates a landfill site is exempt from section 27 of the Act with respect to increasing the service area of the site if the additional area from which the site will receive municipal waste is, (a) within the boundaries of the local municipality in which the site is located or, if the upper tier municipality in which the local municipality is located is exercising the power to provide landfilling sites for the local municipality, within the boundaries of that upper tier municipality*"

This allows SDG to expand the service area for the landfill sites to within its own boundaries should it assume jurisdiction for waste disposal. Any increase in the rate of fill due to the service area expansion would be exempt from a hearing under Section 2(5). However, approvals would likely be required to address operational issues such as incremental traffic etc. LMs would require section 27 approval to expand its landfill site service area beyond its boundary.

Regulation 101/94 under the EPA sets out the requirements for municipalities regarding recycling and composting. The requirements for recycling would become obsolete once the responsibility shifts from the municipalities to producers. Municipalities will no longer be mandated to provide and report on recycling services. Regulation 101/94 Part II stipulates that all municipalities with populations of at least 5,000 must provide backyard composter to residents at or below cost. Public education and awareness relevant to backyard composting is also required. Municipalities with populations of 50,000 or more must provide leaf and yard waste collection or drop-off facilities. Regardless of population, any municipality that has a leaf and yard waste program must ensure the materials are transported to an approved compost site, composted to meet required standards and available for use directly on land. Part V sets out the standards for compost quality and how the material may be used. Parts III and IV deal with recycling depots and sorting facilities respectively.

## 2.4 Existing and Future Customer Growth & Tonnages

The number of customers currently serviced and tonnages were estimated using available 2019 and 2020 data from each LM. These were categorized by LM and component. Customer growth was estimated using SDG's Official Plan, recent building starts for each LM and input received from SDG and LM staff. The information was used to project the annual increase in the number of customers (by LM) and the annual increase in tonnage by program over the study period. The historical per capita or per household tonnages were used while having regard for increase in waste diversion targets as follows:

- The annual number of customers (collection stops) expected to be serviced each year was forecasted based on a review of customer growth information as noted;
- The 2018 and 2019 historical and the 2020 projected tonnages were categorized by program to determine the average per stop and per capita; and
- Using the historical average with consideration to future waste diversion targets, demand for the various services (e.g. curbside collection) was projected.

Table 2-3 summarizes the 2020 population, collection stops and tonnages disposed and diverted by LM. The 2020 information is the baseline for the future projections. Table 2-3 shows that approximately 61% of the waste disposed by the municipalities is at municipally owned landfill sites. The remaining 39% is disposed at a private landfill site.

Table 2-4 shows the increase in population, collection stops and tonnages disposed and diverted by LM over the 25-year study period (2020 to 2044 inclusive). This assumes that waste will continue to be generated at the current per capita rates and no new programs would be implemented to significantly reduce waste generation. The assumption is that South Glengarry would redirect disposal from North Lancaster Landfill Site to Beaverbrook and subsequently expand Beaverbrook. North Dundas and South Dundas are seeking capacity expansions beyond the current approved capacities of their respective land fill sites. The North Dundas landfill site is over its approved capacity and is currently operating under an emergency licence pending the outcome of an ongoing environmental assessment process to obtain the expansion. Although waste diversion tonnages are projected to 2044 the cost analysis is based on a transitioning recycling from the municipalities to producers on January 1, 2025.

**Table 2-3: 2020 Population Curbside Stops and Tonnes Disposed & Diverted**

| Municipality | Population | Curbside Stops | Waste Disposed (tonnes) | | Waste Diverted (tonnes) |
|---|---|---|---|---|---|
| | | | Municipal Landfill | Private Landfill | |
| North Dundas | 12,152 | 4,300 | 2,087 | - | 609 |
| South Dundas | 11,450 | 4,830 | 4,284 | - | 530 |
| North Glengarry | 10,595 | 3,650 | 1,100 | 2,284 | 765 |
| South Glengarry | 13,879 | 5,965 | 3,000 | - | 706 |
| North Stormont | 7,347 | 2,700 | - | 1,666 | 400 |
| South Stormont | 14,140 | 5,602 | 358 | 2,853 | 800 |
| **SDG Total** | **69,563** | **27,047** | **10,829** | **6,803** | **3,810** |

**Table 2-4: 2020 to 2044 Increase in Population Curbside Stops and Tonnes Disposed & Diverted**

| Municipality | Population | Curbside Stops | Waste Disposed (tonnes) | | Waste Diverted (tonnes) |
|---|---|---|---|---|---|
| | | | Municipal Landfill | Private Landfill | |
| North Dundas | 3,283 | 1,342 | 564 | - | 165 |
| South Dundas | 939 | 400 | 351 | - | 43 |
| North Glengarry | 399 | 168 | 41 | 86 | 29 |
| South Glengarry | 1,952 | 792 | 422 | - | 99 |
| North Stormont | 382 | 146 | - | 87 | 21 |
| South Stormont | 4,030 | 1,584 | (358) | 1,273 | 228 |
| **SDG Total** | **10,984** | **4,431** | **1,020** | **1,446** | **585** |

Table 2-5 shows the projected 2044 information by LM. The increases contribute to future demand for services and the costs related to each component of the solid waste management system. By 2044 approximately 41% of the waste will be disposed at the private landfill site compared to 39% in 2020. The portion of waste to be disposed at municipal landfill sites by 2044 would decline slightly from approximately 61% in 2020 to 59%. This projected shift is due to the anticipated redirection of waste to a private landfill site following closure of South Stormont's Trillium Landfill Site. The annual projections over the study period are provided in Appendix C.

**Table 2-5: Projected 2044 Population Curbside Stops and Tonnes Disposed & Diverted**

| Municipality | Population | Curbside Stops | Waste Disposed (tonnes) | | Waste Diverted (tonnes) |
|---|---|---|---|---|---|
| | | | Municipal Landfill | Private Landfill | |
| North Dundas | 15,435 | 5,642 | 2,651 | - | 774 |
| South Dundas | 12,390 | 5,230 | 4,635 | - | 573 |
| North Glengarry | 10,993 | 3,818 | 1,141 | 2,370 | 794 |
| South Glengarry | 15,831 | 6,757 | 3,422 | - | 805 |
| North Stormont | 7,729 | 2,846 | - | 1,753 | 421 |
| South Stormont | 18,170 | 7,186 | - | 4,126 | 1,028 |
| **SDG Total** | **80,548** | **31,478** | **11,849** | **8,249** | **4,395** |

## 2.5 Landfill Sites

There are six (6) municipal landfill sites within SDG that are currently in use by the respective LMs for waste disposal. The closure dates for three (3) of these are within the next five (5) years based on the conditions of their Environmental Certificates of Approval (ECA). Two (2) others are due to close in 2029 and 2033. Table 2-6 shows the anticipated closure date and estimated remaining capacity for each landfill site.

The collective remaining capacity (2021) is approximately 114,800 tonnes. However, efforts are underway to obtain approval to expand the capacity and extend the use of the Boyne Road Landfill Site in North Dundas and the Matilda Landfill Site in South Dundas. Based on feedback from South Glengarry during the review process the assumption is that waste currently disposed at North Lancaster would be redirected to the Beaverbrook Landfill Site which would then be expanded for use beyond 2033. South Glengarry has not yet confirmed this approach but the assumption was made for the purposes of this review. If these expansions receive approval then the collective remaining capacity would be approximately 306,000 tonnes as noted in Table 2-6. The cost calculations assume that the expansions would be approved. ***However, the expansion costs are expected to increase for each landfill site as additional issues are addressed during the approval process.***

**Table 2-6: Active Municipal Landfill Sites - Closure Dates and Remaining Capacities**

| Municipality | Landfill Site | Under Current Licences (ECAs) | | | With Approved Expansions | | |
|---|---|---|---|---|---|---|---|
| | | Closure Date | Remaining Years | Remaining Capacity (tonnes) | Closure Date | Remaining Years | Remaining Capacity (tonnes) |
| North Dundas | Boyne Road | December 31, 2022 | 2 | 4,300 | December 31, 2047 | 27 | 62,700 |
| South Dundas | Matilda | December 31, 2023 | 3 | 13,000 | December 31, 2038 | 18 | 80,500 |
| North Glengarry | Glen Robertson | December 31, 2056 | 36 | 40,600 | December 31, 2056 | 36 | 40,600 |
| South Glengarry | North Lancaster | December 31, 2025 | 5 | 6,400 | December 31, 2025 | 5 | 6,400 |
| | Beaverbrook | December 31, 2033 | 13 | 47,100 | December 31, 2057 | 37 | 112,400 |
| North Stormont | No Active Site | NA | NA | - | NA | NA | - |
| South Stormont | Trillium | December 31, 2029 | 9 | 3,400 | December 31, 2029 | 9 | 3,400 |
| **SDG Total** | | | | **114,800** | | | **306,000** |

There are seven (7) closed landfill sites as listed in Table 2-7 by municipality. These require perpetual care which includes annual ground and surface water monitoring, site maintenance, etc. The related costs are included in the closure and post closure care costs calculated for this study. These are liabilities that are only partially funded by some LMs.

**Table 2-7: Closed Landfill Sites**

| Municipality | Closed Landfill Site |
|---|---|
| North Dundas | Mountain |
| South Dundas | Williamsburg |
| North Glengarry | Alexandria |
| South Glengarry | County Road 27 |
| North Stormont | Finch |
| | Roxborough |
| South Stormont | County Road 29 |

## 2.6 Level of Service Inventory

The existing waste management by-laws, website information and discussions with municipal staff on current services and possible changes were used to determine the current services/ programs and the level of service offered each LM. An inventory of the level of service (e.g. waste and curbside blue box collection frequency, drop off depot operating hours, etc.) is provided in Appendix D. The services and level to which they are offered are quite similar among the municipalities. However, there are some differences/variations as noted in Table 2-8. There are opportunities to harmonize the services including those related to recycling in preparation for the transition to producer responsibility. These include consistency in the frequency of collection and materials collected. Public outreach and customer service could be a singular approach that services all the municipalities. There is also sharing the use of landfill resources including drop-off locations. These are areas that require further consideration to identify service levels that might be appropriate on a broader scale in the future.

**Table 2-8: Level of Service Harmonization Opportunities**

| Service | Harmonization Opportunities |
|---|---|
| Waste Collection | • Container limits range from 2 to 8 bags per week<br>• Exemptions from container limits<br>• Use of bag tags and fees<br>• Acceptable container size and weight<br>• Materials not accepted at the curb<br>• Large item collection |
| Recycling Collection | • Weekly vs. bi-weekly collection<br>• Single vs. dual stream<br>• Acceptable blue box materials<br>• Sale of blue boxes including price |
| Leaf and Yard Waste Collection | • Curbside collection vs. drop-off<br>• Frequency of curbside collection (no. of times per year)<br>• Set out limits and restrictions |

| Service | Harmonization Opportunities |
|---|---|
| Landfill Sites | • Operating hours vary<br>• IC&I waste acceptable at three (3) landfill sites. Residential waste only at others.<br>• Drop-off / tipping fees<br>• Acceptable materials |
| HHW & E-waste Collection | • Frequency of events<br>• Location of events |
| Backyard Composting | • Availability of backyard composters<br>• Fees for backyard composters |
| Public Education/ Customer Service | • Tactics to generate awareness<br>• Communication methods<br>• One-call approach to customer service |

## 2.7 Asset Inventory

Appendix E provides a listing of the tangible solid waste management assets held by each LM categorized by service component - waste collection, waste disposal, recycling collection and other diversion. The information was derived from each LM's PSAB-3150 TCA data, landfill monitoring reports to identify the number of monitoring wells and supplemented by discussions with the respective municipal staff to obtain any additional information on undocumented assets and plans for renewals replacements or new additions to the inventory. Reasonable assumptions were made where information gaps exist based on industry best practices regarding age and useful life. Table 2-9 summarizes the asset values by service component and LM. This does not include the value of existing approved landfill capacity.

**Table 2-9: Current Assets - 2020 Value**

| Solid Waste Component | North Dundas | South Dundas | North Glengarry | South Glengarry | North Stormont | South Stormont | SDG Total | % |
|---|---|---|---|---|---|---|---|---|
| WASTE COLLECTION ASSETS | 271,400 | - | - | - | - | 560,000 | 831,400 | 5% |
| WASTE DISPOSAL ASSETS | 1,445,846 | 1,471,544 | 5,218,163 | 1,081,499 | 291,100 | 369,200 | 9,877,353 | 61% |
| RECYCLING COLLECTION ASSETS | 242,477 | - | - | - | 168,000 | 280,000 | 690,477 | 4% |
| MRF & OTHER WASTE DIVERSION ASSETS | 25,488 | - | 4,639,640 | - | - | - | 4,665,128 | 29% |
| **Total** | **1,985,210** | **1,471,544** | **9,857,804** | **1,081,499** | **459,100** | **1,209,200** | **16,064,358** | **100%** |
| Percentage of Assets by Municipality (%) | 12% | 9% | 61% | 7% | 3% | 8% | 100% | |

The total value of the current assets (excluding the value of landfill capacity) is approximately $16.1 million. Approximately 61% is related to waste disposal and 29% to recycling processing and other diversion assets. The majority of the disposal assets are the monitoring wells and some buildings. The diversion assets are mostly the RARE MRF assets. There are also waste and recycling collection trucks which account for 9% of the total asset value. These include three (3) garbage trucks and three (3) recycling trucks. North Glengarry's assets account for 61% of the total value. This includes the RARE

equipment and machinery and a building at the landfill site. Appendix E gives a more detailed breakdown of the asset descriptions and values.

## 2.8 Existing Contracts

An inventory of the major contracts is included in Appendix F. The main services that are outsourced by the six (6) LMs are listed below.

- *Curbside Waste Collection* - four (4) contracts with different expiry dates. Some also include leaf and yard waste collection.
- *Curbside Recycling Collection* - three (3) contracts with different expiry dates. Some of these are included with waste collection as a single contract for both services.
- *Landfill Disposal at Private Landfills* - three (3) contracts with different expiry dates. Two (2) expire in 2021 (one in November 2021) and the other in May 2022.
- *Landfill Site Monitoring* - six (6) contracts that are awarded each year with potentially different consultants for each LM
- *Recycling Processing* - five (5) contracts four (4) of which are with the City of Cornwall and these are negotiated annually. The other contract is with a private facility on a month-to-month basis. In this case there is also another month-to month contract with different service provider for delivery of recyclable materials from the LM's transfer location to the private MRF.

There are opportunities to rationalize some of these contracts to achieve economies of scale and perhaps better pricing.

## 2.9 Gross Operating Cost Analysis & Projections

This task involved the following activities for each LM:

- Reviewing the 2020 operating budgets to quantify annual costs and allocating the gross operating costs to the following solid waste components:
  - ✓ waste collection
  - ✓ recycling collection
  - ✓ waste disposal
  - ✓ recycling processing and other waste diversion costs
  - ✓ landfill closure and post closure care costs

  These were further broken down into in-house and contracted costs as appropriate to identify any differences between the two (2) operational approaches. Landfill post closure care operating costs were estimated to the extent possible to 2044. These costs would be incurred for many years beyond landfill site closure. However, for the purposes of this study, costs were considered up to 2044 and not beyond. Therefore these costs are an underestimate of the true liability.
- Projecting operating costs for the study period (2020-2044) based on the 2020 budgets, changes to annual operating costs (e.g. due to switching from in-house to contracted waste collection services or vice versa, etc.) and annual inflationary increases of 2%. ***The costs related to recycling collection and processing were projected to December 31, 2024 given the date for the transition to producer responsibility is January 1, 2025. The assumption is that the***

***municipalities will not be responsible for the blue box program costs beyond this date.*** Similarly, LM responsibility for the Household Hazardous Waste (HHW) program costs would end in 2021.

Many of the municipalities provide solid waste operations as part of another department's functions (e.g. Public Works, Infrastructure Services or Environmental Services and share some of the costs with those non-solid waste functions). In these cases, the annual budgets were assumed to provide an accurate allocation of costs to solid waste. Table 2-10 summarizes the projected 2021 gross operating cost by component for each LM. The 2021 costs are Gross before revenues are considered. The revenue information was not discrete to be able to allocate revenues to specific services (e.g. recycling collection, processing, waste disposal etc.) for all LMs. Therefore the gross 2021 costs are presented for consistency across all LMs. However, the 2021 net present value (NPV) of costs over the 25 years as presented in Table 2-13 is after revenues and reserve balances are deducted. The NPV is representative of each LM's future costs.

The 2021 projected costs are presented instead of 2020 costs to account for operational changes that were made by some municipalities during 2020. Accordingly, 2021 would be more reflective of current operations and related costs compared to 2020. The total 2021 gross operating costs for the six (6) municipalities is estimated to be $7.1 million. Approximately 25% is related to disposal and 28% to waste collection. Recycling collection processing and other diversion account for 44% of the costs. Appendix G provides the gross operating cost projections for the study period for each LM.

**Table 2-10: 2021 Gross Operating Costs Estimates**

| Solid Waste Component | North Dundas | South Dundas | North Glengarry | South Glengarry | North Stormont | South Stormont | SDG Total | % |
|---|---|---|---|---|---|---|---|---|
| WASTE COLLECTION COSTS (INHOUSE) | 271,459 | - | - | - | - | 399,809 | 671,268 | |
| WASTE COLLECTION COSTS (CONTRACT) | - | 326,786 | 261,621 | 502,565 | 178,883 | - | 1,269,855 | 28% |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 209,308 | 362,983 | 239,160 | 272,821 | - | 167,356 | 1,251,628 | |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | - | - | 198,139 | - | 114,720 | 172,386 | 485,245 | 25% |
| RECYCLING COLLECTION COSTS (INHOUSE) | 316,944 | - | - | - | 99,805 | 207,417 | 624,165 | |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | 326,786 | 173,733 | 237,170 | - | - | 737,688 | 19% |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 127,592 | 202,276 | 791,885 | 270,637 | 136,742 | 264,257 | 1,793,389 | 25% |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 15,300 | 110,759 | 25,500 | 2,550 | 36,720 | 33,770 | 224,598 | 3% |
| **Total** | **940,604** | **1,329,590** | **1,690,037** | **1,285,742** | **566,870** | **1,244,994** | **7,057,836** | **100%** |

## 2.10 Capital Cost Projections

The current and future gross capital cost projections were developed for each LM as follows:

- Reviewing the 2020 capital budgets and approved forecasts and allocating these costs into the solid waste components (same as the operating costs allocations);
- Estimating future capital costs (high level) related to landfill capacity expansions and landfill closure and post closure care as needed to complement existing available information;
- Developing 2020 asset replacement costs through a combination of inflating historical costs using the historical construction price indices or current market prices as available;
- Estimating the timing for asset replacement based on the life expectancies of each asset type and including these needs in the study projections

- Projecting capital costs for the study period (2020-2044) based on the above and annual increases of 3% to reflect the construction price index. The capital costs identified were assumed to be incurred in the year needed (i.e. without debt financing).

A limitation of the capital projections is that the capital forecasts and assets were not available to the same level of detail and consistency across the six (6) municipalities. Therefore, estimates were made to the extent possible where specific costs were not available. Landfill post closure care requirements would extend for 50-years or more beyond landfill closure. Closure and post closure care costs are included in this study to 2044 and are an underestimate of the true costs.

Table 2-11 summarizes the projected 2021 gross capital cost by component for each LM. The total 2021 gross capital cost for the six (6) municipalities is approximately $2.5 million. Most (98%) of the capital needs is for waste disposal. Appendix G also provides the gross capital cost projections including asset management needs for the study period for each LM.

**Table 2-11: 2021 Gross Capital Costs Estimates**

| Solid Waste Component | North Dundas | South Dundas | North Glengarry | South Glengarry | North Stormont | South Stormont | SDG Total | % |
|---|---|---|---|---|---|---|---|---|
| WASTE COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | 0% |
| WASTE DISPOSAL ASSETS/ PROJECTS | 799,345 | 744,932 | 328,176 | - | - | 520,150 | 2,392,604 | 98% |
| RECYCLING COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | 0% |
| OTHER WASTE DIVERSION ASSETS/ PROJECTS | - | - | - | - | - | - | - | 0% |
| CLOSURE & POST CLOSURE CARE CAPITAL | - | - | 49,131 | - | - | - | 49,131 | 2% |
| **Total** | **799,345** | **744,932** | **377,307** | **-** | **-** | **520,150** | **2,441,735** | **100%** |

## 2.11 Full Costs of Waste Management Services

Based on the gross operating and capital cost projections developed as described the full cost of managing each component of the waste management system was established. All costs associated with the waste management operations, program changes, replacement and/ or rehabilitation of existing assets, landfill capacity expansions, customer growth were projected over the study period by component. These estimates identify the full cost of waste management services (i.e. annual revenue requirements for waste management each year over the study period). Appendix G provides the annual cost projections for the period 2020 to 2044.

**Table 2-12: 2021 Gross Operating & Capital Costs Estimates**

| Solid Waste Component | North Dundas | South Dundas | North Glengarry | South Glengarry | North Stormont | South Stormont | SDG Total | % |
|---|---|---|---|---|---|---|---|---|
| WASTE COLLECTION COSTS (INHOUSE) | 271,459 | - | - | - | - | 399,809 | 671,268 | |
| WASTE COLLECTION COSTS (CONTRACT) | - | 326,786 | 261,621 | 502,565 | 178,883 | - | 1,269,855 | 20% |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 1,008,654 | 1,107,915 | 567,336 | 272,821 | - | 687,506 | 3,644,232 | |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | - | - | 198,139 | - | 114,720 | 172,386 | 485,245 | 43% |
| RECYCLING COLLECTION COSTS (INHOUSE) | 316,944 | - | - | - | 99,805 | 207,417 | 624,165 | |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | 326,786 | 173,733 | 237,170 | - | - | 737,688 | 14% |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 127,592 | 202,276 | 791,885 | 270,637 | 136,742 | 264,257 | 1,793,389 | 19% |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 15,300 | 110,759 | 74,631 | 2,550 | 36,720 | 33,770 | 273,729 | 3% |
| **Total** | **1,739,949** | **2,074,522** | **2,067,344** | **1,285,742** | **566,870** | **1,765,144** | **9,499,570** | **100%** |

Table 2-12 summarizes the projected 2021 gross operating and capital cost by component for each LM. The total gross cost for the six (6) municipalities is estimated to be approximately $9.5 million in 2021. Approximately 43% is related to waste disposal, 20% to waste collection and 33% to recycling collection and processing and other waste diversion. Landfill closure and post closure account for only 3%-4% of the estimated gross 2021 costs.

The Net Present Values (2021 NPV) of the costs to be incurred over the period 2021-2044 are presented in Table 2-13. They represent the full cost of service (in 2021 dollars) for each LM over the 25-year study period using a 4% discount rate. This takes into account annual revenues and reserve amounts available to municipalities to offset the gross cost of service. The annual revenues were allocated to disposal and recycling as appropriate based on the 2020 budget information available from each LM. Therefore the 2021 NPVs shown are "net" of revenues and available reserves and represent the baseline "do nothing" costs. The NPV before deduction of revenues and reserves are shown in Appendix G Table G3. The Revenue projections are presented in Appendix G Table G4 and the NPV after revenues and reserves are deducted are shown in Appendix Table G5.

The total cost for SDG as a whole is estimated at approximately $93.6 million (NPV 2021). The majority of the costs relate to waste collection (39%) and waste disposal (35%). The costs related to recycling are relatively low (9%) due to the proposed transition to producer responsibility for recycling on January 1, 2025. Landfill closure and post closure care costs represent approximately 16%.

**Table 2-13: 2021 to 2044 Operating & Capital Costs (2021 NPV "Net")**

| Solid Waste Component | North Dundas | South Dundas | North Glengarry | South Glengarry | North Stormont | South Stormont | SDG Total | % |
|---|---|---|---|---|---|---|---|---|
| WASTE COLLECTION COSTS (INHOUSE) | 5,608,873 | - | - | - | - | 7,443,427 | 13,052,300 | |
| WASTE COLLECTION COSTS (CONTRACT) | - | 6,072,156 | 4,872,704 | 9,358,088 | 3,332,044 | - | 23,634,991 | 39% |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 5,238,965 | 5,042,905 | 7,329,248 | 5,354,595 | - | 1,087,880 | 24,053,593 | |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | - | - | 3,690,413 | - | 2,132,579 | 3,232,088 | 9,055,080 | 35% |
| RECYCLING COLLECTION COSTS (INHOUSE) | 1,185,859 | - | - | - | 372,703 | 775,280 | 2,333,843 | |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | 1,220,399 | 649,171 | 886,194 | - | - | 2,755,764 | 5% |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | (209,814) | 595,446 | 1,839,245 | 910,636 | 18,934 | 534,534 | 3,688,981 | 4% |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 1,810,414 | 5,935,669 | 1,957,216 | 2,711,706 | 853,717 | 1,773,542 | 15,042,264 | 16% |
| **Total** | **13,634,296** | **18,866,576** | **20,337,997** | **19,221,219** | **6,709,977** | **14,846,752** | **93,616,817** | **100%** |

# 3 Phase 2- Cost Analysis

This phase involved developing unit costs (i.e. cost per capita, cost per curbside stop and cost per tonne) as appropriate for each solid waste component. A review of the unit costs across the six (6) municipalities is intended to identify differences and/ or similarities in costs having regard for the major differences and similarities in service levels (e.g. weekly versus bi-weekly collection, etc.). It is also intended to identify areas with the potential for cost reductions and greater efficiency for consideration in developing collaborative options going forward. Appendix H provides the unit costs for each year over the study period.

## 3.1 Projected 2021 Unit Costs

The unit costs presented in this section were developed using the estimated 2021 cost of service and the respective units based on the projections of population, curbside stops and tonnes presented in Section 2.4 for each LM. Table 3-1 shows the waste collection unit costs per capita and per curbside stop. Costs range from $62 to $72 per curbside stop with the in-house collection at the lower and upper ends of the range. Contracted services cost between $67 and $72 per curbside stop except for South Glengarry at $84 per curbside stop. All municipalities provide a weekly waste collection service.

**Table 3-1: 2021 Gross Waste Collection Unit Costs**

| Solid Waste Component | North Dundas | South Dundas | North Glengarry | South Glengarry | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| ***Waste Collection Costs per Capita*** | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | 22 | - | - | - | - | 28 |
| WASTE COLLECTION COSTS (CONTRACT) | - | 28 | 25 | 36 | 24 | - |
| ***Waste Collection Costs per Curbside Stop*** | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | 62 | - | - | - | - | 71 |
| WASTE COLLECTION COSTS (CONTRACT) | - | 67 | 72 | 84 | 66 | - |
| ***Waste Collection Level of Service*** | Weekly | Weekly | Weekly | Weekly | Weekly | Weekly |

Table 3-2 shows the recycling collection unit costs per capita and per curbside stop. Weekly 2-stream collection costs are approximately $67 to $72 per curbside stop with North Glengarry's cost lower at $48 per curbside stop. The cost of bi-weekly single stream collection is lower than weekly collection at $37 to $40 per curbside stop. Collection costs appear to be driven more by the level of service (weekly 2-stream vs. bi-weekly single stream) than by contracted versus in-house services.

**Table 3-2: 2021 Gross Recycling Collection Unit Costs**

| Solid Waste Component | North Dundas | South Dundas | North Glengarry | South Glengarry | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| ***Recycling Collection Costs per Capita*** | | | | | | |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | 26 | - | - | - | 14 | 14 |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | 28 | 16 | 17 | - | - |
| ***Recycling Collection Costs per Curbside Stop*** | | | | | | |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | 72 | - | - | - | 37 | 37 |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | 67 | 48 | 40 | - | - |
| ***Recycling Collection Level of Service*** | Weekly 2-Stream | Weekly 2-Stream | Weekly 2-Stream | Bi-Weekly 1-Stream | Bi-Weekly 1-Stream | Bi-Weekly 1-Stream |

Table 3-3 shows the gross waste disposal and waste diversion costs per tonne. The cost of waste disposal using private a sector landfill ranges between $60 and $87 per tonne. Disposal by three (3) municipalities at their respective in-house landfills is more costly at $257 to $515 per tonne. South Glengarry's cost is more consistent with the high end of contracted disposal cost at $90 per tonne. The South Stormont in-house disposal cost is very high and skewed by a one-time capital cost of $430,000 targeted for 2021.

**Table 3-3: 2021 Gross Waste Disposal & Diversion Unit Costs**

| Solid Waste Component | North Dundas | South Dundas | North Glengarry[1] | South Glengarry[2] | North Stormont | South Stormont[3] |
|---|---|---|---|---|---|---|
| ***Waste Disposal Costs per Tonne*** | | | | | | |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 473 | 257 | 515 | 90 | - | 1,898 |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | - | - | 87 | - | 69 | 60 |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 7 | 26 | 22 | 1 | 22 | 10 |
| ***Recycling Processing & Diversion Costs per Tonne*** | | | | | | |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 205 | 379 | 1,034 | 381 | 340 | 326 |
| ***Recycling Processing Facility (MRF) Used*** | WMI | Cornwall | RARE | Cornwall | Cornwall | Cornwall |

*1. North Glengarry operates the RARE MRF*
*2. Landfill post closure costs begin later in the period hence a low cost in 2021*
*3. Own landfill cost includes a one time $430,000 capital cost in 2021*

Landfill closure and post closure care costs for three (3) of the municipalities range between $22 and $26 per tonne disposed. The costs to the other three (3) municipalities range from $1 to $7 per tonne. The 2021 cost do not fully capture the true closure and post closure care costs as some of these costs will be incurred in later years.

The waste diversion costs to those municipalities that use the Cornwall MRF range between $326 and $381 per tonne. The 2021 tipping fee at Cornwall's MRF is $305 per tonne. The cost variations are due to the extent to which other diversion programs are provided (leaf & yard waste composting, scrap metal, etc.). North Dundas' cost of $205 per tonne includes the additional cost to assemble the recyclable materials at its former MRF at the landfill site and ship to Brockville. North Glengarry's cost includes the full cost of managing and operating the RARE MRF.

## 3.2 NPV Unit Costs

Table 3-4 shows the unit costs for each solid waste component based on the 2021 NPV of the costs projected to be incurred between 2021 and 2044 inclusive. These reflect the full cost of service over the study period and are more representative of the long-term costs net of revenues and reserve funds currently available for use. The unit costs for recycling are to December 31, 2024. Appendix G Table G5 shows the NPV calculations including revenues and reserve balances.

*Waste Collection Unit Costs*

The waste collection unit costs per curbside stop range from $73 to $97 per curbside stop with the in-house collection at the lower end of the range at $73 to $77 per curbside stop.

*Recycling Collection Unit Costs*

The weekly 2-stream collection costs are approximately $56 to $58 per curbside stop with North Glengarry's cost lower at $40 per curbside stop. The cost of bi-weekly single stream collection is lower at $30 to $33 per curbside stop. Recycling collection costs are driven by the collection frequency and streams compared to contracted versus in-house services.

**Table 3-4: 2021-2044 Unit Costs Based on NPV (Net)**

| Solid Waste Component | North Dundas | South Dundas | North Glengarry | South Glengarry | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| ***Waste Collection Costs per Capita*** | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | 26 | - | - | - | - | 31 |
| WASTE COLLECTION COSTS (CONTRACT) | - | 33 | 30 | 42 | 29 | - |
| ***Waste Collection Costs per Curbside Stop*** | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | 73 | - | - | - | - | 77 |
| WASTE COLLECTION COSTS (CONTRACT) | - | 79 | 86 | 97 | 79 | - |
| ***Recycling Collection Costs per Capita*** | | | | | | |
| RECYCLING COLLECTION COSTS (INHOUSE) | 21 | - | - | - | 11 | 12 |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | 24 | 14 | 14 | - | - |
| ***Recycling Collection Costs per Curbside Stop*** | | | | | | |
| RECYCLING COLLECTION COSTS (INHOUSE) | 58 | - | - | - | 31 | 30 |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | 56 | 40 | 33 | - | - |
| ***Waste Disposal Costs per Tonne*** | | | | | | |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 144 | 74 | 430 | 110 | - | 387 |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | - | - | 104 | | 82 | 62 |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 50 | 87 | 37 | 56 | 33 | 32 |
| ***Recycling Processing & Diversion Costs per Tonne*** | | | | | | |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | (73) | 248 | 538 | 285 | 11 | 145 |

### ***Waste Disposal Unit Costs***

The cost of waste disposal using private a sector landfill ranges between $62 and $104 per tonne over the long-term. The in-house landfills are more costly with three (3) ranging between $144 and $430 per tonne. South Dundas' cost is more consistent with the lower end of contracted disposal cost at $74 per tonne. South Glengarry's in-house disposal cost is estimated at $110 per tonne over the period.

Landfill closure and post closure care costs range between $32 and $87 per tonne disposed. These unit costs are more reflective of the true closure and post closure care costs compared to the 2021 unit costs. However, they do not fully represent the true landfill liability for closed sites as those costs would extend well beyond 2044 which is the last year of the study period for this review.

### ***Waste Diversion Unit Costs***

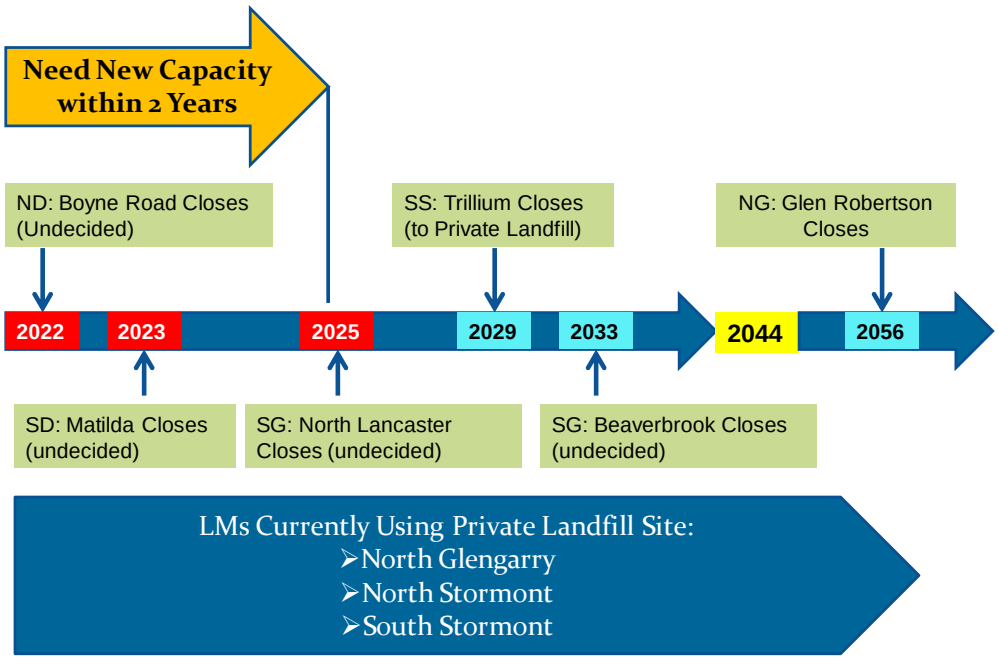
The waste diversion and processing unit costs are based on the NPV of the costs from 2021 to December 31, 2024 for recycling services and net of available reserves and expected annual revenues. Therefore, for North Dundas there is a unit revenue due mainly to the available cash is reserve. Otherwise, the cost per tonne ranges from $145 to $245 with North Glengarry higher at $538 per tonne.

# 4 Phase 3- Collaboration Opportunities

This section presents Phase 3: Collaboration Opportunities which discusses the options available to the six (6) local municipalities (LMs) and the United Counties of SDG (SDG) to work together to address the current waste management challenges, enhance service delivery and create efficiencies. The LMs are facing a variety of challenges with delivering their respective services:

- Diminishing landfill capacities in the short-term (2-8 years). Figure 4-1 shows the timelines for landfill closures.
- Increasing cost of service and financial sustainability
- Landfill liability that is mostly unfunded (for some LMs)
- Transitioning to producer responsibility for blue box recycling on January 1, 2025 under O.Reg. 391/21
- Stagnant waste diversion. Considering organics (food waste) collection would increase diversion but is relatively expensive
- Lack of weigh scales to accurately measure waste disposed
- Limited organizational capacities to plan and sustain services at desired levels into the future.

**Figure 4-1: Landfill Closures Timeline**



The options presented are based on the information contained in the Draft Phases 1 & 2 Report dated March 12, 2021, industry best practices, latest recycling regulations (O.Reg. 391/21), input received from local municipal (LM) and SDG staff and Councils, and preliminary discussions with City of Cornwall staff. The fundamentals for successful collaboration include:

- Providing services across municipal boundaries to benefit from economies of scale and sharing resources to reduce costs.
- Greater alignment of service levels for consistency and facilitating collaboration
- Establishing a robust management structure to plan, implement, operate and finance waste management programs in the future.

Assessment of alternative and new technologies such as incineration is beyond the scope of this review. However, collaboration between the LMs and SDG and other jurisdictions will create greater economies of scale when these are considered in a broader geographical context.

## 4.1 Stakeholder Input

### 4.1.1 Council and Staff Input

The Draft Phases 1&2 Report was distributed to all members of SDG and Local Municipal Councils and staff for review. The results were discussed with senior staff and presented to SDG Council on March 25, 2021. Individual presentations were also made to the respective Local Municipal Councils and the South Glengarry Environmental Committee on request.

- SDG Council - March 25, 2021
- Meeting with CAOs and Senior Staff - April 22, 2021
- South Stormont Council - April 26, 2021
- South Glengarry Environment Committee - April 27, 2021
- South Glengarry Council - May 3, 2021
- North Dundas Council - May 12, 2021
- South Dundas Council - July 13, 2021

Each Council was also presented with four (4) questions to obtain their views on collaboration. The responses received are provided in Appendix I and summarized in Table 4-1.

**Table 4-1: Summary of Local Municipal Responses to Questions**

| Questions & Responses |
|---|
| **1. Which waste management collaboration opportunities interest your Municipality the most?** |
| Support for collaboration on the following:<br>✓ Public education and communication<br>✓ Blue box transitioning to producers |

| Questions & Responses |
|---|
| ✓ Leaf and yard waste composting<br>✓ Organics collection and processing<br>✓ Procurement of waste collection and engineering services<br>✓ Investigating innovative diversion opportunities<br>✓ Sharing of resources<br>✓ Improving disposal efficiencies |
| **2. What information does your Council need to be able to decide whether to support regional and/or inter-municipal collaboration efforts?** |
| Information required include:<br>✓ Comparison of Service Levels<br>✓ Service Levels to be same or better across all LMs<br>✓ The implications of O.Reg. 391/21<br>✓ Cost of landfill expansions<br>✓ Cost of private sector disposal<br>✓ Cost benefit analysis of waste management over the long-term (10+ years)<br>✓ Costs if SDG assumes responsibility<br>✓ Industry best practice and technology advancements |
| **3. Does your Council have any input or preference regarding who should lead the coordination of collaboration efforts going forward (e.g. A specific municipality, a group of municipalities, SDG, joint committee or board)** |
| Support for the following:<br>✓ Joint Committee with representatives from each LM & Cornwall<br>✓ Representatives may be Councillors and staff<br>✓ SDG to lead the collaboration |
| **4. Does your municipality have any other items or issues that need to be considered within the analysis of collaboration opportunities?** |
| The following should be considered in the analysis of collaboration opportunities<br>✓ Collaborating with Cornwall<br>✓ The future of North Glengarry's MRF<br>✓ Alternative / innovative technologies for waste management including incineration |

| Questions & Responses |
| --- |
| ✓ Impending closure of existing landfill sites means closure of the residential drop-off program. This is a concern.<br>✓ The future of existing landfill sites given the challenges of expansions. |

There is support for collaboration not only among the six (6) LMs and SDG but also with the City of Cornwall subject to approval by City Council. One challenge is the relatively long travel distance between Cornwall and the western municipalities. This may be addressed through transfer stations as appropriate and if cost effective. Collaboration on a broader scale outside of SDG would also be supported by the LMs if there is an opportunity to access programs and facilities that may otherwise be unaffordable. There is also support for establishing a committee with SDG as the lead to coordinate the collaboration activities. Other feedback received from the municipalities include the following.

- Collaboration that can be easily implemented should be given priority
- North Glengarry's RARE MRF has sufficient capacity to process additional materials by adding another processing line and sorters. A building and equipment condition review of the MRF is in progress to assess its viability as a processing facility under producer responsibility for blue box recycling.
- South Glengarry may decide to seek extensions to one or both of its landfill sites (North Lancaster and Beaverbrook) instead of closing them as indicated in the Phases 1&2 Report. However this would depend on the potential environmental impacts and availability of alternative disposal capacity.
- South Dundas is also undecided on whether or not to continue to pursue the Matilda Landfill Site expansion and would consider alternative disposal opportunities depending on costs.

### 4.1.2 City of Cornwall Staff Input

Preliminary discussions were held with City of Cornwall (City) staff on May 4 and July 30, 2021 to:

- gauge whether or not there is a desire to collaborate with the LMs and SDG;
- identify potential opportunities for collaboration; and
- obtain background information on the City's current initiatives particularly its renewable natural gas (RNG) project underway at its wastewater treatment plant (WWTP).

The feedback from these discussions indicates that the City is willing to collaborate, in principle, and work with SDG and the LMS to develop specific collaboration arrangements for further consideration by City staff and Council. The primary opportunities are in leaf and yard waste and green bin organics (food waste) processing as part of the City's renewable natural gas (RNG) project. The City would accept both leaf and yard waste and green bin organics on a full cost recovery and revenue sharing basis. This would be similar to the current blue box materials processing contracts between the City and some LMs. The City is in the process of obtaining approvals from the Ministry of Environment Conservation and Parks (MECP) to receive waste at the WWTP from a broad geographical area including SDG and the LMs.

Efforts are also underway to design and construct modifications to the WWTP to receive a blend of feedstock including leaf and yard waste and organics, for the production of RNG.

Regarding waste disposal the City has approximately 12 to 14 years of capacity remaining at its landfill site. The RNG project is expected to divert the City's organics from the landfill site thereby extending its remaining life. Collaboration on waste disposal is not a priority at this time but the City would be open to holding discussions.

### 4.1.3 Senior SDG 7 LM Staff Input on Phases 3 & 4

Draft versions of Phases 3 and 4 were presented to senior staff from SDG and the LMs on the following dates to obtain input:

- Draft Phase 3 Review Meeting with CAOs and Public Works Officials - November 2, 2021
- Draft Phase 4 Review Meeting with CAOs and Public Works Officials - February 24, 2022

Input from both meetings has been incorporated into this report.

## 4.2 Recycling Transition Regulation

Municipalities have been the drivers of blue box recycling in Ontario over the past few decades in terms of implementing and developing programs for the collection, processing and sale of blue box materials to end users. These programs are mature and well accepted by tax payers. However the end markets for many blue box materials have softened in the last few years resulting in lower revenues to offset the cost of service and redirection of some materials to disposal. Accordingly, a fundamental change to blue recycling is occurring in Ontario shifting the responsibility from municipalities to the producers of packaging materials. The producers would have full responsibility and accountability for design, collection, processing, reuse and reintegration of packaging materials into production to minimize waste. This is referred to as a "circular economy".

On June 3, 2021 O.Reg. 391/21 (Blue Box Regulation) filed under the Resource Recovery and Circular Economy Act, 2016 became effective. It sets out the requirements for transitioning responsibility for blue box recycling in Ontario from municipalities to the producers of packaging. The transition date for transferring responsibility from the LMs and Cornwall to the producers is January 1, 2025. It is important to note that municipalities will no longer be responsible or have the authority to deliver recycling programs after this date. O. Reg. 392/22 filed under the Environment Protection Act which also took effect on June 3, 2021 amends the existing O.Reg.101/94 by removing the requirement for municipalities to be responsible for recycling after the transition date. This means that municipalities would no longer have the legal obligation or authority for blue box recycling. It would allow municipalities to redirect their efforts and resources (including annual budgets) from blue box recycling to other forms of waste diversion such as leaf and yard waste composting and organics collection and processing.

The Resource Productivity and Recovery Authority (RPRA) is the Authority to enforce the requirements of the Blue Box Regulation, the Electrical and Electronic Equipment Regulation, Batteries Regulation and Tires Regulation. The Authority is also responsible for providing information and supporting businesses

in understanding and complying with the regulatory requirements. A summary of the Blue Box Regulation requirements is presented in Appendix J.

On April 14, 2022, amendments to the Blue Box Regulation were made through O.Reg. 349/22: Blue Box. These changes are to clarify the process for establishing the province-wide system and are summarized below as stated in a news release issued by RPRA:

- *"Each producer is responsible for providing Blue Box collection to every eligible source in Ontario.*
- *Rule creators and the rule creation process, including the allocation table, have been removed.*
- *PROs that, either on their own or with another PRO, represent producers that supply more than 66% of Blue Box material tonnage are required to submit a report on how they will operate the Blue Box system. The report must be submitted to RPRA by July 1, 2022.*
- *Newspaper producers whose newspaper supply accounts for at least 70% of their total Blue Box supply are exempt from collection, management, and promotion and education requirements. Newspapers, however, are still an obligated material under the regulation and will continue to be collected in the Blue Box system."*

### 4.2.1 Producer Responsibilities

The Blue Box Regulation requires producers of products and packaging supplied to consumers in Ontario to do the following:

- Register with RPRA by April 1, 2022
- Establish and operate systems to collect and manage blue box materials discarded by consumers. This includes:
  - ✓ providing blue boxes to consumers;
  - ✓ collection and processing of blue box materials;
  - ✓ providing drop-off service at existing depots and landfill sites; and
  - ✓ undertaking public education about the blue box program
- Report annually on performance to RPRA

A key issue to be addressed by the LMs as part of the transition is the collection of blue box materials from small commercial properties that currently receive curbside blue box collection. Producers are not required to collect materials from commercial properties under the Blue Box Regulation so it is uncertain how these properties would be handled after the transition. Another potential issue is the blue box collection frequency. There is currently a mix of weekly and bi-weekly collection by the LMs. Producers are required by regulation to maintain these collection frequencies until December 31, 2025 when the transition period ends province wide. Afterwards the regulations allow for bi-weekly collection as a minimum so it is possible that LMs currently providing weekly collection may change to bi-weekly collection.

### 4.2.2 Local Municipal Role

Municipalities will not be responsible for blue box materials recycling after the transition date nor will they have the authority to continue to provide recycling services. However, they may choose to operate as service providers (Producer Responsibility Organizations) to the producers to provide collection or processing services by negotiating contracts on the open market with one or more producers. In such cases municipalities would be contractors to the producers with the inherent risk of not recovering the full cost of service depending on the contractual arrangements. Those municipalities will be required to register with RPRA and meet specific reporting obligations. Municipally owned and operated processing facilities that choose to work with producers will be legally responsible for reporting on materials processed by type and by producer. This may require a change to their operations to segregate materials by producer to be able to accurately report to RPRA in accordance with the regulation. This would be the case for RARE and Cornwall's recycling facility should those facilities continue to operate beyond January 1, 2025.

Table 4-2 highlights the items that must be prepared by the LMs and Cornwall and submitted to RPRA by the dates shown, as part of the transition.

**Table 4-2: Items to be Submitted by LMs to RPRA**

| Item | Deadline |
|---|---|
| Each LM to submit an **Initial Report** on its current blue box collection system to the Authority | September 30, 2021 |
| Registration of Processors of blue box materials with the Authority. This applies to RARE and Cornwall's MRF | April 1, 2022 |
| Each LM to submit a **Transition Report** with further information about its current blue box collection system to the Authority ahead of their transition date of January 1, 2025 | August 31, 2023 |
| **Change Report** is required if there are changes to an **Initial Report** or a **Transition Report** | Within 30 days of the change |

The RARE and Cornwall's recycling facilities must register with RPRA by April 1, 2022 whether or not these facilities would be operating after the transition date of January 1, 2025.

The overall purpose of the transition to producer responsibility is to bring accountability for the life cycle of packaging materials, consistency across the province in materials collected, benefit from economies of scale and improve efficiencies. The transition will occur between 2023 and 2025 inclusive to allow producers and municipalities sufficient time to prepare for and manage the transfer in an orderly fashion. This is intended to reduce the risks and costs to both sides and minimize disruption of the blue box services. Following transition the producers would be fully responsible for recycling under the RRCEA. The LMs would no longer be bound by O.Reg.101/94 which mandates municipalities to have curbside programs. However, the municipalities would need to decide on the future role they wish to

play, if any, after the transition as they would be allowed to bid on collection and/ or processing services if they so wish.

### 4.2.3 Transitioning to Producer Responsibility

The factors to be considered in addressing potential risks and identifying key steps to be taken by the LMs and/or SDG in preparation for the transition are noted below.

- Existing contractual obligations that the LMs may have the related costs and the timing of the expiry of these contracts.
- Existing equipment and their potential for re-purposing or continued use in recycling. This would include consideration of the North Glengarry (RARE) MRF.
- Consistency in the materials currently collected by each LM.
- The public education that would be necessary to advise residents of the changes due to transitioning from municipal to producer responsibility.
- The potential triggers for service disruption.
- The risk of LMs no longer having direct control over blue box collection and link with residents
- The possible criteria that producers may use to prioritize the municipalities to be transitioned. These may include:
    - ✓ Cost effectiveness and efficiencies
    - ✓ Geographical location and grouping of municipalities
    - ✓ Readiness to transfer (e.g. expiry of or ability to end existing contracts, decisions on future role and use of existing assets, preference of the LMs regarding timing of the transfer, etc.)
- ✓ The need for staff resources to facilitate the transition including liaison and coordination with producers and RPRA. Registration with RPRA may be required if the LM or collaboration group plans to have a future role in the recycling service.
- ✓ The possible roles the LMs may have based on staff capacity and equipment availability and the need to make the RPRA and producers aware of these.

## 4.3 Regional Level of Service

The “regional” level of service presented in this section is based on the analysis and results from phases 1 and 2 and considers the following:

- Current differences in service levels by solid waste component among the LMs.
- Desired service levels and potential future changes being contemplated by each LM.
- Industry best practices.
- Customer expectations and convenience

- The question of equity and 'cross subsidization' among LMs in "regional setting". To address this a "base" level of service across the six (6) LMs is proposed with the opportunity to add enhanced services in specific LMs as appropriate upon request
- Requirements for transitioning to producer responsibility

### 4.3.1 Current Levels of Service

The existing waste management by-laws, website information and discussions with municipal staff were used to determine the current services and programs and the level of service offered by each LM. An inventory of the level of service (e.g. waste and curbside blue box collection frequency, drop off depot operating hours, etc.) is provided in Appendix D. The services and level to which they are offered are similar among the municipalities. However, there are some differences as noted in Table 4-3. Each LM provides its own services with differing waste/recycling collection schedules, types of materials and quantity allowed for curbside collection, waste drop-off locations and materials acceptable for drop-off, operating hours and fees, etc. Some services are provided in-house while others are outsourced. Each LM manages its own contracts for waste and recycling collection and processing. These contracts have different expiry dates.

**Table 4-3: Current Levels of Service Summary**

| Differences in Levels of Service |
|---|
| **Curbside Waste Collection** |
| • All LMs provide weekly curbside collection.<br>• Slight variations in schedule changes due to holidays.<br>• Set out times vary slightly between 6am and 7am.<br>• Some LMs specify the earliest the previous day that set out can occur.<br>• Residential container limits are generally consistent at 2 containers/bags except for one (1) LM that allows 8 containers/bags.<br>• Wider variation in container limits for commercial and agricultural sectors ranging from 4 containers/bags to 10 containers/bags.<br>• Variations in bag tag limit and costs. Some municipalities do not offer additional set out. Where offered, bag tag fees range from $1.25 to $3.00 per bag/container.<br>• Some variation in size and weight of bag/container allowed.<br>• Variation in definitions of unacceptable waste.<br>• Most LMs outsource collection of residential waste. Two municipalities provide waste collection services with in-house resources. |

| Differences in Levels of Service |
|---|
| **Curbside Blue Box Collection** |
| • Three (3) LMs provide weekly collection with alternating streams each week. Three (3) LMs provide bi-weekly, single-stream collection.<br>• Some variation in types of material acceptable for collection.<br>• No LM has a limit to amount of recyclables that can be set out.<br>• Some variation in bin types that can be used/not used and use of clear/blue recycling bags.<br>• Some variation in ability/cost to get new blue boxes.<br>• Three (3) LMs that outsource waste collection also outsource recyclables collection. The two (2) LMs that collect waste in-house also collect recyclables in-house. One (1) LM that outsources waste collection collects recyclables in-house. |
| **Blue Box Materials Processing** |
| • Four (4) LMs have annual contracts with the City of Cornwall facility<br>• One (1) LM utilizes a private sector facility.<br>• One (1) LM has its own MRF with in-house staff (RARE) |
| **Bulky Waste/ White Goods Collection** |
| • Most LMs require bulky items/white goods to be dropped off at the landfill. Only one (1) LM has an annual curbside pickup which is free to residents. |
| **Leaf and Yard Waste Collection** |
| • No regular weekly collection offered by LMs<br>• Five (5) LMs offer curbside collection but it varies between 1 and 2 annual events<br>• Some variation in the areas of each LM where the annual curbside program is provided.<br>• Most LMs accept unlimited leaf and yard material at the annual curbside collection events. Two (2) LMs have 20 bag/bundle limits.<br>• Of the five (5) LMs that offer the annual curbside leaf and yard material collection, three (3) collect in-house and two (2) outsource. |
| **Source Separated Organics Collection** |
| • There are no organics collection or processing programs in any LM.<br>• Some LMs promote use of/sell backyard composters. |

| Differences in Levels of Service |
|---|
| **Residential Drop-off Depots** |
| • Located at the active landfill sites.<br>• Some variation in operating hours.<br>• Some accept I, C & I waste, while others do not.<br>• Definitions of acceptable and unacceptable waste vary.<br>• Varies on whether tipping fee charged, and where tipping fees are charged, the manner in which the tipping fee is determined. Some LMs provide residents limited free disposal per year (2 loads). Where tipping fees charged, varies by volume or vehicle type. |
| **Household Special Waste (HSW) & Electronic (E-waste) Collection** |
| • Programs vary, with 2 LMs having a single, annual event, 2 others having one monthly drop-off over 6 months per year, and 1 LM with 2 drop-off days/month over 8 months.<br>• Drop-off locations vary.<br>• Some electronic waste drop-off locations also provided at some, but not all landfills. |
| **Landfill Sites** |
| • Four (4) LMs have one active landfill. One LM has two (2) active landfills. One (1) LM uses a private sector landfill and has no active landfill.<br>• Two (2) LMs that have active landfills also use a private sector landfill for disposal of curbside collected residential waste.<br>• All municipal landfill operations, including container stations are in-house<br>• Monitoring is generally outsourced. Some in-house staff used to assist with monitoring at one LM in conjunction with contractors. |
| **Public Education/ Customer Service** |
| • Public education information/materials and contact resources varies significantly among the municipalities. |

### 4.3.2 Level of Service Best Practices

One of the main goals in waste management is to divert waste from landfill disposal through the use of best practices in waste collection, enhanced recycling programs, organics collection and educational programs that build awareness about the programs and importance of increasing waste diversion. Best practices that are currently employed by municipalities in Ontario include:

- Expanded leaf and yard waste collection programs

- Curbside bulky/ large item waste collection
- A dedicated green bin collection program to collect organic materials curbside.
- Dual-stream recycling that offers weekly collection of both streams. This increases the convenience for residents and encourages participation. It removes the need to store materials for a 2-week period as required under a bi-weekly collection program and the temptation to dispose of recyclables in the regular weekly garbage.
- Every-Other-Week (EOW) waste collection to encourage more recycling and organics collection. EOW waste collection encourages residents to place appropriate recycling and organic materials out for weekly collection so that the residual waste does not create odour over a 2-week period.

Given the current differences in levels of service across the LMs, it is acknowledged that implementing some of the best practices may not be feasible without some changes being made. For example, it would be difficult for the LMs to individually introduce an organics program with curbside collection and begin supporting dual-stream recycling, because the infrastructure to do so does not currently exist and is expensive to implement. Shifting to EOW waste collection would be difficult without an established weekly organics program in place to remove the waste that would decay and result in odours, as residents would need to keep their waste at their homes for two weeks at a time. Most municipalities that implement EOW waste collection usually do so in support of successful weekly organics and recycling programs to make it more convenient for residents to use the organics and recycling diversion programs than the curbside waste collection disposal program, thus leading to increased waste diversion. It would take time and careful consideration to prepare for the shift to such programs and contracts would need to be reviewed and updated to ensure that collection of the waste, recycling and organics is possible.

One possible program change would be to expand leaf & yard waste collection. Currently, one municipality does not offer collection, some municipalities offer one collection per year (spring), others two collections (spring and fall) and one municipality offers curbside collection monthly from May to November. Most leaf and yard waste production occurs in the spring when residents clean up their properties and plant and again during fall clean-up. Therefore, a minimum of two collections per year would be appropriate to meet these demands.

Any changes to the current curbside blue box recycling program should be held for now due to the transitioning of the blue box recycling program to producer responsibility. The change to producer responsibility of the blue box program could have implications to the manner in which collection programs will be undertaken, what materials will be collected and where and how materials will be processed. Until these details are available, significant changes to the existing recycling programs should not be made.

Another opportunity to increase level of service and convenience for residents is to provide a curbside “Bulky Item/White Goods” collection program. Bulky items can include furniture, mattresses, carpet and white goods (e.g. washers. dryers, etc.). Currently, only one (1) LM offers a curbside bulky item collection program. Residents of the other LMs must transport their bulky items/white goods to a landfill for disposal. Provision of curbside services can assist those residents who do not have access to a

vehicle for hauling these oversized items to a landfill site. One annual collection day can be provided as is currently offered by the one LM. Other program options may include:

- More frequent collection than once per year
- A call-in collection service possibly with a limit on the number of pick-ups per address
- Free service or a nominal cost per item

### 4.3.3 Base Level of Service (Proposed)

Implementing a "base" level of service that can be applied region wide would bring consistency across the LMs to facilitate joint programs and eliminate need to account for variations in service levels when designing collection programs. For example, the base level of service would establish a uniform set of expectations/ deliverables of contractors who may be interested in bidding on joint tenders between two or more LMs for waste collection.

The base level of service is comprised of:

- The current programs and service levels that are most common among the LMs; and
- Additional services and service level changes to improve customer convenience and align with best practices.

In addition, enhanced services over and above the base service level could be made available to LMs upon request on a user pay basis specific to that LM. This offers flexibility to LMs (e.g. to provide more frequent leaf and yard waste collection, etc. compared to the base service).This approach is consistent with maintaining the current service levels as a minimum as noted in the feedback received from the LM Councils. Table 4-4 identifies the "base" level of service. Appendix K includes a comparison with the current level of service offered by each LM.

**Table 4-4: Regional Base Level of Service (Proposed)**

| Service | Proposed Base Level of Service |
|---|---|
| **Curbside Waste Collection** | |
| Frequency | • Weekly |
| Set-Out Time | • 7am<br>• No earlier than 7pm on previous day |
| Container Limits | • Residential - 2 containers/bags<br>• Commercial - 6 containers/bags[2] |
| Bag Tag Fees | • Tags required for extra bags/containers<br>• Range from $1.25 to $3.00 per tag<br>• Tag fee of $2.00 |

| Service | Proposed Base Level of Service |
|---|---|
| Container Size | • Maximum weight of 23 kg (50 lb) |
| **Curbside Blue Box Collection** | |
| Frequency | • No change due to transition to producer responsibility |
| Set-Out Time | • Same as waste collection |
| Container Limits | • No limit |
| Containers | • Blue Boxes |
| New Blue Boxes | • $5.00 per blue box<br>• Available for sale at all LMs |
| **Blue Box Materials Processing** | |
| Facility used | • No change due to transition to producer responsibility |
| **Bulky Waste/ White Goods Collection** | |
| Collection | • Drop off at landfill/ residential depot<br>• Curbside service could be offered as an *enhanced service* at any municipality's discretion (at an additional cost over the base service).<br>• Enhanced curbside could be offered to residents for free or at a nominal fee (e.g. a tag system) |
| **Leaf and Yard Waste Collection** | |
| Curbside Collection | • Two (2) collections per year (spring and fall) is proposed<br>• More frequent collection could be an enhanced services |
| **Source Separated Organics Collection** | |
| Curbside Collection | • None pending cost/ benefit analysis |
| Backyard Composter | • Available for sale at LM offices |
| **Residential Drop-off Depots** | |
| Location | • At land fill sites<br>• Offer convenient alternative locations as landfill sites close |
| Operating Hours | • 8 am to 4 pm during weekdays<br>• 8 am to 4 pm on Saturdays<br>• Closed Sundays and holidays |

| Service | Proposed Base Level of Service |
|---|---|
| Acceptance of IC&I waste | • Accept IC&I waste but reconsider policy to preserve landfill capacity vs. potential loss in revenue |
| Tipping Fees | • 2 free disposals per year (max. 500 kg), after which tipping fees apply |
| **Household Special Waste (HSW) & Electronic (E-waste) Collection** | |
| Frequency | • Year round Drop-off |
| **Landfill Sites** | |
| Number of Operating Sites | • Minimize the number of operating sites to reduce costs |
| **Public Education/ Customer Service** | |
| Education & Communication Program | • Develop and implement a uniform plan that optimizes existing resources and technologies |
| Customer Service | • Establish a one-call system and response tracking |

## 4.4 Collaboration

### 4.4.1 Collaboration Principles

The principles noted below were established to guide development of the collaboration opportunities. These are based on the information and feedback received from Phases 1 and 2, industry best practices, having a uniform regional level of service and the recycling transition regulations (O.Reg. 391/21).

- *Ease of Implementation*. The opportunities that are easier to implement should be prioritized over those that would require greater effort and approvals.
- *Support Transition to Producer Responsibility*. The opportunity should position the LMs for a smooth transition to producer responsibility including consistency in levels of services, meeting O.Reg. 391/21 requirements and public education on the transition.
- *Enhancing Waste Diversion*. The opportunity should facilitate increasing waste diversion beyond current levels to extend current landfill site capacities
- *Efficiencies.* The opportunity should create efficiencies between two (2) or more LMs and on a regional basis. To facilitate this a "regional" level of service is required.
- *Cost Reduction*. The opportunity should lead to cost reductions to the extent possible for each solid waste program component
- *Disposal Capacity*. The opportunity should facilitate securing new capacity to address the landfill site closures expected in the next 2 to 8 years, optimize remaining landfill capacity and minimize disposal costs.

- *Management Capacity*. The opportunity should provide a robust management structure with adequate staff and resource capacity including financing, to manage the respective solid waste programs and meet regulatory requirements in a sustainable fashion in the future
- *SDG and Cornwall Roles*. SDG should lead the collaboration effort on behalf of the municipalities and partnerships with the City of Cornwall should be pursued as appropriate.
- *Municipal Act, 2001 Requirements*. The collaboration opportunities must be achievable under the Municipal Act, 2001.

### 4.4.2 Collaboration Opportunities

Opportunities for the LMs, SDG and Cornwall to collaborate are described below. These were identified in accordance with the above noted guiding principles. They are not mutually exclusive but rather complement or can be blended with one another. An analysis of the advantages and disadvantages of each opportunity is provided in Appendix L. The responsibility for leading these collaboration opportunities is reviewed in Section 7 and the timelines for implementation presented in Phase 4 - Implementation Strategy.

#### 4.4.2.1 Planning & Communications Opportunities

***1. Public Education & Communications***

- Develop and distribute educational materials about the waste management services delivered to customers by the LMs
- Use of various communication methods and appropriate technologies - print, websites, social media, customer service software
- Track and respond to customer queries in a timely fashion

***2. Waste Management Planning***

- Investigating new waste disposal technologies (including incineration) and options for long-term waste disposal through partnerships with others
- Implementing the regional level of service that supports collaboration, offers LMs option to select enhanced services if desired and offers convenience to customers
- Seeking MECP approvals as required
- Facilitating/ negotiating with Producers or Producer Responsible Organizations (PROs) as they set-up blue box drop-off depots as part of the waste drop off service at landfill sites as required under the new regulation

These activities are relatively easy to jointly undertake and would reduce duplication of effort. Dedicated resources would be required.

#### 4.4.2.2 Waste Diversion Opportunities

***3. Transitioning to Producer Responsibility***

- Meeting the reporting requirements of RPRA under O.Reg. 391/21 prior to the transition date

- Liaising with RPRA as needed
- Liaising with producers to ensure that the public is made aware of services they will received after the transition
- Addressing any issues that may arise
- Aligning current blue box collection contracts with transition date

This is more immediate as the first reporting deadline was September 30, 2021. The LMs would continue to be individually responsible for their submissions to RPRA but the identification and resolution of issues and liaising with producers would be a joint coordinated effort. This may be a function of the Waste Management Planning and Communications staff

***4. Collaborate with Cornwall***

- This collaboration will focus on holding further discussions with the City of Cornwall regarding processing services to the LMs for an organics collection program and leaf and yard waste.

An organics program is discretionary as it is not required under Provincial Policy 4(i) but would increase waste diversion if implemented. Discussions can begin immediately to develop the terms and conditions that would apply and used to assess the costs and benefits of implementing an organics program.

***5. Food Cycler Organics Composting***

- This collaboration will focus on assessing and sharing the results of Food Cycle Science's pilot program for organics home composting with a view to expanding the program if it is successful.

South Dundas, South Glengarry and South Stormont have partnered with Food Cycle Science to undertake home composting pilot studies using the Food Cycler. These units offer an economical alternative to the green bin organics program depending on the uptake and participation by residents and the amount of waste diverted. Under the pilot program South Dundas and South Glengarry will offer 100 units available to residents at a subsidized price in 2022. 200 units will be available in South Stormont. Depending on the results of the pilot the program can be expanded across the LMs as an alternative to shipping organics to a centralized processing facility.

***6. Sharing existing leaf and yard waste composting facilities***

- Two or more LMs may share the use of existing or planned new leaf and yard waste composting facilities. This option would avoid the cost of establishing and operating multiple facilities but would require MECP approval to move waste across municipal boundaries. There would also be additional drive time and related costs to be considered.

***7. Joint purchase and distribution of backyard composters and possibly Food Cyclers***

This would reduce duplication and increase the likelihood of volume discounts from suppliers. SDG's purchasing department may facilitate the purchase and distribution.

#### 4.4.2.3 Waste Collection Opportunities

***8. Joint waste collection between 2 or more LMs***

- Identify LMs where joint collection would be feasible and align contracts as needed.

- Decide on outsourcing vs. in-house collection, develop tender documents and obtain bids.

Joint collection would be limited by the in-house resources available to share between municipalities and exposure to liability due to regular operations in another municipality. The benefits of route and equipment optimization, potential reduced costs and liability limitation would best be realized if adjacent LMs were to outsource collection services. Decisions would be required on reassigning collection staff to other functions and reallocating or selling collection vehicles.

#### 4.4.2.4 Waste Disposal Opportunities

***9. IC&I Waste Disposal Policy***

- Establish a policy to limit the disposal of non-residential waste at existing landfill sites that are approaching closure to preserve capacity

Some LMs currently accept IC&I waste at their respective landfill sites. Changing this practice to accepting residential waste only would reduce the amount of waste received annually and potentially extend the use of the landfill sites. Assuming that 15% of the waste disposed is from the IC&I sector, high level estimates indicate that use of some landfill sites may be extended by few months (Matilda and Boyne Road) to 1 to 2.5 years (Beaverbrook and North Lancaster). However, the tipping fee revenue would decrease. IC&I customers would also be required to make alternative disposal arrangements. This policy would also be appropriate for transfer station operations to minimize the quantity of waste to be hauled and costs.

***10. Conceptual Disposal Option A: Expansion and Sharing Waste Disposal Capacity at Landfill Sites***

- North Dundas would continue with expansion at Boyne Road and share disposal capacity with South Dundas when Matilda closes
- SD would directly haul curbside waste to Boyne Road
- South Glengarry (SG) would close North Lancaster when it is at capacity (Dec 2025) and operate Beaverbrook year round
- SG would initiate work in 2022 seeking approval to expand the Beaverbrook Landfill for use beyond 2033 when the site is expected to close.
- NS, SS and NG would continue to dispose waste at GFL under existing individual contracts
- An agreement with GFL would be negotiated for disposal of all curbside waste from ND and SD starting in 2034
- Establish a transfer station at Boyne Road by the end of 2033 to transfer residential waste only to GFL for disposal. (IC&I would make own disposal arrangements)

This option is conceptual and would require further investigation and analysis to confirm its feasibility due to the number of variables and assumptions. However, it would allow ND and SD to share landfill capacity at Boyne Road for approximately 10 years while reducing the cost of the planned expansion and future operation at Matilda beyond 2023. After closure in 2033 a transfer station would be required at Boyne Road to collect and haul waste for disposal at GFL. Note that GFL is in the process of completing an Environmental Assessment (EA) to increase disposal capacity by approximately 15 million

cubic metres so there should be sufficient capacity to accommodate the LMs' long-term disposal needs Beaverbrook would also be expanded to provide SG with capacity beyond the estimated closure in 2033.

High level estimates suggest that the disposal costs over the next 23 years for the three (3) LMs would be approximately $18.8 million (NPV $2022) compared to approximately $23.4 million (NPV $2022) under the current approach resulting in a potential savings of approximately $4.6 million. The assumptions made regarding costs and tonnages are provided in Appendix L. A major drawback of this option is that approval of the expansion at Boyne Road is uncertain and may not be obtained by the estimated closure at the end of 2022. This is also the need for MECP approvals to redirect and dispose SD's waste at Boyne Road which may be a protracted process. Further discussion with and input from the MECP is required to better assess the timing of approvals. Further details on the pros and cons of this option are presented in Appendix L.

***11. Conceptual Disposal Option B: Negotiate Contract for Long-term (20 years) Disposal at GFL***

- Establish a transfer station at Boyne Road (ND) by the beginning of 2023. This will be used by ND starting in 2023 followed by SD in 2024 when Matilda closes.
- SD would directly haul curbside waste to Boyne Road
- Waste to be hauled from the Boyne Road Transfer Station to GFL
- South Glengarry to close North Lancaster when it is at capacity (Dec 2025) and operate Beaverbrook year round
- Establish a transfer station at Beaverbrook by the end of 2032
- Would include residential drop-off depots at both Boyne Road and Beaverbrook for transfer to GFL.
- The agreement with GFL would include:
    - all curbside waste from ND, SD and SG
    - allowing residents from any LM at GFL (except for North Stormont which already has residential drop-off included in its contract with GFL).

This option is also conceptual and would require further investigation and analysis to confirm its feasibility due to the number of variables and assumptions. It is premised on negotiating long-term (20+ years) a contract for disposal of residential waste from ND, SD and SG at GFL and subject to discussions with GFL. In this case expansions at Boyne Road, Matilda and Beaverbrook and related environmental impacts would be avoided. Transfer stations would be required instead. High level estimates suggest that the disposal costs over the next 23 years for the three (3) LMs would be approximately $15.8 million compared to approximately $23.4 million (both NPV $2022) under the current approach resulting in a potential savings of approximately $7.6 million. The assumptions made regarding costs and tonnages are provided in Appendix L. One of the key benefits of this option is the relatively immediate access to long-term disposal capacity especially for those LMs facing landfill closures within the next 2 years (ND and SD). Approval of transfer stations are expected to be less involved but confirmation of the approval requirements from the MECP would be required. There may also be the opportunity include

Cornwall and increase the waste quantity for negotiations with GFL. Further details on the pros and cons of this option are presented in Appendix L.

***12. Sharing drop-off facilities***

- Continue to offer residential drop-off at Boyne Road after 2022.
- Allow residents from all 6 LMs to use any residential drop-off facility within the 6 municipalities

The main advantage of this opportunity is that residents would continue to have access to waste drop-off depots in other LMs as their respective landfill sites close. There is also the added opportunity to close NG's Glen Robertson landfill site to preserve its capacity (as disposal security) for future use. NG's residents could be re-directed to Beaverbrook in SG or other convenient locations. This opportunity would require MECP approval to move waste across municipal boundaries.

13. ***Joint procurement***

- Obtain landfill site monitoring and lab-testing services through joint tenders/ quotations

The benefit would be potential economies of scale and lower landfill monitoring costs and would require a plan to bundle landfill sites into service packages.

## 4.5 Responsibility for Collaboration

This section reviews the options available to the LMs and SDG regarding the responsibility for moving the collaboration forward. It addresses the following two (2) collaboration principles:

- *Management Capacity*. The opportunity should provide a robust management structure with adequate staff and resource capacity including financing, to manage the respective solid waste programs and meet regulatory requirements in a sustainable fashion in the future.
- *Municipal Act, 2001 Requirements*. The collaboration opportunities must be achievable under the Municipal Act, 2001.

Currently the LMs are responsible for their respective waste management systems and enjoy the control and oversight of the services offered to their respective taxpayers. However, they are faced with limited financial and staff resources to address increasing costs and other challenges including diminishing landfill capacity. Collaboration is intended to improve service delivery and minimize costs in the future for all LMs. The collaboration opportunities discussed in Section 6 can only be achieved if there is the management capacity and authority to implement the actions required. There are three (3) options available:

- A: LMs may work with one another as and when necessary through a series of agreements.
- B: Establishing a Board of Management with equal representation from each LM; or
- C: Transferring responsibility for some or all of the waste management components to SDG

All the options are acceptable under the Municipal Act, 2001 regarding the authority for waste management. However there are significant management capacity differences. Option A is fragmented, cumbersome and does not support a cohesive approach to collaboration that would maximize

efficiencies and cost reductions. It also does not address the current capacity limitations of the individual LMs and is therefore not considered further in the analysis. Options B and C are both viable options.

A review of other jurisdictions across Ontario indicates that there is a mix of responsibility for waste management as summarized in Table 4-5. The local municipalities are responsible for waste management in 11 Counties (including SDG). There are 10 upper tier municipalities with responsibility and five (5) with split jurisdiction between the upper tier and local municipalities. There are three (3) counties with Boards of Management. Two (2) are specific to a component of waste - one specific to waste disposal and the other for recycling processing.

**Table 4-5: Responsibility for Waste Management in Ontario**

| Responsibility | Practices in Ontario |
|---|---|
| Local Municipalities | • 11 Counties with Local Municipal responsibility<br>• Mostly smaller Local Municipal Landfill Sites<br>• Municipalities in 4 Counties use Private Landfill Sites<br>• Some Transfer Stations |
| Region/County/ District | • 5 Regions 4 Counties and 1 District with responsibility<br>• 6 have 1 large Landfill Site with Transfer Stations<br>• 2 use Private Landfill Sites only<br>• 1 uses 2 Owned and 1 Private Landfill Site<br>• 1 uses 1 large Incineration Facility and 1 Private Landfill |
| Split Responsibility | • 1 Region and 4 Counties with split responsibility<br>• Planning - All 5 Regions/Counties responsible<br>• Collection - Municipalities in all 5 responsible<br>• Diversion Processing - 3 Regions/ Counties responsible<br>• Landfill Disposal:<br>➢ Municipalities in 2 Counties responsible (use municipal landfills)<br>➢ 2 Regions/ Counties responsible (1 shares Incinerator with Durham the other uses own and private landfill sites)<br>➢ 1 County with joint landfill site (County & 1 City) |
| Board of Management | • 3 Counties with Board of Management<br>➢ 1 Board has responsibility for all waste management<br>➢ 2 Boards with Local Municipalities responsible for all waste |

| Responsibility | Practices in Ontario |
|---|---|
| | management. All use municipal landfill sites |

### 4.5.1 Options Analysis

Appendix M details the advantages and disadvantages of the two (2) options B and C. The main advantage having a Board of Management is that the LMs would maintain control of waste management budgets and major approvals. However the Board would require its own structure, management procedures and resource capacity (staff, office space, computers, etc.) to function effectively creating another organization and level of bureaucracy. Depending on the agreement there could be a significant reliance on one of the LMs or SDG to provide the administrative support to the Board.

The Municipal Act does not allow the LMs to transfer authority to the Board for finance and property related decisions. These decisions would still be subject to the approval of the individual municipalities which can lead to delays in implementing the joint activities. Approvals from the MECP to move waste across municipal boundaries may also be more involved and time consuming.

Transferring responsibility to SDG for some of all waste management components requires a major decision by the LMs but has significant advantages particularly regarding waste disposal. The landfill sites would become SDG sites and require only administrative approvals for the ownership change. SDG would be allowed to redirect waste within the Counties and thereby more easily implement the disposal and other collaboration options discussed in Section 6. The organization structure, management policies and procedures, resources and decision-making authority already exists. These can be extended to include waste management and provide the capacity required to address the challenges and manage waste in the future, including implementing the collaboration activities described in Section 6. SDG also has equal representation from the 6 LMs on Council discounting the need for a separate Board of Management to provide equal representation. It also mitigates the loss of waste management control by the LMs

The financial sustainability is key to ensuring that the waste management service delivery and financial obligations can be met over the long-term. Currently SDG has the authority to raise the revenue required for the services it delivers, through its taxes. Waste management would be funded in the same manner if transferred to SDG. This means that waste management would be funded from SDG taxes and removing the need for the LMs to continue to fund waste management through their respective taxes thereby creating tax "room" and flexibility to fund other services at each Council's discretion. Note that residents would still pay for waste management through taxes albeit through SDG. The waste management tax may also be requisitioned on a "user pay" basis according to number of properties that receive collection, tonnes of waste disposed by municipality, etc. This would enhance fairness and equity among the LMs and allow SDG to assign costs for enhanced services specifically to LMs requesting the service. This methodology has been used by Niagara Region for many years. SDG also has the authority to issue debt if required to finance major capital investments such as landfill expansions. Currently LMs rely of SDG for debt issuances which would continue under the Board option.

Responsibility for recycling will be transitioned from the LMs to producers on January 1, 2025. Therefore switching to management by a Board or SDG at this time is not necessary. The LMs would continue to be individually responsible for recycling and submitting the reports to RPRA until the transition date. However, collaboration on monitoring the transition and collectively addressing transition issues would be beneficial.

The LMs have indicated a preference for a Committee with representation from the LMs and SDG as the lead to implement the collaboration. This approach can work well as a preliminary step to begin the collaboration with a view to transferring responsibility to SDG. A Waste Management Advisory Committee (WMAG) led by SDG would be appropriate to initiate implementing the collaboration options and guide the decision to transfer responsibility to SDG under an approved Terms of Reference. Phase 4 will addresses the timing of the activities of the WMAG and implementation of the collaboration activities.

# 5 Phase 4 - Implementation Strategy

The Implementation Strategy sets out how the collaboration opportunities presented in Phase 3 might be implemented. ***The strategy is guided by the principles described below and considers the timing of the municipal elections to be held in October 2022 as it relates to decision-making by the LMs and SDG required for implementation***. The strategy identifies the key the actions and decisions to be undertaken, completion timelines and the responsible parties.

## 5.1 Implementation Principles

The implementation strategy considers the immediate challenges facing the LMs, the input by the Steering Committee and feedback from consultations with the Public Works Officials, CAOs, senior staff and SDG and LM Councils to date, and applicable legislation and regulations. The implementation principles include the following:

*Priority Activities*

- Prioritizing collaboration opportunities that:
  - ✓ can be more easily implemented;
  - ✓ enhance waste diversion (excluding blue box recycling which will be transitioned to producer responsibility on January 1, 2025); and
  - ✓ investigate innovative technologies and solutions that support a higher level of environmental stewardship.
- Urgently addressing the waste disposal capacity shortfall in North Dundas and South Dundas within the next 2 years and in South Glengarry within 5 years.

*Blue Box Recycling*

- Ensuring a smooth transition to producer responsibility for the blue box program on January 1, 2025 and meeting RPRA's reporting requirements during the transition period in accordance with the regulation.

- Municipalities will no longer have legal responsibility or jurisdiction over blue box recycling after the transition date. The regulation places this responsibility on the producers of packing materials.

*Partnerships*

- Seeking partnerships with other jurisdictions and service providers to:
  - ✓ investigate long-term innovative solutions to waste management; and
  - ✓ access approved technical solutions for waste disposal and enhancing waste diversion in the short-term.

*Responsibility for Implementation*

- Strengthening the relationship among the LMs and SDG is essential to successful implementation. A Waste Management Advisory Group (WMAG) comprised of LM and SDG representatives, headed by SDG would be established to lead the implementation. This will be through an agreement between the LMs and SDG.

*Organization Capacity*

- SDG's leadership role would require building the resource capacity to support implementation. This would include appropriate staffing, funding and a reporting structure to support the collaboration activities and coordinate with the WMAG. Funding would be shared among the LMs and SDG.

*Responsibility for Waste Management*

- ***The ownership and responsibility for all waste management programs, operations and facilities will remain vested in the respective LMs.*** Phase 3 indicates the benefits of managing waste on a region wide scale and transferring responsibility to SDG particularly for waste disposal. SDG ownership and responsibility would allow movement of waste across the Counties, sharing of facilities and potentially significantly reduce future disposal costs. ***The implementation strategy includes development of further information to inform decisions on whether or not to transfer responsibility to SDG*** and the key decision points. This approach to implementation acknowledges the complexities of waste management and would facilitate a phased transfer of responsibility to SDG should that be the eventual collective decision of the LMs and SDG.

*Existing staff*

- The collaboration opportunities may potentially impact the existing staff e.g. due to combining collection contracts, outsourcing services currently completed by staff, etc. The anxiety and stress this may cause must be acknowledged and properly addressed. It is important to develop information to support staffing decisions and ensure that all existing staff who may be impacted would be treated fairly.

## 5.2 Waste Management Advisory Group (WMAG)

### 5.2.1 WMAG Composition

It is recommended that the WMAG with SDG as the lead, have full representation from each LM and SDG to capture the collective technical and political input as the implementation progresses. A possible composition includes fourteen (14) members:

- The Public Works Official from each LM (6 members)
- One (1) member of Council from each LM (6 members)
- The Director of Transportation from SDG
- One (1) member of Council from SDG

This is a relatively large group. However, given the complexity of waste management services and current challenges, there is a fundamental need to give each LM and SDG the opportunity to fully participate in discussions and decision-making during implementation and further explore the options. The composition and Terms of Reference for the WMAG would require further discussion following the October 2022 municipal elections once the new Councils are in place.

### 5.2.2 WMAG Role and Responsibilities

The WMAG's mandate would be to guide the implementation of the collaboration opportunities identified in Phase3. Its key roles and responsibilities would include:

- Reviewing information developed to support the implementation.
- Identifying additional information requirements.
- Engaging the following:
  - ✓ Ministry of the Environment Conservation and Parks (MECP) as required to obtain information respecting approvals required.
  - ✓ Potential partners including other jurisdictions and service providers as necessary to obtain further information required for implementation.
  - ✓ Environmental groups, other stakeholders including businesses and residents as necessary to obtain their input.
- Monitoring the status of implementation.
- Addressing any issues raised during process.
- Keeping the respective senior staff and Councils apprised of progress.
- Providing information and guidance to the respective senior staff and Councils to support decision making related to implementing the collaboration opportunities and whether or not responsibility for one or more waste management components should be transferred to SDG.
- Holding monthly meetings

Appendix N shows conceptual organization structure for implementation. The precise reporting lines would require further discussion prior to formation of the WMAG and included in the WMAG's Terms of Reference. Reliance on the WMAG structure is not a sustainable long-term solution for waste management. A more robust structure would be required for the long-term as partnerships with other jurisdictions and service providers begin to materialize. However, WMAG is an appropriate arrangement

for advancing collaboration in the short-term and developing the information necessary to assist the LMs and SDG in making informed decisions regarding future programs and the responsibility for waste management. Its role may shift to transitioning waste management to SDG if that is the eventual decision, and subsequently becoming an advisory committee to SDG. Its composition may also change to include representation from other stakeholders such as environmental groups, businesses and the public as programs are implemented. The role of the WMAG should be reviewed annually and adjusted accordingly.

### 5.2.3 SDG Role and Responsibilities

SDG's leadership role would be action based and include the following key elements to support the WMAG and assist with the implementation:

- Information gathering, research and investigations
- Communication and liaison with the MECP, service providers, other jurisdictions and stakeholders
- Developing information for WMAG review to support the implementation efforts
- Implementing the collaboration opportunities related to waste management planning and communications
- Facilitating WMAG meetings (agendas, meeting notes and follow-up actions) through the Director of Transportation
- Monitoring and advancing the implementation activities

The LMs would be responsible for implementing opportunities related to waste collection, waste diversion collection and disposal operations.

## 5.3 Resource Capacity

Staff resources to research, plan and implement changes required to take waste management forward are limited in many LMs and is one of the major challenges facing most LMs as noted in Phase 3. Each LM would need to add it own staff resource to enhance its capacity related to communication and planning for the future.

SDG is currently leading this study through its Transportation Department but also has limited capacity to assist with the implementation of collaboration opportunities. The single new position would eliminate the need for each LM to have its own resources and thereby improve efficiencies and costs due to sharing of the single resource. Additional staff, funding, office accommodations and computers would be required for SDG to facilitate its role noted in Section 5.2.3. The following resources would be required as a start and additional needs gauged as the implementation progresses.

- one (1) FTE to fill the position of Waste Management Planning Coordinator (WMPC) to report the Director of Transportation. ***The annual cost of this position is estimated to be between $64,000 and $74,000 including benefits based on SDG's salary grid.***
- work space and computer for one (1) FTE

- administrative support of half (0.5) FTE which may be provided through existing SDG Transportation Department staff. Support would also be required as needed from SDG's communications staff for website and social media postings and communications.
- Funding for the resources to be cost shared among the LMs and SDG. The apportionment of costs would be subject to further discussion and agreement among the parties.

SDG's resource needs should be confirmed prior to establishing the WMAG in 2023.

### 5.3.1 Waste Management Planning Coordinator (WMPC) Responsibilities

In general, the WMPC would be responsible for all waste management planning activities on behalf of the LMs to take waste management forward. This would include coordinating communication activities and public education on waste management programs and latest initiatives. Responsibilities would include the following under the direction of the Director Transportation Services and input from the WMAG:

- Information gathering, research and investigations related to waste collection, waste disposal and waste diversion.
- Working with the MECP to identify approval requirements for the movement of waste within SDG, sharing of landfill capacity and implementation of waste diversion programs including organics.
- Preparing the region wide waste management by-law that incorporates the region wide level of service and enhanced services for adoption by the LMs.
- Confirming the enhanced services that each LM would like to offer its residents.
- Reviewing the current waste collection contracts to identify expiry dates and timing for combining contracts, for review by WMAG and implementation by the LMs.
- Liaison with the individual LM Public Works Officials as necessary
- Coordinating discussions with and gathering information from Cornwall, GFL and others on potential partnerships
- Working with LMs to prepare and distribute communication and public education materials including website postings
- Coordinating efforts with LMs to address any gaps in service that may result from the transition of blue box recycling to producer responsibility. A key issue to be addressed is the blue box collection from small commercial and mixed use properties that currently receive curbside collection but may not under producer responsibility.

This could be a 1-year contract position with the option to renew annually as needed. The role of the WMPC would require further discussion and refinement following establishment of the WMAG.

## 5.4 Implementation Activities

Table 5-1 identifies the key activities required to implement the collaboration opportunities, the responsible parties and approximate timelines for completion. It is expected that other activities would be identified and added as the implementation progresses. The activities cover the immediate to medium term from:

- ✓ Immediate: April 1, 2022 to December 31, 2022

- ✓ Medium Term: January 1 2023 to December 31, 2025

The long-term from January 1, 2026 onward is not covered as the activities during this period would depend on the outcomes and decisions made during the short and medium terms.

The timing also recognizes that the incoming Councils would need to be part of the discussions and decision-making related to implementing the major collaboration efforts. Therefore much of the work during 2022 would be geared towards information gathering for decision-making by the Councils starting in 2023.

The activities indicated under ***"19. Waste Management Responsibility" would apply only if the LMs and SDG approve the transfer of waste management responsibility to SDG and are at a high level to guide the implementation***. A more detailed list of activities would be required at that time.

Appendix O presents a Gantt chart showing the activities timelines and decision points.

**Table 5-1: Implementation Activities (April 1, 2022 to December 31, 2025)**

| Activity | Target Completion | Responsibility |
|---|---|---|
| **Immediate: April 1, 2022 to December 31, 2022** | | |
| **1. Blue Box Transition to Producer Responsibility - Reporting to RARE** | | |
| ▪ Each LM to submit an *Initial Report* on its current blue box collection system to RPRA | ▪ September 30, 2021 (Past Due) | ▪ Each LM |
| ▪ Registration of Processors of blue box materials with the RPRA. This applies to RARE | ▪ April 1, 2022 (Past Due) | ▪ North Glengarry |
| ▪ Liaise with RARE to keep up-to-date on the latest transition developments | ▪ April 2022-December 2024 | ▪ Each LM |
| **2. Waste Diversion - Organics Composting Food Cycler Pilot** | | |
| ▪ Assemble results of the Food Cycler pilot and summarize the findings on costs, quantities diverted, participation rates, issues identified by residents, etc. for sharing with other LMs | ▪ 3rd Quarter 2022 | ▪ LMs undertaking the Pilot Studies |
| ▪ Prepare a cost benefit analysis of the Food Cycler Pilot for consideration by LMs | ▪ 4th Quarter 2022 | ▪ LMs undertaking the Pilot Studies |
| **3. Waste Diversion - Sharing Leaf & Yard Waste Composting Facilities** | | |
| ▪ Identify existing L&Y waste composting facilities and approved capacities | ▪ 2nd Quarter 2022 | ▪ LMs |
| ▪ Identify LMs interested in sharing L&Y waste composting facilities | ▪ 3rd Quarter 2022 | ▪ LMs |
| ▪ Liaise with MECP to determine approval requirements for sharing L&Y waste composting facilities | ▪ 3rd Quarter 2022 | ▪ LMs |

| Activity | Target Completion | Responsibility |
|---|---|---|
| **4. Waste Diversion - Joint Purchase of Backyard Composters & Blue Boxes** | | |
| ▪ Confirm the type and number of composters required by each municipality for 2023 | ▪ 2nd Quarter 2022 | ▪ LMs |
| ▪ Prepare joint tender documents for supply of composters & issue tender call | ▪ 3rd Quarter 2022 | ▪ 1 LM or SDG on behalf of all LMs |
| ▪ Review bids and award contract | ▪ 3rd Quarter 2022 | ▪ 1 LM or SDG Purchasing |
| ▪ Direct delivery to LMs | ▪ 1st Quarter 2023 | ▪ 1 LM or SDG Purchasing |
| **5. Waste Disposal: Expansion and Sharing Waste Disposal Capacity at Landfill Sites** | | |
| ▪ Confirm status of landfill site expansions in North Dundas, South Dundas and South Glengarry | ▪ 2nd Quarter 2022 | ▪ ND, SD & SG |
| ▪ Confirm period for which MECP would extend use of the landfill sites in North Dundas and South Dundas under emergency approvals | ▪ 2nd Quarter 2022 | ▪ ND & SD |
| ▪ Confirm environmental issues to be addressed as part of expansion approvals | ▪ 3rd Quarter 2022 | ▪ ND, SD & SG |
| ▪ Confirm future costs and anticipated timeline to receive approvals | ▪ 3rd Quarter 2022 | ▪ ND, SD & SG |
| **Medium Term: January 1, 2023 to December 31, 2025** | | |
| **6. Establish the WMAG** | | |
| ▪ Prepare WMAG Terms of Reference | ▪ 1st Quarter 2023 | ▪ LMs and SDG |
| ▪ Prepare working agreement between LMs and SDG | ▪ 1st Quarter 2023 | ▪ LMs and SDG |
| ▪ Prepare staff report to Councils for approval of working agreement and WMAG Terms of Reference and appointments | ▪ 1st Quarter 2023 | ▪ LMs and SDG |
| ▪ Approval of agreement and WMAG appointments | ▪ 1st Quarter 2023 | ▪ LMs and SDG |
| **7. Establish Resource Capacity** | | |
| ▪ Prepare job description for Waste Management Planning Coordinator | ▪ 2nd Quarter 2023 | ▪ SDG |
| ▪ Arrange office accommodation, computer, etc. | ▪ 2nd Quarter 2023 | ▪ SDG |
| ▪ Fill the position of Waste Management Planning & Communications Coordinator | ▪ 2nd Quarter 2023 | ▪ SDG |
| **8. Region Wide Base Level of Service** | | |
| • Prepare options for enhanced curbside leaf and | ▪ 3rd Quarter 2023 | ▪ WMPC |

| Activity | Target Completion | Responsibility |
|---|---|---|
| waste collection. | | |
| • Prepare options for enhanced bulky waste collection including options for limits and charges | ▪ 3rd Quarter 2023 | ▪ WMPC |
| • Prepare new waste management by-law for region wide base level of service | ▪ 3rd Quarter 2023 | ▪ WMPC |
| ▪ Review and recommend new by-law, preferred bulky waste collection option, and enhanced leaf and yard waste collection for implementation | ▪ 3rd Quarter 2023 | ▪ WMAG |
| ▪ Approve new by-law for region wide level of service, leaf and yard waste collection and bulk waste collection | ▪ 4th Quarter 2023 | ▪ LMs |
| ▪ Implement region wide level of service, leaf and yard waste collection and bulk waste collection | ▪ 1st Quarter 2024 | ▪ LMs |
| **9. Public Education & Communications** | | |
| • Amend SDG customer service system to accommodate waste management | ▪ 3rd Quarter 2023 | ▪ WMPC with SDG Communications Staff |
| ▪ Assemble program information from each LM for communication to the public | ▪ 3rd Quarter 2023 | ▪ WMPC |
| • Develop educational materials and web content about the waste management services delivered to customers by the LMs | ▪ 3rd Quarter 2023 | ▪ WMPC with SDG Communications Staff |
| • WMAG review of educational materials and web content about the waste management services delivered to customers by the LMs | ▪ 3rd Quarter 2023 | ▪ WMAG |
| • Disseminate information through various communication methods and appropriate technologies - print, websites, social media, etc. | ▪ 4th Quarter 2023 | ▪ WMPC with SDG Communications Staff |
| • Track and respond to customer queries in a timely fashion | ▪ 4th Quarter 2023 | ▪ SDG Communication Staff with LMs |
| • Prepare quarterly reports on customer queries | ▪ 4th Quarter 2023 | • WMPC |
| **10. Blue Box Transition to Producer Responsibility** | | |
| ▪ Each LM to submit a Transition Report with further information about its current blue box collection system to RPRA | ▪ August 31, 2023 | ▪ Each LM |
| ▪ Negotiating with Producers or Producer | ▪ 3rd Quarter 2023 to | ▪ Each LM |

| Activity | Target Completion | Responsibility |
|---|---|---|
| Responsible Organizations (PROs) as they set-up blue box drop-off depots at landfill sites as required under the new regulation | 4th Quarter2024 | |
| ▪ Liaise with producers to ensure that the public is made aware of services they will receive after the transition | ▪ 3rd Quarter 2023 to 4th Quarter2024 | ▪ WMPC & LMs |
| ▪ Address any issues that may arise including collection frequency, IC&I collection and establishing depots | ▪ 3rd Quarter 2023 to 4th Quarter2024 | ▪ WMPC & LMs |
| ▪ Identify Blue Box Collection contracts where alignment to coincide with the transition date to producer responsibility (Jan 1, 2025) would be required. This may require negotiation with existing contractors to extend or terminate contracts earlier if they expire after the transition date. | ▪ 3rd Quarter 2023 | ▪ WMPC & LMs |
| ▪ Provide summary report to WMAG for review | ▪ 3rd Quarter 2023 | ▪ WMPC |
| ▪ WMAG review and recommendations on contract alignment | ▪ 3rd Quarter 2023 | ▪ WMAG |
| ▪ Negotiate with existing contractors to extend or terminate contracts earlier if they expire after the transition date Align current blue box collection contracts with transition date | ▪ 4th Quarter 2023 | ▪ LMs |
| ▪ Extend contracts or negotiate to remove blue box collection if they expire after the transition date. Align current blue box collection contracts with transition date and joint waste collection services | ▪ 4th Quarter 2023 | ▪ LMs |
| **11. Waste Diversion - Organics Composting** | | |
| ▪ Liaise with Cornwall to confirm the organics and leaf and yard waste processing services they can offer and the principles regarding acceptable materials, cost, potential revenue sharing, quantities, etc. that may form the basis of an agreement. | ▪ 3rd Quarter 2023 | ▪ WMPC |
| ▪ Prepare a cost benefit analysis of organics composting through Cornwall's facility for consideration by WMAG | ▪ 3rd Quarter 2023 | ▪ WMPC |
| ▪ Review the cost benefit analysis and | ▪ 4th Quarter 2023 | ▪ WMAG |

| Activity | Target Completion | Responsibility |
|---|---|---|
| recommend next steps | | |
| ▪ Make recommendation regarding whether or not waste diversion processing responsibility should be transferred to SDG | ▪ 4th Quarter 2023 | ▪ WMAG |
| ▪ Implement preferred option | ▪ 1st Quarter 2024 | ▪ LMs |
| **12. Waste Diversion - Sharing Leaf & Yard Waste Composting Facilities** | | |
| ▪ Determine if there is a role for Cornwall and/or GFL to provide leaf and yard waste composting and the costs. | ▪ 4th Quarter 2023 | ▪ WMPC |
| ▪ Prepare report identifying facilities, user LMs, logistics, approvals required and costs | ▪ 4th Quarter 2023 | ▪ WMPC |
| ▪ Review by WMAG | ▪ 1st Quarter 2024 | ▪ WMAG |
| ▪ Implement sharing L&Y waste composting facilities and / or pursuing processing services with Cornwall | ▪ 1st Quarter 2024 | ▪ LMs |
| **13. Joint Waste Collection** | | |
| ▪ Prepare inventory of existing collection contracts, expiry dates, services provided and in-house collection services | ▪ 3rd Quarter 2023 | ▪ WMPC with LMs |
| ▪ Identify any liability, insurance and other issues with sharing in-house collection resources (staff and equipment) between 2 or more municipalities | ▪ 3rd Quarter 2023 | ▪ WMPC with LMs |
| ▪ Liaise with MECP regarding any approval requirements for joint collection using in-house resources | ▪ 3rd Quarter 2023 | ▪ WMPC |
| ▪ Identify LMs where joint collection would be feasible | ▪ 3rd Quarter 2023 | ▪ WMPC with LMs |
| ▪ Identify in-house collection staff and where they might be re-deployed to work in other non-solid waste functions | ▪ 3rd Quarter 2023 | ▪ WMPC with LMs |
| ▪ Identify in-house collection equipment that would be affected and how they might be re-purposed or sold as the case may be | ▪ 3rd Quarter 2023 | ▪ WMPC with LMs |
| ▪ Determine where collection services may be in-house and outsourced | ▪ 3rd Quarter 2023 | ▪ WMPC with LMs |
| ▪ Prepare a summary report on joint waste collection including outsourcing vs. in-house collection for review by WMAG | ▪ 4th Quarter 2023 | ▪ WMPC |

| Activity | Target Completion | Responsibility |
|---|---|---|
| ▪ Make recommendations on outsourcing vs. in-house collection and joint collection | ▪ 4th Quarter 2023 | ▪ WMAG |
| ▪ Develop scope and prepare joint tender documents. Time the contracts to coincide with the transition date for blue box (Jan 1, 2025) after which blue box collection services will not be required | ▪ 4th Quarter 2023 | ▪ LMs |
| ▪ Obtain bids for waste collection services & implement new contracts | ▪ 1st Quarter 2025 | ▪ LMs |
| **14. Waste Disposal: Landfill Monitoring** | | |
| ▪ Review existing landfill monitoring activities and contracts to identify how landfill sites might be bundled to promote economies of scale. | ▪ 1st Quarter 2023 | ▪ LMs |
| ▪ Implement bundled contracts. | ▪ 1st Quarter 2023 | ▪ LMs |
| **15. Waste Disposal: IC&I Waste Disposal Policy** | | |
| ▪ Prepare a policy to limit the IC&I waste disposal at landfill sites due to close within the next 5 years. The benefit of extended use may not be significant at sites that are due to close within 1 or 2 years. This would be an appropriate policy to reduce transfer costs if waste were to be transferred to another landfill site for disposal | ▪ 1st Quarter 2023 | ▪ ND, SD & SG |
| ▪ Consider policy and decide whether or not to implement | ▪ 2nd Quarter 2023 | ▪ ND, SD & SG |
| **16. Waste Disposal: Expansion and Sharing Waste Disposal Capacity at Landfill Sites** | | |
| ▪ Liaise with MECP to confirm approval requirements under LM ownership and SDG ownership, to move waste across municipal boundaries for disposal at a neighbouring municipal landfill site (curbside and drop-off waste). | ▪ 3rd Quarter 2023 | ▪ WMPC with LMs |
| ▪ Confirm costs of direct haul of curbside waste from South Dundas to North Dundas considering joint tendering if feasible | ▪ 3rd Quarter 2023 | ▪ WMPC with LMs |
| **17. Waste Disposal: Long-term (20 years) Disposal at GFL** | | |
| ▪ Review an existing agreement between GFL and one of their client LMs to determine potential terms and conditions. | ▪ 3rd Quarter 2023 | ▪ WMPC |
| ▪ Liaise with GFL to identify potential costs, terms | ▪ 3rd Quarter 2023 | ▪ WMPC with ND, |

| Activity | Target Completion | Responsibility |
|---|---|---|
| and conditions should a decision be made to dispose waste from the three (3) LMs at GFL's facility | | SD & SG |
| ▪ Liaise with MECP to determine the approval requirements for establishing a transfer station in North Dundas | ▪ 3rd Quarter 2023 | ▪ WMPC with ND & SD |
| ▪ Determine the potential capital and annual operating costs of a transfer station at North Dundas | ▪ 3rd Quarter 2023 | ▪ WMPC with ND & SD |
| **18. Waste Disposal: Strategy to Address Impending Capacity Shortfall** | | |
| ▪ Confirm if Cornwall would be interested in being a party to the agreement with GFL for waste disposal | ▪ 3rd Quarter 2023 | ▪ WMPC |
| ▪ Identify existing residential drop-off facilities that can be shared for use by neighbouring residents | ▪ 3rd Quarter 2023 | ▪ WMPC with LMs |
| ▪ Based on the latest information, undertake a cost benefit analysis (costs and well as qualitative factors) to confirm which is the preferred option - expansion of existing landfill sites or use of GFL's facility for disposal | ▪ 4th Quarter 2023 | ▪ WMPC with ND, SD & SG |
| ▪ Identify the pros and cons of transferring waste disposal to SDG in order to execute the strategy | ▪ 4th Quarter 2023 | ▪ WMPC |
| ▪ Prepare a summary report outline the preferred strategy for consideration by WMAG | ▪ 4th Quarter 2023 | ▪ WMPC with LMs |
| ▪ Review and recommend preferred strategy | ▪ 1st Quarter 2024 | ▪ WMAG |
| ▪ Recommend whether or not waste disposal should be transferred to SDG | ▪ 1st Quarter 2024 | ▪ WMAG |
| ▪ Present recommendations to LM and SDG CAOs | ▪ 1st Quarter 2024 | ▪ LM and SDG staff |
| ▪ Present recommendations to LM and SDG Councils for information and feedback subject to public input | ▪ 1st Quarter 2024 | ▪ LM and SDG staff |
| ▪ Prepare public communications and stakeholder consultation strategy to solicit feedback on the preferred waste disposal option including transferring responsibility to SDG (if recommended) | ▪ 2nd Quarter 2024 | ▪ WMPC with LMs |
| ▪ Review public communications and stakeholder | ▪ 2nd Quarter 2024 | ▪ WMAG |

| Activity | Target Completion | Responsibility |
|---|---|---|
| consultation strategy and recommend for implementation | | |
| ▪ Facilitate stakeholder information and feedback sessions | ▪ 2nd Quarter 2024 | ▪ WMAG |
| ▪ Prepare report on feedback and any changes to the disposal recommendations to address issues raised | ▪ 3rd Quarter 2024 | ▪ WMPC |
| ▪ Review public consultation report and confirm preferred recommendation for waste disposal with adjustments to address stakeholder issues | ▪ 3rd Quarter 2024 | ▪ WMAG |
| ▪ Initiate MECP approvals for preferred waste disposal strategy | ▪ 3rd Quarter 2024 | ▪ WMPC with LMs |
| **19. Waste Management Responsibility: (If WMAG recommends transferring responsibility to SDG)** | | |
| ▪ Discuss and confirm if waste collection should also be transferred to SDG depending on the realignment of collection services | ▪ 1st Quarter 2024 | ▪ WMAG |
| ▪ Discuss and confirm the staff to be transferred to SDG | ▪ 2nd Quarter 2024 | ▪ WMAG |
| ▪ Discuss and confirm the assets to be transferred to SDG | ▪ 2nd Quarter 2024 | ▪ WMAG |
| ▪ Discuss and confirm the liabilities to be transferred to SDG | ▪ 2nd Quarter 2024 | ▪ WMAG |
| ▪ Discuss and confirm if there should be compensation for assuming responsibility for assets and liabilities | ▪ 2nd Quarter 2024 | ▪ WMAG |
| ▪ Discuss and identify the possible transfer dates for each waste management component | ▪ 3rd Quarter 2024 | ▪ WMAG |
| ▪ Prepare a transition plan capturing the WMAG discussions and recommendations | ▪ 3rd Quarter 2024 | ▪ WMPC |
| ▪ Review and confirm transition plan for presentation to CAOs for feedback | ▪ 3rd Quarter 2024 | ▪ WMAG |
| ▪ Present transition plan to LM and SDG Councils for approval. Require triple majority for transfer to occur. | ▪ 4th Quarter 2024 | ▪ WMAG |
| ▪ Prepare the by-law transferring waste management responsibility to SDG ( for the components identified in the transition plan) | ▪ 4th Quarter 2024 | ▪ WMPC & SDG Legal Counsel |
| ▪ Review the by-law and recommend approval | ▪ 4th Quarter 2024 | ▪ WMAG |
| ▪ By-law approval by SDG | ▪ 4th Quarter 2024 | ▪ SDG Council |

| Activity | Target Completion | Responsibility |
|---|---|---|
| ▪ Transfer responsibility to SDG as outlined in Transition Plan | ▪ January to December 2025 | ▪ SDG & LMs |
| **20. Collaboration with Others** | | |
| ▪ Investigate new waste diversion and waste disposal technologies (including incineration) | ▪ 1st Quarter 2024 | ▪ WMPC |
| ▪ Identify potential partnership opportunities with other jurisdictions | ▪ 1st Quarter 2024 | ▪ WMPC with Director of Transportation |
| ▪ Identify potential benefits that may be derived and the role for LMs & SDG | ▪ 1st Quarter 2024 | ▪ WMPC with Director of Transportation |
| ▪ Identify key agreement principles | ▪ 1st Quarter 2024 | ▪ Director of Transportation with WMPC |
| ▪ Prepare summary report on findings and next steps for review by WMAG | ▪ 2nd Quarter 2024 | ▪ WMPC |
| ▪ Review by WMAG with recommendations for proceeding | ▪ 2nd Quarter 2024 | ▪ WMAG |
| ▪ Initiate collaboration next steps | ▪ 3rd Quarter 2024 | ▪ Director of Transportation with WMPC |

# 6 Recommendations

The review suggests that while the LMs have been successfully delivering solid waste programs and services to their respective communities, there are benefits to collaborating and having SDG as a key partner to take waste management forward. The benefits include, but are not necessarily limited to, potential cost savings especially for waste disposal; enhanced organizational capacity to support future planning, communications and transitioning of the blue box program; improved coordination and efficiencies to enhance waste diversion and other programs; and development of partnerships with service providers and other jurisdictions beyond the SDG border. The following are the main recommendations for consideration by the LMs and SDG:

1. Pursuing the collaboration options described in Section 4.4.2;
2. Further investigating the sharing of landfill capacity or alternatively accessing available private sector disposal capacity in lieu of individual landfill site expansions;
3. Further investigating the benefits of transferring waste management responsibility from the LMs to SDG especially for waste management planning, communications and disposal; and
4. Undertaking the activities described in the Implementation Strategy presented in Section 5.4.

# Appendix A

## Issues List

## APPENDIX A: ISSUES LIST (Updated March 12 2021)

| Issues | Relevant Information | Possible Resolution(s) |
|---|---|---|
| **Collaboration** | | |
| How should the LMs work together - through agreements, a board of management or involve SDG | • The Municipal Act allows the LMs to:<br>- work together through agreements to share their resources<br>- delegate to a board with representation from the participating municipalities<br>- transfer one or more waste management components to SDG from one or more LMs provided there is a "triple majority" | • |
| If a board of management is preferred which LM or would SDG act as agent to the board for all administrative and operational functions | • The Municipal Act allows the LMs to have agreements regarding delegation to a board | • |
| If SDG were to be involved, should all components of solid waste or only some be transferred to SDG? | • LMs have the capacity to service own needs at the moment- will require additional resources and/or adjustments to current services to facilitate collaboration depending on the component.<br>• Waste management costs are high for the LMs and expected to increase | • |
| Should closed landfill sites be transferred to SDG if the SDG were to take on waste management or should that responsibility remain with the respective LMs? | • Landfill closure and post closure care costs for all 6 LMs are estimated to be at least $15 million (in $2021) over the next 25 years (i.e. a liability)<br>• This liability is currently under funded. | • |
| The LMs have limited capacity to undertake the functions of waste management planning and public relations/ education. How should they best work together? | • LMs have limited capacity/ staff to do proper planning and development of waste management programs e.g. reuse etc. going forward.<br>• The transition to producer responsibility will require proactive public education to build customer awareness of the change in responsibility and any adjustments to the program.<br>• The transition to producer responsibility will occur at the same time for the 6 LMs requiring coordination. | • |
| Is sharing landfill capacity acceptable in principle? | • There are currently 6 active landfill sites with 4 due to be at full capacity within 8 years. Initiatives are underway to expand capacity at two landfill sites at significant cost to the respective LMs?<br>• No scales at some landfill sites making it difficult to have true user pay system at these landfill sites<br>• Opportunity to reduce some landfill related costs or achieve economies of scale e.g. for annual monitoring | • |
| What approvals would be necessary to expand service areas for landfill sites under collaboration options or transfer to SDG? | • SDG allowed to expand the service area for the landfill sites to within its own boundaries should it assume jurisdiction for waste disposal. Only an administrative change to the licence. However, The MECP would likely ask that operational issues such as incremental traffic etc. be addressed.<br>• MECP approvals would be required if 2 or more municipalities to share a landfill site. Need to confirm the scope of the approvals with the MECP. | • |
| Should residential drop off currently available in some municipalities be consolidated and be made | • Opportunity to reduce costs | • |

## APPENDIX A: ISSUES LIST (Updated March 12 2021)

| Issues | Relevant Information | Possible Resolution(s) |
|---|---|---|
| available to residents from other municipalities | • MECP approvals would be required if 2 or more municipalities to share a landfill site. Need to confirm the scope of the approvals with the MECP | |
| **Compensation/ Equity** | | |
| Should compensation for existing landfill capacity be established and applied if capacity is shared by 2 or more LMs through agreement? | • The Municipal Act allows LM to work together through negotiated agreements. The matter of compensation would be at the participating LMs' discretion and negotiated accordingly | • |
| How should compensation for existing landfill capacity be established and applied if SDG were to assume responsibility? | • Regulation 815 of the Municipal Act indicates that compensation should be made by SDG to the LMs for the transfer of assets and by the LMs to SDG for any liabilities assumed.<br>• Identification and valuation of assets and liabilities to be transferred would be required e.g. trucks, equipment, buildings etc.<br>• Agreement between SGD and the LMs would be required. | • |
| Are there other areas where compensation should apply? | • | • |
| Should waste management be transferred to SDG are there any assets that the LMs would prefer to keep for use in other areas e.g. trucks, etc.? | • 2 municipalities provide in-house waste and recycling collection. 1 other municipality provides in-house recycling only<br>• Trucks bodies are typically designed for waste and recycling collection. However these can be removed and replaced with bodies suitable for other functions. | • |
| **Staffing** | | |
| Is there the staff capacity available to coordinate/ deliver services under a collaboration agreement between 2 or more LMs? | • Current LM staffing levels are sufficient to service own needs | • |
| If LMs decide to establish a board or transfer to SDG is there any staff currently involved in waste management that the respective LMs would prefer to retain for service in other areas? | • There are currently 18.5 staff positions across the 6 LMs that are shared between waste management and other departments. 12 are non-union and 6.5 union.<br>• There are 16.7 positions with 100% waste management responsibilities. 16.2 are non-union and 0.5 union.<br>• SDG would be required to transfer in the dedicate solid waste staff from the LM should SDG assume waste management responsibility | • |
| **Recycling / Diversion** | | |
| What role, if any, do the municipalities wish to play in recycling after the transition to producer responsibility? | • Producers may not support recycling collection from the IC&I sector<br>• LMs would no longer have the direct contact with its residents and control of recycling to address any impact on level of service<br>• LM would have to register with RPRA and become contractors to producers under a fee for service arrangement | • |
| Is there a role for the RARE MRF after transition to producer responsibility? | • RARE would require a capacity expansion and more staff to handle materials from all SDG municipalities<br>• RARE is aging and in need of work | • |

## APPENDIX A: ISSUES LIST (Updated March 12 2021)

| Issues | Relevant Information | Possible Resolution(s) |
|---|---|---|
| Should blue box collection be bi-weekly or weekly and single stream or dual stream? | • 3 LMs have 2- stream weekly collection and 3 have single stream bi-weekly collection<br>• Producers will become responsible from 2026 onward at the latest but will be required to maintain the going level of service at that time. | • |
| Should LMs participate in the organics collection (green bin) program with Cornwall? | • There is no regulatory or Provincial requirement for the LMs or SDG to provide curbside collection of organics because their respective populations and densities are below the threshold required by Provincial policy.<br>• Provincial policy does not preclude LMs and SDG from implementing a green bin curbside collection program for higher density areas if there is a desire to align with environmental stewardship and industry best practices. This would support the working relationship since the LMs / SDG may also wish to work with Cornwall on other aspects of waste management including waste disposal<br>• Waste diversion levels in the LMs are currently stagnant. An organics program would help to boost waste diversion and extend use of available landfill capacity but at a relatively high cost. | • |
| Should leaf and yard waste collection be included in the standard level of service or should this be at the discretion of each municipality | • LM s have different levels of service for leaf and yard waste - different number of days per year or drop off only at the landfill site (i.e. no curbside collection), etc. | • |
| **Challenges** | | |
| There are no weigh scales at some of the landfill sites to accurately weigh vehicles and bill according to the tipping fees. | • Weigh scales are expensive and require maintenance and periodic calibration | • |
| Waste management costs are increasing | • high and increasing cost of service being experience by municipalities based on discussions with staff<br>• There are multiple contracts for landfill site monitoring and lab testing that could perhaps be rationalized to achieve economies of scale and reduce costs<br>• High cost of truck maintenance<br>• limited available of back up trucks in case of breakdowns, etc. | • |
| Diminishing landfill capacity - need to secure new capacity sooner while capacity is still available rather than later | • Closure of 4 landfill site within next 8 years (expansion applications in progress at significant costs at 2 landfill sites) | • |
| Increasing liability as landfill sites close – mostly unfunded | • Under PSAB 3280 municipalities are required to account for the liability resulting from closed landfill sites and their perpetual care and demonstrate how this might be funded<br>• Currently this liability is underfunded by municipalities | • |

# Appendix B

## Staff Positions Roles and Responsibilities

| North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|
| **Department Responsible for Solid Waste Services** | | | | | |
| • Public Works<br>• Waste management is blended with other public works functions<br>• the municipal landfill operations are overseen by the Environmental Services Manager with dedicated landfill staff<br>• The recycling facility - RARE is a stand-alone solid waste facility overseen by the General Manager, RARE & Solid Waste with dedicated facility staff. The Administrative Clerk also does the Water QMS Internal Audits | • Infrastructure Services<br>• All solid waste functions done by Infrastructure services staff are part of the regular routine integrated with other roads and infrastructure functions/ duties. This seems to work well.<br>• Roads division does the transfer of materials from the drop-off area at the landfill site to the face using rented equipment<br>• Roads staff also operates the compactor at the landfill face | • Waste Management<br>• Only municipality with a stand-alone solid waste management department<br>• All staff 100% dedicated to waste management under the Director of Waste Management<br>• Lead-hand (1) coordinates waste and recycling collection and landfill operations<br>• Curbside recycling material transferred to roll off bins at the former MRF located at the landfill site, for transfer to a contracted MRF by a private hauler.<br>• In-house landfill operations<br>• Minor equipment maintenance done by staff<br>• Major equipment maintenance done by Town's garage staff | • Environmental Services<br>• This department also responsible for drainage and parks and recreation<br>• Waste management is blended with other environmental services functions<br>• Director Environmental Services coordinates the recycling and waste collection contract<br>• Coordinate the L&Y waste composting operations at Morrisburg and Iroquois<br>• Staff operate the drop off activities and compaction at the landfill site | • Public Works<br>• Waste management is blended with other public works functions<br>• The Public Works Superintendent oversees solid waste services and handles all customer issues.<br>• Recycling collection is done by public works staff | • Public Works<br>• Waste management is blended with other public works functions<br>• Waste and recycling collection by staff<br>• Public Works Coordinator handles all customer queries and contract for disposal<br>• Public works staff operate grader that buries waste delivered to landfill site by residents<br>• Other non-solid waste staff would cover on regular staff days off |
| **Staff with Shared Roles Between Solid Waste and Other Non-Solid Waste Functions** | | | | | |
| • ***Public Works Director (1)***<br>• ***Environmental Services Manager (1)***<br>✓ Responsible for Landfill Site operations<br>• ***Administrative Assistant (1)***<br>✓ Handles public enquiries/calls including those related to solid waste. However this is minimal as most calls are handled at RARE<br><br>***Public Works Equipment Operators (2) - Union Position*** | • ***General Manager Infrastructure (1)***<br>• ***Roads Manager (1)*** – Oversees landfill site operations<br>• ***Compactor Operator (1)***<br>• Outside staff is unionized (CUPE) | • All staff dedicated to solid waste management | • ***Director of Environmental Services (1)***<br>✓ Responsible for management of environmental infrastructure including parks, waste management facilities, and municipal drains.<br><u>*Waste Management*</u><br>✓ Develop and implement a sustainable business plan for the municipality's waste management assets including the landfill<br>✓ Assist in the development and monitoring of a sustainable reserve | • ***Public Works Superintendent (1)***<br>• ***Recycling Collector (0.5)*** – Public Works staff | • ***Director of Public Works (1)***<br>✓ Oversee the operation and maintenance of the Town's water system, roads, storm water management systems, streetlights, equipment and machinery.<br>✓ Participate with CAO in strategic planning and member of Senior Management Team<br>✓ Provide support to CAO in staff relations and promoting health and safety<br>✓ Prepare and submit annual business plan and operating and capital budgets |

| North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|
| ✓ Compactor operation<br>✓ Waste transfer to landfill face<br><br>Other public works functions | | | for the landfill's operational and capital requirements<br>✓ Assist in the development of a Regional Waste Management plan that considers the efficiencies of handling all waste regionally with the United Counties of Stormont, Dundas, and Glengarry.<br>✓ Prepare Provincially mandated annual reports for disposal and diversion<br>✓ Work closely with Provincial agencies to ensure compliance with environmental regulations.<br>✓ Read and interpret environmental monitoring information and determine appropriate actions to control potential hazards as required.<br>✓ Develop and implement techniques for disposing of waste in sanitary landfills that provide human health and environmental protection while maximizing airspace utilization and complying with regulatory requirements associated with gas and leachate collection and treatment.<br>✓ Recommend and enforce techniques for applying cover material to waste to reduce leachate generation, odours, vermin, and eliminate wind-blown litter.<br>✓ Oversee and direct employees on diversion related programming at the landfill such as removal of Freon from appliances, tire storage and processing, handling of yard trimmings and composting, recovered materials storage and | | ✓ Review and approve contracts and change orders<br>✓ Lead the management of capital projects<br>✓ Develop and recommend new or improved polices for Public Works<br>✓ Provide oral presentations and reports to Council and other stakeholders from the Public Works Department<br>✓ Participate in the corporate-wide program and promote the services provided by the Public Works Department<br>✓ Develop and maintain contact network with peers in other municipalities and industry<br>✓ Represent the department on all business related matters<br>✓ Identify and track best practices and trends<br>✓ Review and approve operations and maintenance procedures and standards and specifications<br>✓ Undertake regular inspections and implement QA/QC<br>✓ Monitor operating performance make adjustments as needed and provide periodic reports to CAO<br>✓ Implement preventative maintenance and Integrate life cycle management into the Town's Asset Management Program<br>✓ Monitor legislative and regulatory requirements and monitor Town's department's compliance<br>• ***Administrative Coordinator, Public Works (1)***<br>✓ Administrative and technical support to Public Works under direction of Director<br>✓ Coordinate appointments and |

| North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|
| | | | processing, electronics, and other diversion activities.<br>✓ Develop and implement a public education campaign which promotes reduction, reuse and recycling of waste and highlights the environmental benefits of participating in the waste diversion programs available.<br>✓ Develop procurement documents (tenders, RFP, RFQ) that ensure high levels of customer satisfaction for curbside collection of garbage and recycling.<br>✓ Liaise with contractors as required on the level of service, customer satisfaction, and anticipated changes to service due to legislation or Council direction.<br>✓ Participate in stakeholder discussions regarding the municipal blue box | | meetings for the department including prepare and distribute minutes<br>✓ Project management support to Director including maintaining the project tracking system<br>✓ Process and route incoming communications & customer queries<br>✓ Assists with the development and distribution of Department communications.<br>✓ Maintain water and wastewater customer accounts and process billing<br>✓ Maintain and update meter supplies and inventory & coordinate meter reading<br>✓ Update and maintain employee training files for the Department.<br>✓ Prepare and submit routine and special reports<br>✓ Prepare Department purchasing documents<br>✓ Conduct research as required<br>✓ Maintain the records management (hard copy and electronic) and archiving systems for the Directors,<br>✓ Perform other administrative support duties and tasks<br>✓ Support and assist other employees as appropriate<br>• ***Public Works Supervisor (1)***<br>✓<br>• ***Public Works Coordinator (1)***<br>✓ |

| North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|
| | | | | | ***Equipment Operator/ Truck Driver/ Labourer (3)***<br>✓ Assist in all public works operations.<br>✓ Daily collection and transportation of curbside waste and recycling materials.<br>✓ Assist in the repair, construction and maintenance of municipal roads, equipment, property and other assets.<br>✓ Operate trucks utilized by the public works department in a safe, effective and efficient manner to maintain township roads and properties;<br>✓ Operate heavy construction equipment utilized by the public works department; equipment may be owned, leased or rented by the Town;<br>✓ Repair and maintain water and wastewater infrastructure;<br>✓ Complete other duties as required by the Director of Public Works or Supervisor.<br><br>***Landfill Attendant (Part-time) (0.5)***<br>✓ General duties at Landfill site including load inspections and directing customers |

| North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|
| **Staff with 100% Solid Waste Management Roles** | | | | | |
| ***General Manager, R.A.R.E. & Solid Waste (1) - 35hr/ week***<br>✓ Reports to the Township's senior management<br>✓ Responsible for all aspect of the MRF operations including regulatory compliance, public education, materials marketing, grant applications<br>✓ Administration of the solid waste collection contract(s)<br>✓ Administration of agreements with other municipalities under contract to the recycling plant<br>***Administrative Clerk (1) 35 hrs/ week***<br>✓ Reports to the GM RARE<br>✓ Maintain all incoming materials production and sales records<br>✓ Procure weekly quotes from commodity customers<br>✓ Handles all customer queries<br>✓ All bookkeeping duties including shipping bills and revenue reconciliation<br>✓ Help organize special events e.g. HHW days etc.<br>✓ Prepare all reports as needed.<br>*Non-Solid Waste Responsibilities*<br>✓ Responsibility for the QMS Internal Audit Procedure for the Waterworks Department<br>***Operations Supervisor, R.A.R.E. (1) - 40hrs/week.***<br>✓ Reports to the GM RARE | • No dedicated Solid Waste Division or staff | ***Director of Waste Management (1)***<br>✓ Reports to the CAO<br>✓ Ensure compliance with the rules and regulations of the Ministry of Environment Conservation and Parks (MECP)<br>✓ Ensure all municipal programs goals objectives and policies are implemented<br>✓ Ensure all waste management capital projects are designed in accordance with professional engineering standards<br>✓ Work with the Waste Diversion Organization of Ontario to obtain grants and other available funding for waste reduction programs<br>✓ Attend Council meetings and provide regular reports and information o pertinent matters<br>✓ Manage day to day operations of all waste management facilities including scheduling of employees and related payroll issues<br>✓ Negotiate contracted services and oversee day to day operations<br>✓ Responsible for all facility and equipment maintenance<br>✓ Ensure appropriate record keeping<br>✓ Provide compliance reports as required<br>✓ Act as liaison with MECP<br>✓ Provide support to and liaise with CAO and other departments as needed | ***Landfill compactor operator (1)***<br>✓ Operate the compactor at the landfill site<br>***Part-time landfill site attendant (0.5) - Operates compactor as necessary***<br>✓ Conduct load inspections as per Waste Screening Protocol<br>✓ Determine appropriate disposal fees in accordance with Rate Schedule, collect fees and direct customer to appropriate area of disposal site.<br>✓ Answer customer questions related to policies and regulations governing landfill<br>✓ Compact waste using Cat 816F Compactor<br>✓ Oversee contractors completing work on-site<br>✓ Ensure that the waste remains in the identified zones and meets requirements set out in the sites ECA<br>✓ Other duties as assigned | • No dedicated Solid Waste Division or staff | No dedicated Solid Waste Division or staff |

| North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|
| ✓ Ensure that the production line is in full working order and prepare the final product for shipment.<br>✓ Create and implement a maintenance plan and maintain detailed records on each piece of facility equipment.<br>✓ Responsible for the labour of the equipment operators in all the work areas in and out of the plant.<br>✓ All training<br>***Production Supervisor (1) - 40 hrs/ week.***<br>✓ Reports to the GM RARE<br>✓ Supervise overall production of the material sorting lines, including direction and coaching of the staff<br>✓ Ensure the continuous operation of the mechanical equipment.<br>✓ Responsible for the labour and production of the sorting staff at all work stations: pre-sort, Mezzanine, back belt<br>✓ Production planning and reports<br>✓ Participate in or help organize Township events such as MSHW (Hazardous waste Day), etc.<br>***MRF Equipment Operator (1) - 40 hrs/week***<br>✓ Reports to Operations Supervisor<br>✓ Move recycling material using the skid steer loaders, load vans and containers.<br>✓ Safely operate the balers and keep records of baled material.<br>✓ Work as a recycling sorter as needed.<br>✓ Maintain accurate records of the | | ✓ Prepare and monitor waste management budget and approve expenditures and tenders according to purchasing policy<br>✓ Member of Management Team to meet regularly to share information on daily operations and long range planning<br>✓ Prepare all motions related to waste management for approval by Council<br>✓ Work with Management Team to draft annual budget and new or amended personnel policies for Council consideration<br>✓ Communicate with public, media, boards and agencies on waste management issues<br>✓ Develop policies procedures and systems as they related to waste management<br>✓ other duties as assigned<br>***Lead-hand (1)***<br>✓ Perform the duties of the Director of Waste Management in his/her absence.<br>✓ Supervision and training of full and part-time employees<br>✓ Assist with collection and sorting of curbside recycling.<br>✓ Assist with truck and equipment maintenance including pre-trip inspections which includes reporting issues to Township mechanic.<br>✓ Assist in the safe operation of specialized equipment.<br>✓ Responsible for handling and shipping of recyclables.<br>✓ Assist with the handling, sorting, | | |

| North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|
| material loaded on vans<br>✓ Assist with set up of events such as MHSW (Hazardous Waste Day), Electronics Waste Depot, or similar.<br>***MRF Recycling Sorter (3.5) - 3 x 40hrs/ week and 1 x 17.5 hrs /week***<br>✓ Reports to Production Supervisor<br>✓ Manually capture recyclable material (plastic, metal cans, paper, cardboard, and aluminum cans) from household blue box recycling and sort them into the correct chute or barrel.<br>✓ Work in front of a conveyor belt and pick out the type of material needed at his/her workstation. Toss the items into a chute or a barrel. Regularly lift and empty sorting barrels.<br>✓ Rotate to all workstations, including the sorting room (mezzanine), the pre-sort area, and occasionally from the tipping area.<br>✓ Provide labour at, or may be required to help set up, Township events such as MHSW, etc.<br>***Janitor at RARE (0.2) - 8 hrs/week***<br>✓ Overall facility clean-up.<br>***Landfill Site Attendant (0.5 contract) - Union Position***<br>✓ General duties at Landfill site including load inspections and directing customers | | storing and shipping of household hazardous waste.<br>✓ Assist with collecting tipping fees and issuing receipts.<br>✓ Responsible for snow removal at facility in winter months.<br>✓ Responsible for the Opening and Closing of Facility on a daily basis.<br>✓ Responsible for promoting and ensuring good communication with staff and the Director of Waste Management.<br>✓ Promote a positive, professional image to the public.<br>✓ Maintain department records as assigned.<br>✓ Understand health and safety requirements, emergency procedures and Township policies with the responsibility to promote to the staff and to ensure compliance.<br>✓ Other duties as assigned.<br>***Waste & Recycling Truck Driver/ Labourer (2)***<br>✓ Engage in a variety of indoor and outdoor tasks as it relates to the day to day operation of the Township of North Dundas Waste Management Facilities and associated curb-side pick-up.<br>✓ Responsible for pick-up and sorting of curbside recycling.<br>✓ Responsible for truck and equipment maintenance including pre-trip inspections.<br>✓ Responsible for the safe operation of specialized equipment.<br>✓ Responsible for handling, sorting, baling and shipping of recyclables.<br>✓ Responsible for handling, sorting, storing and shipping of household | | |

| North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|
| | | hazardous waste.<br>✓ Responsible for collecting tipping fees and issuing receipts.<br>✓ Promote a positive, professional image to the public.<br>✓ Some weekend work required<br>✓ Other duties as assigned.<br>***Landfill Attendant (1)***<br>✓ General duties at Landfill site including load inspections and directing customers<br>***Landfill Compactor Operator (1)***<br>✓ Operates the compactor at the landfill site<br>***Part-Time Truck Driver /Floater(0.5)***<br>✓ Responsible for pick-up and sorting of curbside recycling.<br>✓ Responsible for handling, sorting and baling of recyclables<br>✓ Responsible for the safe operation of specialized equipment.<br>✓ Promote a positive, professional image in public. | | | |
| **Number of Solid Waste Positions (FTEs)** | | | | | |
| • Number of Staff with Shared Roles = 5. All non-union<br>Union = 2; Non-union = 3<br>• 100% Solid Waste Staff = 8.7 FTEs<br>Union = 0.5 Non-union = 8.2 | • Number of Staff with Shared Roles = 3.<br>Union = 1; Non-union = 2 | • All staff 100% solid waste roles = 6.5 all non-union | • Number of Staff with Shared Roles = 1 non-union<br>• 100% Solid Waste Staff = 1.5 FTEs both non-union | • Number of Staff with Shared Roles = 2 both non-union<br>• 100% Solid Waste Staff = 0 | • Number of Staff with Shared Roles = 7.5. All non-union<br>Union = 4; Non-union = 3.5<br>• 100% Solid Waste Staff = 0 |
| **Anticipated Retirements in Next 5 Years** | | | | | |
| • | • | • | • | • | • Possibly 2 staff |

# Appendix C

## 2020-2044 Population Curbside Stops and Tonnage Projections

## APPENDIX C: 2020-2044: POPULATION CURBSIDE STOPS TONNAGE PROJECTIONS

| Municipality | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **North Dundas** | | | | | | | | | | | | | | | | | |
| Residential Population | 12,152 | 12,410 | 12,666 | 12,923 | 13,179 | 13,435 | 13,542 | 13,649 | 13,756 | 13,862 | 13,969 | 14,075 | 14,181 | 14,287 | 14,392 | 14,498 | 14,603 |
| Curbside Stops | 4,300 | 4,403 | 4,507 | 4,610 | 4,714 | 4,817 | 4,860 | 4,904 | 4,947 | 4,991 | 5,034 | 5,077 | 5,121 | 5,164 | 5,208 | 5,251 | 5,294 |
| Waste Disposed at Municipal Landfill Site(Tonnes) | 2,087 | 2,131 | 2,175 | 2,219 | 2,263 | 2,307 | 2,326 | 2,344 | 2,362 | 2,381 | 2,399 | 2,417 | 2,435 | 2,454 | 2,472 | 2,490 | 2,508 |
| Waste Disposed at Private Landfill Site (Tonnes) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Waste Diverted (Tonnes) | 609 | 622 | 635 | 648 | 660 | 673 | 679 | 684 | 689 | 695 | 700 | 705 | 711 | 716 | 721 | 727 | 732 |
| **South Dundas** | | | | | | | | | | | | | | | | | |
| Residential Population | 11,450 | 11,519 | 11,578 | 11,638 | 11,697 | 11,756 | 11,816 | 11,868 | 11,920 | 11,971 | 12,023 | 12,075 | 12,099 | 12,124 | 12,148 | 12,172 | 12,196 |
| Curbside Stops | 4,830 | 4,859 | 4,884 | 4,909 | 4,934 | 4,959 | 4,984 | 5,006 | 5,028 | 5,050 | 5,072 | 5,094 | 5,104 | 5,115 | 5,125 | 5,135 | 5,146 |
| Waste Disposed at Municipal Landfill Site(Tonnes) | 4,284 | 4,310 | 4,332 | 4,354 | 4,376 | 4,398 | 4,421 | 4,440 | 4,460 | 4,479 | 4,498 | 4,518 | 4,527 | 4,536 | 4,545 | 4,554 | 4,563 |
| Waste Disposed at Private Landfill Site (Tonnes) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Waste Diverted (Tonnes) | 530 | 533 | 536 | 539 | 541 | 544 | 547 | 549 | 552 | 554 | 557 | 559 | 560 | 561 | 562 | 563 | 565 |
| **North Glengarry** | | | | | | | | | | | | | | | | | |
| Residential Population | 10,595 | 10,611 | 10,628 | 10,644 | 10,661 | 10,677 | 10,694 | 10,710 | 10,727 | 10,743 | 10,760 | 10,776 | 10,793 | 10,809 | 10,826 | 10,842 | 10,859 |
| Curbside Stops | 3,650 | 3,657 | 3,664 | 3,671 | 3,678 | 3,685 | 3,692 | 3,699 | 3,706 | 3,713 | 3,720 | 3,727 | 3,734 | 3,741 | 3,748 | 3,755 | 3,762 |
| Waste Disposed at Municipal Landfill Site(Tonnes) | 1,100 | 1,102 | 1,103 | 1,105 | 1,107 | 1,109 | 1,110 | 1,112 | 1,114 | 1,115 | 1,117 | 1,119 | 1,121 | 1,122 | 1,124 | 1,126 | 1,127 |
| Waste Disposed at Private Landfill Site (Tonnes) | 2,284 | 2,288 | 2,291 | 2,295 | 2,298 | 2,302 | 2,305 | 2,309 | 2,313 | 2,316 | 2,320 | 2,323 | 2,327 | 2,330 | 2,334 | 2,337 | 2,341 |
| Waste Diverted (Tonnes) | 765 | 766 | 767 | 769 | 770 | 771 | 772 | 773 | 775 | 776 | 777 | 778 | 779 | 781 | 782 | 783 | 784 |
| **South Glengarry** | | | | | | | | | | | | | | | | | |
| Residential Population | 13,879 | 13,962 | 14,044 | 14,127 | 14,209 | 14,292 | 14,374 | 14,456 | 14,538 | 14,620 | 14,702 | 14,784 | 14,865 | 14,946 | 15,028 | 15,109 | 15,190 |
| Curbside Stops | 5,965 | 5,998 | 6,031 | 6,064 | 6,097 | 6,130 | 6,163 | 6,196 | 6,229 | 6,262 | 6,295 | 6,328 | 6,361 | 6,394 | 6,427 | 6,460 | 6,493 |
| Waste Disposed at Municipal Landfill Site(Tonnes) | 3,000 | 3,018 | 3,036 | 3,054 | 3,071 | 3,089 | 1,802 | 1,812 | 1,823 | 1,833 | 1,843 | 1,853 | 1,864 | 1,874 | - | - | - |
| Waste Disposed at Private Landfill Site (Tonnes) | - | - | - | - | - | - | 1,305 | 1,312 | 1,320 | 1,327 | 1,335 | 1,342 | 1,350 | 1,357 | 3,248 | 3,266 | 3,283 |
| Waste Diverted (Tonnes) | 706 | 710 | 714 | 719 | 723 | 727 | 731 | 735 | 740 | 744 | 748 | 752 | 756 | 760 | 764 | 769 | 773 |
| **North Stormont** | | | | | | | | | | | | | | | | | |
| Residential Population | 7,347 | 7,378 | 7,403 | 7,428 | 7,453 | 7,478 | 7,502 | 7,523 | 7,545 | 7,566 | 7,587 | 7,608 | 7,617 | 7,626 | 7,636 | 7,645 | 7,654 |
| Curbside Stops | 2,700 | 2,712 | 2,721 | 2,730 | 2,740 | 2,749 | 2,759 | 2,767 | 2,775 | 2,783 | 2,791 | 2,799 | 2,802 | 2,806 | 2,809 | 2,813 | 2,817 |
| Waste Disposed at Municipal Landfill Site(Tonnes) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Waste Disposed at Private Landfill Site (Tonnes) | 1,666 | 1,673 | 1,679 | 1,684 | 1,690 | 1,696 | 1,701 | 1,706 | 1,711 | 1,716 | 1,720 | 1,725 | 1,727 | 1,729 | 1,731 | 1,734 | 1,736 |
| Waste Diverted (Tonnes) | 400 | 402 | 403 | 404 | 406 | 407 | 408 | 410 | 411 | 412 | 413 | 414 | 415 | 415 | 416 | 416 | 417 |
| **South Stormont** | | | | | | | | | | | | | | | | | |
| Residential Population | 14,140 | 14,310 | 14,479 | 14,649 | 14,819 | 14,989 | 15,158 | 15,327 | 15,496 | 15,665 | 15,835 | 16,002 | 16,170 | 16,338 | 16,506 | 16,674 | 16,840 |
| Curbside Stops | 5,602 | 5,668 | 5,734 | 5,800 | 5,866 | 5,932 | 5,998 | 6,064 | 6,130 | 6,196 | 6,262 | 6,328 | 6,394 | 6,460 | 6,526 | 6,592 | 6,658 |
| Waste Disposed at Municipal Landfill Site(Tonnes) | 358 | 362 | 367 | 371 | 375 | 380 | 384 | 388 | 392 | 397 | - | - | - | - | - | - | - |
| Waste Disposed at Private Landfill Site (Tonnes) | 2,853 | 2,887 | 2,922 | 2,956 | 2,990 | 3,024 | 3,058 | 3,093 | 3,127 | 3,161 | 3,596 | 3,634 | 3,672 | 3,710 | 3,748 | 3,786 | 3,824 |
| Waste Diverted (Tonnes) | 800 | 810 | 819 | 829 | 838 | 848 | 858 | 867 | 877 | 886 | 896 | 905 | 915 | 924 | 934 | 943 | 953 |

## APPENDIX C: 2020-2044: POPULATION CURBSIDE STOPS TONNAGE PROJECTIONS

| Municipality | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|
| **North Dundas** | | | | | | | | |
| Residential Population | 14,707 | 14,812 | 14,916 | 15,021 | 15,125 | 15,228 | 15,332 | 15,435 |
| Curbside Stops | 5,338 | 5,381 | 5,425 | 5,468 | 5,511 | 5,555 | 5,598 | 5,642 |
| Waste Disposed at Municipal Landfill Site(Tonnes) | 2,526 | 2,544 | 2,562 | 2,580 | 2,597 | 2,615 | 2,633 | 2,651 |
| Waste Disposed at Private Landfill Site (Tonnes) | - | - | - | - | - | - | - | - |
| Waste Diverted (Tonnes) | 737 | 742 | 748 | 753 | 758 | 763 | 768 | 774 |
| **South Dundas** | | | | | | | | |
| Residential Population | 12,220 | 12,245 | 12,269 | 12,293 | 12,317 | 12,341 | 12,366 | 12,390 |
| Curbside Stops | 5,156 | 5,167 | 5,177 | 5,188 | 5,198 | 5,209 | 5,219 | 5,230 |
| Waste Disposed at Municipal Landfill Site(Tonnes) | 4,572 | 4,581 | 4,590 | 4,599 | 4,608 | 4,617 | 4,626 | 4,635 |
| Waste Disposed at Private Landfill Site (Tonnes) | - | - | - | - | - | - | - | - |
| Waste Diverted (Tonnes) | 566 | 567 | 568 | 569 | 570 | 571 | 572 | 573 |
| **North Glengarry** | | | | | | | | |
| Residential Population | 10,876 | 10,893 | 10,909 | 10,926 | 10,943 | 10,960 | 10,977 | 10,993 |
| Curbside Stops | 3,769 | 3,776 | 3,783 | 3,790 | 3,797 | 3,804 | 3,811 | 3,818 |
| Waste Disposed at Municipal Landfill Site(Tonnes) | 1,129 | 1,131 | 1,133 | 1,134 | 1,136 | 1,138 | 1,140 | 1,141 |
| Waste Disposed at Private Landfill Site (Tonnes) | 2,345 | 2,348 | 2,352 | 2,355 | 2,359 | 2,363 | 2,366 | 2,370 |
| Waste Diverted (Tonnes) | 785 | 787 | 788 | 789 | 790 | 791 | 793 | 794 |
| **South Glengarry** | | | | | | | | |
| Residential Population | 15,270 | 15,351 | 15,431 | 15,512 | 15,592 | 15,672 | 15,751 | 15,831 |
| Curbside Stops | 6,526 | 6,559 | 6,592 | 6,625 | 6,658 | 6,691 | 6,724 | 6,757 |
| Waste Disposed at Municipal Landfill Site(Tonnes) | - | - | - | - | - | - | - | - |
| Waste Disposed at Private Landfill Site (Tonnes) | 3,301 | 3,318 | 3,335 | 3,353 | 3,370 | 3,387 | 3,405 | 3,422 |
| Waste Diverted (Tonnes) | 777 | 781 | 785 | 789 | 793 | 797 | 801 | 805 |
| **North Stormont** | | | | | | | | |
| Residential Population | 7,664 | 7,673 | 7,682 | 7,692 | 7,701 | 7,710 | 7,720 | 7,729 |
| Curbside Stops | 2,820 | 2,824 | 2,827 | 2,831 | 2,835 | 2,838 | 2,842 | 2,846 |
| Waste Disposed at Municipal Landfill Site(Tonnes) | - | - | - | - | - | - | - | - |
| Waste Disposed at Private Landfill Site (Tonnes) | 1,738 | 1,740 | 1,742 | 1,744 | 1,746 | 1,748 | 1,751 | 1,753 |
| Waste Diverted (Tonnes) | 417 | 418 | 418 | 419 | 419 | 420 | 420 | 421 |
| **South Stormont** | | | | | | | | |
| Residential Population | 17,006 | 17,172 | 17,339 | 17,505 | 17,671 | 17,837 | 18,003 | 18,170 |
| Curbside Stops | 6,724 | 6,790 | 6,856 | 6,922 | 6,988 | 7,054 | 7,120 | 7,186 |
| Waste Disposed at Municipal Landfill Site(Tonnes) | - | - | - | - | - | - | - | - |
| Waste Disposed at Private Landfill Site (Tonnes) | 3,862 | 3,900 | 3,937 | 3,975 | 4,013 | 4,051 | 4,088 | 4,126 |
| Waste Diverted (Tonnes) | 962 | 972 | 981 | 990 | 1,000 | 1,009 | 1,019 | 1,028 |

# Appendix D

## Current Levels of Service

## APPENDIX D: CURRENT LEVEL OF SERVICE (DRAFT MARCH 12 2021)

| Item | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| **Curbside Waste Collection** | | | | | | |
| Collection Frequency | • Weekly<br>• No holiday collection – shifted to 1 day before or after holiday<br>• Earth day/ Pitch In week (in April) | • Weekly<br>• Large items, including furniture, mattresses, box springs, plastic lawn furniture, toilets, and carpeting ONLY collected during Large Item Pick-Up day in May. NOT be collected during weekly curbside collection. | • Weekly | • Weekly<br>• Christmas collection deferred by 1 day<br>• No campgrounds will be collected under new by-law approved for implementation in May 2021 | • Weekly | • Weekly (Tuesday to Friday) |
| Waste Collection Set-out Time (Based on By-law) | • Set out by 6:00 a.m. on collection day | • Set out by 6:00 a.m. on collection day | • Not specified | • Set out by 7:00 a.m. on collection day, but no earlier than 6:00 p.m. the previous day | • Set out by 7:00 a.m. on collection day, but no earlier than 7:00 p.m. the previous day | • Set out by 7:00 a.m. on collection day, but no earlier than 7:00 p.m. the previous day |
| Container Limit (Based on By-laws) | • 2 Containers/ bags – Max. weight 23 kg (or 50lbs)<br>• Tags required for extra bags/ containers<br>• Exemptions from limits:<br>-Families with special needs (medical)<br>-Special events<br>• Bags must be placed in a covered container | • 8 Containers/ bags | • Residential - 2 Containers/ Bags<br>• Commercial – 6 Bags/ Containers<br>• Farm - 4 Bags / Containers<br>• No bag tags. Extra bags left at curb or collected at collector's discretion depending on the size and weight (e.g. if it is a small grocery bag)<br>• Excess IC&I waste is collected by private collector under separate contracts with individual properties | • Residential & Businesses - 2 Containers/ Bags<br>• Farm - 4 containers - must register with Township annually<br>• Additional bags (must be purchased from the Township are required for set out exceeding 2 containers/bags<br>• Households may apply for extension of limits (up to a maximum of 26 additional bags per year) through annual completion of a Home Healthcare Waste Application - for diapers/incontinence products<br>• No issues from public except that current contractor uses older trucks so collection is sometimes delayed | • Residential - 2 bags per unit<br>• Commercial, agricultural, and industrial - 10 bags per occupied address<br>• Tags required for extra bags/containers<br>• Residents may apply for a conditional extra bag pick up in the following situations:<br>- Someone who lives in the home has a medical condition that requires them to set out more waste<br>- Residents have been away for an extended period of time<br>• New residents of the Township who have excess waste left by the previous home owner may, with the approval of the Public Works Superintendent, be granted | • Residential -2 containers/bundles per dwelling<br>• Commercial, agricultural, and industrial - 6 containers/bundles per address<br>• Tags required for extra bags/containers |

## APPENDIX D: CURRENT LEVEL OF SERVICE (DRAFT MARCH 12 2021)

| Item | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| | | | | | an extra landfill pass | |
| Tag Fee & Availability | • Purchase tags for $3.00 each at:<br>R.A.R.E. or Municipal Office | • No Tag system | • No Tag system | • Purchase tags for $1.25 each at:<br>South Dundas Municipal Centre (Morrisburg)<br>Mustard's Variety (Iroquois)<br>Brinston General Store (Brinston)<br>SDG County Library- Morrisburg Branch, Iroquois Branch and Williamsburg Branch<br>• | • | • Purchase tags for $1.50 each at:<br>Ingleside - Foodland<br>Long Sault - Town Hall<br>St. Andrews West - Crossroads Convenience |
| Container Size & Weight (Based on By-laws) | • Maximum size of garbage containers is 80 cm high by 50 cm (width or diameter)<br>• Maximum size of garbage bags is 80 cm high by 65 cm wide<br>• Bags must be placed in a covered container<br>• Max. weight 23 kg (or 50lbs) | • Container with capacity not larger than 30 gallons, not higher than 71 cm (28"), and diameter no bigger than 45.7 cm (18") with watertight lid and 2 handles<br>• Plastic bag with capacity not more than 0.09 cubic metres and made from a minimum of 1 ½ mil. gauge material that can hold 27 kg (60 lb) of material without tearing | • Container/bags must have a maximum width of 66 cm (26") and maximum height of 91 cm (36"), and not exceed 22.5 kg (50 lb) when full (no 45 gallon drums accepted) | • Set out in plastic bags not exceeding 0.08 cubic metres and strong enough (not less than 1-1/2 mil. gauge material) to hold 23 kg of material without tearing<br>• Households may apply for extension of limits (up to a maximum of 26 additional bags per year) through annual completion of a Home Healthcare Waste Application - for diapers/incontinence products | • Garbage bags must be between 60 cm x 90 cm (24 in x 36 in) and 106 cm x 120 cm (42 in x 48 in), and weigh 50 lb. maximum.<br>• Any receptacle that is already broken or that breaks while being lifted will not be collected. | • Container must be waterproof, durable, rust resistant, non-absorbent with watertight cover and two handles. Container may not exceed 22 kg (50 lb.) when full<br>• Capacity of container may not exceed 82 L (22 gallons) and must be specifically designed for garbage |
| Unacceptable Materials<br>(from By-laws) | • Any items that are in Schedule "A" Acceptable "Blue Box" Recyclable Material<br>• Any plastic item with the recycling symbol on the bottom of container with a | • E-waste<br>• Tree stumps<br>• Building supplies<br>• Broken glass<br>• Hardware | • Recyclable material<br>• Tires<br>• Demolition and construction material<br>• Animal feces | • Any explosive or highly combustible materials of any nature whatsoever<br>• Construction debris<br>• Sawdust and/or shavings | • Bio-Medical Waste<br>• Building Waste<br>• Bulk Waste<br>• Carcasses of dogs, cats, fowl, and other creatures, or parts | • Bio-Medical Waste<br>• Building Waste<br>• Bulk Waste<br>• Carcasses of dogs, cats, fowl, and other creatures, or parts |

## APPENDIX D: CURRENT LEVEL OF SERVICE (DRAFT MARCH 12 2021)

| Item | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| | number 3 or 6.<br>• Electronic and Electric Equipment Waste (WEEE waste)<br>• Hazardous Waste<br>• Pathological Waste<br>• Trade Waste<br>• Automotive wastes, discarded vehicle parts, tires, tire rims and other accessories<br>• Liquid wastes, including liquid in sealed containers Used deposit-return beverage containers<br>• Sod, soil, dirt, manure, sand, root balls, stumps, aggregates, concrete products, bricks or stones;<br>• Sharp-edged material such as broken glass, broken crockery, cut metal or anything of a similar nature unless such material is placed in separate, secure container and whose contents are clearly marked<br>• Glass plate windows, mirrors, doors, table tops, shower doors<br>• Carcasses of any animal (including animal parts) or fowl or live animal or fowl with the exception of bonafide Household Organic Waste<br>• Ashes(warm or hot)<br>• Swill or any other organic not properly drained or wrapped<br>• Celluloid cuttings, including moving picture film | • Tires<br>• Fences<br>• Construction materials<br>• Loose garbage<br>• Loose branches | • Liquids<br>• Furniture and appliances<br>• Paints<br>• Oils<br>• Batteries<br>• Propane tanks<br>• Other hazardous material | • Liquid or semi-liquid garbage<br>• Hay, straw and manure<br>• Carcass of any animal, or thereof<br>• Grass clippings, garden material, tree limbs, branches and trunks, brush, clean lumber and stones ("Environmentally Friendly Landfill Material," as per MOE<br>• Major appliances and/or large household furnishings, appliances<br>• Any material that is frozen or otherwise stuck to a container that cannot be removed by shaking<br>• Tires<br>• Biomedical waste<br>• Automobiles, vehicles, or any parts thereof<br>• Fences, Fence posts, page wire<br>• Hazardous material<br>• Propane tanks<br>• Crates or packing material | thereof<br>• Earth, brick, and stone<br>• Hazardous Waste<br>• Household Hazardous Waste<br>• Human and animal excrement (except for Household Pet Waste and diapers<br>• Industrial, Commercial, and Trade Waste<br>• Leaf and Yard Waste<br>• Liquid Waste<br>• Recyclable Materials<br>• Sawdust, Shavings, and Vermiculite<br>• Steel Barrels<br>• Car Parts<br>• Wood in excess of 0.9 M (3 feet) in length, Wooden boxes and barrels<br>• Wire, wire mesh and fencing<br>• White Goods | thereof<br>• Earth, brick, and stone<br>• Hazardous Waste<br>• Household Hazardous Waste<br>• Human and animal excrement (except for Household Pet Waste and diapers<br>• Industrial, Commercial, and Trade Waste<br>• Leaf and Yard Waste<br>• Liquid Waste<br>• Recyclable Materials<br>• Sawdust, Shavings, and Vermiculite<br>• Steel Barrels<br>• Car Parts<br>• Wood in excess of 0.9 M (3 feet) in length, Wooden boxes and barrels<br>• Wire, wire mesh and fencing<br>• White Goods |

## APPENDIX D: CURRENT LEVEL OF SERVICE (DRAFT MARCH 12 2021)

| Item | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| | • Sewage<br>• Any other material or item designated as Non-Collectible Waste by the Township<br>• Any other materials designated as "designated waste" by the Waste Diversion Act or other applicable legislation | | | | | |
| **Curbside Recycling Collection** | | | | | | |
| Collection Frequency | • Weekly<br>• Alternate Stream each week | • Bi-Weekly | • Weekly (as of July 13 2020)<br>• Alternate Stream each week<br>• Collect from driveways (instead of curb) in special cases | • Weekly<br>• Alternate Stream each week | • Bi-Weekly | • Bi-Weekly |
| Single Stream or Dual Stream? | • Dual Stream | • Single Stream | • Dual Stream | • Dual Stream | • Single Stream | • Single Stream |
| Acceptable Materials<br>(from By-laws) | *Plastic*<br>• Food Grade Plastic, plastic grocery bags<br>• Plastic items with the recycling symbol on the bottom of container with the numbers 1, 2, 4, 5, & 7 only (3 & 6 not accepted)<br>*Glass*<br>• Glass food and beverage bottles and jars<br>*Metal*<br>• Aluminum foils, plates and trays<br>• Metal aerosol and paint cans (emptied and lid removed) | *Containers*<br>• Clear glass containers<br>• Coloured glass containers<br>• Plastic containers including PET, HDPE, mixed plastics, tubs and lids (generally numbers 1, 2, 5)<br>• Plastic clam shell packages<br>• Aerosol cans (empty, no propane or butane containers)<br>• Metal paint cans (empty, dry, lids removed)<br>• Frozen juice containers, cartons (milk, juice, cream)<br>• Steel cans and containers<br>• Newspaper, mixed paper, | *Containers*<br>• Glass bottles & jars<br>• Metal cans (steel and aluminum)<br>• Plastic bottle, jars & jugs<br>• Aluminum trays & foil (clean)<br>*Paper*<br>• Box board (cereal boxes, rolls from paper towels, toilet tissue, shoe boxes, tissue boxes)<br>• Soft cover books (telephone books)<br>• Corrugated cardboard (flattened/bundled/tied)<br>• Detergent boxes<br>• Egg cartons (paper) | *Blue Box (containers):*<br>• Glass food and beverage bottles and jars<br>• Metal food and beverage cans<br>• Clean empty paint cans (lids removed)<br>• Aerosol cans and Styrofoam packaging<br>• Plastic bottles<br>• Plastic containers marked with recycling symbol and numbers 1, 2, 3, 4, or 5<br>• Aluminum pie plates and foil<br>• Rigid foil containers and trays<br>• Margarine and yogurt tubs<br>Green Box (paper): | *Containers*<br>• Aseptic containers (drinking boxes)<br>• Dry empty metal paint and empty aerosol cans<br>• Gable-top containers (juice and milk cartons)<br>• Glass bottles, jars and containers<br>• Metal beverage and food containers, foil and plates<br>• Plastics #1-#7, packaging and containers from food, beverage and household products, including:<br>- Plastic bottles and jugs<br>- Plastic soft drink and water containers<br>- Tubs and lids | *Containers*<br>• Aseptic containers (drinking boxes)<br>• Dry empty metal paint and empty aerosol cans<br>• Gable-top containers (juice and milk cartons)<br>• Glass bottles and jars and containers<br>• Metal beverage and food containers, foil and plates<br>• Plastics #1-#7, packaging and containers from food, beverage and household products, including:<br>- Plastic bottles and jugs<br>- Plastic soft drink and water containers<br>- Tubs and lids |

## APPENDIX D: CURRENT LEVEL OF SERVICE (DRAFT MARCH 12 2021)

| Item | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| | • Steel / aluminum food and beverage cans<br><br>*Paper*<br>• Beverage cartons and boxes & polycoat containers<br>• Aseptic containers (tetra pak) containers for juice, soup, wine<br>• Gable top cartons for juice, milk<br>• Polycoat containers for ice cream<br>• Corrugated cardboard<br>• Newspapers<br>• Boxboard and household papers<br>• Books - hard or soft cover (plastic slip covers removed, hard cover- front and back covers, while recyclable, must be removed<br>• Cereal boxes (liners removed)<br>• Fibre egg cartons and takeout trays<br>• Flour and sugar bags<br>• Kraft paper<br>• Magazines<br>• Paper plates<br>• Pizza boxes<br>• All remaining paper and paper products generated by households<br>• Any other item defined as recyclable by the Township from time to time | boxboard, magazines, catalogues, household fine paper<br>• Books, soft cover or hard cover (hard cover must be removed), telephone books<br>• Brown bags, wrapping paper, corrugated cardboard<br>• Aseptic cartons<br>• Aluminum cans, containers, plates, and foil<br>• Egg cartons | • Kraft (brown) paper bags<br>• Magazines, catalogues, junk mail and office paper<br>• Newspapers and flyers (plastic bags removed)<br>• Pizza boxes (clean)<br>• Gable end milk and juice cartons<br>• Juice and soup boxes (tetra-pak) | • Newspaper and flyers (glossy or plain)<br>• Popsicle wrappers<br>• Paper potato bags<br>• Flour bags<br>• Sugar bags<br>• Paper cups<br>• Fine paper<br>• Boxboard such as cereal, cracker, and cookie boxes<br>• Detergent/laundry cartons<br>• File folders<br>• Shoe and tissue boxes<br>• Apple baskets<br>• Over the counter drug boxes (i.e. toothpaste, toiletries, cough syrups, medicine, and cosmetics)<br>• Paper egg cartons<br>• Toilet and paper towel rolls and pizza boxes<br>• Magazines, catalogues, telephone directories and greeting cards<br>• Cardboard and corrugated cardboard | - Frozen juice containers<br><br>*Paper*<br>• Boxboard (cereal and cracker boxes)<br>• Corrugated cardboard<br>• Envelopes, direct mail advertising, paper egg cartons, greeting cards and all remaining paper and paper products (except tissue, paper towels, napkins, waxed paper, laminated, lined and metalized paper and contaminated paper)<br>• Fine paper<br>• Magazines<br>• Newsprint<br>• Telephone books<br>• Soft cover books and hard cover books (cover removed)<br>• Hot beverage paper cups | - Frozen juice containers<br><br>*Paper*<br>• Boxboard (cereal and cracker boxes)<br>• Corrugated cardboard<br>• Envelopes, direct mail advertising, paper egg cartons, greeting cards and all remaining paper and paper products (except tissue, paper towels, napkins, waxed paper, laminated, lined and metalized paper and contaminated paper)<br>• Fine paper<br>• Magazines<br>• Newsprint<br>• Telephone books<br>• Soft cover books and hard cover books (cover removed)<br>• Hot beverage paper cups |

## APPENDIX D: CURRENT LEVEL OF SERVICE (DRAFT MARCH 12 2021)

| Item | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| Recycling Collection Limits/ Restrictions<br>(from By-laws) | • No limit to number of Blue Boxes (can also be placed in clear plastic bags)<br>• Weight (container and materials) not to exceed 20 kg (44 lb.)<br>• Cardboard/boxboard/other "large fibre" material must be flattened, tied with string, placed beside Blue Box, and not exceed 1 M by 0.3 M | • No limit to number of containers set out for collection<br>• Large recycling bins (35 gallons) are not permitted | • No limit to number of containers set out for collection | • No limit to number of containers set out for collection | • No limit to number of containers set out for collection<br>• May be set out in blue or black plastic boxes with a lip for handling to contain Recyclable Materials without spilling and 130 litres (35 gallons) and shall be specifically designed for recycling collection<br>• May be placed in clear or blue plastic bags, maximum 22 kilograms (approximately 50 lb.)<br>• Fibres and other waste paper tied in bundles not larger than 1 M X 1 M X 0.5 m (approx. 3 feet by 3 feet by 12 inches), maximum 22 kilograms (approximately 50 lb.) | • No limit to number of containers set out for collection<br>• May be set out in blue or black boxes with lip (for handling) with capacity not exceeding 60.5 L (16 gallons), and must be specifically designed for recycling collection<br>• May be placed in clear plastic bags not exceeding 22 kg (50 lb.) when full<br>• Fibres and other waste paper must be tied securely in bundles not exceeding 1 M x 1 M x 0.5 M (3 feet x 3 feet x 1 foot) and weigh no more than 22 kg (50 lb.) |
| Obtain Blue Boxes | • | • | • No charge | • $7.00 per box<br>• Available at the Municipal Building at 34 Ottawa, Morrisburg | • | • 2 free for new homes<br>• $5 each<br>• Available at Town Hall |
| **Curbside Bulk Waste Collection** | | | | | | |
| Bulk Waste Collection Frequency | • Drop off at Landfill Site | • Bulk waste collected once per year in May at no cost to customers | • Drop off at Landfill Site | • Drop off at Landfill Site | • 500kg Free Landfill Passes<br>• Drop off at Landfill Site | • Drop off at Landfill Site |
| Bulk Waste Materials Collected | • | • Large items, include furniture, mattresses, box springs, plastic lawn furniture, toilets, and carpeting | • | • | • | • |

## APPENDIX D: CURRENT LEVEL OF SERVICE (DRAFT MARCH 12 2021)

| Item | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| **Curbside Leaf & Yard Waste Collection** | | | | | | |
| L&Y Collection Frequency | • 2 times per year – once in May and once in November<br>• No collection in small hamlets rural areas and along County roads | • L&Y Waste collection in spring and fall only<br>• Christmas Trees collected by Township staff during January | • 1 pick-up in fall in Village of Winchester and Chesterville.<br>• 5 depots set up for Christmas trees | • No curbside collection – drop off facilities provided<br>• Iroquois Composting Site<br>10 Bouck Street<br>Iroquois, ON K0E 1K0<br>Hours: Saturdays: 10:00am – 12:00pm, April – November<br>• Compost site not an official compost site- no ECA for the facility | • One collection day in May<br>• Christmas Trees collected one day in January | • Once per month from May to November<br>• Curbside delivered to GFL N/C<br>• Drop off at Trillium Landfill Site at no charge every Friday and Saturday<br>• Built up areas only (more than 20 homes either side of road in a 1km stretch)<br>• Upon request |
| Limits/Restrictions | • Not specified | • No limit<br>• No shrubs, large branches, or bundles collected<br>• Sticks and branches up to 4 feet are accepted, as long as they are bundled<br>• Must be in paper bags or reusable containers such as garbage bins or recycling bins | • Not specified | • Not specified | • Limit of 20 bags/bundles per dwelling/unit<br>• Must be placed in paper bags with the tops folded<br>• Boughs, twigs, and cuttings must be securely tied in bundles not exceeding 1 M by 1 M by 0.5 M (3 feet x 3 feet x 1 foot) and weigh no more than 22 kg (50 lb.)<br>• Receptacles already broken or broken while being lifted will not be collected<br>• Leaf and yard waste placed in plastic bags is not accepted<br>• Collection is for residents inside villages and hamlets only | • Limit of 20 bags/bundles per dwelling/unit<br>• Must be placed in paper bags with the tops folded<br>• Boughs, twigs, and cuttings must be securely tied in bundles not exceeding 1 M by 1 M by 0.5 M (3 feet x 3 feet x 1 foot) and weigh no more than 22 kg (50 lb.)<br>• Receptacles already broken or broken while being lifted will not be collected<br>• Leaf and yard waste placed in plastic bags is not accepted |
| Unacceptable Materials | • | • | • | • NA | • Use only compost bags (no plastic bags) | • Use only compost bags (no plastic bags) |

## APPENDIX D: CURRENT LEVEL OF SERVICE (DRAFT MARCH 12 2021)

| Item | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| **Residential Drop-Off Stations** | | | | | | |
| Location(s) | • At the active – accepts residential waste only | • At 2 Municipal Landfill Sites<br>North Lancaster - 4580 2nd Line Road<br>Beaver Brook Road Landfill site - 19281 Beaver Brook Road, east of Chapel Road | • At Municipal Landfill Site - Boyne Road landfill site<br>• 5 depots set up for Christmas trees | • At Municipal Landfill Site –<br>Matilda - 10815 Seibert Road Iroquois, ON K0E 1K0<br><u>The following locations for Compost</u>:<br>• Drop-off only at compost facilities in Morrisburg and Iroquois<br>• Morrisburg Composting Site 70 Prospect Road Morrisburg, ON K0C 1X0<br>Hours:24 hours, 7 days a week, year-round<br>• Iroquois Composting Site 10 Bouck Street Iroquois, ON K0E 1K0<br>Hours: Saturdays: 10:00am – 12:00pm, April – November | • At Private (GFL)<br>• At both Public Works Patrol Yards (Scrap metal, Tires and E-waste only) | • At Trillium Landfill Site – residential waste only |
| Operating Hours | • Alexandria Landfill - Monday, Tuesday, Thursday, Friday - 8:00 a.m. to 4:00 p.m. in summer, Wednesday & Saturday - 8:00 a.m. to 12:00 p.m. in winter | • North Lancaster Landfill Site<br>Thursday and Saturday 9:00 A.M. to 5:00 P.M. from June 1st, 2017 to September 30th, 2017<br>• Beaver Brook Road Landfill Site<br>October 1st to May 31st on Tuesdays and Saturdays from 9:00 am to 5:00 pm. | • 8 am to 4 pm Monday to Friday.<br>• Saturdays -First Sat in May till last Sat in October- 8 am till 11:30 am.<br>• Open first Sat in November, December, January, February, March and April 8 am till 11:30 am. | • Matilda Disposal Site - Wednesday & Friday, 8:00 a.m. to 1:00 p.m.; Saturday, 1:00 p.m. to 4:00 p.m.<br>• Williamsburg Disposal Site is closed | • Insert hours for all locations | • 8am to 4pm every Friday and Saturday |
| IC&I Waste Accepted? | • No | • Yes | • Yes | • Yes | • NA | • No |
| Unacceptable Materials at | • Kitchen waste not accepted | • Car parts and motors | • Concrete and large tree | • Any explosive or highly combustible materials of any | • Not specified | • Bio Medical Waste |

## APPENDIX D: CURRENT LEVEL OF SERVICE (DRAFT MARCH 12 2021)

| Item | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| Landfills | • Commercial construction materials not accepted | | stumps | nature whatsoever<br>• Liquid or semi-liquid garbage<br>• Manure<br>• Carcass of any animal, or thereof<br>• Grass clippings, garden material, tree limbs, branches and trunks, brush, clean lumber and stones ("Environmentally Friendly Landfill Material," as per MOE<br>• Biomedical waste<br>• Automobiles, vehicles, or any parts thereof<br>• Hazardous material<br>• Propane tanks | | • Building Waste as a result of a house or structure fire<br>• Commercial waste<br>• Industrial waste<br>• Condemned or dead animals or their carcasses<br>• Hazardous Waste<br>• Household Hazardous Waste<br>• Explosives or highly flammable materials or chemicals<br>• Motor vehicles or parts of motor vehicles<br>• Waste oil or petroleum products |
| Customer Drop Off Station | • Drop off areas depending on material | • Customers can drop off waste at both landfill sites<br>• There are containment areas for waste and bins for e-waste and recyclables | • There are containers at the bottom of the landfill site for those who have difficulty in backing up to the face.<br>• Recyclables are dropped off at MRF located at the landfill site<br>• HHW also received at site from both North Dundas and South Dundas<br>• No safety issues<br>• There is site surveillance | • No station. A new drop off container station will be established in October 2020 and operated in-house. Roads department will transport bins to face<br>• Residents currently drop off at the face | • Township has 3 "depots" for drop-off at its 2 municipal patrol yards, as follows:<br>- White Goods & Scrap Metal Bin<br>- Electronic Waste Bin<br>- Tire - designated area, tires must be rubber and removed from rims<br>• There are signs and cameras<br>• Scrap metal hauled away by GFL at no cost<br>• E-waste is hauled away as part of provincial program<br>• Tires are hauled away at no cost<br>• Property owners also entitled to 500kg free disposal at GFL. Could be used for bulk waste | • Yes at Trillium<br>• There are concrete bunkers for designated materials |

## APPENDIX D: CURRENT LEVEL OF SERVICE (DRAFT MARCH 12 2021)

| Item | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| | | | | | items | |
| Acceptable Materials | • | • Large items, including furniture, mattresses, box springs, plastic lawn furniture, toilets<br>• Construction and demolition materials<br>• Household waste<br>• E-Waste (Bins available) | • Household waste<br>• Tires<br>• E-waste<br>• Metal<br>• Recyclables<br>• Household Hazardous waste(specific days)<br>• Leaf and yard waste<br>• Soil (contaminate and Non)<br>• White goods ( Freon removal) | • Household waste<br>• Tires<br>• E-waste<br>• Metal<br>• Recyclables<br>• Burnable wood<br>• White appliances<br>• Construction and demolition materials. However considering program to divert waste to a C&D recycling facility near Ottawa<br>• Mattresses | • Scrap metal<br>• Tires<br>• E-Waste | • Household waste<br>• Tires<br>• E-waste<br>• Metal<br>• Recyclables<br>• L&Y Waste<br>• White appliances |
| Tipping Fees Charged | • Free pass that covers 2 loads is sent out annually with tax bill Proof of residency must be provided<br>• Proof of residency must be provided<br>• Certified Freon-free refrigerators, freezers, and air conditioners accepted<br>• Tires accepted free of charge<br>• Leaf and yard waste accepted free of charge | • Yes by type of vehicle and waste<br>• Free access 3 times per year - 2 in May (Beaver Brook) and 1 in June (North Lancaster) for residents non-hazardous waste only. Registration required for a $10 fee<br>• Vehicle used for disposal must be registered | • $15 per cubic yard<br>• $25 per cubic yard for shingles<br>• Leaf and yard waste free<br>• Freon removal- $20 per item<br>• Contaminated soil $25/tonne | • Yes by type of vehicle and waste<br>• Tipping fee schedule (for October 2020 in drop box) | • No fee at yard<br>• Free pass that covers 2 free loads per year (up to 500kg)<br>• Fees apply at GFL after free 500kg certificate is used<br>• One free landfill pass (to GFL Environmental Inc. site) per dwelling unit (property owner, or with permission of owner, lessee of the property)<br>• Landfill passes are issued on an as-requested basis<br>• Landfill pass may only be used by spouse or member of household/dwelling unit with knowledge of pass owner<br>• Person who landfill pass is issued to may be held responsible for misuse of pass<br>• Township may suspend, terminate or restrict use of | • Yes by type of vehicle and waste<br>• Landfill Pass for 2 free disposals per year |

## APPENDIX D: CURRENT LEVEL OF SERVICE (DRAFT MARCH 12 2021)

| Item | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| | | | | | landfill site pass for any misuse, or continued contravention of this by-law | |
| **Recycling Processing** | | | | | | |
| Processing Facility (MRF) Used | • Own Facility – RARE (opened in 1990)<br>265 Industrial Blvd.<br>Alexandria, Ontario<br>K0C 1A0<br>• Also processes recyclables from other municipalities<br>• Limited capacity to handle SDG materials<br>• Conveyor and other equipment in need of replacement/ upgrades | • City of Cornwall<br>2590 Cornwall Centre Road | • Former MRF at Boyne Road Landfill site is now a transfer station for recyclables<br>• Recyclables shipped to WMI Brockville for processing on a month-to month contract<br>• Town has access to weigh scale within 5km<br>• | • City of Cornwall<br>2590 Cornwall Centre Road<br>• Option included in new tender set to begin May 2021 | • City of Cornwall<br>• 2590 Cornwall Centre Road | • City of Cornwall<br>2590 Cornwall Centre Road |
| **Household Hazardous Waste & E-Waste Collection** | | | | | | |
| HHW & E-Waste Collection Frequency | • Collection (drop-off) once per year during Township's Hazardous and Electronic Waste Collection Program | • HHW Collection once per year in September 8:00am to noon<br>• E-waste bins at landfills | • HHW Once per month drop off from 8 am till 12 noon between May and October inclusive<br>• E-waste during open Landfill hours | • Drop Off at North Dundas' Boyne Road landfill site<br>• On the following dates from 8 am to Noon:<br>May 18, 2019<br>June 15, 2019<br>July 13, 2019<br>August 10, 2019<br>September 7, 2019<br>October 5, 201<br>• | • HHW Drop Off once per year (June) at west patrol yard<br>• E-Waste ongoing drop off | • Drop Off<br>• April to November<br>• 1 Sat and 2 Wed per Month |
| Collection Location | • | • Smithfield Park, 119 Military Road, Lancaster<br>• South Glengarry has an agreement with the City of Cornwall. South Glengarry residents can dispose of HHW at the City of Cornwall Landfill Site free of charge, as long as | • E-waste drop off on designated days at Cornwall Landfill site, may be dropped off during regular hours for free at Boyne Road Landfill Site<br>• HHW may be dropped off on designated days at Cornwall | • Arrangement to use the North Dundas Hazardous Waste Facility.<br>Boyne Landfill<br>12620 Boyne Rd.<br>Winchester, ON K0C 2K0<br>(613) 774-2105<br>• E-Waste accepted at Matilda | • HHW at West Patrol Yard<br>• E-waste bin at municipal both Patrol Yards | • Cornwall Landfill Site |

## APPENDIX D: CURRENT LEVEL OF SERVICE (DRAFT MARCH 12 2021)

| Item | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| | | they have valid I.D.<br>• The Township pays a $35.00 Tipping Fee for all residents who dispose of HHW at the City of Cornwall Landfill | Landfill Site and North Dundas Landfill Sites | and Williamsburg Landfill Sites | | |
| Restrictions | • | E-Waste not collected at HHW Day – availability of E-Waste bins year round at landfill sites | | | • | • Paints prior to 1977, PCBs, flares, fireworks, ammunition |
| **Composting** | | | | | | |
| Backyard Composting | • | • Promotes Backyard composting on Website | • Can purchase at two locations in North Dundas | • N/A | • Composters available at Town Hall | • Composters available at Town Hall for $30 each |
| Source Separated Organics Collection (SSO) | • None | • None | • None | • None | • None | • None |
| **Public Education/ Customer Service** | | | | | | |
| Main Types of Communication | • | • Annual Collections Calendar mailed in June<br>• Web brochure with information on all programs | • Recycle coach on website | • Face book<br>• Newspaper<br>• Website<br>• Community Guide<br>• Recycle Coach | • Recycle coach on website | • |
| Frequency of Communication | • | • | • | • Once a month | • | • |
| Customer Service Software? | | • | • | • Access E11 | | |
| First Point of Contact for Customers | • Administrative staff RARE or Municipal Office | • Administrative Staff | • Boyne Road Landfill | • Administrative Staff at the Municipal Office | • | • |
| Responsibility for Follow-up on Customer Issues | • Recycling Supervisor | • General Manager Infrastructure or Roads Manager | • Director of Waste Management | • Administrative Staff (depends on level of customer issue) | • | • |

# Appendix E

## Asset Inventory

**TABLE E-1: WASTE COLLECTION ASSETS**

| Asset ID | Asset Description | Asset Historical Cost | 2020 Asset Value | Asset In-Service Year | Asset Life Expectancy (Years) |
|---|---|---|---|---|---|
| | **NORTH DUNDAS** | | | | |
| VH077 | 2012 International 4300 Roll-off Truck Vin # | $ 91,391 | $ 112,400 | 2013 | 15 |
| VH038 | 2020 International Truck #1, SN: TBD | $ 159,000 | $ 159,000 | 2020 | 7 |
| | | | | | |
| | **Subtotal** | **$ 250,391** | **$ 271,400** | | |
| | **SOUTH DUNDAS** | | | | |
| - | - | $ - | $ - | 0 | 0 |
| | | | | | |
| | **Subtotal** | **$ -** | **$ -** | | |
| | **NORTH GLENGARRY** | | | | |
| - | - | $ - | $ - | 0 | 0 |
| | | | | | |
| | **Subtotal** | **$ -** | **$ -** | | |
| | **SOUTH GLENGARRY** | | | | |
| - | - | $ - | $ - | 0 | 0 |
| | | | | | |
| | **Subtotal** | **$ -** | **$ -** | | |
| | **NORTH STORMONT** | | | | |
| - | - | $ - | $ - | 0 | 0 |
| | | | | | |
| | **Subtotal** | **$ -** | **$ -** | | |
| | **SOUTH STORMONT** | | | | |
| 13-01 | Garbage Truck | $ 280,000 | $ 280,000 | 0 | 0 |
| 13-02 | Garbage Truck | $ 280,000 | $ 280,000 | | |
| | | | | | |
| | **Subtotal** | **$ 560,000** | **$ 560,000** | | |
| | **Total Assets** | **$ 810,391** | **$ 831,400** | | |

NOTE: The South Stormont trucks are not included as capital items beaucse the costs are included in the operating rate as part of the operating budget.

**TABLE E-2: WASTE DISPOSAL ASSETS**

| Asset ID | Asset Description | Asset Historical Cost | 2020 Asset Value | Asset In-Service Year | Asset Life Expectancy (Years) |
|---|---|---|---|---|---|
| | **NORTH DUNDAS** | | | | |
| EQ213 | CAT 252B2 Ma8 SSL With heat | $ 59,582 | $ 82,475 | 2009 | 15 |
| EQ212 | Fab roll-off container | $ 5,346 | $ 7,400 | 2009 | 15 |
| VH061 | 2009 Chevrolet Silverado, SN: | $ 18,735 | $ 25,934 | 2009 | 8 |
| EQ448 | Landfill Compactor CAT 816K | $ 604,913 | $ 623,060 | 2019 | 30 |
| BD017 | Landfill Office/Storage Building/Blue box | $ 143,428 | $ 318,596 | 1993 | 50 |
| BD017 | Unit Heater | $ 2,785 | $ 3,425 | 2013 | 20 |
| BD047 | Cameron Road Landfill Office | $ 5,983 | $ 11,465 | 1998 | 50 |
| BD016 | Cover-All Shed (Landfill Site) | $ 18,030 | $ 31,616 | 2001 | 50 |
| PL025 | Landfill Office/Storage Building/Blue box | $ 14,356 | $ 29,184 | 1996 | 25 |
| LI139 | Monitoring Wells Installed in 2016, Golder | $ 11,733 | $ 13,206 | 2016 | 40 |
| LI088 | Well, Bedrock Aquiffer Monitoring Well # 07- | $ 3,173 | $ 7,100 | 2007 | 40 |
| LI087 | Well, Overburden Monitoring Well #07-25, | $ 2,115 | $ 7,100 | 2007 | 40 |
| LI086 | Well, Overburden Monitoring Well #07-24, | $ 2,115 | $ 7,100 | 2007 | 40 |
| LI085 | Well, Overburden Monitoring Well #07-23, | $ 2,115 | $ 7,100 | 2007 | 40 |
| LI084 | Well, Overburden Monitoring Well #06-22, | $ 1,982 | $ 7,100 | 2006 | 40 |
| LI083 | Well, Overburden Monitoring Well #06-21, | $ 1,982 | $ 7,100 | 2006 | 40 |
| LI082 | Well, Overburden Monitoring Well #06-20, | $ 1,982 | $ 7,100 | 2006 | 40 |
| LI042 | Screens A,B, & C installed on BW1 (open | $ 9,518 | $ 13,977 | 2007 | 40 |
| LI041 | Multilevel Monitoring Well, Monitoring Well | $ 2,115 | $ 7,100 | 2007 | 40 |
| LI040 | Multilevel Monitoring Well, Monitoring Well | $ 2,115 | $ 7,100 | 2007 | 40 |
| LI039 | Multilevel Monitoring Well, Monitoring Well | $ 2,115 | $ 7,100 | 2007 | 40 |
| LI038 | Multilevel Monitoring Well, Monitoring Well | $ 2,115 | $ 7,100 | 2007 | 40 |
| LI037 | Multi Level Well, Overbuden Monitoring Well | $ 1,596 | $ 7,100 | 2002 | 40 |
| LI036 | Multi Level Well, Overbuden Monitoring Well | $ 1,596 | $ 7,100 | 2002 | 40 |
| LI035 | Multi Level Well, Overbuden Monitoring Well | $ 1,596 | $ 7,100 | 2002 | 40 |
| LI034 | Multi Level Well, Overbuden Monitoring Well | $ 1,596 | $ 7,100 | 2002 | 40 |
| LI033 | Multi Level Well, Overbuden Monitoring Well | $ 1,596 | $ 7,100 | 2002 | 40 |
| LI032 | Multi Level Well, Overbuden Monitoring Well | $ 1,596 | $ 7,100 | 2002 | 40 |
| LI031 | Multi Level Well, Overburden Monitoring | $ 1,394 | $ 7,100 | 1999 | 40 |
| LI030 | Multi Level Well, Overburden Monitoring | $ 1,394 | $ 7,100 | 1999 | 40 |
| LI029 | Multi Level Well, Overburden Monitoring | $ 1,394 | $ 7,100 | 1999 | 40 |
| LI028 | Multi Level Well, Overburden Monitoring | $ 1,394 | $ 7,100 | 1999 | 40 |
| LI027 | Well, Overburden Monitoring Well # 3, 10891 | $ 1,213 | $ 7,100 | 1993 | 40 |
| LI026 | Well, Overburden Monitoring Well # 2, 10891 | $ 1,213 | $ 7,100 | 1993 | 40 |
| LI025 | Well, Overburden Monitoring Well # 1, 10891 | $ 1,213 | $ 7,100 | 1993 | 40 |
| LI024 | Well, Bedrock Aquiffer Monitoring Well # 3, | $ 1,820 | $ 7,100 | 1993 | 40 |
| LI023 | Well, Bedrock Aquiffer Monitoring Well # 2, | $ 1,820 | $ 7,100 | 1993 | 40 |
| LI021 | Well, Overburden Monitoring Well # 19, | $ 1,596 | $ 7,100 | 2002 | 40 |
| LI020 | Well, Overburden Monitoring Well # 18, | $ 1,596 | $ 7,100 | 2002 | 40 |
| LI019 | Well, Overburden Monitoring Well # 17, | $ 1,596 | $ 7,100 | 2002 | 40 |
| LI018 | Well, Overburden Monitoring Well # 16, | $ 1,596 | $ 7,100 | 2002 | 40 |
| LI017 | Well, Overburden Monitoring Well # 15, | $ 1,568 | $ 7,100 | 2001 | 40 |
| LI016 | Well, Overburden Monitoring Well # 14, | $ 1,568 | $ 7,100 | 2001 | 40 |
| LI015 | Well, Overburden Monitoring Well # 13, | $ 1,213 | $ 7,100 | 1993 | 40 |
| LI014 | Well, Overburden Monitoring Well # 12, | $ 1,213 | $ 7,100 | 1993 | 40 |
| LI013 | Well, Overburden Monitoring Well # 10, | $ 1,213 | $ 7,100 | 1993 | 40 |
| LI012 | Well, Overburden Monitoring Well # 9, 12620 | $ 1,205 | $ 7,100 | 1992 | 40 |
| LI011 | Well, Overburden Monitoring Well # 7, 12620 | $ 1,205 | $ 7,100 | 1992 | 40 |

**TABLE E-2: WASTE DISPOSAL ASSETS**

| Asset ID | Asset Description | Asset Historical Cost | 2020 Asset Value | Asset In-Service Year | Asset Life Expectancy (Years) |
|---|---|---|---|---|---|
| LI010 | Well, Overburden Monitoring Well # 5, 12620 | $ 1,212 | $ 7,100 | 1991 | 40 |
| LI009 | Well, Overburden Monitoring Well # 4, 12620 | $ 1,212 | $ 7,100 | 1991 | 40 |
| LI008 | Well, Overburden Monitoring Well # 1, 12620 | $ 1,212 | $ 7,100 | 1991 | 40 |
| EQ412 | Security Cameras | $ 1,421 | $ 1,508 | 2018 | 5 |
| | | | | | |
| | | | | | |
| | **Subtotal** | **$ 961,390** | **$ 1,445,846** | | |
| | **SOUTH DUNDAS** | | | | |
| | 4021 County Rd 8/Church Rd - Building | $ 4,317 | $ 9,309 | 1994 | 50 |
| | Purchase of Used 2014 Compactor | $ 193,000 | $ 193,000 | 2020 | 10 |
| | 3 Roll Offs | $ 49,000 | $ 49,000 | 2020 | 10 |
| | Land Acquisition 62.89 Acres | $ 723,235 | $ 723,235 | 2021 | |
| | *Williamsburg (Existing Wells)* | | $ - | | |
| | 97-2s | $ 3,598 | $ 7,100 | 1997 | 40 |
| | 97-2d | $ 3,598 | $ 7,100 | 1997 | 40 |
| | 97-1s | $ 3,598 | $ 7,100 | 1997 | 40 |
| | 97-1d | $ 3,598 | $ 7,100 | 1997 | 40 |
| | 97-3d | $ 3,598 | $ 7,100 | 1997 | 40 |
| | 97-3s | $ 3,598 | $ 7,100 | 1997 | 40 |
| | 97-4d | $ 3,598 | $ 7,100 | 1997 | 40 |
| | 97-4s | $ 3,598 | $ 7,100 | 1997 | 40 |
| | 99-1d | $ 3,817 | $ 7,100 | 1999 | 40 |
| | 99-IBR | $ 3,817 | $ 7,100 | 1999 | 40 |
| | 99-1s | $ 3,817 | $ 7,100 | 1999 | 40 |
| | 99-2s | $ 3,817 | $ 7,100 | 1999 | 40 |
| | 99-2d | $ 3,817 | $ 7,100 | 1999 | 40 |
| | 99-2BR | $ 3,817 | $ 7,100 | 1999 | 40 |
| | 99-3s | $ 3,817 | $ 7,100 | 1999 | 40 |
| | 99-3d | $ 3,817 | $ 7,100 | 1999 | 40 |
| | 99-3BR | $ 3,817 | $ 7,100 | 1999 | 40 |
| | 4a | $ 4,424 | $ 7,100 | 2004 | 40 |
| | 4b | $ 4,424 | $ 7,100 | 2004 | 40 |
| | 4c | $ 4,424 | $ 7,100 | 2004 | 40 |
| | 4d | $ 4,424 | $ 7,100 | 2004 | 40 |
| | 5a | $ 4,557 | $ 7,100 | 2005 | 40 |
| | 5b | $ 4,557 | $ 7,100 | 2005 | 40 |
| | 12-1s | $ 5,605 | $ 7,100 | 2012 | 40 |
| | 12-1d | $ 5,605 | $ 7,100 | 2012 | 40 |
| | 12-1BR | $ 5,605 | $ 7,100 | 2012 | 40 |
| | 14-3s | $ 5,946 | $ 7,100 | 2014 | 40 |
| | 14-3d | $ 5,946 | $ 7,100 | 2014 | 40 |
| | 14-3BR | $ 5,946 | $ 7,100 | 2014 | 40 |
| | 14-1s | $ 5,946 | $ 7,100 | 2014 | 40 |
| | 14-1d | $ 5,946 | $ 7,100 | 2014 | 40 |
| | 14-1BR | $ 5,946 | $ 7,100 | 2014 | 40 |
| | 14-2s | $ 5,946 | $ 7,100 | 2014 | 40 |
| | 14-2d | $ 5,946 | $ 7,100 | 2014 | 40 |
| | 14-2BR | $ 5,946 | $ 7,100 | 2014 | 40 |
| | 17-1s | $ 6,498 | $ 7,100 | 2017 | 40 |
| | 17-2d | $ 6,498 | $ 7,100 | 2017 | 40 |

**TABLE E-2: WASTE DISPOSAL ASSETS**

| Asset ID | Asset Description | Asset Historical Cost | 2020 Asset Value | Asset In-Service Year | Asset Life Expectancy (Years) |
|---|---|---|---|---|---|
| | 17-1BRS | $ 6,498 | $ 7,100 | 2017 | 40 |
| | 17-1BRD | $ 6,498 | $ 7,100 | 2017 | 40 |
| | *Matilda (Existing Wells)* | | $ - | | |
| | 91-1 | $ 3,013 | $ 7,100 | 1991 | 40 |
| | 91-2 | $ 3,013 | $ 7,100 | 1991 | 40 |
| | 91-3 | $ 3,013 | $ 7,100 | 1991 | 40 |
| | 93-4 | $ 3,196 | $ 7,100 | 1993 | 40 |
| | 93-5 | $ 3,196 | $ 7,100 | 1993 | 40 |
| | 93-6 | $ 3,196 | $ 7,100 | 1993 | 40 |
| | 93-7 | $ 3,196 | $ 7,100 | 1993 | 40 |
| | 98-10 | $ 3,705 | $ 7,100 | 1998 | 40 |
| | 98-11d | $ 3,705 | $ 7,100 | 1998 | 40 |
| | 98-11s | $ 3,705 | $ 7,100 | 1998 | 40 |
| | 98-12d | $ 3,705 | $ 7,100 | 1998 | 40 |
| | 98-12s | $ 3,705 | $ 7,100 | 1998 | 40 |
| | 00-01d | $ 3,931 | $ 7,100 | 2000 | 40 |
| | 00-01s | $ 3,931 | $ 7,100 | 2000 | 40 |
| | 00-02 | $ 3,931 | $ 7,100 | 2000 | 40 |
| | 00-03d | $ 3,931 | $ 7,100 | 2000 | 40 |
| | 00-03s | $ 3,931 | $ 7,100 | 2000 | 40 |
| | 00-04 | $ 3,931 | $ 7,100 | 2000 | 40 |
| | 07-03d | $ 4,835 | $ 7,100 | 2007 | 40 |
| | 07-03s | $ 4,835 | $ 7,100 | 2007 | 40 |
| | 07-04 | $ 4,835 | $ 7,100 | 2007 | 40 |
| | 07-05 | $ 4,835 | $ 7,100 | 2007 | 40 |
| | 20-01d | $ 7,100 | $ 7,100 | 2020 | 40 |
| | 20-01s | $ 7,100 | $ 7,100 | 2020 | 40 |
| | 20-02s | $ 7,100 | $ 7,100 | 2020 | 40 |
| | 20-02d | $ 7,100 | $ 7,100 | 2020 | 40 |
| | 20-03d | $ 7,100 | $ 7,100 | 2020 | 40 |
| | 20-03br | $ 7,100 | $ 7,100 | 2020 | 40 |
| | 20-03s | $ 7,100 | $ 7,100 | 2020 | 40 |
| | 20-04s | $ 7,100 | $ 7,100 | 2020 | 40 |
| | 20-05s | $ 7,100 | $ 7,100 | 2020 | 40 |
| | | | | | |
| | **Subtotal** | **$ 1,302,990** | **$ 1,471,544** | | |
| | **NORTH GLENGARRY** | | | | |
| | Land Improvements | $ 90,473 | $ 114,609 | 2012 | 40 |
| | Buildings | $ 1,417,025 | $ 4,230,141 | 1983 | 48 |
| | Vehicles | $ 60,000 | $ 80,635 | 2010 | 10 |
| | Equipment | $ 67,817 | $ 214,779 | 1981 | 40 |
| | Leachate Solution | $ 200,000 | $ 200,000 | 2030 | |
| | *Glen Robertson Wells* | | $ - | | |
| | A1 | $ 3,763 | $ 7,000 | 1999 | 40 |
| | A2 | $ 3,763 | $ 7,000 | 1999 | 40 |
| | B1 | $ 3,763 | $ 7,000 | 1999 | 40 |
| | B2 | $ 3,763 | $ 7,000 | 1999 | 40 |
| | C1 | $ 3,763 | $ 7,000 | 1999 | 40 |
| | C2 | $ 3,763 | $ 7,000 | 1999 | 40 |
| | D2 | $ 3,763 | $ 7,000 | 1999 | 40 |

**TABLE E-2: WASTE DISPOSAL ASSETS**

| Asset ID | Asset Description | Asset Historical Cost | 2020 Asset Value | Asset In-Service Year | Asset Life Expectancy (Years) |
|---|---|---|---|---|---|
| | E1 | $ 4,767 | $ 7,000 | 2007 | 40 |
| | E2 | $ 4,767 | $ 7,000 | 2007 | 40 |
| | F1 | $ 4,767 | $ 7,000 | 2007 | 40 |
| | F2 | $ 4,767 | $ 7,000 | 2007 | 40 |
| | P1-1 | $ 6,219 | $ 7,000 | 2016 | 40 |
| | P1-1-16 | $ 6,219 | $ 7,000 | 2016 | 40 |
| | P1-2 | $ 6,219 | $ 7,000 | 2016 | 40 |
| | P1-2-16 | $ 6,219 | $ 7,000 | 2016 | 40 |
| | P2 | $ 6,219 | $ 7,000 | 2016 | 40 |
| | P3 | $ 6,219 | $ 7,000 | 2016 | 40 |
| | P4 | $ 6,219 | $ 7,000 | 2016 | 40 |
| | P5-1 | $ 6,219 | $ 7,000 | 2016 | 40 |
| | P5-1-16 | $ 6,219 | $ 7,000 | 2016 | 40 |
| | P5-2 | $ 6,219 | $ 7,000 | 2016 | 40 |
| | P5-2-16 | $ 6,219 | $ 7,000 | 2016 | 40 |
| | P6 | $ 6,219 | $ 7,000 | 2016 | 40 |
| | G-S | $ 6,219 | $ 7,000 | 2016 | 40 |
| | G-D | $ 6,219 | $ 7,000 | 2016 | 40 |
| | H-S | $ 6,219 | $ 7,000 | 2016 | 40 |
| | H-D | $ 6,219 | $ 7,000 | 2016 | 40 |
| | *Alexandria Wells* | | $ - | | |
| | MW-2 | $ 2,970 | $ 7,000 | 1991 | 40 |
| | MW-6A | $ 2,970 | $ 7,000 | 1991 | 40 |
| | MW-6B | $ 2,970 | $ 7,000 | 1991 | 40 |
| | MW-7A | $ 2,970 | $ 7,000 | 1991 | 40 |
| | MW-7B | $ 2,970 | $ 7,000 | 1991 | 40 |
| | MW-8 | $ 3,343 | $ 7,000 | 1995 | 40 |
| | MW-9 | $ 3,343 | $ 7,000 | 1995 | 40 |
| | MW-10 | $ 3,343 | $ 7,000 | 1995 | 40 |
| | MW-11 | $ 3,343 | $ 7,000 | 1995 | 40 |
| | MW-12 | $ 3,343 | $ 7,000 | 1995 | 40 |
| | MW-13 | $ 3,343 | $ 7,000 | 1995 | 40 |
| | MW-14 | $ 3,343 | $ 7,000 | 1995 | 40 |
| | MW-15A | $ 3,547 | $ 7,000 | 1997 | 40 |
| | MW-15B | $ 3,547 | $ 7,000 | 1997 | 40 |
| | MW-16 | $ 3,876 | $ 7,000 | 2000 | 40 |
| | MW-17 | $ 3,876 | $ 7,000 | 2000 | 40 |
| | MW-18 | $ 3,876 | $ 7,000 | 2000 | 40 |
| | MW-19A | $ 5,862 | $ 7,000 | 2014 | 40 |
| | MW-19B | $ 5,862 | $ 7,000 | 2014 | 40 |
| | MW-20 | $ 5,862 | $ 7,000 | 2014 | 40 |
| | MW-21 | $ 5,862 | $ 7,000 | 2014 | 40 |
| | MW-22 | $ 5,862 | $ 7,000 | 2014 | 40 |
| | MW-23D | $ 5,862 | $ 7,000 | 2014 | 40 |
| | MW-23S | $ 5,862 | $ 7,000 | 2014 | 40 |
| | MW-24D | $ 5,862 | $ 7,000 | 2014 | 40 |
| | MW-24S | $ 5,862 | $ 7,000 | 2014 | 40 |
| | MW-25 | $ 5,862 | $ 7,000 | 2014 | 40 |
| | | | | | |
| | **Subtotal** | **$ 2,095,832** | **$ 5,218,163** | | |

**TABLE E-2: WASTE DISPOSAL ASSETS**

| Asset ID | Asset Description | Asset Historical Cost | 2020 Asset Value | Asset In-Service Year | Asset Life Expectancy (Years) |
|---|---|---|---|---|---|
| | **SOUTH GLENGARRY** | | | | |
| | Compactor (Kitty) | $ 300,000 | $ 300,000 | 2020 | 10 |
| | *North Lancaster Monitoring Wells* | | $ - | | |
| | 96-1s;96-1d;96-3s;96-3d;96-2d | $ 17,464 | $ 35,500 | 1996 | 40 |
| | 97-1s;97-4d;97-3d;97-2s | $ 14,390 | $ 28,400 | 1997 | 40 |
| | 99-1sBR;99-3sBR;99-7s;99-7sBR;99-5sBR;99- | $ 57,249 | $ 106,500 | 1999 | 40 |
| | 00-1s;00-4s;00-1dBR;00-2s;00-2sBR;00- | $ 47,173 | $ 85,201 | 2000 | 40 |
| | 06-2s;06-2d;06-3dBR;06-4d;06-4dBR;06-1s;06 | $ 42,245 | $ 63,900 | 2006 | 40 |
| | *Beaverbrook Monitoring Wells* | | $ - | | |
| | 3;11-I;11-II;14-A;14-II;14-III;15-I;15-II;15-III;16- | $ 49,026 | $ 119,000 | 1990 | 40 |
| | 8-I;8-IIIOLD;8-II;9-I;9-II;10-I;10-II | $ 19,599 | $ 49,000 | 1989 | 40 |
| | 17-SBR;99-1SBR;99-1D;99-1S;99-2BR;99- | $ 48,917 | $ 91,000 | 1999 | 40 |
| | 19-I;19-II;21-I;21-II;22-II;23-I;23-II;24-I;24- | $ 44,556 | $ 105,000 | 1991 | 40 |
| | 12-3S;12-4S;12-4D;12-5S;12-5D;12-6S;12- | $ 71,836 | $ 91,000 | 2012 | 40 |
| | 08-1; | $ 4,910 | $ 7,000 | 2008 | 40 |
| | | | | | |
| | **Subtotal** | **$ 717,366** | **$ 1,081,499** | | |
| | **NORTH STORMONT** | | | | |
| | Finch GW Monitoring Well A7 | $ 2,925 | $ 7,100 | 1990 | 40 |
| | Finch GW Monitoring Well A-10 | $ 2,925 | $ 7,100 | 1990 | 40 |
| | Finch GW Monitoring Well A-12 | $ 5,773 | $ 7,100 | 2013 | 40 |
| | Finch GW Monitoring Well A-14 | $ 3,013 | $ 7,100 | 1991 | 40 |
| | Finch GW Monitoring Well A-16 | $ 3,013 | $ 7,100 | 1991 | 40 |
| | Finch GW Monitoring Well 09-17 | $ 6,498 | $ 7,100 | 2017 | 40 |
| | Finch GW Monitoring Well A-18s | $ 6,692 | $ 7,100 | 2018 | 40 |
| | Finch GW Monitoring Well A-19s | $ 6,893 | $ 7,100 | 2019 | 40 |
| | Finch GW Monitoring Well A-18d | $ 6,692 | $ 7,100 | 2018 | 40 |
| | Finch GW Monitoring Well A-19d | $ 6,893 | $ 7,100 | 2019 | 40 |
| | Finch GW Monitoring Well OB-1d | $ 2,925 | $ 7,100 | 1990 | 40 |
| | Finch GW Monitoring Well OB-2 | $ 2,925 | $ 7,100 | 1990 | 40 |
| | Finch GW Monitoring Well OB-3 | $ 3,013 | $ 7,100 | 1991 | 40 |
| | Finch GW Monitoring Well OB-4 | $ 3,013 | $ 7,100 | 1991 | 40 |
| | Finch GW Monitoring Well BR-1 | $ 2,925 | $ 7,100 | 1990 | 40 |
| | Finch GW Monitoring Well 17-1 | $ 6,498 | $ 7,100 | 2017 | 40 |
| | Roxborough Lechate Monitor 95-2.0 | $ 3,391 | $ 7,100 | 1995 | 40 |
| | Roxborough Lechate Monitor 17-3 | $ 6,498 | $ 7,100 | 2017 | 40 |
| | Roxborough Monitoring Well 90-4.2 | $ 2,925 | $ 7,100 | 1990 | 40 |
| | Roxborough Monitoring Well 90-5.2 | $ 2,925 | $ 7,100 | 1990 | 40 |
| | Roxborough Monitoring Well 93-2.3 | $ 2,925 | $ 7,100 | 1990 | 40 |
| | Roxborough Monitoring Well 90-1.1 | $ 2,925 | $ 7,100 | 1990 | 40 |
| | Roxborough Monitoring Well 90-1.2 | $ 2,925 | $ 7,100 | 1990 | 40 |
| | Roxborough Monitoring Well 93-1.0 | $ 3,196 | $ 7,100 | 1993 | 40 |
| | Roxborough Monitoring Well 93-1.1 | $ 3,196 | $ 7,100 | 1993 | 40 |
| | Roxborough Monitoring Well 93-1.2 | $ 3,196 | $ 7,100 | 1993 | 40 |
| | Roxborough Monitoring Well 93-2.1 | $ 3,196 | $ 7,100 | 1993 | 40 |
| | Roxborough Monitoring Well 93-2.2 | $ 3,196 | $ 7,100 | 1993 | 40 |
| | Roxborough Monitoring Well 08-1s | $ 4,980 | $ 7,100 | 2008 | 40 |
| | Roxborough Monitoring Well 93-1.3 | $ 3,196 | $ 7,100 | 1993 | 40 |
| | Roxborough Monitoring Well 90-4.1 | $ 2,925 | $ 7,100 | 1990 | 40 |
| | Roxborough Monitoring Well 95-1.0 | $ 3,391 | $ 7,100 | 1995 | 40 |

**TABLE E-2: WASTE DISPOSAL ASSETS**

| Asset ID | Asset Description | Asset Historical Cost | 2020 Asset Value | Asset In-Service Year | Asset Life Expectancy (Years) |
|---|---|---|---|---|---|
| | Roxborough Monitoring Well 95-2.0 | $ 3,391 | $ 7,100 | 1995 | 40 |
| | Roxborough Monitoring Well 95-3.0 | $ 3,391 | $ 7,100 | 1995 | 40 |
| | Roxborough Monitoring Well 95-4.0 | $ 3,391 | $ 7,100 | 1995 | 40 |
| | Roxborough Monitoring Well P3 | $ 3,196 | $ 7,100 | 1993 | 40 |
| | Roxborough Monitoring Well P4 | $ 3,196 | $ 7,100 | 1993 | 40 |
| | Roxborough Monitoring Well 17-1 | $ 6,498 | $ 7,100 | 2017 | 40 |
| | Roxborough Monitoring Well 17-2 | $ 6,498 | $ 7,100 | 2017 | 40 |
| | Roxborough Monitoring Well 91-3.2 | $ 3,013 | $ 7,100 | 1991 | 40 |
| | Roxborough Monitoring Well 91-2.1 | $ 3,013 | $ 7,100 | 1991 | 40 |
| | | | | | |
| | | | | | |
| | **Subtotal** | **$ 163,191** | **$ 291,100** | | |
| | **SOUTH STORMONT** | | | | |
| 3.0748 | 3 wells | $ 6,927 | $ 21,300 | 1982 | 40 |
| 2.3566 | 6 wells | $ 18,077 | $ 42,599 | 1991 | 40 |
| 2.2879 | 3 wells | $ 9,310 | $ 21,300 | 1992 | 40 |
| 2.2213 | 6 wells | $ 19,178 | $ 42,600 | 1993 | 40 |
| 1.8061 | 6 wells | $ 23,587 | $ 42,600 | 2000 | 40 |
| 1.4685 | 12 wells | $ 58,018 | $ 85,202 | 2007 | 40 |
| 1.1941 | 6 wells | $ 35,675 | $ 42,598 | 2014 | 40 |
| 1.1255 | 10 wells | $ 63,083 | $ 71,001 | 2016 | 40 |
| | | | | | |
| | | | | | |
| | **Subtotal** | **$ 233,856** | **$ 369,200** | | |
| | **Total Assets** | **$ 5,474,624** | **$ 9,877,353** | | |

## TABLE E-3: RECYCLING COLLECTION ASSETS

| Asset ID | Asset Description | Asset Historical Cost | 2020 Asset Value | Asset In-Service Year | Asset Life Expectancy (Years) |
|---|---|---|---|---|---|
| | **NORTH DUNDAS** | | | | |
| VH038 | 2020 International Truck #2, SN: TBD | $ 159,000 | $ 159,000 | 2020 | 8 |
| EQ351 | Roll-off Bin | $ 7,276 | $ 8,435 | 2015 | 15 |
| EQ332 | Roll-off Box | $ 6,920 | $ 8,262 | 2014 | 15 |
| EQ271 | Roll-off Bins | $ 11,194 | $ 14,605 | 2011 | 15 |
| EQ242 | Roll-off box for recycling | $ 5,940 | $ 7,983 | 2010 | 15 |
| EQ241 | Roll-off box for recycling | $ 5,940 | $ 7,983 | 2010 | 15 |
| BD031 | Recycling Unloading Area | $ 6,035 | $ 10,275 | 2002 | 50 |
| VH061 | 2009 Chevrolet Silverado, SN: 1GCEC14C89Z247539, Bill Osborne Chevrolet | $ 18,735 | $ 25,934 | 2009 | 8 |
| | | | | | |
| | | | | | |
| | **Subtotal** | **$ 221,040** | **$ 242,477** | | |
| | **SOUTH DUNDAS** | | | | |
| - | - | $ - | $ - | 0 | 0 |
| - | - | $ - | $ - | 0 | 0 |
| | | | | | |
| | **Subtotal** | **$ -** | **$ -** | | |
| | **NORTH GLENGARRY** | | | | |
| - | - | $ - | $ - | 0 | 0 |
| | | | | | |
| | **Subtotal** | **$ -** | **$ -** | | |
| | **SOUTH GLENGARRY** | | | | |
| - | - | $ - | $ - | 0 | 0 |
| | | | | | |
| | **Subtotal** | **$ -** | **$ -** | | |
| | **NORTH STORMONT** | | | | |
| - | Recycling truck replacement | $ 168,000 | $ 168,000 | 2019 | 7 |
| | | | | | |
| | | | | | |
| | **Subtotal** | **$ 168,000** | **$ 168,000** | | |
| | **SOUTH STORMONT** | | | | |
| 14-06 | Recycling truck | $ 280,000 | $ 280,000 | 2026 | 0 |
| | | | | | |
| | | | | | |
| | **Subtotal** | **$ 280,000** | **$ 280,000** | | |
| | **Total Assets** | **$ 669,040** | **$ 690,477** | | |

NOTE: The South Stormont trucks are not included as capital items beaucse the costs are included in the operating rate as part of the operating budget.

## TABLE E4: RECYCLING PROCESSING & DIVERSION ASSETS

| Asset ID | Asset Description | Asset Historical Cost | 2020 Asset Value | Asset In-Service Year | Asset Life Expectancy (Years) |
|---|---|---|---|---|---|
| | **NORTH DUNDAS** | | | | |
| BD018 | Hazardous Waste Facility | $ 11,474 | $ 25,488 | 1993 | 50 |
| | | | | | |
| | | | | | |
| | **Subtotal** | **$ 11,474** | **$ 25,488** | | |
| | **SOUTH DUNDAS** | | | | |
| - | - | $ - | $ - | 0 | 0 |
| | | | | | |
| | | | | | |
| | **Subtotal** | **$ -** | **$ -** | | |
| | **NORTH GLENGARRY** | | | | |
| - | Buildings | $ 1,669,947 | $ 2,525,384 | 2006.007495 | 40.00000024 |
| - | Vehicles | $ 174,354 | $ 241,346 | 2009 | 10 |
| - | Equipment | $ 687,030 | $ 1,812,909 | 1987.17358 | 37.9692446 |
| - | RARE Material | $ 60,000 | $ 60,000 | 2022 | 0 |
| | | | | | |
| | | | | | |
| | **Subtotal** | **$ 2,591,331** | **$ 4,639,640** | | |
| | **SOUTH GLENGARRY** | | | | |
| - | - | $ - | $ - | 0 | 0 |
| | | | | | |
| | **Subtotal** | **$ -** | **$ -** | | |
| | **NORTH STORMONT** | | | | |
| - | - | $ - | $ - | 0 | 0 |
| | | | | | |
| | | | | | |
| | **Subtotal** | **$ -** | **$ -** | | |
| | **SOUTH STORMONT** | | | | |
| - | - | $ - | $ - | 0 | 0 |
| | | | | | |
| | | | | | |
| | **Subtotal** | **$ -** | **$ -** | | |
| | **Total Assets** | **$ 2,602,805** | **$ 4,665,128** | | |

# Appendix F

## Asset Inventory

## APPENDIX F: EXISTING CONTRACTS (MARCH 12 2021)

| Item | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| **Waste Collection Contracts** | | | | | | |
| Waste Collection Contract Terms | • Outsourced<br>• GRS Sanitation Inc. to collect and deliver waste to GFL. Contract expires in 2021 and includes recycling collection | • Contract expires November 30 2020<br>• Will be extended by 1 year to consider outcome of this study | • NA<br>• Contract terminated as of July 12th, 2020<br>• In-House as of July 13, 2020 | • Co-collection with recycling Contract extended by 1 year to April 20, 2021<br>• New contract begins May 2021 (**new contractor and expiry date?)** | • Outsourced effective July 2020 **(obtain contract for actual date)** 2-year contract | • NA<br>• In-House Since 2007 – better accountability of service and extra resources to cover other public works functions |
| **Recycling Collection Contracts** | | | | | | |
| Recycling Collection Contract Terms | • Outsourced<br>• GRS Sanitation Inc. to collect recycling and deliver to RARE. Contract expires in 2021 and includes waste collection | • Included under Waste Collection Contract | • NA - In-house | • Co-collection with garbage using 2 vehicles<br>• Extended with garbage collection by 1 year to April 30, 2021<br>• Extension requires South Dundas to have a separate direct agreement with Cornwall regarding processing fees and revenues from recycling<br>• Contractor has right to negotiate additional fees if Town changes processing to another location<br>• New contract begins May 2021- submitting an in-house bid for recycling collection | • NA - In-house | • NA - In-house |
| **Leaf & Yard Waste Collection** | | | | | | |
| L&Y Waste Collection Contract Terms | • Out sourced under waste collection contract | • Out sourced under waste collection contract | • NA – In-house | • NA – Drop off only | NA – In-house | NA – In-house |

## APPENDIX F: EXISTING CONTRACTS (MARCH 12 2021)

| Item | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| **Landfill Sites** | | | | | | |
| Municipal or Private Landfill Site Used for Disposal? | • 1 active – accepts residential waste only delivered by residents to the site. Operated in-house<br>• Private landfill (GFL) used for curbside waste. Contract expires in 2021 | • 2 Municipal Landfill Sites<br>• North Lancaster - 4580 2nd Line Road<br>• Beaver Brook Road Landfill site - 19281 Beaver Brook Road, east of Chapel Road | • 1 Municipal Landfill Site - Boyne Road landfill site<br>• Environmental Compliance Approval (ECA) No.A482101 issued December 4, 1989<br>• 1 closed landfill site (monitored annually) | • Municipal (Matilda)<br>10815 Seibert Road Iroquois, ON K0E 1K0<br>• 1 closed landfill site – Williamsburg | • Private (GFL) | • Both private and municipally owned (Trillium) landfill sites are used<br>• GFL – curbside<br>• Trillium – residents only |
| Landfill Operations Contract Terms | • NA - In-house (for Municipal landfill site) | • NA - In-house | • Landfill operations by Township employees-2020 816K waste compactor | • NA - In-House | • NA (uses GFL) | • In-house (for Municipal landfill site) |
| Private Waste Disposal Contract Terms | • Private landfill (GRS Sanitation Inc./GFL) used for curbside waste. Contract expires in 2021. Contract also includes curbside waste and recycling collection | • NA – In-house operations | • NA – In-house operations | • NA – In-house operations | • Private landfill (GFL)<br>• 20 year contract expires Nov 1, 2021 | • Private landfill (GFL) used for curbside waste.<br>• 20 year contract that expires May 31,2023 |
| Container Station Operations Contract Terms | • | • NA - In-house<br>• | • NA - In-house<br>• | • New drop off container station will be operated in-house. Roads department will transport bins to face | • NA - In-house<br>• | • NA - (uses GFL) |
| Landfill Monitoring Contract Terms | • | • In-house & Consultant<br>• Annual | • Outsourced(Golder)<br>• Annual | • Outsourced (WSP)<br>• Annual | • Outsourced for 2 closed sites (Morison Hershfield)<br>• Annual | • Outsourced (EVB)<br>• Annual |
| **Recycling Processing Contracts** | | | | | | |
| Processing Facility (MRF) Used | • Own Facility – RARE (opened in 1990)<br>265 Industrial Blvd. Alexandria, Ontario K0C 1A0<br>• Also processes recyclables from other SDG municipalities and elsewhere | • City of Cornwall<br>2590 Cornwall Centre Road | • WMI in Brockville. Month to month contract<br>• Separate contract with another contractor to deliver recyclables to WMI's facility. Month to month. | • City of Cornwall<br>2590 Cornwall Centre Road<br>• An alternative to Cornwall included in new tender set to begin May 2021 | • City of Cornwall<br>• 2590 Cornwall Centre Road | • City of Cornwall<br>2590 Cornwall Centre Road |

## APPENDIX F: EXISTING CONTRACTS (MARCH 12 2021)

| Item | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
|---|---|---|---|---|---|---|
| MRF Contract Terms | • NA | • Annual<br>• Processing fee is $301/tonne gross<br>• Revenue based on share of tonnes processed | • NA | • Annual<br>• Direct contract with Cornwall for recycling processing and revenues. Previously part of collection contractor's contract.<br>• Expires Dec 31 2020<br>• Max 1000 tonnes per year can be processed<br>• Processing fee is $301/tonne gross<br>• Revenue based on market price received and municipality's share of tonnes processed | • Annual<br>• Processing fee is $301/tonne gross<br>• Revenue based on share of tonnes processed | • Annual<br>• Processing fee is $301/tonne gross<br>• Revenue based on share of tonnes processed |
| **Household Hazardous Waste & E-Waste Collection Contracts** | | | | | | |
| Collection Contract Terms | • | • | • | • | • | • Agreement with City of Cornwall |
| **Other Waste Diversion Contracts** | | | | | | |
| Scrap Metal | • | • | • | • | • | • |
| Supply of Backyard Composters/ Blue Boxes | • | • | • | • | • | • |
| **Public Education/ Customer Service Contracts** | | | | | | |
| Public Education/ Customer Service Contracts | • | • | • | • | • | • |

# Appendix G

## Gross Operating & Capital Cost Projections (2020-2044)
## and
## NPV 2021 Calculations

# APPENDIX G: GROSS OPERATING AND CAPITAL COSTS (2020-2044)

## TABLE G1:GROSS OPERATING COSTS BY MUNICIPALITY — INFLATED

| Municipality | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **North Dundas** | | | | | | | | | | | | |
| WASTE COLLECTION OPERATING COSTS (INHOUSE) | 259,887 | 271,459 | 276,888 | 282,274 | 287,768 | 293,375 | 295,371 | 301,219 | 307,218 | 313,338 | 319,580 | 325,947 |
| WASTE COLLECTION OPERATING COSTS (CONTRACT) | 187,289 | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL OPERATING COSTS (OWN LANDFILL) | 200,950 | 209,308 | 213,488 | 217,659 | 221,915 | 226,257 | 228,144 | 232,667 | 237,302 | 242,030 | 246,852 | 251,771 |
| WASTE DISPOSAL OPERATING COSTS (CONTRACT LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | 274,137 | 316,944 | 324,016 | 330,335 | 336,765 | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION OPERATING COSTS | 67,333 | 127,592 | 119,911 | 122,038 | 124,419 | 2,463 | - | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE OPERATING COSTS | 15,000 | 15,300 | 15,606 | 15,918 | 16,236 | 16,561 | 16,892 | 17,230 | 17,575 | 17,926 | 18,285 | 18,651 |
| **TOTAL** | 1,004,596 | 940,604 | 949,908 | 968,224 | 987,103 | 538,656 | 540,407 | 551,116 | 562,095 | 573,294 | 584,717 | 596,369 |
| **South Dundas** | | | | | | | | | | | | |
| WASTE COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION OPERATING COSTS (CONTRACT) | 315,000 | 326,786 | 333,082 | 339,734 | 346,519 | 353,441 | 360,500 | 367,480 | 374,821 | 382,310 | 389,949 | 397,740 |
| WASTE DISPOSAL OPERATING COSTS (OWN LANDFILL) | 453,153 | 362,983 | 369,331 | 376,701 | 352,170 | 359,035 | 366,204 | 373,291 | 380,746 | 388,350 | 396,107 | 404,019 |
| WASTE DISPOSAL OPERATING COSTS (CONTRACT LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (CONTRACT) | 315,000 | 326,786 | 333,082 | 339,734 | 346,519 | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION OPERATING COSTS | 202,100 | 202,276 | 206,128 | 210,242 | 214,440 | 26,060 | 25,585 | 26,075 | 26,596 | 27,127 | 27,669 | 28,222 |
| LANDFILL CLOSURE & POST CLOSURE CARE OPERATING COSTS | 39,345 | 110,759 | 112,974 | 115,233 | 157,604 | 160,756 | 163,971 | 167,251 | 170,596 | 174,008 | 177,488 | 190,242 |
| **TOTAL** | 1,324,598 | 1,329,590 | 1,354,597 | 1,381,644 | 1,417,253 | 899,292 | 916,260 | 934,096 | 952,758 | 971,795 | 991,212 | 1,020,223 |
| **North Glengarry** | | | | | | | | | | | | |
| WASTE COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION OPERATING COSTS (CONTRACT) | 256,000 | 261,621 | 266,853 | 272,189 | 277,632 | 283,184 | 288,846 | 294,622 | 300,513 | 306,523 | 312,652 | 318,904 |
| WASTE DISPOSAL OPERATING COSTS (OWN LANDFILL) | 234,105 | 239,160 | 243,943 | 248,821 | 253,797 | 258,872 | 264,049 | 269,329 | 274,715 | 280,209 | 285,812 | 291,528 |
| WASTE DISPOSAL OPERATING COSTS (CONTRACT LANDFILL) | 193,951 | 198,139 | 202,101 | 206,143 | 210,265 | 214,470 | 218,759 | 223,134 | 227,596 | 232,147 | 236,789 | 241,525 |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (CONTRACT) | 170,000 | 173,733 | 177,207 | 180,751 | 184,365 | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION OPERATING COSTS | 775,149 | 791,885 | 761,945 | 777,110 | 792,650 | - | - | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE OPERATING COSTS | 25,000 | 25,500 | 26,010 | 26,530 | 27,061 | 27,602 | 28,154 | 28,717 | 29,291 | 29,877 | 30,475 | 31,084 |
| **TOTAL** | 1,654,205 | 1,690,037 | 1,678,060 | 1,711,544 | 1,745,770 | 784,128 | 799,808 | 815,802 | 832,116 | 848,756 | 865,729 | 883,041 |
| **South Glengarry** | | | | | | | | | | | | |
| WASTE COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION OPERATING COSTS (CONTRACT) | 490,000 | 502,565 | 512,616 | 522,853 | 533,294 | 543,944 | 554,806 | 565,886 | 577,187 | 588,714 | 600,472 | 612,464 |
| WASTE DISPOSAL OPERATING COSTS (OWN LANDFILL) | 280,800 | 272,821 | 278,184 | 283,736 | 289,399 | 295,176 | 152,414 | 154,583 | 157,663 | 160,810 | 164,019 | 167,293 |
| WASTE DISPOSAL OPERATING COSTS (CONTRACT LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (CONTRACT) | 231,240 | 237,170 | 241,913 | 246,744 | 251,671 | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION OPERATING COSTS | 263,760 | 270,637 | 239,634 | 244,198 | 249,070 | - | - | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE OPERATING COSTS | 2,500 | 2,550 | 2,601 | 2,653 | 2,706 | 57,964 | 59,124 | 60,306 | 61,512 | 62,742 | 63,997 | 65,277 |
| **TOTAL** | 1,268,300 | 1,285,742 | 1,274,948 | 1,300,183 | 1,326,141 | 897,084 | 766,344 | 780,775 | 796,362 | 812,266 | 828,488 | 845,034 |
| **North Stormont** | | | | | | | | | | | | |
| WASTE COLLECTION OPERATING COSTS (INHOUSE) | 52,200 | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION OPERATING COSTS (CONTRACT) | 87,500 | 178,883 | 182,703 | 186,355 | 190,080 | 193,879 | 197,755 | 201,605 | 205,635 | 209,746 | 213,939 | 218,216 |
| WASTE DISPOSAL OPERATING COSTS (OWN LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL OPERATING COSTS (CONTRACT LANDFILL) | 112,000 | 114,720 | 116,921 | 119,257 | 121,640 | 124,071 | 126,551 | 129,016 | 131,595 | 134,225 | 136,907 | 139,644 |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | 97,429 | 99,805 | 101,718 | 103,751 | 105,825 | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION OPERATING COSTS | 133,500 | 136,742 | 123,239 | 125,646 | 128,157 | - | - | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE OPERATING COSTS | 36,000 | 36,720 | 37,454 | 38,203 | 38,968 | 39,747 | 40,542 | 41,353 | 42,180 | 43,023 | 43,884 | 44,761 |
| **TOTAL** | 518,629 | 566,870 | 562,035 | 573,213 | 584,669 | 357,698 | 364,847 | 371,974 | 379,409 | 386,994 | 394,730 | 402,621 |
| **South Stormont** | | | | | | | | | | | | |
| WASTE COLLECTION OPERATING COSTS (INHOUSE) | 363,500 | 399,809 | 408,098 | 416,208 | 424,476 | 432,909 | 441,511 | 450,286 | 459,236 | 468,365 | 477,677 | 487,175 |
| WASTE COLLECTION OPERATING COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL OPERATING COSTS (OWN LANDFILL) | 112,720 | 167,356 | 162,974 | 170,362 | 173,795 | 177,247 | 180,760 | 184,351 | 188,015 | 191,752 | - | - |
| WASTE DISPOSAL OPERATING COSTS (CONTRACT LANDFILL) | 167,000 | 172,386 | 175,834 | 179,326 | 182,887 | 186,520 | 190,216 | 193,995 | 197,850 | 201,783 | 208,624 | 212,786 |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | 191,500 | 207,417 | 211,681 | 215,887 | 220,176 | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION OPERATING COSTS | 256,000 | 264,257 | 257,057 | 262,011 | 267,212 | 15,269 | 12,564 | 12,779 | 13,032 | 13,291 | 17,090 | 17,468 |
| LANDFILL CLOSURE & POST CLOSURE CARE OPERATING COSTS | 33,108 | 33,770 | 34,445 | 35,134 | 35,837 | 36,553 | 37,284 | 38,030 | 38,791 | 39,567 | 138,826 | 141,602 |
| **TOTAL** | 1,123,828 | 1,244,994 | 1,250,089 | 1,278,927 | 1,304,382 | 848,498 | 862,335 | 879,441 | 896,924 | 914,757 | 842,217 | 859,031 |

# APPENDIX G: GROSS OPERATING AND CAPITAL COSTS (2020-2044)

## TABLE G1:GROSS OPERATING COSTS BY MUNICIPALITY

| Municipality | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **North Dundas** | | | | | | | | | | | | | |
| WASTE COLLECTION OPERATING COSTS (INHOUSE) | 332,442 | 339,066 | 345,822 | 352,714 | 359,743 | 366,913 | 374,226 | 381,685 | 389,293 | 397,054 | 404,969 | 413,043 | 421,278 |
| WASTE COLLECTION OPERATING COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL OPERATING COSTS (OWN LANDFILL) | 256,787 | 261,904 | 267,122 | 272,446 | 277,875 | 283,414 | 289,063 | 294,824 | 300,701 | 306,696 | 312,810 | 319,047 | 325,408 |
| WASTE DISPOSAL OPERATING COSTS (CONTRACT LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION OPERATING COSTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE OPERATING COSTS | 19,024 | 19,404 | 19,792 | 20,188 | 20,592 | 21,004 | 21,424 | 21,852 | 22,289 | 22,735 | 23,190 | 23,653 | 24,127 |
| **TOTAL** | 608,252 | 620,373 | 632,737 | 645,347 | 658,210 | 671,330 | 684,712 | 698,362 | 712,284 | 726,485 | 740,969 | 755,743 | 770,813 |
| **South Dundas** | | | | | | | | | | | | | |
| WASTE COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION OPERATING COSTS (CONTRACT) | 404,763 | 412,855 | 421,110 | 429,531 | 438,120 | 446,882 | 455,820 | 464,936 | 474,235 | 483,720 | 493,394 | 503,262 | 513,327 |
| WASTE DISPOSAL OPERATING COSTS (OWN LANDFILL) | 411,160 | 419,378 | 427,762 | 436,314 | 445,036 | 453,935 | 463,012 | 461,486 | 470,692 | 480,104 | 489,705 | 499,497 | 509,485 |
| WASTE DISPOSAL OPERATING COSTS (CONTRACT LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION OPERATING COSTS | 28,720 | 29,294 | 29,880 | 30,477 | 31,087 | 31,708 | 32,342 | 32,989 | 33,649 | 34,322 | 35,008 | 35,708 | 36,422 |
| LANDFILL CLOSURE & POST CLOSURE CARE OPERATING COSTS | 194,047 | 197,928 | 201,887 | 205,924 | 114,989 | 117,288 | 119,634 | 132,812 | 135,468 | 138,177 | 140,941 | 143,760 | 146,635 |
| **TOTAL** | 1,038,691 | 1,059,455 | 1,080,639 | 1,102,246 | 1,029,231 | 1,049,814 | 1,070,809 | 1,092,223 | 1,114,044 | 1,136,323 | 1,159,047 | 1,182,226 | 1,205,869 |
| **North Glengarry** | | | | | | | | | | | | | |
| WASTE COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION OPERATING COSTS (CONTRACT) | 325,281 | 331,785 | 338,420 | 345,187 | 352,090 | 359,130 | 366,311 | 373,636 | 381,108 | 388,729 | 396,502 | 404,430 | 412,518 |
| WASTE DISPOSAL OPERATING COSTS (OWN LANDFILL) | 297,358 | 303,304 | 309,370 | 315,556 | 321,867 | 328,311 | 334,877 | 341,574 | 348,404 | 355,371 | 362,478 | 369,727 | 377,120 |
| WASTE DISPOSAL OPERATING COSTS (CONTRACT LANDFILL) | 246,355 | 251,281 | 256,306 | 261,432 | 266,660 | 271,999 | 277,438 | 282,986 | 288,645 | 294,418 | 300,305 | 306,311 | 312,436 |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION OPERATING COSTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE OPERATING COSTS | 31,706 | 32,340 | 32,987 | 33,647 | 34,320 | 35,006 | 35,706 | 36,420 | 37,149 | 37,892 | 38,649 | 39,422 | 40,211 |
| **TOTAL** | 900,699 | 918,711 | 937,082 | 955,822 | 974,935 | 994,447 | 1,014,333 | 1,034,617 | 1,055,306 | 1,076,409 | 1,097,935 | 1,119,890 | 1,142,285 |
| **South Glengarry** | | | | | | | | | | | | | |
| WASTE COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION OPERATING COSTS (CONTRACT) | 624,696 | 637,173 | 649,899 | 662,879 | 676,119 | 689,623 | 703,398 | 717,447 | 731,778 | 746,394 | 761,303 | 776,510 | 792,021 |
| WASTE DISPOSAL OPERATING COSTS (OWN LANDFILL) | 170,632 | 174,037 | 177,511 | 181,054 | 184,667 | 188,353 | 192,113 | 195,948 | 199,859 | 203,849 | 207,918 | 212,069 | 216,302 |
| WASTE DISPOSAL OPERATING COSTS (CONTRACT LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION OPERATING COSTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE OPERATING COSTS | 66,583 | 132,595 | 135,247 | 137,952 | 140,711 | 143,525 | 146,395 | 149,323 | 152,310 | 155,356 | 158,463 | 161,632 | 164,865 |
| **TOTAL** | 861,911 | 943,805 | 962,656 | 981,884 | 1,001,497 | 1,021,501 | 1,041,906 | 1,062,718 | 1,083,946 | 1,105,599 | 1,127,685 | 1,150,211 | 1,173,189 |
| **North Stormont** | | | | | | | | | | | | | |
| WASTE COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION OPERATING COSTS (CONTRACT) | 222,229 | 226,672 | 231,205 | 235,829 | 240,545 | 245,356 | 250,263 | 255,269 | 260,374 | 265,581 | 270,893 | 276,311 | 281,837 |
| WASTE DISPOSAL OPERATING COSTS (OWN LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL OPERATING COSTS (CONTRACT LANDFILL) | 142,219 | 145,063 | 147,964 | 150,922 | 153,940 | 157,018 | 160,158 | 163,361 | 166,628 | 169,960 | 173,359 | 176,826 | 180,362 |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION OPERATING COSTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE OPERATING COSTS | 45,657 | 46,570 | 47,501 | 48,451 | 49,420 | 50,409 | 51,417 | 52,445 | 53,494 | 54,564 | 55,655 | 56,768 | 57,904 |
| **TOTAL** | 410,105 | 418,305 | 426,670 | 435,203 | 443,906 | 452,783 | 461,839 | 471,075 | 480,496 | 490,106 | 499,907 | 509,905 | 520,103 |
| **South Stormont** | | | | | | | | | | | | | |
| WASTE COLLECTION OPERATING COSTS (INHOUSE) | 496,864 | 506,746 | 516,826 | 527,107 | 537,594 | 548,291 | 559,202 | 570,331 | 581,683 | 593,261 | 605,071 | 617,118 | 629,405 |
| WASTE COLLECTION OPERATING COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL OPERATING COSTS (OWN LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL OPERATING COSTS (CONTRACT LANDFILL) | 217,017 | 221,333 | 225,736 | 230,226 | 234,783 | 239,455 | 244,220 | 249,081 | 254,038 | 259,095 | 264,253 | 269,515 | 274,881 |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION OPERATING COSTS | 17,815 | 18,170 | 18,531 | 18,900 | 19,274 | 19,657 | 20,049 | 20,448 | 20,855 | 21,270 | 21,693 | 22,125 | 22,566 |
| LANDFILL CLOSURE & POST CLOSURE CARE OPERATING COSTS | 144,434 | 147,323 | 150,269 | 153,275 | 156,340 | 159,467 | 162,657 | 165,910 | 169,228 | 172,612 | 176,065 | 179,586 | 183,178 |
| **TOTAL** | 876,131 | 893,572 | 911,362 | 929,508 | 947,992 | 966,870 | 986,127 | 1,005,769 | 1,025,804 | 1,046,239 | 1,067,083 | 1,088,344 | 1,110,030 |

## TABLE G2: GROSS CAPITAL COSTS BY MUNICIPALITY — INFLATED

| Municipality | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **North Dundas** | | | | | | | | | | | | |
| WASTE COLLECTION ASSETS/ PROJECTS | 159,000 | - | - | - | - | - | - | 195,550 | 142,385 | - | - | - |
| WASTE DISPOSAL ASSETS/ PROJECTS | 267,000 | 799,345 | 1,202,009 | 28,966 | 390,248 | 59,047 | 29,851 | 530,873 | 33,579 | 32,619 | 33,598 | 64,090 |
| RECYCLING COLLECTION ASSETS/ PROJECTS | 164,000 | - | - | - | - | - | - | - | - | - | - | - |
| OTHER WASTE DIVERSION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| CLOSURE & POST CLOSURE CARE ASSETS REPLACEMENT & OTHER PROJECTS | 87,000 | - | 164,065 | 721,200 | - | - | - | - | - | 453,777 | - | - |
| **TOTAL** | 677,000 | 799,345 | 1,366,074 | 750,166 | 390,248 | 59,047 | 29,851 | 726,423 | 175,964 | 486,396 | 33,598 | 64,090 |
| **South Dundas** | | | | | | | | | | | | |
| WASTE COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL ASSETS/ PROJECTS | 242,000 | 744,932 | - | 546,364 | - | - | - | - | - | - | 325,228 | - |
| RECYCLING COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| OTHER WASTE DIVERSION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| CLOSURE & POST CLOSURE CARE ASSETS REPLACEMENT & OTHER PROJECTS | 63,900 | - | - | - | 1,350,611 | 82,308 | - | - | - | - | - | 1,690,565 |
| **TOTAL** | 305,900 | 744,932 | - | 546,364 | 1,350,611 | 82,308 | - | - | - | - | 325,228 | 1,690,565 |
| **North Glengarry** | | | | | | | | | | | | |
| WASTE COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL ASSETS/ PROJECTS | 218,306 | 328,176 | 26,523 | 27,318 | 28,138 | 28,982 | 29,851 | 30,747 | 31,669 | 32,619 | 410,748 | 5,890,110 |
| RECYCLING COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| OTHER WASTE DIVERSION ASSETS/ PROJECTS | 25,582 | - | 222,789 | - | - | - | - | - | - | - | - | - |
| CLOSURE & POST CLOSURE CARE ASSETS REPLACEMENT & OTHER PROJECTS | 47,700 | 49,131 | 442,554 | 52,123 | 53,687 | 55,297 | 56,956 | 58,665 | 60,425 | 62,238 | 64,105 | 114,476 |
| **TOTAL** | 291,588 | 377,307 | 691,866 | 79,441 | 81,824 | 84,279 | 86,808 | 89,412 | 92,094 | 94,857 | 474,853 | 6,004,586 |
| **South Glengarry** | | | | | | | | | | | | |
| WASTE COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL ASSETS/ PROJECTS | 300,000 | - | - | 286,294 | 812,482 | 551,006 | - | - | - | 63,934 | 563,101 | 145,345 |
| RECYCLING COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| OTHER WASTE DIVERSION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| CLOSURE & POST CLOSURE CARE ASSETS REPLACEMENT & OTHER PROJECTS | - | - | - | - | - | 463,710 | - | - | - | - | - | - |
| **TOTAL** | 300,000 | - | - | 286,294 | 812,482 | 1,014,715 | - | - | - | 63,934 | 563,101 | 145,345 |
| **North Stormont** | | | | | | | | | | | | |
| WASTE COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| OTHER WASTE DIVERSION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| CLOSURE & POST CLOSURE CARE ASSETS REPLACEMENT & OTHER PROJECTS | - | - | - | - | - | - | - | - | - | - | 104,960 | 58,968 |
| **TOTAL** | - | - | - | - | - | - | - | - | - | - | 104,960 | 58,968 |
| **South Stormont** | | | | | | | | | | | | |
| WASTE COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL ASSETS/ PROJECTS | - | 520,150 | 21,218 | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| OTHER WASTE DIVERSION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - |
| CLOSURE & POST CLOSURE CARE ASSETS REPLACEMENT & OTHER PROJECTS | 30,000 | - | - | - | - | - | - | - | - | - | 252,421 | 58,967 |
| **TOTAL** | 30,000 | 520,150 | 21,218 | - | - | - | - | - | - | - | 252,421 | 58,967 |

# APPENDIX G: GROSS OPERATING AND CAPITAL COSTS (2020-2044)

## TABLE G2: GROSS CAPITAL COSTS BY MUNICIPALITY

| Municipality | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **North Dundas** | | | | | | | | | | | | | |
| WASTE COLLECTION ASSETS/ PROJECTS | - | - | 240,502 | - | - | - | - | - | - | 295,787 | - | 221,831 | - |
| WASTE DISPOSAL ASSETS/ PROJECTS | 57,176 | 761,306 | 37,815 | 38,949 | 40,118 | 42,812 | 45,128 | 962,712 | 45,153 | 121,169 | 185,675 | 681,092 | 50,820 |
| RECYCLING COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| OTHER WASTE DIVERSION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CLOSURE & POST CLOSURE CARE ASSETS REPLACEMENT & OTHER PROJECTS | - | - | - | 541,833 | - | - | - | - | - | 646,977 | - | - | - |
| **TOTAL** | 57,176 | 761,306 | 278,317 | 580,783 | 40,118 | 42,812 | 45,128 | 962,712 | 45,153 | 1,063,933 | 185,675 | 902,923 | 50,820 |
| **South Dundas** | | | | | | | | | | | | | |
| WASTE COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | 437,079 | - | - | - | 18,924 |
| RECYCLING COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| OTHER WASTE DIVERSION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CLOSURE & POST CLOSURE CARE ASSETS REPLACEMENT & OTHER PROJECTS | 101,229 | 41,706 | - | - | - | 93,882 | 60,436 | 2,216,256 | 76,940 | - | - | - | 57,731 |
| **TOTAL** | 101,229 | 41,706 | - | - | - | 93,882 | 60,436 | 2,216,256 | 514,019 | - | - | - | 76,655 |
| **North Glengarry** | | | | | | | | | | | | | |
| WASTE COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL ASSETS/ PROJECTS | 35,644 | 36,713 | 37,815 | 38,949 | 40,118 | 41,321 | 42,561 | 129,759 | 190,789 | 46,507 | 47,903 | 49,340 | 50,820 |
| RECYCLING COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| OTHER WASTE DIVERSION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CLOSURE & POST CLOSURE CARE ASSETS REPLACEMENT & OTHER PROJECTS | 68,009 | 70,049 | 72,151 | 150,655 | 76,544 | 101,981 | 81,206 | 83,642 | 124,080 | 88,736 | 91,398 | 94,140 | 96,964 |
| **TOTAL** | 103,653 | 106,762 | 109,965 | 189,605 | 116,662 | 143,302 | 123,767 | 213,402 | 314,868 | 135,243 | 139,301 | 143,480 | 147,784 |
| **South Glengarry** | | | | | | | | | | | | | |
| WASTE COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL ASSETS/ PROJECTS | 1,505,241 | - | - | - | - | 670,636 | - | 159,569 | 1,274,656 | - | - | 800,775 | - |
| RECYCLING COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| OTHER WASTE DIVERSION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CLOSURE & POST CLOSURE CARE ASSETS REPLACEMENT & OTHER PROJECTS | - | 204,292 | - | - | 28,024 | 23,784 | 592,076 | 100,386 | 113,257 | 646,977 | - | 686,378 | - |
| **TOTAL** | 1,505,241 | 204,292 | - | - | 28,024 | 694,421 | 592,076 | 259,955 | 1,387,913 | 646,977 | - | 1,487,153 | - |
| **North Stormont** | | | | | | | | | | | | | |
| WASTE COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| OTHER WASTE DIVERSION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CLOSURE & POST CLOSURE CARE ASSETS REPLACEMENT & OTHER PROJECTS | - | 83,413 | - | 55,308 | - | - | - | - | - | - | - | - | - |
| **TOTAL** | - | 83,413 | - | 55,308 | - | - | - | - | - | - | - | - | - |
| **South Stormont** | | | | | | | | | | | | | |
| WASTE COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| OTHER WASTE DIVERSION ASSETS/ PROJECTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CLOSURE & POST CLOSURE CARE ASSETS REPLACEMENT & OTHER PROJECTS | 30,369 | 62,559 | - | - | - | - | - | - | 76,941 | - | - | - | - |
| **TOTAL** | 30,369 | 62,559 | - | - | - | - | - | - | 76,941 | - | - | - | - |

## APPENDIX G: GROSS OPERATING AND CAPITAL COSTS (2020-2044) and 2021 NPV

### TABLE G3: GROSS CAPITAL & OPERATING COSTS and 2021 NPV

| Municipality | 2020 | NPV at Start of 2021 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **North Dundas** | | | | | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | 418,887 | 5,608,873 | 271,459 | 276,888 | 282,274 | 287,768 | 293,375 | 295,371 | 496,769 | 449,603 | 313,338 | 319,580 |
| WASTE COLLECTION COSTS (CONTRACT) | 187,289 | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 467,950 | 8,192,465 | 1,008,654 | 1,415,497 | 246,625 | 612,162 | 285,304 | 257,995 | 763,540 | 270,881 | 274,649 | 280,450 |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | 438,137 | 1,185,859 | 316,944 | 324,016 | 330,335 | 336,765 | - | - | - | - | - | - |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 67,333 | 450,418 | 127,592 | 119,911 | 122,038 | 124,419 | 2,463 | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 102,000 | 1,981,399 | 15,300 | 179,671 | 737,118 | 16,236 | 16,561 | 16,892 | 17,230 | 17,575 | 471,703 | 18,285 |
| **TOTAL** | 1,681,596 | 17,419,014 | 1,739,949 | 2,315,983 | 1,718,390 | 1,377,351 | 597,703 | 570,259 | 1,277,539 | 738,059 | 1,059,690 | 618,315 |
| **South Dundas** | | | | | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION COSTS (CONTRACT) | 315,000 | 6,072,156 | 326,786 | 333,082 | 339,734 | 346,519 | 353,441 | 360,500 | 367,480 | 374,821 | 382,310 | 389,949 |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 695,153 | 7,854,032 | 1,107,915 | 369,331 | 923,064 | 352,170 | 359,035 | 366,204 | 373,291 | 380,746 | 388,350 | 721,335 |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION COSTS (CONTRACT) | 315,000 | 1,220,399 | 326,786 | 333,082 | 339,734 | 346,519 | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 202,100 | 1,100,349 | 202,276 | 206,128 | 210,242 | 214,440 | 26,060 | 25,585 | 26,075 | 26,596 | 27,127 | 27,669 |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 103,245 | 5,935,669 | 110,759 | 112,974 | 115,233 | 1,508,215 | 243,065 | 163,971 | 167,251 | 170,596 | 174,008 | 177,488 |
| **TOTAL** | 1,630,498 | 22,182,605 | 2,074,522 | 1,354,597 | 1,928,008 | 2,767,864 | 981,601 | 916,260 | 934,096 | 952,758 | 971,795 | 1,316,440 |
| **North Glengarry** | | | | | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION COSTS (CONTRACT) | 256,000 | 4,872,704 | 261,621 | 266,853 | 272,189 | 277,632 | 283,184 | 288,846 | 294,622 | 300,513 | 306,523 | 312,652 |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 452,411 | 9,443,832 | 567,336 | 270,465 | 276,139 | 281,935 | 287,854 | 293,900 | 300,076 | 306,384 | 312,828 | 696,560 |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | 193,951 | 3,690,413 | 198,139 | 202,101 | 206,143 | 210,265 | 214,470 | 218,759 | 223,134 | 227,596 | 232,147 | 236,789 |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION COSTS (CONTRACT) | 170,000 | 649,171 | 173,733 | 177,207 | 180,751 | 184,365 | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 800,731 | 3,040,279 | 791,885 | 984,734 | 777,110 | 792,650 | - | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 72,700 | 1,957,216 | 74,631 | 468,564 | 78,653 | 80,748 | 82,899 | 85,110 | 87,382 | 89,716 | 92,115 | 94,580 |
| **TOTAL** | 1,945,793 | 23,653,615 | 2,067,344 | 2,369,926 | 1,790,985 | 1,827,594 | 868,407 | 886,616 | 905,214 | 924,210 | 943,613 | 1,340,581 |
| **South Glengarry** | | | | | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION COSTS (CONTRACT) | 490,000 | 9,358,088 | 502,565 | 512,616 | 522,853 | 533,294 | 543,944 | 554,806 | 565,886 | 577,187 | 588,714 | 600,472 |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 580,800 | 7,371,921 | 272,821 | 278,184 | 570,030 | 1,101,881 | 846,181 | 152,414 | 154,583 | 157,663 | 224,744 | 727,120 |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION COSTS (CONTRACT) | 231,240 | 886,194 | 237,170 | 241,913 | 246,744 | 251,671 | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 263,760 | 911,780 | 270,637 | 239,634 | 244,198 | 249,070 | - | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 2,500 | 2,711,706 | 2,550 | 2,601 | 2,653 | 2,706 | 521,674 | 59,124 | 60,306 | 61,512 | 62,742 | 63,997 |
| **TOTAL** | 1,568,300 | 21,239,689 | 1,285,742 | 1,274,948 | 1,586,477 | 2,138,623 | 1,911,799 | 766,344 | 780,775 | 796,362 | 876,200 | 1,391,589 |
| **North Stormont** | | | | | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | 52,200 | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION COSTS (CONTRACT) | 87,500 | 3,332,044 | 178,883 | 182,703 | 186,355 | 190,080 | 193,879 | 197,755 | 201,605 | 205,635 | 209,746 | 213,939 |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | 112,000 | 2,132,579 | 114,720 | 116,921 | 119,257 | 121,640 | 124,071 | 126,551 | 129,016 | 131,595 | 134,225 | 136,907 |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | 97,429 | 372,703 | 99,805 | 101,718 | 103,751 | 105,825 | - | - | - | - | - | - |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 133,500 | 466,672 | 136,742 | 123,239 | 125,646 | 128,157 | - | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 36,000 | 873,954 | 36,720 | 37,454 | 38,203 | 38,968 | 39,747 | 40,542 | 41,353 | 42,180 | 43,023 | 148,844 |
| **TOTAL** | 518,629 | 7,177,952 | 566,870 | 562,035 | 573,213 | 584,669 | 357,698 | 364,847 | 371,974 | 379,409 | 386,994 | 499,690 |
| **South Stormont** | | | | | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | 363,500 | 7,443,427 | 399,809 | 408,098 | 416,208 | 424,476 | 432,909 | 441,511 | 450,286 | 459,236 | 468,365 | 477,677 |
| WASTE COLLECTION COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 112,720 | 1,832,106 | 687,506 | 184,192 | 170,362 | 173,795 | 177,247 | 180,760 | 184,351 | 188,015 | 191,752 | - |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | 167,000 | 3,232,088 | 172,386 | 175,834 | 179,326 | 182,887 | 186,520 | 190,216 | 193,995 | 197,850 | 201,783 | 208,624 |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | 191,500 | 775,280 | 207,417 | 211,681 | 215,887 | 220,176 | - | - | - | - | - | - |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 256,000 | 1,156,044 | 264,257 | 257,057 | 262,011 | 267,212 | 15,269 | 12,564 | 12,779 | 13,032 | 13,291 | 17,090 |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 63,108 | 1,803,542 | 33,770 | 34,445 | 35,134 | 35,837 | 36,553 | 37,284 | 38,030 | 38,791 | 39,567 | 391,247 |
| **TOTAL** | 1,153,828 | 16,242,488 | 1,765,144 | 1,271,307 | 1,278,927 | 1,304,382 | 848,498 | 862,335 | 879,441 | 896,924 | 914,757 | 1,094,638 |

# APPENDIX G: GROSS OPERATING AND CAPITAL COSTS (2020-2044) and 2021 NPV

## TABLE G3: GROSS CAPITAL & OPERATING COSTS and 2021 NPV

| Municipality | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **North Dundas** | | | | | | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | 325,947 | 332,442 | 339,066 | 586,324 | 352,714 | 359,743 | 366,913 | 374,226 | 381,685 | 389,293 | 692,841 | 404,969 | 634,874 |
| WASTE COLLECTION COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 315,861 | 313,963 | 1,023,210 | 304,937 | 311,395 | 317,993 | 326,226 | 334,191 | 1,257,536 | 345,854 | 427,864 | 498,485 | 1,000,139 |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 18,651 | 19,024 | 19,404 | 19,792 | 562,021 | 20,592 | 21,004 | 21,424 | 21,852 | 22,289 | 669,712 | 23,190 | 23,653 |
| **TOTAL** | 660,459 | 665,428 | 1,381,680 | 911,053 | 1,226,130 | 698,328 | 714,142 | 729,840 | 1,661,074 | 757,437 | 1,790,418 | 926,644 | 1,658,667 |
| **South Dundas** | | | | | | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION COSTS (CONTRACT) | 397,740 | 404,763 | 412,855 | 421,110 | 429,531 | 438,120 | 446,882 | 455,820 | 464,936 | 474,235 | 483,720 | 493,394 | 503,262 |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 404,019 | 411,160 | 419,378 | 427,762 | 436,314 | 445,036 | 453,935 | 463,012 | 461,486 | 907,771 | 480,104 | 489,705 | 499,497 |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 28,222 | 28,720 | 29,294 | 29,880 | 30,477 | 31,087 | 31,708 | 32,342 | 32,989 | 33,649 | 34,322 | 35,008 | 35,708 |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 1,880,807 | 295,276 | 239,634 | 201,887 | 205,924 | 114,989 | 211,170 | 180,071 | 2,349,068 | 212,408 | 138,177 | 140,941 | 143,760 |
| **TOTAL** | 2,710,788 | 1,139,920 | 1,101,162 | 1,080,639 | 1,102,246 | 1,029,231 | 1,143,696 | 1,131,245 | 3,308,479 | 1,628,063 | 1,136,323 | 1,159,047 | 1,182,226 |
| **North Glengarry** | | | | | | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION COSTS (CONTRACT) | 318,904 | 325,281 | 331,785 | 338,420 | 345,187 | 352,090 | 359,130 | 366,311 | 373,636 | 381,108 | 388,729 | 396,502 | 404,430 |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 6,181,638 | 333,002 | 340,018 | 347,184 | 354,505 | 361,984 | 369,633 | 377,438 | 471,333 | 539,193 | 401,879 | 410,381 | 419,066 |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | 241,525 | 246,355 | 251,281 | 256,306 | 261,432 | 266,660 | 271,999 | 277,438 | 282,986 | 288,645 | 294,418 | 300,305 | 306,311 |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 145,560 | 99,715 | 102,389 | 105,137 | 184,302 | 110,864 | 136,987 | 116,912 | 120,063 | 161,229 | 126,628 | 130,048 | 133,563 |
| **TOTAL** | 6,887,627 | 1,004,352 | 1,025,473 | 1,047,048 | 1,145,426 | 1,091,598 | 1,137,748 | 1,138,100 | 1,248,018 | 1,370,175 | 1,211,653 | 1,237,235 | 1,263,370 |
| **South Glengarry** | | | | | | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION COSTS (CONTRACT) | 612,464 | 624,696 | 637,173 | 649,899 | 662,879 | 676,119 | 689,623 | 703,398 | 717,447 | 731,778 | 746,394 | 761,303 | 776,510 |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 312,638 | 1,675,873 | 174,037 | 177,511 | 181,054 | 184,667 | 858,990 | 192,113 | 355,517 | 1,474,515 | 203,849 | 207,918 | 1,012,844 |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 65,277 | 66,583 | 336,887 | 135,247 | 137,952 | 168,734 | 167,309 | 738,471 | 249,709 | 265,567 | 802,333 | 158,463 | 848,010 |
| **TOTAL** | 990,379 | 2,367,152 | 1,148,097 | 962,656 | 981,884 | 1,029,521 | 1,715,922 | 1,633,982 | 1,322,673 | 2,471,859 | 1,752,576 | 1,127,685 | 2,637,364 |
| **North Stormont** | | | | | | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE COLLECTION COSTS (CONTRACT) | 218,216 | 222,229 | 226,672 | 231,205 | 235,829 | 240,545 | 245,356 | 250,263 | 255,269 | 260,374 | 265,581 | 270,893 | 276,311 |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | 139,644 | 142,219 | 145,063 | 147,964 | 150,922 | 153,940 | 157,018 | 160,158 | 163,361 | 166,628 | 169,960 | 173,359 | 176,826 |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | - | - | - | - | - | - | - | - | - | - | - | - | - |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 103,730 | 45,657 | 129,983 | 47,501 | 103,759 | 49,420 | 50,409 | 51,417 | 52,445 | 53,494 | 54,564 | 55,655 | 56,768 |
| **TOTAL** | 461,590 | 410,105 | 501,718 | 426,670 | 490,510 | 443,906 | 452,783 | 461,839 | 471,075 | 480,496 | 490,106 | 499,907 | 509,905 |
| **South Stormont** | | | | | | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | 487,175 | 496,864 | 506,746 | 516,826 | 527,107 | 537,594 | 548,291 | 559,202 | 570,331 | 581,683 | 593,261 | 605,071 | 617,118 |
| WASTE COLLECTION COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | 212,786 | 217,017 | 221,333 | 225,736 | 230,226 | 234,783 | 239,455 | 244,220 | 249,081 | 254,038 | 259,095 | 264,253 | 269,515 |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 17,468 | 17,815 | 18,170 | 18,531 | 18,900 | 19,274 | 19,657 | 20,049 | 20,448 | 20,855 | 21,270 | 21,693 | 22,125 |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 200,570 | 174,803 | 209,882 | 150,269 | 153,275 | 156,340 | 159,467 | 162,657 | 165,910 | 246,169 | 172,612 | 176,065 | 179,586 |
| **TOTAL** | 917,999 | 906,500 | 956,131 | 911,362 | 929,508 | 947,992 | 966,870 | 986,127 | 1,005,769 | 1,102,744 | 1,046,239 | 1,067,083 | 1,088,344 |

## Table G4: 2021 NPV of ANNUAL REVENUES

| Municipality | 2020 | NPV to Start of 2021 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **North Dundas** | | | | | | | | | | | | | |
| WASTE DISPOSAL REVENUES | (136,500) | (2,593,257) | (139,230) | (142,015) | (144,855) | (147,752) | (150,707) | (153,721) | (156,796) | (159,932) | (163,130) | (166,393) | (169,721) |
| WASTE DIVERSION REVENUES | (145,965) | (502,869) | (147,456) | (132,719) | (135,373) | (138,080) | - | - | - | - | - | - | - |
| **TOTAL** | (282,465) | (3,096,125) | (286,686) | (274,733) | (280,228) | (285,832) | (150,707) | (153,721) | (156,796) | (159,932) | (163,130) | (166,393) | (169,721) |
| **South Dundas** | | | | | | | | | | | | | |
| WASTE DISPOSAL REVENUES | (135,000) | (2,564,760) | (137,700) | (140,454) | (143,263) | (146,128) | (149,051) | (152,032) | (155,073) | (158,174) | (161,337) | (164,564) | (167,856) |
| WASTE DIVERSION REVENUES | (98,604) | (504,903) | (100,576) | (102,588) | (104,639) | (106,732) | (9,385) | (9,572) | (9,764) | (9,959) | (10,158) | (10,361) | (10,569) |
| **TOTAL** | (233,604) | (3,069,663) | (238,276) | (243,042) | (247,902) | (252,860) | (158,436) | (161,604) | (164,836) | (168,133) | (171,496) | (174,926) | (178,424) |
| **North Glengarry** | | | | | | | | | | | | | |
| WASTE DISPOSAL REVENUES | (16,500) | (313,471) | (16,830) | (17,167) | (17,510) | (17,860) | (18,217) | (18,582) | (18,953) | (19,332) | (19,719) | (20,113) | (20,516) |
| WASTE DIVERSION REVENUES | (328,260) | (1,201,034) | (332,785) | (323,835) | (330,312) | (336,918) | - | - | - | - | - | - | - |
| **TOTAL** | (344,760) | (1,514,505) | (349,615) | (341,002) | (347,822) | (354,778) | (18,217) | (18,582) | (18,953) | (19,332) | (19,719) | (20,113) | (20,516) |
| **South Glengarry** | | | | | | | | | | | | | |
| WASTE DISPOSAL REVENUES | (97,500) | (1,852,326) | (99,450) | (101,439) | (103,468) | (105,537) | (107,648) | (109,801) | (111,997) | (114,237) | (116,522) | (118,852) | (121,229) |
| WASTE DIVERSION REVENUES | (300) | (1,143) | (306) | (312) | (318) | (325) | - | - | - | - | - | - | - |
| **TOTAL** | (97,800) | (1,853,470) | (99,756) | (101,751) | (103,786) | (105,862) | (107,648) | (109,801) | (111,997) | (114,237) | (116,522) | (118,852) | (121,229) |
| **North Stormont** | | | | | | | | | | | | | |
| WASTE DISPOSAL REVENUES | (10,000) | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DIVERSION REVENUES | (104,000) | (447,738) | (106,080) | (101,959) | (103,998) | (106,078) | (4,968) | (5,068) | (5,169) | (5,272) | (5,378) | (5,485) | (5,595) |
| **TOTAL** | (114,000) | (447,738) | (106,080) | (101,959) | (103,998) | (106,078) | (4,968) | (5,068) | (5,169) | (5,272) | (5,378) | (5,485) | (5,595) |
| **South Stormont** | | | | | | | | | | | | | |
| WASTE DISPOSAL REVENUES | (271,400) | (501,553) | (26,928) | (27,467) | (28,016) | (28,576) | (29,148) | (29,731) | (30,325) | (30,932) | (31,550) | (32,181) | (32,825) |
| WASTE DIVERSION REVENUES | (161,625) | (616,010) | (164,858) | (168,155) | (171,518) | (174,948) | - | - | - | - | - | - | - |
| **TOTAL** | (433,025) | (1,117,563) | (191,786) | (195,621) | (199,534) | (203,524) | (29,148) | (29,731) | (30,325) | (30,932) | (31,550) | (32,181) | (32,825) |

## Table G4: 2021 NPV of ANNUAL REVENUES

| Municipality | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **North Dundas** | | | | | | | | | | | | | |
| WASTE DISPOSAL REVENUES | (173,115) | (176,577) | (180,109) | (183,711) | (187,385) | (191,133) | (194,956) | (198,855) | (202,832) | (206,888) | (211,026) | (215,247) | (219,552) |
| WASTE DIVERSION REVENUES | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **TOTAL** | (173,115) | (176,577) | (180,109) | (183,711) | (187,385) | (191,133) | (194,956) | (198,855) | (202,832) | (206,888) | (211,026) | (215,247) | (219,552) |
| **South Dundas** | | | | | | | | | | | | | |
| WASTE DISPOSAL REVENUES | (171,213) | (174,637) | (178,130) | (181,692) | (185,326) | (189,033) | (192,813) | (196,670) | (200,603) | (204,615) | (208,707) | (212,881) | (217,139) |
| WASTE DIVERSION REVENUES | (10,780) | (10,996) | (11,216) | (11,440) | (11,669) | (11,902) | (12,140) | (12,383) | (12,631) | (12,883) | (13,141) | (13,404) | (13,672) |
| **TOTAL** | (181,993) | (185,633) | (189,345) | (193,132) | (196,995) | (200,935) | (204,953) | (209,052) | (213,233) | (217,498) | (221,848) | (226,285) | (230,811) |
| **North Glengarry** | | | | | | | | | | | | | |
| WASTE DISPOSAL REVENUES | (20,926) | (21,345) | (21,771) | (22,207) | (22,651) | (23,104) | (23,566) | (24,037) | (24,518) | (25,008) | (25,509) | (26,019) | (26,539) |
| WASTE DIVERSION REVENUES | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **TOTAL** | (20,926) | (21,345) | (21,771) | (22,207) | (22,651) | (23,104) | (23,566) | (24,037) | (24,518) | (25,008) | (25,509) | (26,019) | (26,539) |
| **South Glengarry** | | | | | | | | | | | | | |
| WASTE DISPOSAL REVENUES | (123,654) | (126,127) | (128,649) | (131,222) | (133,847) | (136,524) | (139,254) | (142,039) | (144,880) | (147,777) | (150,733) | (153,748) | (156,823) |
| WASTE DIVERSION REVENUES | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **TOTAL** | (123,654) | (126,127) | (128,649) | (131,222) | (133,847) | (136,524) | (139,254) | (142,039) | (144,880) | (147,777) | (150,733) | (153,748) | (156,823) |
| **North Stormont** | | | | | | | | | | | | | |
| WASTE DISPOSAL REVENUES | - | - | - | - | - | - | - | - | - | - | - | - | - |
| WASTE DIVERSION REVENUES | (5,707) | (5,821) | (5,938) | (6,056) | (6,178) | (6,301) | (6,427) | (6,556) | (6,687) | (6,820) | (6,957) | (7,096) | (7,238) |
| **TOTAL** | (5,707) | (5,821) | (5,938) | (6,056) | (6,178) | (6,301) | (6,427) | (6,556) | (6,687) | (6,820) | (6,957) | (7,096) | (7,238) |
| **South Stormont** | | | | | | | | | | | | | |
| WASTE DISPOSAL REVENUES | (33,482) | (34,151) | (34,834) | (35,531) | (36,242) | (36,966) | (37,706) | (38,460) | (39,229) | (40,014) | (40,814) | (41,630) | (42,463) |
| WASTE DIVERSION REVENUES | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **TOTAL** | (33,482) | (34,151) | (34,834) | (35,531) | (36,242) | (36,966) | (37,706) | (38,460) | (39,229) | (40,014) | (40,814) | (41,630) | (42,463) |

| Table G5: COSTS OVER STUDY PERIOD - NET PRESENT VALUE (NPV) AT START OF: 2021 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Municipality** | **NPV GROSS COSTS** | **LESS NPV REVENUES** | **LESS CURRENT RESERVES** | **NPV COSTS** | **NPV COST PER CAPITA** | **NPV COST PER STOP** | **NPV COST PER TONNE DISPOSED** | **NPV COST PER TONNE DIVERTED** |
| **North Dundas** | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | 5,608,873 | | | 5,608,873 | 26 | 73 | | |
| WASTE COLLECTION COSTS (CONTRACT) | - | | | - | - | - | | |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 8,192,465 | (2,593,257) | (360,244) | 5,238,965 | | | 144 | |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | - | | | - | | | | |
| RECYCLING COLLECTION COSTS (INHOUSE) | 1,185,859 | | | 1,185,859 | 21 | 58 | | |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | | | - | - | - | | |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 450,418 | (502,869) | (157,364) | (209,814) | | | | (73) |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 1,981,399 | | (170,985) | 1,810,414 | | | 50 | |
| **TOTAL** | **17,419,014** | **(3,096,125)** | **(688,592)** | **13,634,296** | | | | |
| **South Dundas** | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | - | | | - | - | - | | |
| WASTE COLLECTION COSTS (CONTRACT) | 6,072,156 | | | 6,072,156 | 33 | 79 | | |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 7,854,032 | (2,564,760) | (246,367) | 5,042,905 | | | 74 | |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | - | | | - | | | | |
| RECYCLING COLLECTION COSTS (INHOUSE) | - | | | - | - | - | | |
| RECYCLING COLLECTION COSTS (CONTRACT) | 1,220,399 | | | 1,220,399 | 24 | 56 | | |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 1,100,349 | (504,903) | - | 595,446 | | | | 248 |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 5,935,669 | | - | 5,935,669 | | | 87 | |
| **TOTAL** | **22,182,605** | **(3,069,663)** | **(246,367)** | **18,866,576** | | | | |
| **North Glengarry** | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | - | | | - | - | - | | |
| WASTE COLLECTION COSTS (CONTRACT) | 4,872,704 | | | 4,872,704 | 30 | 86 | | |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 9,443,832 | (313,471) | (1,801,113) | 7,329,248 | | | 430 | |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | 3,690,413 | | | 3,690,413 | | | 104 | |
| RECYCLING COLLECTION COSTS (INHOUSE) | - | | | - | - | - | | |
| RECYCLING COLLECTION COSTS (CONTRACT) | 649,171 | | | 649,171 | 14 | 40 | | |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 3,040,279 | (1,201,034) | - | 1,839,245 | | | | 538 |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 1,957,216 | | - | 1,957,216 | | | 37 | |
| **TOTAL** | **23,653,615** | **(1,514,505)** | **(1,801,113)** | **20,337,997** | | | | |
| **South Glengarry** | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | - | | | - | - | - | | |
| WASTE COLLECTION COSTS (CONTRACT) | 9,358,088 | | | 9,358,088 | 42 | 97 | | |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 7,371,921 | (1,852,326) | (165,000) | 5,354,595 | | | 110 | |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | - | | | - | | | | |
| RECYCLING COLLECTION OPERATING COSTS (INHOUSE) | - | | | - | - | - | | |
| RECYCLING COLLECTION COSTS (CONTRACT) | 886,194 | | | 886,194 | 14 | 33 | | |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 911,780 | (1,143) | - | 910,636 | | | | 285 |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 2,711,706 | | - | 2,711,706 | | | 56 | |
| **TOTAL** | **21,239,689** | **(1,853,470)** | **(165,000)** | **19,221,219** | | | | |
| **North Stormont** | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | - | | | - | - | - | | |
| WASTE COLLECTION COSTS (CONTRACT) | 3,332,044 | | | 3,332,044 | 29 | 79 | | |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | - | - | - | - | | | | |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | 2,132,579 | | | 2,132,579 | | | 82 | |
| RECYCLING COLLECTION COSTS (INHOUSE) | 372,703 | | | 372,703 | 11 | 31 | | |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | | | - | - | - | | |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 466,672 | (447,738) | - | 18,934 | | | | 11 |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 873,954 | | (20,237) | 853,717 | | | 33 | |
| **TOTAL** | **7,177,952** | **(447,738)** | **(20,237)** | **6,709,977** | | | | |
| **South Stormont** | | | | | | | | |
| WASTE COLLECTION COSTS (INHOUSE) | 7,443,427 | | | 7,443,427 | 31 | 77 | | |
| WASTE COLLECTION COSTS (CONTRACT) | - | | | - | - | - | | |
| WASTE DISPOSAL COSTS (OWN LANDFILL) | 1,832,106 | (501,553) | (242,673) | 1,087,880 | | | 387 | |
| WASTE DISPOSAL COSTS (CONTRACT LANDFILL) | 3,232,088 | | | 3,232,088 | | | 62 | |
| RECYCLING COLLECTION COSTS (INHOUSE) | 775,280 | | | 775,280 | 12 | 30 | | |
| RECYCLING COLLECTION COSTS (CONTRACT) | - | | | - | - | - | | |
| RECYCLING PROCESSING & OTHER WASTE DIVERSION COSTS | 1,156,044 | (616,010) | (5,500) | 534,534 | | | | 145 |
| LANDFILL CLOSURE & POST CLOSURE CARE COSTS | 1,803,542 | | (30,000) | 1,773,542 | | | 32 | |
| **TOTAL** | **16,242,488** | **(1,117,563)** | **(278,173)** | **14,846,752** | | | | |

# Appendix H

## Annual Unit Cost Projections (2020- 2044)

# APPENDIX H: 2020-2024 UNIT COST PROJECTIONS

## TABLE H1: WASTE COLLECTION UNIT COSTS

| Municipality | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Waste Collection In-House Cost per Capita** | | | | | | | | | | | | | |
| North Dundas | 34 | 22 | 22 | 22 | 22 | 22 | 22 | 36 | 33 | 23 | 23 | 23 | 23 |
| South Dundas | - | - | - | - | - | - | - | - | - | - | - | - | - |
| North Glengarry | - | - | - | - | - | - | - | - | - | - | - | - | - |
| South Glengarry | - | - | - | - | - | - | - | - | - | - | - | - | - |
| North Stormont | 7 | - | - | - | - | - | - | - | - | - | - | - | - |
| South Stormont | 26 | 28 | 28 | 28 | 29 | 29 | 29 | 29 | 30 | 30 | 30 | 30 | 31 |
| **Waste Collection In-house Cost per Curbside Stop** | | | | | | | | | | | | | |
| North Dundas | 97 | 62 | 61 | 61 | 61 | 61 | 61 | 101 | 91 | 63 | 63 | 64 | 65 |
| South Dundas | - | - | - | - | - | - | - | - | - | - | - | - | - |
| North Glengarry | - | - | - | - | - | - | - | - | - | - | - | - | - |
| South Glengarry | - | - | - | - | - | - | - | - | - | - | - | - | - |
| North Stormont | 19 | - | - | - | - | - | - | - | - | - | - | - | - |
| South Stormont | 65 | 71 | 71 | 72 | 72 | 73 | 74 | 74 | 75 | 76 | 76 | 77 | 78 |
| **Waste Collection Contract Cost per Capita** | | | | | | | | | | | | | |
| North Dundas | 15 | - | - | - | - | - | - | - | - | - | - | - | - |
| South Dundas | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 31 | 32 | 32 | 33 | 33 |
| North Glengarry | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 | 30 | 30 |
| South Glengarry | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 39 | 40 | 40 | 41 | 41 | 42 |
| North Stormont | 12 | 24 | 25 | 25 | 26 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 29 |
| South Stormont | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Waste Collection Contract Cost per Curbside Stop** | | | | | | | | | | | | | |
| North Dundas | 44 | - | - | - | - | - | - | - | - | - | - | - | - |
| South Dundas | 65 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 75 | 76 | 77 | 78 | 79 |
| North Glengarry | 70 | 72 | 73 | 74 | 75 | 77 | 78 | 80 | 81 | 83 | 84 | 86 | 87 |
| South Glengarry | 82 | 84 | 85 | 86 | 87 | 89 | 90 | 91 | 93 | 94 | 95 | 97 | 98 |
| North Stormont | 32 | 66 | 67 | 68 | 69 | 71 | 72 | 73 | 74 | 75 | 77 | 78 | 79 |
| South Stormont | - | - | - | - | - | - | - | - | - | - | - | - | - |

# APPENDIX H: 2020-2024 UNIT COST PROJECTIONS

## TABLE H1: WASTE COLLECTION UNIT COSTS

| Municipality | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Waste Collection In-House Cost per Capita** | | | | | | | | | | | | |
| North Dundas | 24 | 41 | 24 | 25 | 25 | 25 | 26 | 26 | 46 | 27 | 41 | 27 |
| South Dundas | - | - | - | - | - | - | - | - | - | - | - | - |
| North Glengarry | - | - | - | - | - | - | - | - | - | - | - | - |
| South Glengarry | - | - | - | - | - | - | - | - | - | - | - | - |
| North Stormont | - | - | - | - | - | - | - | - | - | - | - | - |
| South Stormont | 31 | 31 | 32 | 32 | 32 | 33 | 33 | 33 | 34 | 34 | 34 | 35 |
| **Waste Collection In-house Cost per Curbside Stop** | | | | | | | | | | | | |
| North Dundas | 66 | 113 | 67 | 68 | 69 | 70 | 70 | 71 | 126 | 73 | 113 | 75 |
| South Dundas | - | - | - | - | - | - | - | - | - | - | - | - |
| North Glengarry | - | - | - | - | - | - | - | - | - | - | - | - |
| South Glengarry | - | - | - | - | - | - | - | - | - | - | - | - |
| North Stormont | - | - | - | - | - | - | - | - | - | - | - | - |
| South Stormont | 78 | 79 | 80 | 81 | 82 | 82 | 83 | 84 | 85 | 86 | 87 | 88 |
| **Waste Collection Contract Cost per Capita** | | | | | | | | | | | | |
| North Dundas | - | - | - | - | - | - | - | - | - | - | - | - |
| South Dundas | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 39 | 40 | 41 | 41 |
| North Glengarry | 31 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 |
| South Glengarry | 43 | 43 | 44 | 45 | 45 | 46 | 46 | 47 | 48 | 49 | 49 | 50 |
| North Stormont | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 34 | 34 | 35 | 36 | 36 |
| South Stormont | - | - | - | - | - | - | - | - | - | - | - | - |
| **Waste Collection Contract Cost per Curbside Stop** | | | | | | | | | | | | |
| North Dundas | - | - | - | - | - | - | - | - | - | - | - | - |
| South Dundas | 81 | 82 | 84 | 85 | 87 | 88 | 90 | 91 | 93 | 95 | 96 | 98 |
| North Glengarry | 89 | 90 | 92 | 94 | 95 | 97 | 99 | 101 | 102 | 104 | 106 | 108 |
| South Glengarry | 100 | 101 | 103 | 104 | 106 | 107 | 109 | 110 | 112 | 114 | 115 | 117 |
| North Stormont | 81 | 82 | 84 | 85 | 87 | 89 | 90 | 92 | 94 | 95 | 97 | 99 |
| South Stormont | - | - | - | - | - | - | - | - | - | - | - | - |

## TABLE H2: RECYCLING COLLECTION UNIT COSTS

| Municipality/ Collaboration Option | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|---|
| **Recycling Collection In-House Cost per Capita** | | | | | | |
| North Dundas | 36 | 26 | 26 | 26 | 26 | - |
| South Dundas | - | - | - | - | - | - |
| North Glengarry | - | - | - | - | - | - |
| South Glengarry | - | - | - | - | - | - |
| North Stormont | 13 | 14 | 14 | 14 | 14 | - |
| South Stormont | 14 | 14 | 15 | 15 | 15 | - |
| **Recycling Collection In-house Cost per Curbside Stop** | | | | | | |
| North Dundas | 102 | 72 | 72 | 72 | 71 | - |
| South Dundas | - | - | - | - | - | - |
| North Glengarry | - | - | - | - | - | - |
| South Glengarry | - | - | - | - | - | - |
| North Stormont | 36 | 37 | 37 | 38 | 39 | - |
| South Stormont | 34 | 37 | 37 | 37 | 38 | - |
| **Recycling Collection Contract Cost per Capita** | | | | | | |
| North Dundas | - | - | - | - | - | - |
| South Dundas | 28 | 28 | 29 | 29 | 30 | - |
| North Glengarry | 16 | 16 | 17 | 17 | 17 | - |
| South Glengarry | 17 | 17 | 17 | 17 | 18 | - |
| North Stormont | - | - | - | - | - | - |
| South Stormont | - | - | - | - | - | - |
| **Recycling Collection Contract Cost per Curbside Stop** | | | | | | |
| North Dundas | - | - | - | - | - | - |
| South Dundas | 65 | 67 | 68 | 69 | 70 | - |
| North Glengarry | 47 | 48 | 48 | 49 | 50 | - |
| South Glengarry | 39 | 40 | 40 | 41 | 41 | - |
| North Stormont | - | - | - | - | - | - |
| South Stormont | - | - | - | - | - | - |

## APPENDIX H: 2020-2024 UNIT COST PROJECTIONS

### TABLE H3: WASTE DISPOSAL UNIT COSTS

| Municipality/ Collaboration Option | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Waste Disposal (OWN LANDFILL) Cost per Tonne** | | | | | | | | | | | | | |
| North Dundas | 224 | 473 | 651 | 111 | 270 | 124 | 111 | 326 | 115 | 115 | 117 | 131 | 129 |
| South Dundas | 162 | 257 | 85 | 212 | 80 | 82 | 83 | 84 | 85 | 87 | 160 | 89 | 91 |
| North Glengarry | 411 | 515 | 245 | 250 | 255 | 260 | 265 | 270 | 275 | 280 | 624 | 5,525 | 297 |
| South Glengarry | 194 | 90 | 92 | 187 | 359 | 274 | 49 | 49 | 50 | 71 | 229 | 98 | 522 |
| North Stormont | - | - | - | - | - | - | - | - | - | - | - | - | - |
| South Stormont | 315 | 1,898 | 502 | 459 | 463 | 467 | 471 | 475 | 479 | 483 | - | - | - |
| **Waste Disposal (CONTRACT LANDFILL) Cost per Tonne** | | | | | | | | | | | | | |
| North Dundas | - | - | - | - | - | - | - | - | - | - | - | - | - |
| South Dundas | - | - | - | - | - | - | - | - | - | - | - | - | - |
| North Glengarry | 85 | 87 | 88 | 90 | 91 | 93 | 95 | 97 | 98 | 100 | 102 | 104 | 106 |
| South Glengarry | - | - | - | - | - | - | - | - | - | - | - | - | - |
| North Stormont | 67 | 69 | 70 | 71 | 72 | 73 | 74 | 76 | 77 | 78 | 80 | 81 | 82 |
| South Stormont | 59 | 60 | 60 | 61 | 61 | 62 | 62 | 63 | 63 | 64 | 58 | 59 | 59 |

## TABLE H3: WASTE DISPOSAL UNIT COSTS

| Municipality/ Collaboration Option | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Waste Disposal (OWN LANDFILL) Cost per Tonne** | | | | | | | | | | | | |
| North Dundas | 417 | 123 | 125 | 127 | 129 | 131 | 491 | 134 | 165 | 191 | 380 | 142 |
| South Dundas | 92 | 94 | 96 | 98 | 99 | 101 | 101 | 197 | 104 | 106 | 108 | 114 |
| North Glengarry | 303 | 309 | 315 | 321 | 327 | 334 | 416 | 475 | 354 | 361 | 368 | 375 |
| South Glengarry | 54 | 55 | 55 | 56 | 260 | 58 | 107 | 440 | 60 | 61 | 297 | 63 |
| North Stormont | - | - | - | - | - | - | - | - | - | - | - | - |
| South Stormont | - | - | - | - | - | - | - | - | - | - | - | - |
| **Waste Disposal (CONTRACT LANDFILL) Cost per Tonne** | | | | | | | | | | | | |
| North Dundas | - | - | - | - | - | - | - | - | - | - | - | - |
| South Dundas | - | - | - | - | - | - | - | - | - | - | - | - |
| North Glengarry | 108 | 110 | 112 | 114 | 116 | 118 | 120 | 123 | 125 | 127 | 129 | 132 |
| South Glengarry | - | - | - | - | - | - | - | - | - | - | - | - |
| North Stormont | 84 | 85 | 87 | 89 | 90 | 92 | 94 | 96 | 97 | 99 | 101 | 103 |
| South Stormont | 60 | 60 | 61 | 61 | 62 | 63 | 63 | 64 | 65 | 65 | 66 | 67 |

**TABLE H4: WASTE DIVERSION UNIT COSTS**

| Municipality | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Recycling Processing & Other Diversion Costs per Tonne** | | | | | | | | | | | | |
| North Dundas | 111 | 205 | 189 | 188 | 188 | 4 | - | - | - | - | - | - |
| South Dundas | 381 | 379 | 385 | 390 | 396 | 48 | 47 | 47 | 48 | 49 | 50 | 50 |
| North Glengarry | 1,047 | 1,034 | 1,283 | 1,011 | 1,030 | - | - | - | - | - | - | - |
| South Glengarry | 374 | 381 | 335 | 340 | 345 | - | - | - | - | - | - | - |
| North Stormont | 334 | 340 | 306 | 311 | 316 | - | - | - | - | - | - | - |
| South Stormont | 320 | 326 | 314 | 316 | 319 | 18 | 15 | 15 | 15 | 15 | 19 | 19 |

**TABLE H4: WASTE DIVERSION UNIT COSTS**

| Municipality | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Recycling Processing & Other Diversion Costs per Tonne** | | | | | | | | | | | | | |
| North Dundas | - | - | - | - | - | - | - | - | - | - | - | - | - |
| South Dundas | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 64 |
| North Glengarry | - | - | - | - | - | - | - | - | - | - | - | - | - |
| South Glengarry | - | - | - | - | - | - | - | - | - | - | - | - | - |
| North Stormont | - | - | - | - | - | - | - | - | - | - | - | - | - |
| South Stormont | 19 | 20 | 20 | 20 | 20 | 20 | 21 | 21 | 21 | 21 | 21 | 22 | 22 |

**TABLE H5: LANDFILL CLOSURE & POST CLOSURE CARE UNIT COSTS**

| Municipality | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Landfill Closure & Post Closure Care Costs per Tonne** | | | | | | | | | | | | |
| North Dundas | 49 | 7 | 83 | 332 | 7 | 7 | 7 | 7 | 7 | 198 | 8 | 8 |
| South Dundas | 24 | 26 | 26 | 26 | 345 | 55 | 37 | 38 | 38 | 39 | 39 | 416 |
| North Glengarry | 21 | 22 | 138 | 23 | 24 | 24 | 25 | 26 | 26 | 27 | 28 | 42 |
| South Glengarry | 1 | 1 | 1 | 1 | 1 | 169 | 19 | 19 | 20 | 20 | 20 | 20 |
| North Stormont | 22 | 22 | 22 | 23 | 23 | 23 | 24 | 24 | 25 | 25 | 87 | 60 |
| South Stormont | 20 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 109 | 55 |

**TABLE H5: LANDFILL CLOSURE & POST CLOSURE CARE UNIT COSTS**

| Municipality | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Landfill Closure & Post Closure Care Costs per Tonne** | | | | | | | | | | | | | |
| North Dundas | 8 | 8 | 8 | 226 | 8 | 8 | 8 | 9 | 9 | 258 | 9 | 9 | 9 |
| South Dundas | 65 | 53 | 44 | 45 | 25 | 46 | 39 | 512 | 46 | 30 | 31 | 31 | 44 |
| North Glengarry | 29 | 30 | 30 | 53 | 32 | 39 | 34 | 34 | 46 | 36 | 37 | 38 | 39 |
| South Glengarry | 21 | 104 | 42 | 42 | 51 | 51 | 223 | 75 | 79 | 238 | 47 | 249 | 48 |
| North Stormont | 26 | 75 | 27 | 60 | 28 | 29 | 30 | 30 | 31 | 31 | 32 | 32 | 33 |
| South Stormont | 48 | 57 | 40 | 40 | 41 | 41 | 42 | 42 | 62 | 43 | 43 | 44 | 44 |

# Appendix I

## Municipal Responses to Questions

## APPENDIX I: MUNICIPAL RESPONSES TO QUESTIONS

| North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont | Summary & Comments |
|---|---|---|---|---|---|---|
| **1. Which waste management collaboration opportunities interest your Municipality the most?** | | | | | | |
| • Joint communication efforts – to allow for consistent messaging across SDG<br>• Waste diversion projects such as organics, composters, electronic waste<br>• Joint tendering, i.e. Collection and recycling contracts; engineering and studies | • Currently, our waste collection is via third-party contract. As we have minimal resources in-house, we would certainly benefit from opportunities for collaboration in order to develop stronger control and communications, as well as the opportunity to share resources. | • Leaf & Yard waste possibly leading to organics<br>• Shared Compost Site<br>• Public Education - Brochures/ Recycling website<br>• Bulk Purchases - blue boxes<br>• Shipping and processing recyclables | • Public Education<br>• Innovative opportunities for recycling (looking at neighbouring municipalities i.e. City of Cornwall recycled wrapping paper)<br>• Dedicated customer service line for garbage and recycling inquiries<br>• composting opportunities<br>• waste disposal and collection (Public vs. Private) | • Open to all opportunities for collaboration with the exception of waste disposal. The Township has a new 20-year agreement with GFL for waste disposal | • Public Education<br>• Curbside collection/disposal efficiencies<br>• Leaf and yard waste disposal<br>• Decisions required for Recycling transition. | • Support for joint:<br>✓ public education / communication<br>✓ transitioning of blue box program to producers<br>✓ L&Y waste composting and organics programs<br>✓ purchasing/tendering for collection and engineering services<br>✓ investigating innovative waste diversion opportunities<br>✓ use (sharing) of resources<br>• Some support for improving disposal efficiencies (consideration of public vs. private). North Stormont already has a new 20-year agreement with GFL. |
| **2. What information does your Council need to be able to decide whether to support regional and/or inter-municipal collaboration efforts?** | | | | | | |
| • Service levels and price – service levels cannot be reduced. Joint tendering "should" reduce costs.<br>• Individual municipalities will remain responsible for their services, i.e. landfills, collection, and must ensure they are an active participant in any discussions which impact the environmental requirements or service to taxpayers. | • We are concerned about impending changes to legislation regarding producer responsibility and what that is going to look like moving forward. It is challenging to make decisions when we are seemingly at a fork in the road, with a lot of questions up in the air, as our current contracts for waste collection services are nearing expiration. | • Expansion Approval for Boyne Roads Landfill - Yes/No<br>• Cost to North Dundas to Implement<br>• Separate Cost for Commercial | • Diversion program available<br>• Advancements in technology (comparison with other countries)<br>• Providing costing scenarios i.e. if Counties were to take over garbage the cost of the capital purchase<br>• Collaboration interest from lower and upper tier government (how many are on board)<br>• Comparison of service levels<br>• Long-term costing for | • No specific information indicated | • Reliable financial information, including strong financial plan that includes cost benefit over long term (+10yrs) | • Information required:<br>✓ Comparison of service levels (already provided in Phases 1&2 Report -Appendix D)<br>✓ Levels of service to be same or better across all municipalities<br>✓ The implications of O.Reg. 391/21 (Recycling transition to producers)<br>✓ Cost of landfill expansions<br>✓ Cost of private sector disposal<br>✓ Cost benefit analysis of waste management options over long-term (10+ years) |

| North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont | Summary & Comments |
|---|---|---|---|---|---|---|
| | | | options/ recommendations<br>• Current practices/ models | | | ✓ Costs if SDG assumes responsibility for waste management<br>✓ Industry best practices<br>✓ technology advancements |
| **3. Does your Council have any input or preference regarding who should lead the coordination of collaboration efforts going forward (e.g. A specific municipality, a group of municipalities, SDG, joint committee or board)** | | | | | | |
| • A joint committee made up of representatives from each municipality. The committee should have terms of reference and mandate. They should report back to the CAO group and/or Council. | • Since our current waste management services are contracted out to a third-party, our residents are not attached to who is collecting waste or coordinating waste management strategies so long as the level of service remains the same (or improved). | • Working group consisting of one individual from each municipality with the Counties as lead | • A committee that consists of Counties, Cornwall and representation from each lower tier municipality | • Open to all options | • Joint Committee or Board comprised of local municipal staff; it would be beneficial to have a couple of political representatives from SDG County Council should the effort move beyond public education initiatives. | • Support for joint committee with representation from each municipality and Cornwall (subject to approval by Cornwall). Representatives may be staff and Councillors<br>• Support for SDG as lead<br>• Terms of Reference required<br>• Service levels must be same or better under joint committee |
| **4. Does your municipality have any other items or issues that need to be considered within the analysis of collaboration opportunities?** | | | | | | |
| • The City of Cornwall should be included in the collaboration efforts.<br>• Alternative methods for waste management and waste diversion should be explored (i.e. Incineration)<br>• An analysis of North Glengarry's recycling plant should be conducted to determine how the new regulations will impact the future of RARE. | • Regardless of whether or not collaboration amongst the region moves forward, we need to gain a better understanding and develop a plan for the future of our landfills (potential for expansion at the North Lancaster site, greater challenge for expansion at Beaver Brook site). | • Ongoing landfill expansion<br>• Presently share HHW Facility with South Dundas<br>• Possibility of sharing compost site<br>• Private Industry - Presently Waste Management Processing of recyclables<br>• Want autonomy to pick collaboration initiatives | • Innovative and creative opportunities should be explored<br>• any diversion programs | • The Township has a new 20-year agreement with GFL for waste disposal | • Current landfill has short remaining useful life. No local drop-off for homeowner delivering residential waste once closed.<br>Should Council have additional thoughts or comments they will be forwarded as well. | • Items to consider include:<br>✓ collaborating with Cornwall<br>✓ the future of North Glengarry's MRF given O.Reg. 391/21<br>✓ alternative / innovative technologies for waste management including incineration<br>✓ impending closure of existing landfill sites means closure of residential drop-off program. This is a concern.<br>✓ The future of existing landfill sites given the challenges of expansions.<br>Comment - Sharing of facilities may be a solution |

# Appendix J

## Blue Box Recycling Regulation 391/21 - Summary

# APPENDIX J: BLUE BOX REGULATION (O.REG. 391/21) - SUMMARY (October 4, 2021)

## 1 Background

*This summary is intended to capture the requirements of the regulations that are of importance to the SDG municipalities and Cornwall and does not include all aspects of the regulation.*

O. Reg. 391/21 (Blue Box Regulation) filed under the Resource Recovery and Circular Economy Act, 2016 became effective on June 3, 2021. The Resource Productivity and Recovery Authority (RPRA) is the Authority to enforce the requirements of the Blue Box Regulation, the Electrical and Electronic Equipment Regulation, Batteries Regulation and Tires Regulation. The Authority is also responsible for providing information and supporting businesses in understanding and complying with the regulatory requirements.

The Blue Box Regulation requires producers of products and packaging supplied to consumers in Ontario to:

- Register with RPRA
- Establish and operate systems to collect and manage blue box materials discarded by consumers
- Report annually on performance to RPRA

In general Producers may be:

- the brand holder of a product (for the portion of packaging added by the brand holder in Ontario)
- the importer (for the portion added by the importer)
- the retailer (if not the brand-holder or importer)

There are more details identifying the producers of various types of materials in Part II of the regulation. Producers may enter into agreements with persons called "Producer Responsibility Organizations" (PROs) to represent the producer is meeting these requirements.

***Municipalities no longer responsible for recycling after transition date***

O. Reg. 392/22 under the Environment Protection Act also took effect on June 3, 2021. This new regulation amends the existing O.Reg. 101/94 by removing the requirement for municipalities to be responsible for recycling after the transition date (January 1, 2025 for SDG municipalities and Cornwall)

## 2 Key Dates for Producers

| Item | Deadline |
|---|---|
| Register with the Authority (excel based format) | October 1, 2021 |
| Establish and begin to operate blue box materials recycling systems | July 1, 2023 |
| Report annually on performance | Starting 2024 |

## 3 Key Submission & Dates for SDG Municipalities & Cornwall

| Item | Deadline |
|---|---|
| **Transition Date** for transferring recycling responsibility to Producers | January 1, 2025 |
| Submit **Initial Report** on their respective current blue box collection systems to the Authority | September 30, 2021 |
| Registration of Processors of blue box materials (RARE) with the Authority | April 1, 2022 |

| Item | Deadline |
|---|---|
| Submit a **Transition Report** with further information about their current blue box collection systems to the Authority ahead of their transition date | August 31, 2023 |
| **Change Report** if there are changes to an **Initial Report** or a **Transition Report** | Within 30 days of the change |

***Contents of Initial Report (Section 54 of Regulation)***

1. The number of residents and residences (defined as single-unit dwelling including seasonal) in the municipality.
2. The municipality or other entity that provides the blue box program and garbage collection.
3. The contact information of the person responsible for waste management.
4. The number of residences that received blue box collection services.
5. The criteria or conditions used to determine which facilities (*see definition below) were included in the blue box program as of August 15, 2019.
6. The number of facilities* in the municipality that received collection services.
7. The number of blue box receptacles in a public space (park, playground, sidewalk, transit station/stop) in the municipality that receive collection.

***Contents of Transition Report (Section 55 of Regulation)***

1. The location of residences that receive curbside garbage collection.
2. The location of residences that receive depot garbage collection.
3. The location of every garbage depot collection site.
4. The location of residences that receive blue box curbside collection.
5. The location of residences that receive depot collection.
6. The location of facilities* in the eligible community that receive recycling collection services.
7. A description of a method pursuant to which additional information about the addresses of residences and facilities* in the municipality that receive collection under its garbage collection program and blue box program can be provided.
8. The location of each blue box receptacle in a public space that received collection.
9. A list of materials that are collected under the blue box program.
10. The frequency at which residences in the municipality receive collection.
11. The number of blue box collection streams.
12. The location of every blue box materials depot collection site in the municipality.
13. The languages used for communications about the blue box program in the municipality.

**** Facilities Definition***

Facilities mean the following types of buildings:

1. a building that contains *more than one dwelling unit*, including an apartment building and a condominium. Does not include a building used for temporary accommodation (e.g. hotel)
2. a municipal or non-profit retirement home or one that was included in the blue box program on August 15, 2019.
3. a non-profit long-term care home or one that was included in the municipal blue box program on August 15, 2019.
4. a building that contains a school or private school

*Note: RPRA has defined any property that has 2 to 5 units as a single family residence and eligible for collection. Multi-residential properties are those with 6 or more units. Further clarification from RPRA confirmed that mixed use properties with up to 5 units are eligible to receive blue box collection under the regulation. However the commercial units in those properties are not eligible.*

# 4 Definition and Categories Blue Box Materials

The Regulation defines blue box materials as:

1. product packaging
2. paper products
3. packaging-like products

| Blue Box Material | Description |
|---|---|
| **1. Product Packaging** | |
| Primary Packaging | ➢ Used for containment, protection, handling, delivery and presentation of a product at the point of sale (e.g., film and cardboard used to package a 24-pack of water bottles and the label on the water bottle)<br>➢ Does not include convenience packaging or transport packaging |
| Transportation Packaging | ➢ In addition to primary packaging to facilitate the handling or transportation of one or more products (e.g. a pallet, bale wrap or box)<br>➢ Does not include a shipping container designed for transporting things by road, ship, rail or air. |
| Convenience Packaging | ➢ Service packaging that is used in addition to primary packaging to facilitate end users' handling or transportation of one or more products.<br>➢ Includes packaging that is supplied at the point of sale by food-service or other service providers whether or not there is a separate fee for these items. (e.g. bags and boxes that are supplied to end users at check out ) |
| Service Accessories | ➢ Products supplied with a food or beverage product and facilitate the consumption of that food or beverage product and are ordinarily disposed of after a single use, whether or not they could be reused (e.g., a straw, cutlery or plate). |
| Ancillary Elements | ➢ Integrated into packaging (directly hung or attached to packaging and are intended to be consumed or disposed of with the primary packaging.<br>➢ Ancillary elements help the consumer use the product (e.g. caps for measuring dosage that form part of a detergent container cap) |
| **2. Paper Products** | ➢ Printed and unprinted paper (e.g. newspaper, magazine, greeting cards, calendars, notebooks and daily planners, promotional material, directory, catalogue or paper used for copying, writing or any other general use)<br>➢ Does not include hard or soft cover books and hardcover periodicals |
| **3. Packaging-Like Products** | ➢ Ordinarily used for the containment, protection, handling, delivery, presentation or transportation of things<br>➢ Ordinarily disposed of after a single use<br>➢ Not used as packaging when it is supplied to the consumer<br>(e.g. aluminum foil, a metal tray, plastic film, plastic wrap, wrapping |

| Blue Box Material | Description |
|---|---|
| | paper, a paper bag, beverage cup, plastic bag, cardboard box or envelope)<br>➢ Does not include a product made from flexible plastic that is ordinarily used for the containment, protection, or handling of food (e.g. cling wrap, sandwich bags, or freezer bags) |

The Regulation requires all blue box materials to be placed into the following seven (7) categories:

1. Beverage containers (includes all beverage containers regardless of material)
2. Glass
3. Flexible plastic
4. Rigid plastic
5. Metal
6. Paper
7. Certified compostable products and packaging (includes all certified compostable products regardless of material - paper or plastic). *Note: Compostable products are only defined in the Regulation for the purpose of certifying certain materials as compostable. There is no requirement for producers to collect compostable waste.*

## 5 Residences & Facilities Eligible to Receive Collection

The residences and facilities in the SDG municipalities and Cornwall that would be eligible to receive collection from January 1, 2025 (the transition date) are:

1. All residences (defined as single-unit dwelling including seasonal) and facilities (as defined above) that received collection prior to January 1, 2025 will received collection. *(Further clarification is required on eligibility of existing small commercial, mixed use, etc. that currently receive collection and how these would be handled)*
2. Any residence that did not receive collection prior January 1, 2025 would not be eligible for collection after January 1, 2025 but would become eligible on January 1, 2026. *(Further clarification was obtained from RPRA regarding the eligibility of new residences in 2025 and how they would be handled during 2025. All new residences added as a result of natural growth of the community will be eligible for collection)*
3. Any facility that did not receive collection prior January 1, 2025 would not be eligible for collection after January 1, 2025 but would become eligible on January 1, 2026 if the facility's representative registers the facility with RPRA.

## 6 Producer Obligations - Collection from Residences

Producer obligations take effect on January 1, 2025 for the SDG municipalities and Cornwall.

***During Transition Period (January 1, 2025 to December 31, 2025)***

1. All residences must be provided with blue boxes at least one (1) week before January 1, 2025. These must be large enough to store materials
2. Curbside collection frequency will be the same as provided by the municipalities on August 15, 2019
3. Operate the same number of blue box material depots as there were on August 15, 2019, if all residences receive curbside collection.

4. Collect the same materials as collected by the municipalities on August 15, 2019 but may collect additional materials (curbside and depot)

***After Transition Period (January 1, 2026)***

5. Must provide curbside blue box collection services - If an *eligible residence* receives curbside garbage collection.
6. Must provide curbside or depot collection - If an eligible *residence* does not receive curbside garbage collection.
7. Curbside collection from residences:
   - ✓ Collection must be every other week (bi-weekly) minimum
   - ✓ All materials must be collected in a single day
   - ✓ Damaged blue boxes must be repaired or replaced within one (1) week when requested.
8. Depot collection from residences:
   - ✓ Must operate the same number of recycling depots as waste depots
   - ✓ Must operate depots year-round
   - ✓ Operating hours must be equal to waste depot hours (as minimum)
   - ✓ Ensure bins are sufficiently sized, emptied before they become full and replaced as needed
   - ✓ May be operated by one or more producers (including producer responsible organizations that act on behalf of producers through agreements - PROs)

## 7 Producer Obligations - Collection from Facilities

Producer obligations take effect on January 1, 2025 for the SDG municipalities and Cornwall.

***During and After the Transition Period (i.e. from January 1, 2025 onward)***

1. Only facilities registered with RPRA will be collected. This must be done by the facility's representative and gives permission to producers or their representatives to collect materials from that facility. The facility may revoke its registration at any time.
2. All registered facilities must be provided with blue boxes at least one (1) week before collection from the facility is due to begin. These must be large enough to store materials
3. Collection frequency is not stated - only that producers must collect materials before the receptacles are full.
4. Only materials generated at the facility would be collected.
5. *During the transition period* producers must ccollect the same materials that were collected by the municipalities on August 15, 2019 but may choose to collect additional materials.

*(Further clarification is required on whether or not those "facilities" currently receiving curbside collection would continue to receive curbside service and/ or how often would collection occur).*

## 8 Producer Obligations - Collection from Public Spaces

Producers must provide the recycling receptacles in public spaces each year starting on January 1, 2026. Section 48 of the regulations provides a formula for calculating the number of containers based on population and weight of blue box materials.

## 9 Producer Obligations - Alternative Collection by Mail

Under Section 35 of the Regulation, producers may set up alternative material collection by mail. In such cases the producers must:

- ✓ Provide the service in all municipalities
- ✓ Operate the mail collection year-round
- ✓ Pay the postage for the consumer

## 10 Producer Obligations - Promotion and Education

Under Part VIII of the Regulation, producers (and PROs) must undertake a promotion and education program including:

- ✓ list of acceptable blue box materials for collection
- ✓ list of unacceptable materials
- ✓ replacement of blue boxes
- ✓ curbside collection schedule
- ✓ depot locations and operating hours
- ✓ materials collected through an alternative collection system (e.g. by mail)
- ✓ a description of how the alternative collection would operate (date and time of collection events; arranging for pick up of materials; return-to-retail locations and operating hours
- ✓ contact telephone and email address

***During Transition Period (January 1, 2025 to December 31, 2025)***

- ✓ a description of significant changes from the municipal program including changes to acceptable materials, sorting procedures, etc.
- ✓ preparation of materials for collection (rinsing, flattening etc.)
- ✓ a description of how to sort or bag materials

***Forms of Promotion***

- ✓ Publicly accessible website
- ✓ Print delivered by mail at least annually
- ✓ Information to be in both English and French
- ✓ During the transition period - In any other languages used by the municipalities

## 11 Blue Box Processors

The requirements for processors under the regulation would apply to North Glengarry's RARE facility and Cornwall's recycling facility. These are the two (2) municipally owned and operate recycling processing facilities that serve the six (6) SDG municipalities.

***Registration with RPRA***

Blue Box Processors are required to register with RPRA *by April 1, 2022*. The information to be submitted for registration includes:

- ✓ The name and contact information for the processor
- ✓ Any unique identifier assigned by RPRA
- ✓ The name and contact information of the person registering the processor

- ✓ The name, contact information and unique identifiers assigned by RPRA of the producers and PROs that have agreements with the processor to process blue box materials

Changes to the information must be submitted to RPRA within 15 days of the change.

The following are noted based on discussion with RPRA:

1. RARE and Cornwall must register their processing facilities by April 30th 2022 whether or not they intend to offer processing services after the transition
2. Any processing facility may de-register at anytime.
3. RPRA will be preparing a registry of producers, PROs and processors etc. This will be shared so that they can negotiate agreements among themselves in the open market. This means that RARE and Cornwall will need to do the following should they wish to continue to operate after the transition:
   - ✓ Identify relevant producers/ PROs for material types to be processed
   - ✓ Negotiate with the producers/ PROs and enter into agreements
   - ✓ Report to RPRA as noted above
   - ✓ Maintain records as noted above

Note that there is no obligation for municipalities to continue to operate MRFs or any part of the recycling program after the transition date.

***Annual Reports to RPRA***

Blue Box Processors are required to submit annual reports *by April 30 each year beginning in 2024*. The information to be reported is identified in Section 53 (1) of the regulation and includes:

- ✓ Weights of materials received, processed and recovered by material type
- ✓ Weights of materials recovered listed by producers and PROs
- ✓ Weights of materials recovered that a producer could account for and report on to RPRA
- ✓ Weights of recovered materials marketed for re-use (for original purpose) and for use in new products
- ✓ Weights of materials recovered that was collected from curbside and depot programs and alternative collection programs

No reporting of compostable materials is required.

***Record Keeping***

Blue Box Processors are required to maintain either paper or electronic records (weights, agreements, information submitted to RPRA, etc.) for a period of five (5) years from date of creation.

# Appendix K

## Comparison of Proposed Base and Current Levels of Service

# APPENDIX K: COMPARISON OF PROPOSED BASE & CURRENT LEVELS OF SERVICE (DRAFT OCTOBER 4, 2021)

| Service | Proposed Base Level Program/Service Based on Most Common Program/Service | Difference Between Proposed Base Level Program/Service and Existing Level of Service | | | | | |
|---|---|---|---|---|---|---|---|
| | | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
| **1. Curbside Waste Collection** | | | | | | | |
| • Frequency | • Weekly | • Weekly | • Weekly | • Weekly | • Weekly | • Weekly | • Weekly |
| • Set-out Time | • 7:00 AM & no earlier than 7:00 PM the previous day | • 6:00 AM on collection day | • 6:00 AM on collection day | • Not specified | • 7:00 AM & no earlier than 6:00 PM the previous day | • 7:00 AM & no earlier than 7:00 PM the previous day | • 7:00 AM & no earlier than 7:00 PM the previous day |
| • Container Limit<br>○ Residential[1]<br>○ Commercial/Agricultural[2] | • 2 containers/bags[1]<br>• 6 containers/bags[2] | • 2 containers/bags | • 8 containers/bags | • 2 containers/bags[1]<br>• 6 containers/bags[2] | • Residential & Businesses – 2 containers/bags | • 2 containers/bags[1]<br>• Commercial, agricultural and industrial – 10 containers/bags per address | • 2 containers/bags[1]<br>• 6 containers/bags[2] |
| • Bag Tags/Fees | • Tags required for extra pick-ups<br>• Range from $1.25 to $3.00<br>• Propose a common bag tag cost of $.2.00 | • Tags required for extra pick-ups<br>• $3.00 each | • Not specified | • No bag tags. Extra bags left at curb or collected at collector's discretion depending on the size and weight | • Tags required for extra pick-ups<br>• $1.25 each | • Tags required for extra pick-ups<br>• Price not specified | • Tags required for extra pick-ups<br>• $1.50 each |
| • Container Size | • No consistency in container/bag size<br>• 23 kg (50 lb) maximum most common | • Maximum container size 80 cm high by 50 cm (width or diameter)<br>• 23 kg (50 lb) maximum | • Container with capacity not larger than 30 gallons, not higher than 71 cm (28"), and diameter no bigger than 45.7 cm (18") with watertight lid and 2 handles<br>• 27 kg (60 lb) maximum weight | • Container/bags must have a maximum width of 66 cm (26") and maximum height of 91 cm (36")<br>• 23 kg (50 lb) maximum | • Maximum bag size must not exceed 0.08 cubic metres<br>• 23 kg (50 lb) maximum | • Garbage bags must be between 60 cm x 90 cm (24 in x 36 in) and 106 cm x 120 cm (42 in x 48 in)<br>• 23 kg (50 lb) maximum | • Container must not exceed 82 L (22 gallons) and must be waterproof, durable, rust-resistant, non-absorbent with watertight lid and 2 handles. Must be specifically designed for garbage<br>• 23 kg (50 lb) maximum |
| • Service Delivery | • Contracted | • Contracted | • Contracted | • In-house | • Contracted | • Contracted | • In-house |
| **2. Recycling Collection** | | | | | | | |
| • Frequency | • Even between weekly (alternating streams) and bi-weekly (single-stream)<br>• At this time, no changes to recycling collection program proposed due to impending legislative changes to producer responsibility | • Weekly (alternating streams) | • Bi-weekly (single stream) | • Weekly (alternating streams) | • Weekly (alternating streams) | • Bi-weekly (single stream) | • Bi-weekly (single stream) |
| • Collection Limits | • No limit | • No limit | • No limit | • No limit | • No limit | • No limit | • No limit |
| • Collection Containers | • Blue boxes | • Blue boxes | • Blue boxes | • Blue boxes | • Blue boxes | • Blue boxes | • Blue boxes |
| • New Blue Boxes | • Range from free to $5.00-$7.00. | • Not specified | • Not specified | • No charge | • $7.00 per box | • Not specified | • 2 free per new home<br>• $5.00 per additional box |

## APPENDIX K: COMPARISON OF PROPOSED BASE & CURRENT LEVELS OF SERVICE (DRAFT OCTOBER 4, 2021)

| Service | Proposed Base Level Program/Service Based on Most Common Program/Service | Difference Between Proposed Base Level Program/Service and Existing Level of Service | | | | | |
|---|---|---|---|---|---|---|---|
| | | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
| • Service Delivery | • Even between in-house and contract<br>• At this time, no changes to recycling collection program proposed due to impending legislative changes to producer responsibility | • Contracted | • Contracted | • In-house | • Contracted | • In-house | • In-house |
| **3. Recyclables Processing** | | | | | | | |
| • Facility Used | • City of Cornwall MRF<br>• At this time, no changes to recycling collection program proposed due to impending legislative changes to producer responsibility | • In-house | • City of Cornwall MRF | • In-house | • City of Cornwall MRF | • City of Cornwall MRF | • City of Cornwall MRF |
| **4. Bulky Waste/White Goods** | | | | | | | |
| • Collection | • Drop-off at landfill | • Drop-off at landfill | • Bulk waste collected once per year in May at no cost to customers | • Drop-off at landfill | • Drop-off at landfill | • Drop-off at landfill | • Drop-off at landfill |
| **5. Leaf & Yard Material** | | | | | | | |
| • Curbside Collection | • Even between 1 collection per year (spring or fall) or 1-2 per year (spring and fall)<br>• Proposed two collections per year (spring and fall) | • 2 collections per year (spring and fall) | • 2 collections per year (spring and fall) | • 1 collection per year (fall) | • No curbside collection – drop-off facilities available | • 1 collection per year (spring) | • Once per month from May to November |
| • Container Limits | • No limit | • No limit | • No limit | • Not specified | • Not specified | • 20 bags/bundles per unit | • 20 bags/bundles per unit |
| **6. Source Separated Organics** | | | | | | | |
| • Curbside Collection | • None | • None | • None | • None | • None | • None | • None |
| • Other Programs | • Sell backyard composters | • Not specified | • Sell backyard composters | • Sell backyard composters | • N/A | • Sell backyard composters | • Sell backyard composters |
| **7. Residential Drop-off** | | | | | | | |
| • Operating Hours | • No consistency in operating hours and days<br>• Operating hours mostly 8 am to 4 pm during weekdays and varies on Saturdays<br>• Propose that consistent hours be established for all sites if possible | • Monday, Tuesday, Thursday, Friday - 8:00 a.m. to 4:00 p.m. in summer, Wednesday & Saturday - 8:00 a.m. to 12:00 p.m. in winter | • North Lancaster Landfill – Thursday and Saturday 9:00 A.M. to 5:00 P.M. from June 1st, 2017 to September 30th, 2017<br>• Beaver Brook Road Landfill – October 1st to May 31st on Tuesdays and Saturdays from 9:00 am to 5:00 pm | • 8 am to 4 pm Monday to Friday.<br>• Saturdays -First Sat in May till last Sat in October- 8 am till 11:30 am.<br>• Open first Sat in November, December, January, February, March and April 8 am till 11:30 am. | • Wednesday & Friday, 8:00 a.m. to 1:00 p.m.; Saturday, 1:00 p.m. to 4:00 p.m. | • Not Specified | • 8am to 4pm every Friday and Saturday |

## APPENDIX K: COMPARISON OF PROPOSED BASE & CURRENT LEVELS OF SERVICE (DRAFT OCTOBER 4, 2021)

| Service | Proposed Base Level Program/Service Based on Most Common Program/Service | Difference Between Proposed Base Level Program/Service and Existing Level of Service | | | | | |
|---|---|---|---|---|---|---|---|
| | | North Glengarry | South Glengarry | North Dundas | South Dundas | North Stormont | South Stormont |
| • I, C & I Waste Accepted | • Yes | • No | • Yes | • Yes | • Yes | • N/A | • No |
| • Tipping Fees | • 2 free disposals per year (max. 500 kg), after which tipping fees apply | • 2 free disposals per year (max. 500 kg), after which tipping fees apply | • 3 free disposals per year (2 in May, 1 in June), after which tipping fees apply | • Tipping fees always apply | • Tipping fees always apply | • 2 free disposals per year (max. 500 kg), after which tipping fees apply | • 2 free disposals per year (max. 500 kg), after which tipping fees apply |
| **8. Household Hazardous Waste and Electronic Waste** | | | | | | | |
| • Frequency | • 1 drop-off day per year | • 1 drop-off day per year | • 1 drop-off day per year | • 1 drop-off per month between May and October | • Several drop-offs per year on select dates between May and October | • 1 drop-off day per year | • 3 drop-offs per month between April and November |
| • E-waste | • E-waste bins at Cornwall landfills | • E-waste bins at Cornwall landfills | • E-waste bins at Cornwall landfills | • E-waste bins at Cornwall landfills | • HHW – Boyne Landfill<br>• E-waste – Matilda and Williamsburg Landfills | • HHW – West Patrol Yard<br>• E-waste – both patrol yards | • E-waste bins at Cornwall landfills |
| **9. Landfills** | | | | | | | |
| • Location | • 1 active landfill within the municipality | • 1 active landfill (municipal)<br>• Private landfill also used | • 2 active landfills (municipal) | • 1 active landfill (municipal) | • 1 active landfill (municipal) | • Private landfill used | • 2 active landfills (1 municipal, 1 private) |
| • Operation | • In-house | • In-house at municipal landfill | • In-house | • In-house | • In-house | • N/A | • In-house at municipal landfill |
| • Monitoring | • Contracted | • Not specified | • In-house & Consultant | • Contracted | • Contracted | • Contracted | • Contracted |

# Appendix L

## Collaboration Opportunities Analysis

# APPENDIX L: COLLABORATION OPPORTUNITIES ANALYSIS (DRAFT OCTOBER 14, 2021)

| Collaboration Opportunities | Advantages | Disadvantages | Comments |
|---|---|---|---|
| **Waste Management Planning & Communications** | | | |
| **1. Public Education & Communications**<br>• Develop and distribute educational materials about the waste management services delivered to customers by the LMs<br>• Use of various communication methods and appropriate technologies - print, websites, social media, customer service software<br>• Track and respond to customer queries in a timely fashion | • Reduced duplication of effort and improved economies of scale e.g. production of information materials, staffing, etc.<br>• Consistent tactics and messaging across all LMs<br>• Facilitates a one-call system for residents to obtain waste management information or file complaints<br>• Facilitates a streamlined and effective system to document and respond to customer queries and inform service improvements<br>• Addresses gap that currently exists in those LMs with limited resources to dedicate to public education and communications<br>• Possibility to leverage latest communication and customer service technologies<br>• Support the transition of blue box recycling to producer responsibility across all LMs | • Smaller service providers may be at a theoretical disadvantage due to limited capacity to handle larger contracts | • Dedicated resources (i.e. staff, office space, computers, funding, etc.) would be required to undertake these activities.<br>• An agreement among all 6 LMs (and SDG as lead) would be required to address cost sharing, roles and responsibilities of each LM and SDG, and accommodations for staff |
| **2. Waste Management Planning**<br>• Investigate new waste disposal technologies (including incineration) and options for long-term waste disposal in partnership with others<br>• Implementing a regional level of service that supports collaboration, offers LMs option to select enhanced services if desired and offers convenience to customers<br>• Seek MECP approvals as required<br>• Facilitating/ negotiating with Producers or Producer Responsible Organizations (PROs) as the set-up blue box drop-off depots as part of the waste drop off service at landfill sites as required under the new regulation. | • Reduced duplication of effort and improved economies of scale (e.g. collective review and decisions on new disposal technologies; a single by-law template for all LMs)<br>• Facilitates consistency in implementing and adjusting future service levels offered to customers<br>• A larger cohesive voice in discussions with the MECP<br>• Will position the LMs to negotiate agreements with Producers and PROs who are required by the regulation to provide blue box drop off depots where waste depots exist. This would be on municipal property. | • | • Dedicated resources (i.e. staff, office space, computers, funding, etc.) would be required to undertake these activities.<br>• An agreement among all 6 LMs (and SDG as lead) would be required to address cost sharing, roles and responsibilities of each LM and SDG, and accommodations for staff.<br>• Development of the new by-law for the regional level of service would be required for adoption by each municipality |

| Collaboration Opportunities | Advantages | Disadvantages | Comments |
|---|---|---|---|
| **Waste Diversion** | | | |
| **3. Transitioning from LMs to producer responsibility for blue box recycling**<br>• Meeting the reporting requirements of RPRA under O.Reg. 391/21 prior to the transition date<br>• Liaising with RPRA as needed<br>• Liaising with producers to ensure that the public is made aware of services they will received after the transition<br>• Addressing any issues that may arise<br>• Aligning current blue box collection contracts with transition date | • The LMs and Cornwall will be transitioned on the same date (January 1, 2025). Collaboration will allow the LMs to collectively liaise with RPRA and address transition issues. | • | • Results of the ongoing analysis of North Glengarry's recycling plant (RARE) would be taken into account in deciding whether or not to operate RARE beyond the transition date.<br>• A key issue to be addressed is the blue box collection from small commercial and mixed use properties that currently receive curbside collection. Producers are not required to collect from commercial properties according to the regulation. RPRA's role does not include addressing this issue - only enforcement of the regulation as written.<br>• Aligning blue box collection contract to coincide with the transition date to producer responsibility (Jan 1, 2025). This may require negotiation with existing contractors to extend of terminate contracts earlier if they expire after the transition date.<br>• Coordination of the transition would be included in the roles and responsibilities of the Waste Management Planning & Communications staff noted above. |
| 4. **Potentially work with the City of Cornwall**<br>• Collaborating with Cornwall will focus on providing processing services to the LMs for:<br>✓ an organics collection program for the LMs<br>✓ leaf and yard waste | • Leverages existing good working relationships between 4 LMs and Cornwall for blue box material processing<br>• Provides access to an organics processing facility that is based on green energy technology<br>• Provides access to another location for leaf and yard waste composting that may be may be more convenient for some LMs<br>• Supports increasing waste diversion and preserving capacity at existing landfill sites. Approximately 10,500 tonnes of curbside waste is collected annually by the LMs for disposal. Organics comprise at least 40%. Assuming only 25% is captured by an organics program approximately 2,600 tonnes would be diverted annually. | • Additional cost for organics program (collection and processing) which can be expensive. | • Provincial policy does not require the municipalities to provide organics collection. An organic program would be at the discretion of the LMs.<br>• Discussions with Cornwall are required to fully assess the costs and benefits of implementing an organics program.<br>• Discussion with Cornwall may be included in the roles and responsibilities of the Waste Management Planning & Communications staff noted above. |

| Collaboration Opportunities | Advantages | Disadvantages | Comments |
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| **5. Food Cycler Organics Composting at Home**<br>Leveraging the results of recently initiated pilot program organics home composting:<br>✓ Assess and share results from 3 pilot LMs<br>✓ Possibly expand across all LMs if successful as an alternative to curbside organics collection and centralized composting | • Leverages new technology<br>• Offers an economical alternative to curbside organics collection especially is less densely populated areas<br>• Supports increasing waste diversion and preserving capacity at existing landfill sites.<br>• Organics composting would be available to residents in rural areas where curbside organics collection would not be otherwise available due to high collection cost | • The durability and life expectancy of the units are relatively untested over the long-term.<br>• Requires ongoing commitment by residents to use and maintain units for program to be successful | • Provincial policy does not require the municipalities to provide organics collection. An organic program would be at the discretion of the LMs.<br>• The results of the pilot needs to be fully reviewed to gauge the long-term viability of this program<br>• Units are more expensive than green bins for residents to purchase and will need to be subsidized by the LMs to encourage uptake and participation |
| **6. Sharing existing leaf and yard waste composting facilities**<br>• Two or more LMs may share the use of existing or planned new facilities | • Optimizes use of existing facilities<br>• Lower costs due to fewer facilities<br>• Provides access to residents from more than one LM | • Additional drive distance and related costs | • Capacity of existing L&Y waste composting facilities to handle additional material to be confirmed<br>• MECP approval to move L&Y waste across municipal boundaries to be confirmed.<br>• These may be included in the roles and responsibilities of the Waste Management Planning & Communications staff noted above. |
| **7. Joint purchase and distribution of backyard composters an possibly Food Cyclers** | • Potential for volume discounts due to economies of scale<br>• Allows customers from all 6 municipalities to purchase composters in any LM (greater flexibility and convenience)<br>• Reduces administration of the procurement from 6 processes to 1 | • | • SDG would take the lead on procurement of composters on behalf of the municipalities<br>• These may be included in the roles and responsibilities of the Waste Management Planning & Communications staff noted above. |
| **Waste Collection** | | | |
| **8. Joint waste collection between 2 or more LMs**<br>• Identify LMs where joint collection would be feasible and align contracts<br>• Decide on outsourcing vs. in-house collection<br>• Develop tender documents and obtain bids | • Potential for cost reduction though joint tendering of collection services.<br>➢ Larger service areas may attract interest from more service providers and increase competition<br>➢ More efficient route optimization and utilization of collection vehicles<br>• Sharing of collection vehicles and staff between municipalities<br>• Opportunity to streamline waste collection as of January | • May discourage smaller service providers from bidding due to low service capacity | • Alignment of existing contracts would be required so that collection in two or more LMs could be combined into a single contract.<br>• Timing the alignment of contracts to coincide with the transition date for blue box (Jan 1, 2025) would allow the new contracts to be for waste collection only and not include blue box collection.<br>• Liability and insurance regarding cross municipal boundary service need to be confirmed if collection will be done by LM staff and vehicles |

| Collaboration Opportunities | Advantages | Disadvantages | Comments |
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| | 1, 2025 when recycling collection would no longer be a municipal responsibility | | • Municipalities currently do not have the resources to extend in-house collection services to other LMs so moving to contract services may be more appropriate.<br>• Decisions on sale or re-purposing of existing in-house vehicles would be required if there is a switch from in-house to contracted collection<br>• Decisions on allocating existing waste collection staff to other functions would also be required |
| **Waste Disposal** | | | |
| **9. IC&I Waste Disposal Policy**<br>• Establish a policy to limit the disposal of non-residential waste at existing landfill sites that are approaching closure to preserve capacity | • Will preserve capacity and extend use of landfill sites. High level estimates suggest the following capacity savings and additional years of use starting 2022:<br>➢ Boyne Road - 300 tonnes; 2 months extended use<br>➢ Matilda Landfill Site - 1,300 tonnes; 4 months extended use<br>➢ Beaverbrook Landfill Site - 4,200 tonnes, 2.5 years extended use<br>➢ North Lancaster Landfill Site - 1,100 tonnes; 1 year extended use<br>• Less waste to be managed resulting in lower costs to establish a transfer station and haul waste to another landfill site (if expansion is not pursued) | • Reduction in annual tipping fee revenues generated from IC&I customers<br>➢ Boyne Road - $101,000<br>➢ Matilda -$97,000<br>➢ Beaverbrook - $34,000<br>➢ North Lancaster - $35,000<br>• IC&I customers would need to make alternative disposal arrangements | • Limiting the disposal of IC&I waste at municipal landfill sites is a strategy that has been used by many municipalities to preserve landfill capacity for residential waste.<br>• The benefit of extended use may not be significant at sites that are due to close within 1 year.<br>• This is a policy change that will require further discussion and decisions by the LMs<br>• This would be an appropriate policy to reduce transfer costs if waste were to be transferred to another landfill site for disposal |

| Collaboration Opportunities | Advantages | Disadvantages | Comments |
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| 10. ***Conceptual Disposal Option A: Expansion and Sharing Waste Disposal Capacity at Landfill Sites***:<br>• North Dundas would continue with expansion at Boyne Road and share disposal capacity with South Dundas when Matilda closes<br>• SD would directly haul curbside waste to Boyne Road<br>• South Glengarry (SG) would close North Lancaster when it is at capacity (Dec 2025) and operate Beaverbrook year round<br>• SG would initiate work in 2022 seeking approval to expand the Beaverbrook Landfill for use beyond 2033 when the site is expected to close.<br>• NS, SS and NG would continue to dispose waste at GFL under existing individual contracts<br>• Negotiate an agreement with GFL for disposal of all curbside waste from ND and SD starting in 2034<br>• Establish a transfer station at Boyne Road by the end of 2033 to transfer residential waste only to GFL for disposal. (IC&I would make own disposal arrangements) | • Provides approximately 11 years of disposal capacity (to 2033) for North Dundas and South Dundas beyond the current closure date of their respective landfill sites. Use could be longer by approximately 2 years (to 2035) if IC&I waste is not accepted for disposal.<br>• Expansion of Beaverbrook will provide capacity for SG beyond 2033.<br>• Residential waste drop-off would continue to be available to ND residents at Boyne Road. SD residents would have access to a drop off location after Matilda closes<br>• Residential waste drop-off would continue to be available to SG residents at Beaverbrook<br>• Economies of scale (lower cost per tonne) by having more waste disposed at the Boyne Road landfill site. Estimated to be 50% lower due to doubling of the waste to be disposed<br>• Cost savings.<br>➢ Avoids the need to expand Matilda (which is the current plan) and the capital costs related to the expansion<br>➢ Avoids the operating costs at Matilida if it were to be expanded.<br>➢ Overall savings estimated to be $4.6 million over a 23-year period from 2022 to 2044 ($18.8 million vs.$23.4 million if both sites were to be expanded)<br>• Potential environmental impacts from the expansion and operation of Matilda would be avoided<br>• Environmental impacts due to current operations would be reduced when North Lancaster (SG) is closed<br>• Reduces the need to replace existing landfill operating equipment at Matilda and North Lancaster<br>• Buys time to consider alternative disposal technologies<br>• Provides a hybrid disposal system of municipal and private landfill sites to mitigate dependency on a single private sector landfill site for all LMs | • Additional drive distance for SD waste collection vehicles to drive to Boyne Road landfill site. This would increase collection costs related to SD but may be offset by cost reductions from joint tendering.<br>• Cost of expansions at the Boyne Road Beaverbrook Landfill Sites. However these would be offset by the savings.<br>• Obtaining approval to expand Beaverbrook would be a lengthy process (6 to 10 years approximately)<br>• Potential additional environmental impacts due to expansion of and continuing operations at Beaverbrook<br>• Securing disposal capacity for ND and SD beyond 2033 would still be required<br>• Obtaining MECP approval to expand the service area for Boyne Road may:<br>➢ be more difficult.<br>➢ also require further analysis of increased truck traffic to Boyne Road may require redoing work already completed by ND for the expansion to address the additional waste from SD<br>➢ be difficult to obtain in time for 2023<br>• ND residents may not support disposal of waste from another municipality at the Boyne Road landfill site<br>• Will need to complete closure works sooner rather than later due to earlier closure of Boyne and Matilda compared to current scenario if both sites are expanded. However, the closure and post closure care costs are legal obligations that cannot be avoided and would be required under all scenarios. Incurring these costs sooner would reduce the municipalities' liability related to landfill sites. | • North Dundas (ND), South Dundas (SD) and South Glengarry (SG) are the three (3) municipalities with landfill sites approaching closure. These are the municipalities that will require alternative disposal starting in 2023 for curbside waste.<br>• North Glengarry (NG), South Stormont (SS) and North Stormont (NS) have long-term disposal contracts with GFL. Only waste dropped off by residents are disposed at Glen Robertson (NG) and Trillium (SS).<br>• North Dundas and South Dundas are adjacent municipalities so sharing disposal is a feasible option.<br>• South Glengarry's neighbouring municipalities all use GFL so there is no opportunity to share municipally owned landfill capacity for disposal of curbside waste<br>• Will require MECP approval to move waste across municipal boundaries specifically from SD to ND. Further discussion with MECP will be required to establish approval requirements and timelines.<br>• May require public outreach to gauge public approval and determine if there are any issues with disposal of SD's waste at Boyne Road.<br>• Will require an agreement between ND and SD including cost sharing of the expansion and development of a tipping fee that would apply to all curbside waste disposed at Boyne Road. This would ensure that each municipality would pay for its fair share (tonnage) of waste disposed (user pay).<br>• Will require weighing of collection vehicles to determine the quantity of waste from ND and SD for billing and/ or cost sharing purposes<br>• Decisions on sale or re-purposing of existing Matilda landfill equipment would be required<br>• Decisions on allocating existing waste disposal staff to other functions would also be required by SD |

| Collaboration Opportunities | Advantages | Disadvantages | Comments |
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| ***11. Conceptual Disposal Option B: Negotiate Contract for Long-term (20 years) Disposal at GFL***<br>• Establish a transfer station at Boyne Road (ND) by the beginning of 2023. This will be used by ND starting in 2023 followed by SD in 2024 when Matilda closes.<br>• SD would directly haul curbside waste to Boyne Road<br>• Waste to be hauled from the Boyne Road Transfer Station to GFL<br>• South Glengarry to close North Lancaster when it is at capacity (Dec 2025) and operate Beaverbrook year round<br>• Establish a transfer station at Beaverbrook by the end of 2032<br>• Would include residential drop-off depots at both Boyne Road and Beaverbrook for transfer to GFL.<br>• The agreement with GFL would include:<br>➢ all curbside waste from ND, SD and SG<br>➢ allowing residents from any LM at GFL (except for North Stormont which already has residential drop-off included in its contract with GFL). | • Gives LMs immediate access to approved disposal capacity for 20 years, especially those with landfill sites due to close within the next 2 years.<br>• 3 LMs already have long-term (20-year) individual contracts with GFL for waste disposal. Opportunity for the other 3 LMs and Cornwall to negotiate a single contract with GFL.<br>• Buys time to consider other disposal technologies and options beyond 20 years<br>• Residential waste drop-off would continue to be available to ND residents. SD residents would have access to a drop off location (Boyne Road) after Matilda closes<br>• Residential waste drop-off would continue to be available to SG residents at Beaverbrook<br>• Potentially easier, less costly and faster to obtain MECP approval for transfer station vs. expansion. Transfer station approval estimated to take 1 year.<br>• ND residents may be more receptive to a transfer station vs. on-site disposal regarding waste from SD.<br>• Cost savings.<br>➢ Avoids expansions at Boyne Road, Matilda and Beaverbrook (which is the current plan) and the associated capital costs<br>➢ Avoids the operating costs at Boyne Road, Matilda and Beaverbrook beyond their current closure dates.<br>➢ Overall savings estimated to be $7.6 million over a 23-year period from 2022 to 2044 ($15.8 million vs.$23.4 million if both sites were to be expanded)<br>• Potential environmental impacts from the expansion and operation of the three (3) landfill sites would be avoided<br>• Potentially reduces the need to replace existing landfill operating equipment at the landfill sites<br>• Opportunity to include transfer station operations as part of waste disposal contract with GFL.<br>• Including direct drop-off at GFL's landfill site by residents | • Additional drive distance for SD waste collection vehicles to drive to Boyne Road landfill site. This would increase collection costs related to SD but may be offset by cost reductions from joint tendering.<br>• Additional costs, including approvals, to establish transfer stations at Boyne Road (2022) and Beaverbrook (2033). However these would be offset by the savings.<br>• Additional cost to hauls waste from Boyne Road (starting in 2023) and Beaverbrook (starting in 2033) to GFL. However these would be offset by the savings.<br>• Will need to complete closure works sooner rather than later due to earlier closures compared to current scenario if the sites are expanded. However, the closure and post closure care costs are legal obligations that cannot be avoided and would be required under all scenarios. Incurring these costs sooner would reduce the municipalities' liability related to landfill sites | • North Dundas, South Dundas and South Glengarry are the municipalities with landfill sites approaching closure. These are the municipalities that will require alternative disposal starting in 2023.<br>• North Glengarry (NG), South Stormont (S) and North Stormont (NS) have long-term disposal contracts with GFL. Only waste dropped off by residents are disposed at Glen Robertson (NG) and Trillium (SS).<br>• North Dundas and South Dundas are adjacent to each other so sharing a transfer station is an option.<br>• South Glengarry's neighbouring municipalities' curbside collection vehicles all directly haul curbside waste to GFL so there is no opportunity to share disposal capacity<br>• Will require MECP approval to move waste across municipal boundaries. Further discussion with MECP will be required to establish approval requirements and identify the precise plan for redirection of waste across the LMs<br>• Will require MECP approval to amend the existing licences (ECAs) to establish Waste Transfer Stations at both Boyne and Beaverbrook. (EPA Section 27). It may be possible to obtain interim approval from the District Manager to begin transfer operation while the application is being processed (EPA Section 157.1)<br>• Will require review of the terms and conditions of the existing 3 contracts (NS, SS, and NG)with GFL<br>• Will require initiating discussions with GFL for waste disposal from the ND, SD, SG and possibly Cornwall to establish agreement terms and costs<br>• Will require weighing of collection vehicles to determine the quantity of waste shipped to GFL from ND and SD for billing and/ or cost sharing purposes. SG's waste will be hauled separately and weighed at GFL.<br>• GFL is currently in the EA process for capacity expansion of 15.1 million m3 of additional capacity. |

| Collaboration Opportunities | Advantages | Disadvantages | Comments |
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| | as part of the agreement would give residents another location for drop-off at their convenience | | |
| 12. **Sharing drop-off facilities**<br>• Continue to offer residential drop-off at Boyne Road after 2022.<br>• Allow residents from all 6 LMs to use any residential drop-off facility within the 6 municipalities | • Will continue to offer residents drop off facilities that are reasonably convenient after existing landfill sites close. Gives residents a broader choice and flexibility on which facility to use.<br>• Will leverage the expansions and use of transfer stations noted in Conceptual Disposal Options A and B.<br>• The municipality operating the residential drop-off depot will realize additional revenue from additional waste dropped off by residents<br>• Will offer alternatives to South Stormont's residents when Trillium closes.<br>• Potential to redirect NG's residents to Beaverbrook and GFL to drop off waste. This would allow operations at Glen Robertson to temporarily cease thereby reducing operating costs and preserving the remaining capacity for future use. Approximately 40,000 tonnes of capacity would be available. | • More traffic can be expected and improved operations of the drop-off facility will be required at the site. | • Will require MECP approval to move waste across municipal boundaries. Further discussion with MECP will be required to establish approval requirements and identify the precise plan for redirection of waste across the LMs<br>• Drop-off facility operations could be outsourced |
| 13. **Joint procurement**<br>• Obtain landfill site monitoring and lab-testing services through joint tenders/ quotations | • May generate more competition with larger contracts that include multiple landfill sites and possible lower professional fees<br>• Possible economies of scale with respect to lab testing costs | • Smaller service providers may be at a theoretical disadvantage due to limited capacity to handle larger contracts | • Will need to review existing landfill monitoring activities and bundle landfill sites to promote economies of scale. |

# Appendix M

## SDG vs. Local Municipal Responsibility

# APPENDIX M: SDG vs. LOCAL MUNICIPAL RESPONSIBILITY

| Item | SDG | Local Municipalities | Comments |
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| 1. **Legal Authority for Waste Management** | • SDG does not have the legal authority for waste management services. Under the Municipal Act, 2001 responsibility for one or more waste management components may be transferred to SDG with approval from the respective LM and SDG Councils (triple majority) | • The LMs have responsibility for waste management and may establish agreements under the Municipal Act, 2001 to work together, including establishing a Board of Management or having an agreement with SDG to coordinate collaboration or may alternatively transfer responsibility to SDG | • An agreement among all 6 LMs (and SDG as lead) would be required to address cost sharing, roles and responsibilities of each LM and SDG, and accommodations for staff as a minimum<br>• Alternatively SDG and the LMs may agree to transfer responsibility to SDG |
| 2. **Organization Structure & Capacity** | • SDG has a robust organization structure that already supports a range of services across all six (6) LMs and relationships with other organizations outside the Counties including the City of Cornwall.<br>• It would be relatively easy to add waste management services to the organization. Decisions on where the service should reside within the organization structure would be required.<br>• The management processes and policies (e.g. related to finance, human resources, information technology, purchasing, etc.) are already well established to support the services delivered. These are readily available for waste management services.<br>• Staff with waste management expertise will be required as SDG is currently not responsible for waste management and does not carry this expertise. This would be accomplished through transfers of existing local municipal waste management staff supplemented by new hires as needed over time.<br>• Office space would be relatively easy to accommodate | • Each LM has a robust organization structure and management processes and policies that support a range services delivered within its jurisdiction. However, the structure, processes and policies do not currently support inter-municipal collaboration<br>• An agreement among all 6 LMs would be required to address the additional organizational structure and management process requirements to facilitate collaboration. This may include creating a Board of Management with representation from each LM. One of the LMs (or SDG) may act as the "agent" for the Board to provide all support services including staff and accommodations.<br>• Each municipality has sufficient staff and equipment to manage waste. However, the LMs do not have the staff and equipment capacity to share under a collaborative arrangement. Only North Dundas has dedicated waste management staff. The waste management staff in the other LMs is shared with other services. Additional staff would be required by the "agent" to implement the collaboration options.<br>• The Board agreement would also need to address cost sharing, roles and responsibilities and accommodations for staff. A dedicated manager and office space would be required as a minimum to coordinate the operations and handle the Board's business<br>• The Board arrangement would be affected if one LM decides to withdraw | • The Board approach would add another organization and layer of bureaucracy. The Board would be subject to the ongoing participation of all the LMs. SDG offers a more robust and stable approach with less duplication<br>• Dedicated resources (i.e. staff, office space, computers, funding, etc.) would be required to undertake waste management activities. |
| 3. **Decision-Making** | • SDG has region wide jurisdiction<br>• SDG has well established legislative procedures for decision-making by Council<br>• SDG Council is comprised of two(2) Councillors from each LM (Mayor and Deputy Mayor) i.e. equal representation from each LM<br>• All decisions related to waste management would be by Council as it does for other services that SDG provides within its boundaries. Council decisions would likely consider the input from the LMs and the best | • The Board would have region wide jurisdiction for waste management to the extent that the authority can be given by the municipalities under the Municipal Act i.e. mainly administrative. The Board will not have powers to make decisions on property and finance<br>• The Board agreement will need to address representation from each LM and identify the decision-making processes to be employed.<br>• Board decisions will require approval from each LM Council before major programs can be implemented. Accordingly Board decisions may | • More streamlined and faster decision-making under SDG vs. Board<br>• SDG already has equal representation from each municipality on its Council. Representation through a Board is not necessary. |

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| | interest of the Counties as a whole. | be more tenuous if there is difficulty reaching agreement or delays in obtaining approval from one or more LM. | |
| 4. **Waste Management Financing** | • SDG already has legal mechanisms and timelines for generating revenues through taxes. These would be utilized for waste management.<br>• Taxes related to waste management can be requisitioned on a "user pay" basis according to number of properties receiving waste collection, tonnes of waste disposed by municipality, etc. This method would achieve fairness and equity across the local municipalities. It has been employed by Niagara Region since 1996.<br>• SDG has the authority to issue debt if required for waste management<br>• Waste management would become a service funded by the Counties taxes. The LMs would no longer be required to fund waste management through their taxes thereby creating tax room to fund other services. | • Budgets approved by the Board would require approval by each LM before spending can occur. Each LM's respective share of the budget can be included in its tax bill.<br>• Separate procedures and accounting between the "agent" and each municipality would be required to facilitate cost sharing<br>• The Board would not be authorized to issue debt. Each municipality would need to approve debt financing of its share then include the amount in its overall debt request to the Counties. SDG being the upper tier has the authority to issue debt.<br>• All funding for waste management would continue to be included in each LM's taxes. | • SDG is better positioned to fund the joint waste management system over the long-term. |
| 5. **Waste Management Operations** | • SDG would be fully responsible for all operations | • The Board would be responsible for operations and accountable to each LM. | • |
| 6. **Customer Communications and Education** | • SDG already has communication mechanisms and tactics in place that reach customers across the Counties. This would be leveraged to meet the waste management communication and education needs<br>• A one-call system for waste management information or filing complaints would exist by default (SDG is a single entity)<br>• A streamlined and effective system to document and respond to customer queries and inform service improvements can be easily established<br>• SDG already has the communications expertise and resources and well positioned to leverage latest communication and customer service technologies<br>• Greater clarity for customers regarding who to call for waste management matters | • Many LMs have limited resources to dedicate to public education and communications. Additional resources would be required by the Board.<br>• A region wide communication system would need to be developed and implemented.<br>• A decision on where the one-call system and coordination of the responses to customers should reside (agent's staff or direct Board staff and accommodations)<br>• Customers may not fully understand role of the Board vs. the roles of the LMs regarding waste management. Can be addressed through education | • |
| 7. **Waste Management Planning & Approvals** | • SDG would offer the centralized planning that is required to ensure an efficient, integrated waste management system for the region over the long-term.<br>• Reduced duplication of effort and less complication (e.g. review and decisions on new disposal technologies; a single waste management by-law, etc.) | • Would offer the centralized planning that is required for the region over the long-term but may be more complicated and subject to approval by the LMs based on their individual preferences<br>• Reduced duplication of effort related to planning but would still require individual waste management by-laws albeit the same template.<br>• A single voice in discussions with the MECP subject to approval by the | • Development of the new by-law for the regional level of service would be required for adoption by each municipality or SDG as they case may be<br>• Approval to redirect waste to various sites across municipal boundaries would be required. This would be best accomplished under SDG jurisdiction. Only |

| Item | SDG | Local Municipalities | Comments |
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| | • A single voice and accountable entity in discussions with the MECP<br>• Facilitates consistency in implementing a uniform region wide level of service and adjusting future service levels offered to customers. Enhanced services (e.g. more frequent leaf and yard waste collection) can be offered to municipalities upon request.<br>• Facilitates investigating new waste diversion and disposal technologies (including incineration) and options for long-term waste disposal that would be appropriate for the region as a whole | LMs<br>• Facilitates consistency in implementing a uniform region wide level of service and adjusting future service levels offered to customers. Enhanced services (e.g. more frequent leaf and yard waste collection) can be offered to municipalities upon request.<br>• Facilitates investigating new waste diversion and disposal technologies (including incineration) and options for long-term waste disposal that would be appropriate for the region as a whole | administrative approvals would be required |
| 8. **Transitioning Blue Box Recycling from LMs to Producers** | • This activity is temporary with a finite end date (transition date of January 1, 2025 for all LMs and Cornwall). Collaboration will allow the LMs to collectively liaise with RPRA and address transition issues. This can be facilitated by SDG if required by the LMs but does not require a transfer of responsibility to SDG | • Does not require collaboration agreements or a Board of Management to complete the transition | • Each LM would continue to be responsible for blue box recycling and all the transition requirements until the transition date. |
| 9. **External Partnerships** | • SDG has a strong track record of partnering with other municipalities including the City of Cornwall and other external parties to provide region wide services to residents in the following areas: long-term care; health, paramedics; and social services. Specifically, SDG and Cornwall established a Joint Liaison Committee since 1999 to oversee some of these partnership arrangements.<br>• This can be leveraged to advance discussions with Cornwall on organics and leaf and yard waste processing and GFL on waste disposal<br>• SDG's is well positioned also pursue potential partnership opportunities for the region as a whole on a broader geographical area (e.g. with the City of Ottawa which is currently preparing its 30-year waste management master plan) | • There are existing good working relationships between 4 LMs and Cornwall for blue box material processing. 3 LMs also have long-term disposal contracts with GFL. However these are all individual agreements with each LM.<br>• There is limited experience working as a group of municipalities with a single voice and entity on partnerships. Although the Board would represent all the local municipalities on potential partnership opportunities, its authority would be limited as all major decisions would require approval by the individual LMs. | • SDG has the resources available, a sound track record and the authority to negotiate external partnerships on a broader scale on behalf of the region as a whole |
| 10. **Waste Disposal and Sharing Landfill Site Capacity & Drop-off Facilities** | • SDG would become the owner of all active landfill sites if responsibility for waste disposal is transferred. This would allow SDG to move waste throughout the Counties with minor administrative approvals to reflect the new ownership on the licences<br>• Greater flexibility to optimize use of active landfill sites in the short-term for region wide disposal needs and minimize costs due to fewer operating landfill sites<br>• SDG ownership would allow residents to use any landfill site within the Counties to drop off waste<br>• SDG would be responsible for all the waste to be disposed increasing the ability to create a partnership with Cornwall and/or negotiate disposal at | • LMs would retain ownership of their respective landfill sites. Approval to move waste across municipal boundaries for disposal at another LM's landfill site would be more complex and protracted.<br>• Ability to move waste across municipal boundaries may be limited especially in the short-term<br>• Would be in a good position to partner with Cornwall and negotiate waste disposal at private sector facilities but may be limited by preferences of each LM<br>• May also continue with seeking landfill expansion approvals | • SDG offers greater flexibility in implementing waste disposal options in both the short and long term. |

| Item | SDG | Local Municipalities | Comments |
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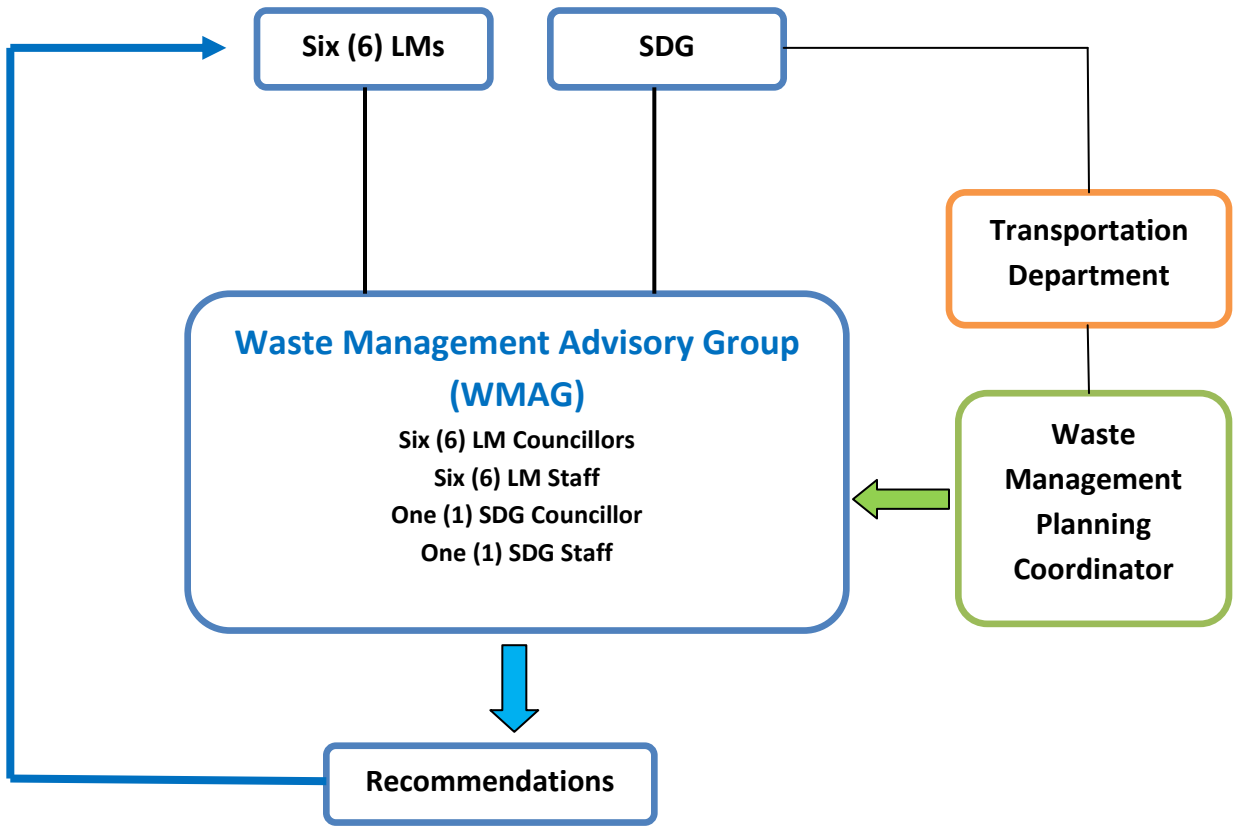
| | private sector facilities.<br>• Improves opportunity to consolidate existing disposal agreements between 3 LMs and GFL into a single contract with SDG, if beneficial.<br>• Flexibility to continue with seeking landfill expansion approvals if deemed to be beneficial | | |
| 11. **Joint purchase and distribution of backyard composters** | • Potential for volume discounts due to economies of scale<br>• Allows customers from all 6 municipalities to purchase composters in any LM (greater flexibility and convenience)<br>• Reduces administration of the procurement from 6 processes to 1<br>• SDG already has a procurement process /system that can be utilised and works yards in addition to LM offices for distribution | • Potential for volume discounts due to economies of scale<br>• Allows customers from all 6 municipalities to purchase composters in any LM (greater flexibility and convenience)<br>• Would utilize the procurement process of the agent or develop a separate process for the Board<br>• Distribution would be at all LM offices and possibly at SDG works yards | • |
| 12. **Waste Collection** | • Potential for cost reduction through:<br>➢ Larger service areas which may attract interest from more service providers and increase competition<br>➢ More efficient route optimization across municipal boundaries<br>➢ More efficient use/ rationalization of collection vehicles across multiple routes on different days<br>• No change in collection service provided to non-residential sector<br>• Flexibility to add collection services as needed on a region wide basis | • Potential for cost reduction through:<br>➢ Combining municipalities into larger service areas which may attract interest from more service providers and increase competition<br>➢ More efficient route optimization across municipal boundaries<br>• Use of collection vehicles owned by LMs would be limited to use within home municipality due to liability reasons. Switching to contracted service would remove this limitation.<br>• No change in collection service provided to non-residential sector<br>• Flexibility to add services as needed on a region wide basis | • |
| 13. **Staffing** | • Dedicated waste management staff currently employed by the LMs would be transferred to SDG<br>• Opportunity for transferred staff to grow within SDG's organization<br>• Would require and assessment of staff by LMs to decide which staff would continue to have a role at the respective LM<br>• Collective agreement requirements would need to be met or negotiated | • Existing waste management staff may continue to be LM staff but work under Board direction<br>• Existing staff may be transferred as direct employees of the Board<br>• Collective agreement requirements would need to be met or negotiated | • Decisions by LMs on which staff members they would retain vs. transfer would be required. |
| 14. **Assets & Liabilities** | • All waste management assets and liabilities would be transferred to SDG should waste management responsibility be transferred to the Counties from the LMs<br>• Assets may also include remaining landfill capacity and liabilities mainly the closure and post closure care costs | • All assets and liabilities (including closed landfill sites) would remain with the respective local municipalities. | |

| Item | SDG | Local Municipalities | Comments |
|---|---|---|---|
| | • Assets such as collection vehicles could be reassigned to other local municipal functions or sold instead of transfer to SDG<br>• Compensation for assets and liabilities would need to be discussed and negotiated between SDG and the LMs.<br>• Closed landfill sites could be excluded from a transfer of responsibility to SDG to avoid any compensation for the liability | | |
| 15. **Public Acceptance** | • SDG responsibility for waste management is likely to be acceptable to customers as long as they receive an acceptable level of service at a reasonable price (taxes). | • Board responsibility for waste management is likely to be acceptable to customers as long as they receive an acceptable level of service at a reasonable price (taxes) | • No difference to customers as long as the service levels are acceptable and the costs are reasonable<br>• Transferring waste management to SDG should consider public input prior to making any decisions |

# Appendix N

## Conceptual Organizational Structure

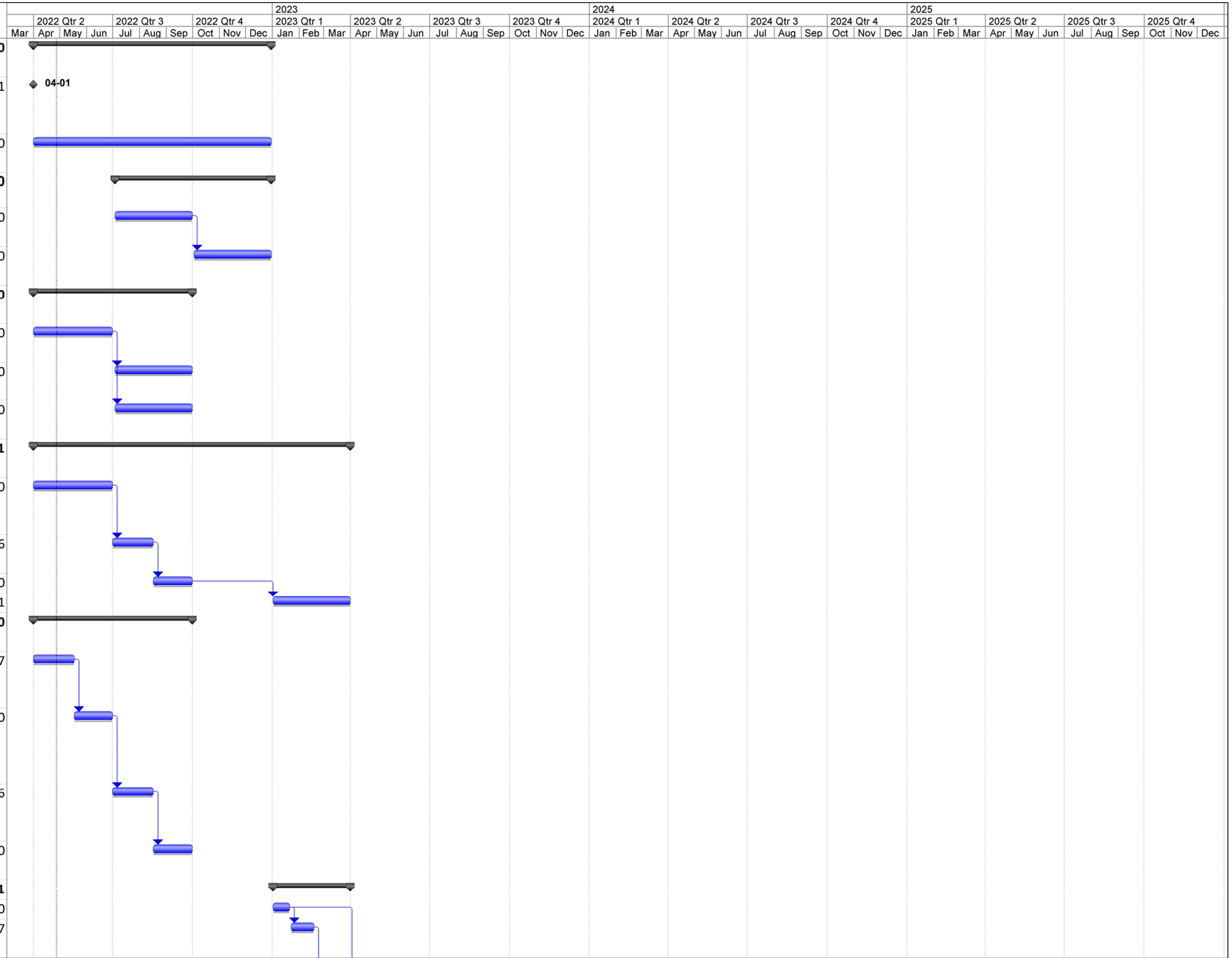
# APPENDIX N: CONCEPTUAL ORGANIZATIONAL STRUCTURE



# Appendix O

## Implementation Schedule Gantt Chart

| ID | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 1 | **1. Blue Box Transition to Producer Responsibility** | **196 days** | **Apr 01** | **Dec 30** |
| 2 | Registration of Processors of blue box materials with the RPRA. This applies to RARE | 0 days | Apr 01 | Apr 01 |
| 3 | Liaise with RARE to keep up to date on transition developments | 196 days | Apr 01 | Dec 30 |
| 4 | **2. Waste Diversion - Organics Composting Food Cycler Pilot** | **130 days** | **Jul 04** | **Dec 30** |
| 5 | Assemble results of the Food Cycler pilot | 65 days | Jul 04 | Sep 30 |
| 6 | Prepare a cost benefit analysis of Food Cycler Pilot for considerations by LMs | 65 days | Oct 03 | Dec 30 |
| 7 | **3. Waste Diversion - Sharing Leaf & Yard Waste Composting Facilities** | **131 days** | **Apr 01** | **Sep 30** |
| 8 | Identify existing L&Y waste composting facilities and approved capacities | 65 days | Apr 01 | Jun 30 |
| 9 | Identify LMs interested in sharing L&Y waste composting facilities | 65 days | Jul 04 | Sep 30 |
| 10 | Liaise with MECP to determine approval requirements for sharing facilities | 65 days | Jul 04 | Sep 30 |
| 11 | **4. Waste Diversion - Joint Purchase of Backyard Composters** | **261 days** | **Apr 01** | **Mar 31** |
| 12 | Confirm the type and number of composters required by each municipality for 2023 | 65 days | Apr 01 | Jun 30 |
| 13 | Prepare tender documents for supply of composters & issue tender call | 33 days | Jul 01 | Aug 16 |
| 14 | Review bids and award contract | 33 days | Aug 17 | Sep 30 |
| 15 | Direct Delivery to LMs | 65 days | Jan 02 | Mar 31 |
| 16 | **5. Waste Disposal: Expansion and Sharing Waste Disposal Capacity at Landfill Sites** | **131 days** | **Apr 01** | **Sep 30** |
| 17 | Confirm status of landfill site expansions in North Dundas, South Dundas and South Glengarry | 33 days | Apr 01 | May 17 |
| 18 | Confirm period for which MECP would extend use of the landfill sites in North Dundas and South Dundas under emergency approvals | 32 days | May 18 | Jun 30 |
| 19 | Confirm environmental issues to be addressed as part of expansion approvals | 33 days | Jul 01 | Aug 16 |
| 20 | Confirm future costs and anticipated timeline to receive approvals | 33 days | Aug 17 | Sep 30 |
| 21 | **6. Establish the WMAG** | **65 days** | **Jan 02** | **Mar 31** |
| 22 | Prepare WMAG Terms of Reference | 15 days | Jan 02 | Jan 20 |
| 23 | Prepare working agreement between LMs and SDG | 20 days | Jan 23 | Feb 17 |

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Waste Management "Roadmap" Imple
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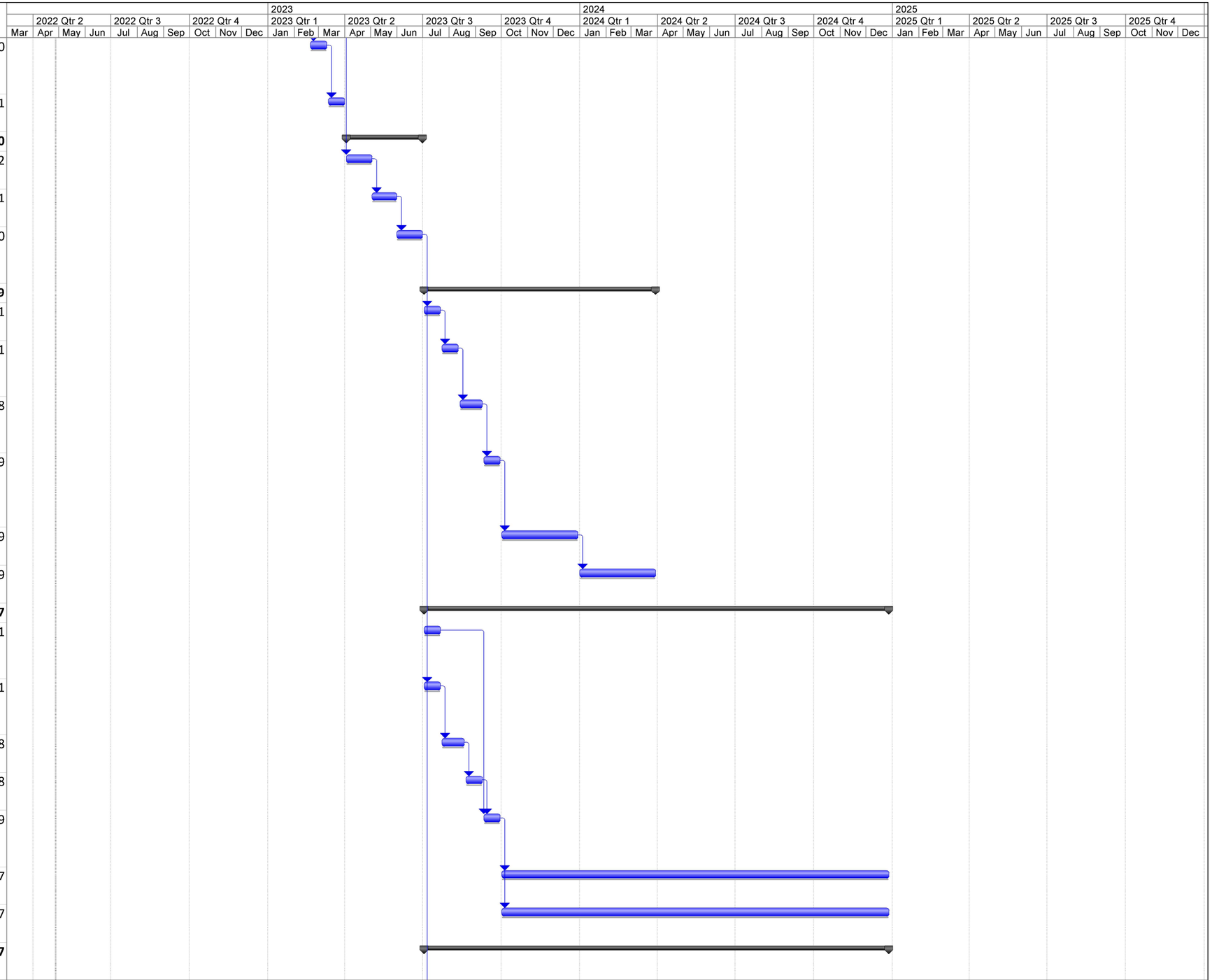
Task — Progress — Summary — External Tasks — Deadline
Split — Milestone — Project Summary — External Milestone

| ID | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 24 | Prepare staff report to Councils for approval of working agreement and WMAG appointments | 15 days | Feb 20 | Mar 10 |
| 25 | Council Approval - Working agreement and WMAG appointments | 15 days | Mar 13 | Mar 31 |
| 26 | **7. Establish Resource Capacity** | **65 days** | **Apr 03** | **Jun 30** |
| 27 | Prepare job description for Waste Management Planning Coordinator | 22 days | Apr 03 | May 02 |
| 28 | Arrange office accommodation, computer, etc. | 21 days | May 03 | May 31 |
| 29 | Fill the position of Waste Management Planning & Communications Coordinator | 22 days | Jun 01 | Jun 30 |
| 30 | **8. Region Wide Base Level of Service** | **195 days** | **Jul 03** | **Mar 29** |
| 31 | Prepare options for enhanced curbside leaf and waste collection. | 15 days | Jul 03 | Jul 21 |
| 32 | Prepare options for enhanced bulky waste collection including options for limits and charges | 15 days | Jul 24 | Aug 11 |
| 33 | Prepare new waste management by-law for region wide base level of service | 20 days | Aug 14 | Sep 08 |
| 34 | Review and recommend new by-law, preferred bulky waste collection option, and enhanced leaf and yard waste collection for implementation | 15 days | Sep 11 | Sep 29 |
| 35 | Approve new by-law for region wide level of service | 65 days | Oct 02 | Dec 29 |
| 36 | Implement region wide level of service | 65 days | Jan 01 | Mar 29 |
| 37 | **9. Public Education & Communications** | **390 days** | **Jul 03** | **Dec 27** |
| 38 | Amend SDG customer service system to accommodate waste management | 15 days | Jul 03 | Jul 21 |
| 39 | Assemble program information from each LM for communication to the public | 15 days | Jul 03 | Jul 21 |
| 40 | Develop educational materials and web content | 20 days | Jul 24 | Aug 18 |
| 41 | WMAG review of educational materials and web content | 15 days | Aug 21 | Sep 08 |
| 42 | Disseminate information through various communication methods and appropriate technologies | 15 days | Sep 11 | Sep 29 |
| 43 | Track and respond to customer queries in a timely fashion | 325 days | Oct 02 | Dec 27 |
| 44 | Prepare quarterly reports on customer queries | 325 days | Oct 02 | Dec 27 |
| 45 | **10. Blue Box Transition to Producer Responsibility** | **390 days** | **Jul 03** | **Dec 27** |

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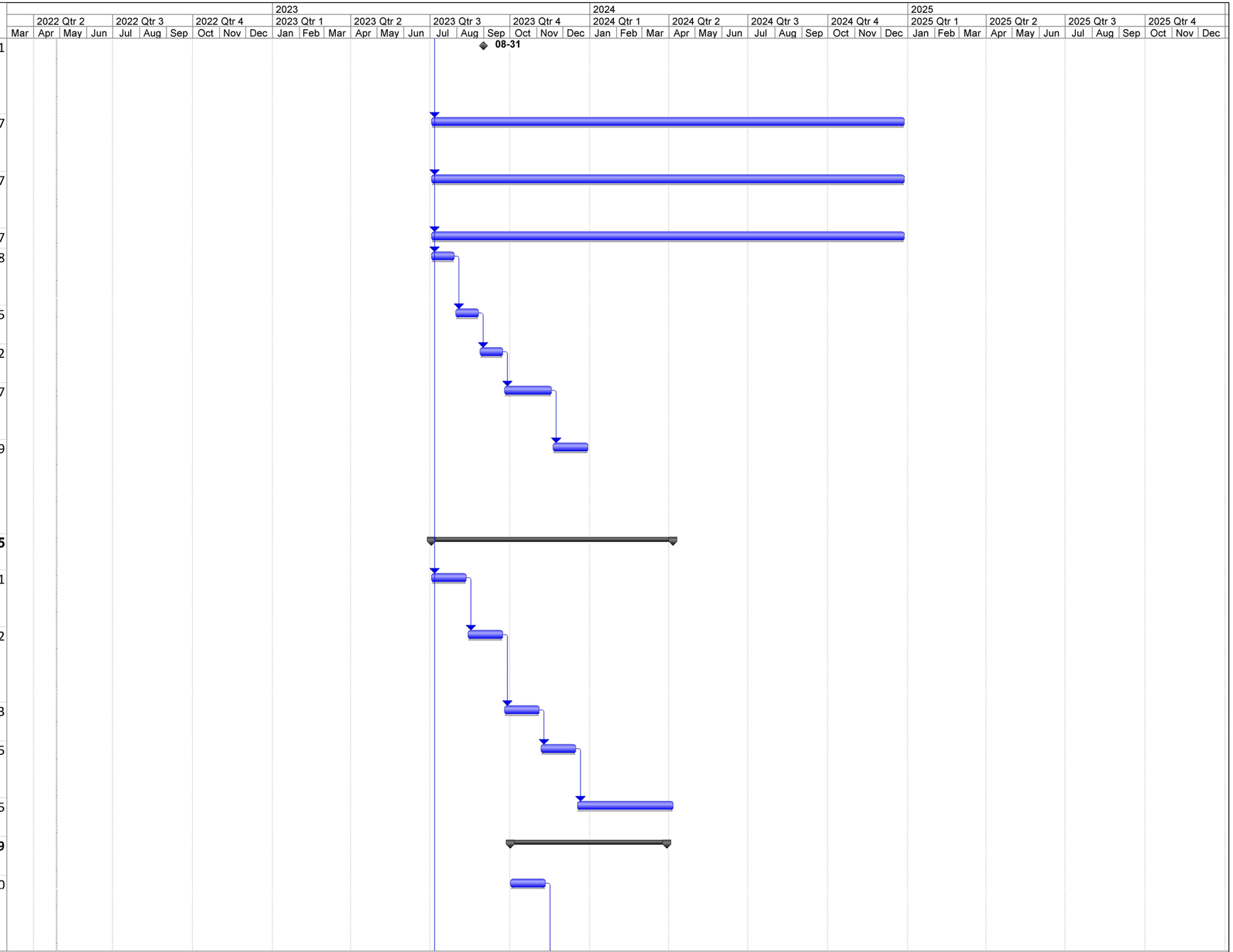
Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

| ID | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 46 | Each LM to submit a Transition Report with further information about its current blue box collection system to RPRA | 0 days | Aug 31 | Aug 31 |
| 47 | Negotiating with Producers or PROs (set-up blue box drop-off depots at landfill sites) | 390 days | Jul 03 | Dec 27 |
| 48 | Liaise with Producers to ensure that public is made aware of services they will receive after the transition | 390 days | Jul 03 | Dec 27 |
| 49 | Address any issues that may arise | 390 days | Jul 03 | Dec 27 |
| 50 | Identify Blue Box Collection contracts where alignment transition date would be required. | 20 days | Jul 03 | Jul 28 |
| 51 | Provide summary report to WMAG for review | 20 days | Jul 31 | Aug 25 |
| 52 | WMAG review and recommendations on contract alignment | 20 days | Aug 28 | Sep 22 |
| 53 | Negotiate with existing contractors to extend or terminate contracts earlier | 40 days | Sep 25 | Nov 17 |
| 54 | Extend contracts or negotiate to remove blue box collection. Align current recycling contracts with transition date and joint waste collection services | 30 days | Nov 20 | Dec 29 |
| 55 | **11. Waste Diversion - Organics Composting** | **200 days** | **Jul 03** | **Apr 05** |
| 56 | Liaise with Cornwall to confirm the organics and leaf and yard waste processing services they can offer | 30 days | Jul 03 | Aug 11 |
| 57 | Prepare a cost benefit analysis of organics composting through Cornwall's facility for consideration by WMAG | 30 days | Aug 14 | Sep 22 |
| 58 | Review the cost benefit analysis and recommend next steps | 30 days | Sep 25 | Nov 03 |
| 59 | Make recommendation regarding whether or not waste diversion processing responsibility | 30 days | Nov 06 | Dec 15 |
| 60 | Implement preferred option | 80 days | Dec 18 | Apr 05 |
| 61 | **12. Waste Diversion - Sharing Leaf & Yard Waste Composting Facilities** | **130 days** | **Oct 02** | **Mar 29** |
| 62 | Determine if there is a role for Cornwall and/or GFL to provide leaf and yard waste composting and the costs. | 30 days | Oct 02 | Nov 10 |




United Counties of SDG
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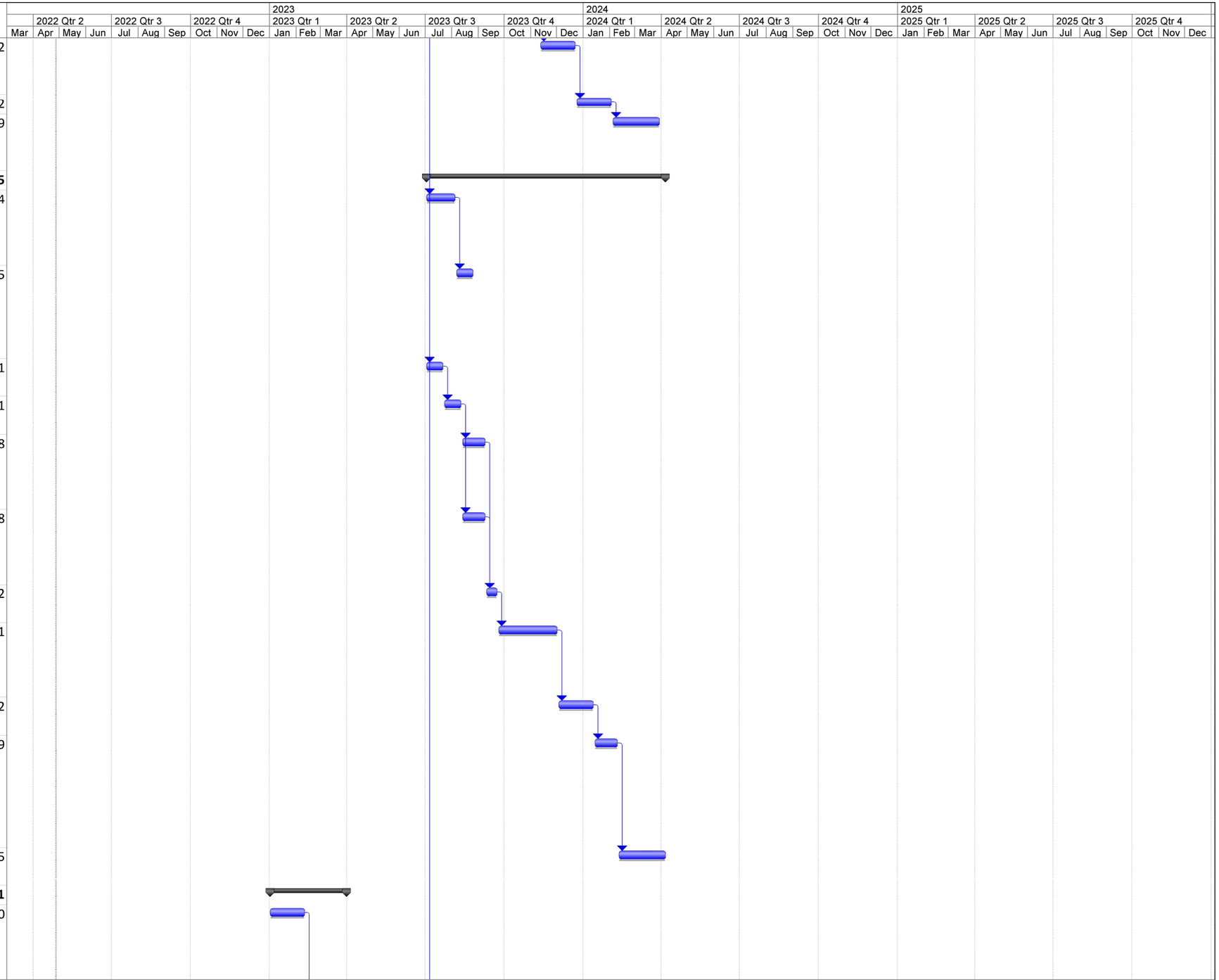
Date: April 27 2022

Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

| ID | | Task Name | Duration | Start | Finish |
|---|---|---|---|---|---|
| 63 | | Prepare report identifying facilities, user LMs, logistics, approvals required and costs | 30 days | Nov 13 | Dec 22 |
| 64 | | Review by WMAG | 30 days | Dec 25 | Feb 02 |
| 65 | | Implement sharing L&Y waste composting facilities ans/ or pursuing processing services with Cornwall | 40 days | Feb 05 | Mar 29 |
| 66 | | **13. Joint Waste Collection** | **200 days** | **Jul 03** | **Apr 05** |
| 67 | | Prepare inventory of existing collection contracts, expiry dates, services provided and in-house collection services | 25 days | Jul 03 | Aug 04 |
| 68 | | Identify any liability, insurance and other issues with sharing in-house collection resources (staff and equipment) between 2 or more municipalities | 15 days | Aug 07 | Aug 25 |
| 69 | | Liaise with MECP regarding any approval requirements for joint collection using | 15 days | Jul 03 | Jul 21 |
| 70 | | Identify LMs where joint collection would be feasible | 15 days | Jul 24 | Aug 11 |
| 71 | | Identify in-house collection staff and where they might be re-deployed to work in other non-solid waste functions | 20 days | Aug 14 | Sep 08 |
| 72 | | Identify in-house collection equipment that would be affected and how they might be re-purposed or sold as the case may be | 20 days | Aug 14 | Sep 08 |
| 73 | | Determine where collection services may be in-house and outsourced | 10 days | Sep 11 | Sep 22 |
| 74 | | Prepare a summary report on joint waste collection including outsourcing vs. in-house collection for review by WMAG | 50 days | Sep 25 | Dec 01 |
| 75 | | Make recommendations on outsourcing vs. in-house collection and joint collection | 30 days | Dec 04 | Jan 12 |
| 76 | | Develop scope and prepare joint tender documents. Time the contracts to coincide with the transition date for blue box (Jan 1, 2025) after which blue box collection services will not be required | 20 days | Jan 15 | Feb 09 |
| 77 | | Obtain bids for waste collection services | 40 days | Feb 12 | Apr 05 |
| 78 | | **14. Waste Disposal: Landfill Monitoring** | **65 days** | **Jan 02** | **Mar 31** |
| 79 | | Review existing landfill monitoring activities and contracts to identify how landfill sites might be bundled to promote economies of scale. | 30 days | Jan 02 | Feb 10 |

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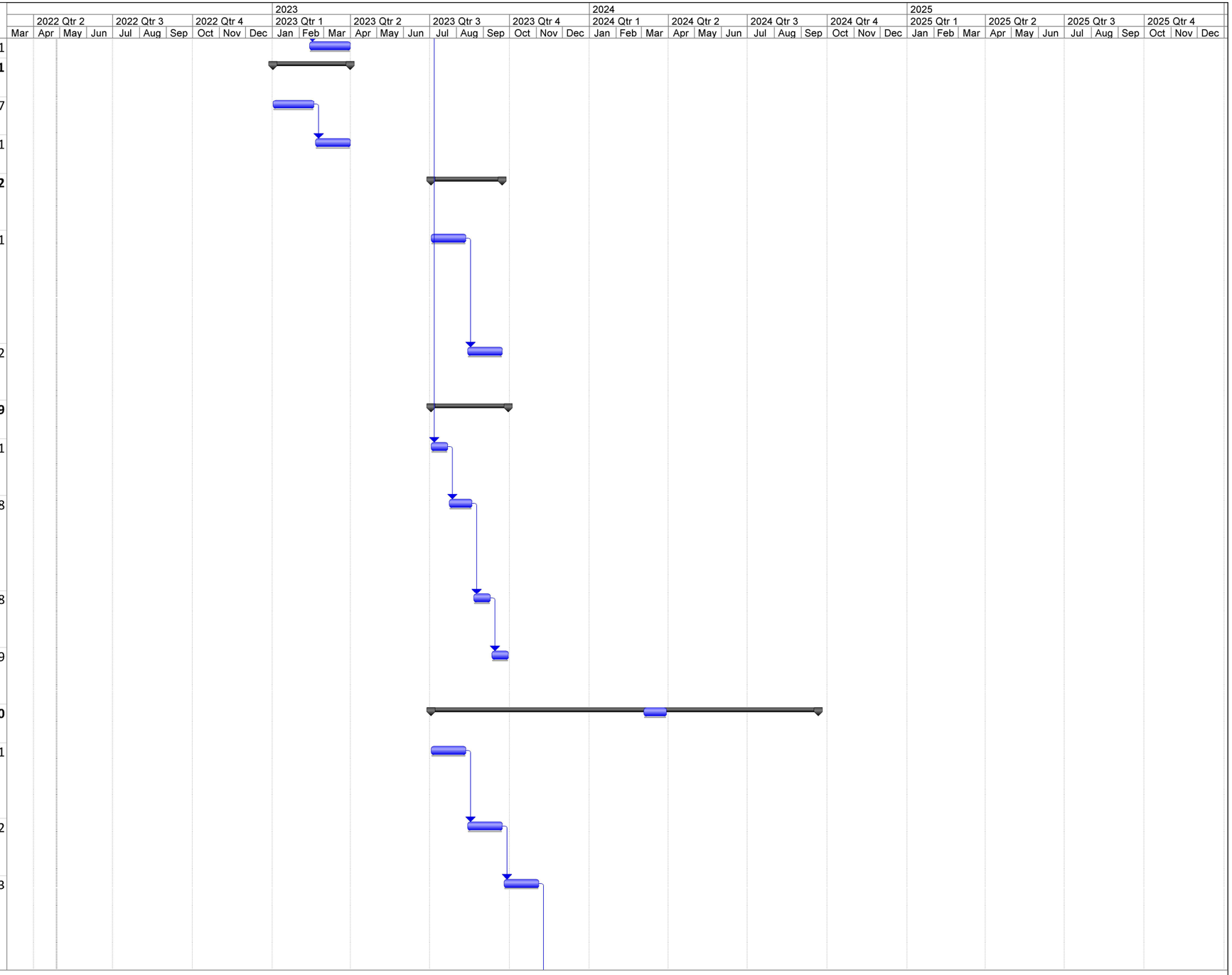
Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

| ID | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 80 | Implement bundled contracts. | 35 days | Feb 13 | Mar 31 |
| 81 | **15. Waste Disposal: IC&I Waste Disposal Policy** | **65 days** | **Jan 02** | **Mar 31** |
| 82 | Prepare a policy to limit the IC&I waste disposal at landfill sites | 35 days | Jan 02 | Feb 17 |
| 83 | Consider policy and make recommendations | 30 days | Feb 20 | Mar 31 |
| 84 | **16. Waste Disposal: Expansion and Sharing Waste Disposal Capacity at Landfill Sites** | **60 days** | **Jul 03** | **Sep 22** |
| 85 | Liaise with MECP to confirm approval requirements under LM ownership and SDG ownership, to move waste across municipal boundaries for disposal at a neighbouring municipal landfill site (curbside and drop-off waste). | 30 days | Jul 03 | Aug 11 |
| 86 | Confirm costs of direct haul of curbside waste from South Dundas to North Dundas | 30 days | Aug 14 | Sep 22 |
| 87 | **17. Waste Disposal: Long-term (20 years) Disposal at GFL** | **65 days** | **Jul 03** | **Sep 29** |
| 88 | Review an existing agreement between GFL and LMs to determine terms and conditions | 15 days | Jul 03 | Jul 21 |
| 89 | Liaise with GFL to identify potential costs, terms and conditions should a decision be made to dispose waste from the three (3) LMs at GFL's facility | 20 days | Jul 24 | Aug 18 |
| 90 | Liaise with MECP to determine approval requirements for transfer station | 15 days | Aug 21 | Sep 08 |
| 91 | Determine the potential capital and annual operating costs of a transfer station at North Dundas | 15 days | Sep 11 | Sep 29 |
| 92 | **18. Waste Disposal: Strategy to Address Impending Capacity Shortfall** | **320 days** | **Jul 03** | **Sep 20** |
| 93 | Confirm if Cornwall would be interested in being a party to the agreement with GFL for waste disposal | 30 days | Jul 03 | Aug 11 |
| 94 | Identify existing residential drop-off facilities that can be shared for use by neighbouring residents | 30 days | Aug 14 | Sep 22 |
| 95 | Based on the latest information, undertake a cost benefit analysis to confirm which is preferred option - expanding existing sites or disposal at GFL | 30 days | Sep 25 | Nov 03 |

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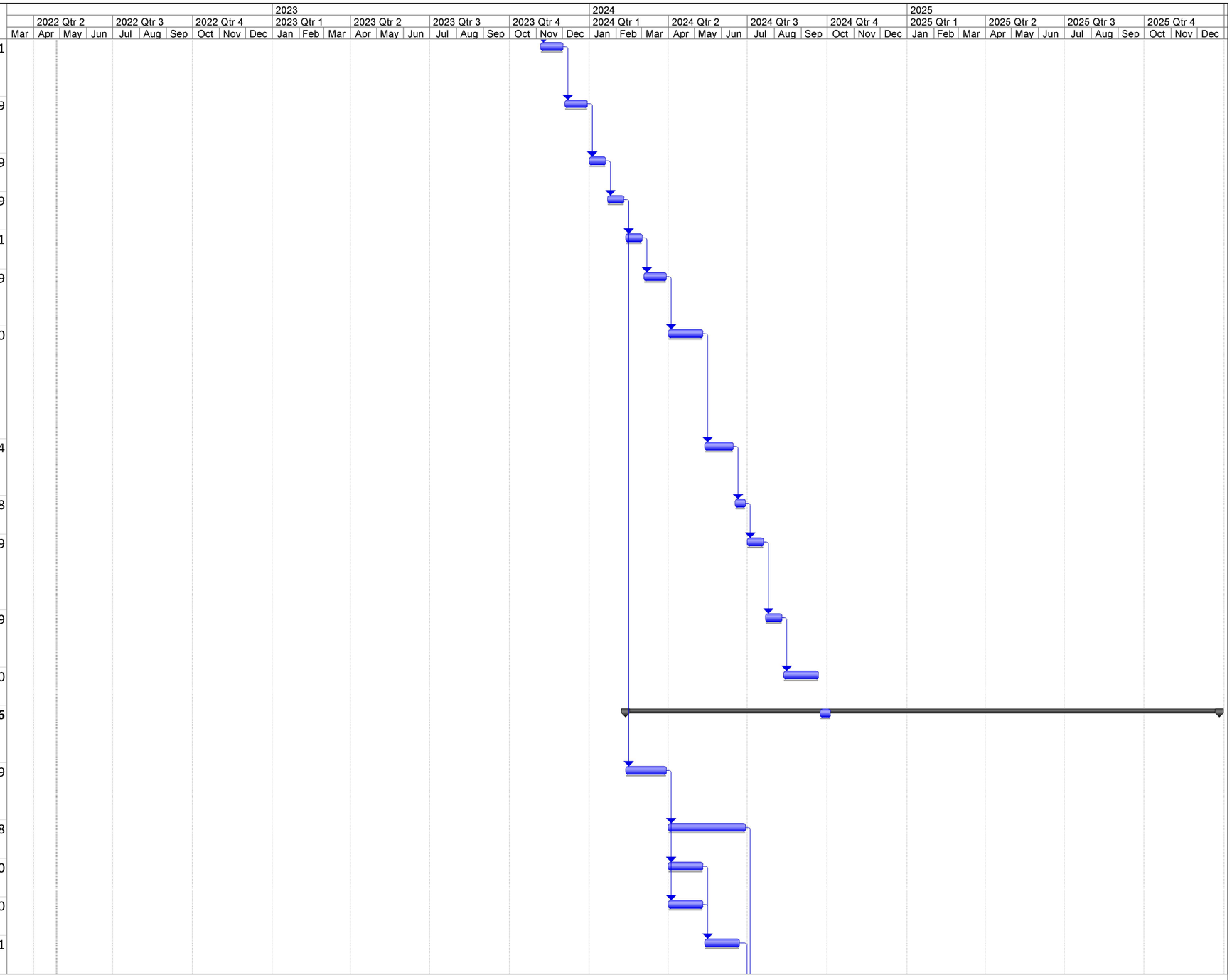
Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

| ID | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 96 | Identify the pros and cons of transferring waste disposal to SDG in order to execute the strategy | 20 days | Nov 06 | Dec 01 |
| 97 | Prepare a summary report outline the preferred strategy for consideration by WMAG | 20 days | Dec 04 | Dec 29 |
| 98 | Review and recommend preferred strategy | 15 days | Jan 01 | Jan 19 |
| 99 | Recommend whether or not waste disposal should be transferred to SDG | 15 days | Jan 22 | Feb 09 |
| 100 | Present recommendations to LM and SDG CAOs | 15 days | Feb 12 | Mar 01 |
| 101 | Present recommendations to LM and SDG Councils for information and feedback subject to public input | 20 days | Mar 04 | Mar 29 |
| 102 | Prepare public communications and stakeholder consultation strategy to solicit feedback on the preferred waste disposal option including transferring responsibility to SDG (if recommended) | 30 days | Apr 01 | May 10 |
| 103 | Review public communications and stakeholder consultation strategy and recommend for implementation | 25 days | May 13 | Jun 14 |
| 104 | Facilitate stakeholder information and feedback sessions | 10 days | Jun 17 | Jun 28 |
| 105 | Prepare report on feedback and any changes to the disposal recommendations to address issues raised | 15 days | Jul 01 | Jul 19 |
| 106 | Review public consultation report and confirm preferred recommendation for waste disposal | 15 days | Jul 22 | Aug 09 |
| 107 | Initiate MECP approvals for preferred waste disposal strategy | 30 days | Aug 12 | Sep 20 |
| 108 | **19. Waste Management Responsibility: (If WMAC recommends transferring responsibility to SDG)** | **490 days** | **Feb 12** | **Dec 26** |
| 109 | Discuss and confirm if waste collection should also be transferred to SDG | 35 days | Feb 12 | Mar 29 |
| 110 | Discuss and confirm the staff to be transferred to SDG | 65 days | Apr 01 | Jun 28 |
| 111 | Discuss and confirm the assets to be transferred to SDG | 30 days | Apr 01 | May 10 |
| 112 | Discuss and confirm the liabilities to be transferred to SDG | 30 days | Apr 01 | May 10 |
| 113 | Discuss and confirm if there should be compensation | 30 days | May 13 | Jun 21 |

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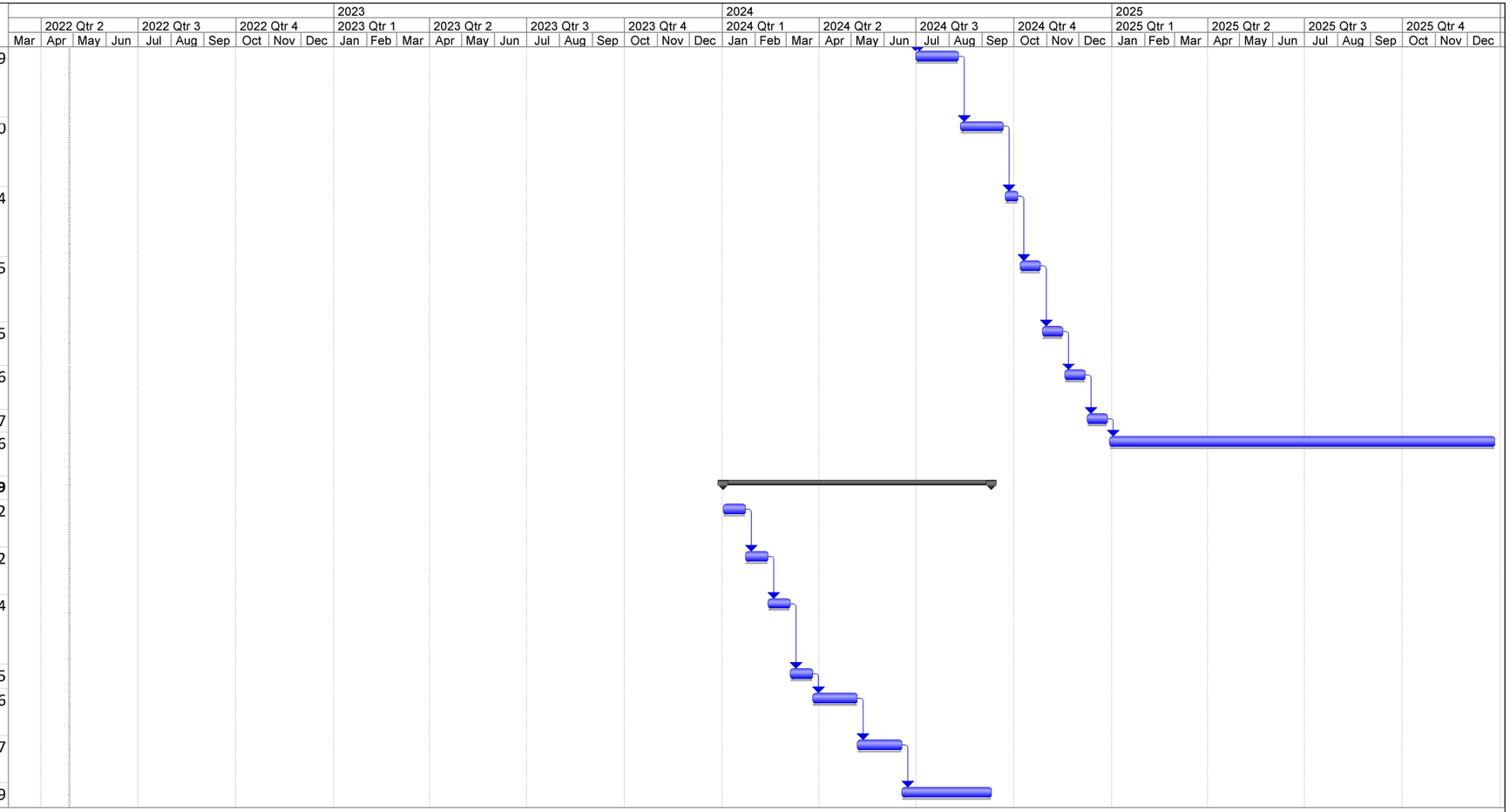
Split | Milestone | Project Summary | External Milestone

| ID | | Task Name | Duration | Start | Finish |
|---|---|---|---|---|---|
| 114 | | Discuss and identify the possible transfer dates for each waste management component | 30 days | Jul 01 | Aug 09 |
| 115 | | Prepare a transition plan capturing the WMAG discussions and recommendations | 30 days | Aug 12 | Sep 20 |
| 116 | | Review and confirm transition plan for presentation to CAOs for feedback | 10 days | Sep 23 | Oct 04 |
| 117 | | Present transition plan to LM and SDG Councils for approval. Require triple majority for transfer to occur. | 15 days | Oct 07 | Oct 25 |
| 118 | | Prepare the by-law transferring waste management responsibility | 15 days | Oct 28 | Nov 15 |
| 119 | | Review the by-law and recommend approval | 15 days | Nov 18 | Dec 06 |
| 120 | | By-law approval by SDG | 15 days | Dec 09 | Dec 27 |
| 121 | | Transfer responsibility to SDG as outlined in Transition Plan | 260 days | Dec 30 | Dec 26 |
| 122 | | **20. Collaboration with Others** | **180 days** | **Jan 02** | **Sep 09** |
| 123 | | Investigate new waste diversion and waste disposal technologies | 15 days | Jan 02 | Jan 22 |
| 124 | | Identify potential partnership opportunities with other jurisdictions | 15 days | Jan 23 | Feb 12 |
| 125 | | Identify potential benefits that may be derived and the role for LMs & SDG | 15 days | Feb 13 | Mar 04 |
| 126 | | Identify key agreement principles | 15 days | Mar 05 | Mar 25 |
| 127 | | Prepare summary report on findings and next steps | 30 days | Mar 26 | May 06 |
| 128 | | Review by WMAG with recommendations for proceeding | 30 days | May 07 | Jun 17 |
| 129 | | Initiate collaboration next steps | 60 days | Jun 18 | Sep 09 |

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