

County of Simcoe
SWMS
5-Year Update
Current Status Report
2015



Solid Waste Management

Solid Waste Management Strategy



2015 5-Year Update Current Status Report



Glossary of Acronyms

AMO Association of Municipalities Ontario

CBCRA Canadian Beverage Container Recycling Association

CIF Continuous Improvement Fund

COGCompressed Natural GasCofACertificate of Approval

EAA Environmental Assessment Act

ECA Environmental Compliance Approval

EFW Energy from Waste

EPA Environmental Protection Act

EPR Extended Producer Responsibility

HHW Household Hazardous Waste

IC&I Industrial, Commercial and Institutional

IFO Industry Funding OrganizationIPR Individual Producer Resposibility

ISP Industry Stewardship Plan

MHSW Municipal Hazardous or Special Waste

MMF Materials Management Facility

MEU Mobile Education Unit

MOECC Ministry of the Environment and Climate Change

MRF Materials Recovery FacilityMWA Municipal Waste AssociationOES Ontario Electronic Stewardship

Ontario Tire Stewardship
OPF Organics Processing Facility

RFP Request for ProposalSO Stewardship Ontario

Source-Separated Organics

SWANA Solid Waste Association of North America

WDA Waste Diversion Act

WDO Waste Diversion Ontario

WEEE Waste Electrical & Electronic Equipment

Strategy 5-Year Update Current Status Report

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Summary

This status report will provide the basis for a recommended 5-year review of the County's Solid Waste Management Strategy. The review will be a comprehensive, multi-staged process examining the current state of the County's solid waste management system and performance targets. It will re-establish waste diversion targets and long-term initiatives and examine potential options to achieve these goals and meet long-term processing and disposal requirements. For consideration during this update will be items deferred by County Council – further restrictions on curbside garbage and contingency garbage disposal.

The Strategy was approved by County Council in 2010. It provides a framework for both short- and long-term diversion and waste disposal programs for the next 20 years. It includes a series of initiatives relating to collections, facilities, and waste management planning.

Since 2010, more than 25 of the Strategy's major recommendations have been undertaken – most notably, transition to a single, County-wide curbside collection contract for garbage, organics, and recycling and uniform collection service for leaf and yard waste, bulky goods, and Christmas trees. The waste export policy was re-examined to allow for export of a portion of curbside garbage to preserve landfill capacity within the County. Development continues on two large infrastructure projects – the Organics Processing Facility and Materials Management Facility.

Since 2010, more than 25 of the Strategy's major recommendations have been undertaken.





The County continues to be a leader in diversion with respect to reuse and recycling initiatives at waste management facilities, with 19 innovative, on-site diversion programs now offered. Curbside blue box recycling is equally successful and capture rates of both paper fibres and containers are excellent. It is noted, however, there is decreasing capture of curbside source-separated organics (SSO) and the County's diversion rate has been relatively stagnant (55.7% in 2013) with no significant increase since the inception of the organics program in 2008.

The waste generation rate per capita has increased 18% since 2010 (averaging a 3.6% increase per year), failing to meet the Council-directed performance target of a minimum 1% annual decrease.



Introduction

A waste management system is complex, encompassing many areas such as environmental protection, government regulation, collection of waste, waste reduction and recycling, management of materials, public education, and performance monitoring. The County's Solid Waste Management Strategy (Strategy), provides a blueprint for our waste management system, a guide for current operations and long-term planning.

With a mandate to encourage and increase diversion, more than 25 of the Strategy's major recommendations have been undertaken since its inception, with County Council deferring some initiatives for consideration in 2015 through the periodic review of the Strategy.

An update was recommended to be completed at various times throughout the Strategy's planning period as detailed timelines could not realistically be developed beyond a 5-year period. This will be the first review of the County's Strategy, beginning with this report - an overview of the current state of the system and summary of how contracts, operations, and materials managed have evolved since 2010.





Policy



Policy

Through comprehensive public consultation and at the direction of County Council, the County's waste management vision statement was established. The vision emphasizes a commitment to diversion and reducing the demand for disposal of residual waste. In addition, it outlines a mandate to ensure secure and cost-effective long-term processing or disposal capacity.

Outlined within the Strategy are a series of adopted principles which will guide decision-making and waste management operations. These include the province's 'Policy Statement on Waste Management Planning' (June 2007), sustainability, the waste management hierarchy, and principles of zero waste. They provide context and direction for current operations within each area – collections, facilities, and long-term waste management planning.

Waste Management Hierarchy

The waste management hierarchy is considered the accepted guide for prioritizing waste management practices. It ranks the most environmentally-sound strategies for managing municipal solid waste, placing emphasis on reducing, reusing, and recycling. Once considered only the 3Rs — reduce, reuse, and recycle — it now places value on the recovery of energy above residual disposal.





Provincial Legislation

Although waste is controlled at all levels of government – federal, provincial, and municipal – it is primarily regulated at the provincial level. In Ontario, waste management is governed by three provincial Acts – the Environmental Protection Act (EPA), the Environmental Assessment Act (EAA), and the Waste Diversion Act (WDA). These Acts, along with the Regulations under them, establish and detail the authority and responsibility of the Ministry of the Environment and Climate Change (MOECC) and the legal requirements for proponents.

Environmental Protection Act (EPA)

The role of the EPA is to provide for the protection and conservation of the natural environment (air, land, and water). Within the EPA, there are specific regulations that mandate how all waste generators in Ontario must manage their waste. These regulations pertain to various aspects of a waste management system – operation of landfills and transfer stations, leaf and yard waste composting, and management of blue box recycling, for example. Key regulations include Ontario Regulation (O. Reg.) 347 – General – Waste Management and O. Reg. 101/94 – Recycling and Composting of Municipal Waste.

Under O. Reg. 347, operations at County waste management facilities are set out in Environmental Compliance Approvals (ECAs), specific to each site. An ECA outlines rules of operation for the storage, transportation, or disposal of waste. They are intended to protect the natural environment and are legally enforceable.

For municipalities, it is provincial legislation that directly impacts waste management operations.



Policy

Environmental Assessment Act (EAA)

The Ontario EAA is a provincial statute that sets out a planning and decision-making process to evaluate the potential environmental effects of a proposed undertaking. Key components of an environmental assessment include consultation with government agencies and the public, consideration and evaluation of all reasonable alternatives, and the mitigation and management of potential negative environmental effects.

In March of 2007, O. Reg. 101/07 – Waste Management Projects Regulation, was enacted under the EAA. The purpose of this regulation was to bring greater clarity to what waste projects are designated as an undertaking under the EAA. Also, it establishes new environmental assessment requirements for waste projects consistent with the potential significance of such projects.

Waste Diversion Act (WDA)

The role of the WDA is to promote the reduction, reuse, and recycling of waste and to facilitate the development, implementation, and operation of waste diversion programs. This Act established Waste Diversion Ontario (WDO), a non-crown agency, as the primary mechanism for achieving the Act's purpose.

In June 2013, the proposed Waste Reduction Act (Bill 91) was introduced into the provincial legislature. This bill was intended to replace the existing WDA and establish individual producer responsibility (IPR) requirements.

The role of the Waste Diversion Act is to facilitate the development, implementation, and operation of waste diversion programs.





Extended Producer Responsibility

Extended Producer Responsibility (EPR) legislation is intended to make producers responsible for the end-of-life management of designated materials, ultimately shifting the cost of diversion away from municipalities and consumers. This potential provincial legislation would further efforts to prevent and minimize waste beyond the jurisdiction of local municipalities.

It was recommended in the Strategy that the County, through organizations such as Association of Municipalities Ontario (AMO), review and comment on proposed initiatives by the province for increased EPR. It was anticipated that changes to the WDA would be forthcoming and the County would support additional EPR legislation.

Waste Reduction Act (Bill 91)

The Waste Reduction Act (Bill 91) was intended to stimulate both reduction and recycling of waste and outline IPR for the end-of-life management of certain designated materials. It was also intended to shift the cost of diversion away from the municipal tax base to producers.

The County supported Bill 91 by attending a MOECC information and feedback session and hosting a special municipal session by the Municipal Waste Association (MWA) and the MOECC. As directed by County Council, comment and support for the draft documents was submitted through the Environmental Bill of Rights registry.

This legislation effectively died when the provincial election was set for June 12, 2014. It is anticipated, however, that new legislation will be introduced in 2015.

Policy

Existing Provincial Stewardship Programs

In Ontario, producer responsibility in its current form was established by the WDA. The Act empowers WDO to develop, implement, and monitor the effectiveness of various waste diversion programs in the province. Brand owners and first importers of products that become designated as wastes, namely Stewards, can join together to create an Industry Funding Organization (IFO), which determines the funding requirements to be paid to program operators, such as municipalities. In order to offset those costs, Stewards are entitled to transfer that fee onto the consumer by raising the cost of the product.

Current program plans – Blue Box Program, Municipal Hazardous or Special Waste Program (Orange Drop), Used Paints and Coatings, Waste Electrical and Electronic Equipment Program, and Used Tires Program – vary considerably in terms of funding levels, reporting and operational requirements. The plans are complex and continue to change.





Blue Box Program

Blue box recycling programs operated by Ontario municipalities as a requirement of O. Reg. 101/94, are partially funded under the WDA. Stewardship Ontario (SO) is the IFO for the Blue Box Program.

Qualifying program costs include recyclables collection, transfer, haulage, and processing. Funding is apportioned based on results of the annual Municipal Datacall completed by municipalities. Through a complex funding formula, municipalities are eligible to receive up to 50% of overall annual net system costs. A portion of the overall funding available, however, is not paid out directly but allocated to the Continuous Improvement Fund (CIF). Further, the newspaper industry provides in-kind advertising space rather than a monetary contribution to the overall funding. The percentages allocated to each municipality are further adjusted based on their performance within their municipal group and the municipality's responses to a series of best practice questions.



Blue Box Program funding is apportioned based on results of the annual Municipal Datacall.

Policy

Municipal Hazardous or Special Waste Program (Orange Drop)

Stewardship Ontario is also responsible for implementing and managing the Municipal Hazardous or Special Waste (MHSW) program. MHSW materials are currently broken out into three phases as follows:

Phase 1 materials (for which the County receives 100% funding of post-collection costs)

 paints and coatings, solvents, oil filters, oil containers (30 litres or less), single-use batteries, antifreeze, pressurized containers, lawn fertilizers and pesticides

Phase 2 materials

 rechargeable batteries, portable fire extinguishers, florescent light bulbs and tubes, mercury containing devices, pharmaceuticals, sharps and syringes

Phase 3 materials

• flammable, corrosive, toxic, reactive, caustic or oxidizing materials, leachate toxins, and peroxides

The MHSW program has undergone several changes since the County first entered into a shared responsibility agreement in 2008; the most significant change being the elimination of funding for Phase 2 materials, which came into effect in October 2014. The County continues to fully fund the collection of Phase 2 and Phase 3 materials in order to prevent these materials from ending up in landfill sites.

In late 2014, the WDO approved the Product Care Association (Product Care) Industry Stewardship Plan (ISP) for paint and coatings. Going forward, Product Care will assume the management of paint, one of the nine MHSW materials currently managed by SO.





Waste Electrical and Electronic Equipment Program

Ontario Electronic Stewardship (OES) is the IFO that develops, implements, and manages the Waste Electrical and Electronic Equipment (WEEE) Program in the province. Eligible materials under this program include computers, printers/fax machines, televisions, telephones, cameras, game consoles, and audio visual equipment. The County undertook a procurement process in 2014, securing an OES-approved processor that provides funding to the County directly for the collection of eligible materials.

Ontario Tire Stewardship Program

Ontario Tire Stewardship (OTS) is responsible for the collection of fees from Stewards and monitoring the effectiveness and efficiency of the program, which includes the collection of:

- on-road passenger/light truck tires
- motorcycle, ATV, and medium truck tires
- off-road tires including golf cart, forklift, bobcat/skid steer, free-rolling farm, and agricultural drive tires
- all sizes of off-road tires and solid industrial tires

The County operates under the program plan as both a collector and as a transporter, receiving funding for both activities.



Policy

Mandatory Diversion Bylaw

The Strategy recommended the County investigate amending its current waste bylaw to require system users to source-separate recyclable and organic materials from the waste stream. While a mandatory diversion bylaw would have some potential benefits, a high degree of enforcement would be necessary.

In June 2013, County Council deferred implementing any further curbside garbage restrictions, including a mandatory diversion bylaw, until the next Strategy review in 2015.





Current System



Managed Tonnages and Direct Diversion Rates - 2010 to 2014

Material	2010	2011	2012	2013	2014
Curbside Garbage	38,395	39,285	39,035	38,470	38,575
Curbside Diversion Tonnes Total	39,780	38,420	41,190	40,980	41,840
Total Curbside Tonnes Collected	78,175	77,705	80,225	79,450	80,415
Direct Curbside Diversion Rate	51%	49%	51%	52%	52%
Facility Garbage	15,405	14,760	19,475	18,100	16,485
Facilities Diversion Tonnes Total	32,590	25,260	29,800	30,500	36,020
Total Facilities Tonnes Collected	47,995	40,020	49,275	48,600	52,505
Direct Facilities Diversion Rate	68%	63%	60%	63%	69%

Note:

All material categories are inclusive of residuals (where applicable), residual percentages are reported and applied for the WDO Datacall process.





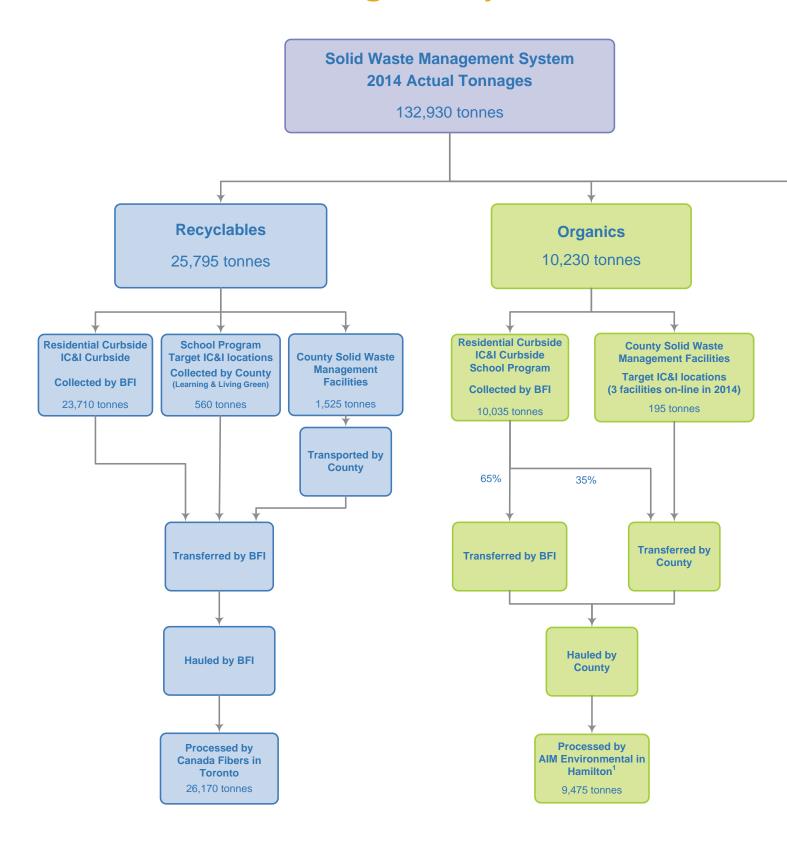
The County of Simcoe offers a wide range of waste management services within an integrated system, serving approximately 293,500 residents in 137,500 serviced residential and commercial units.

In addition, there are currently eight waste receiving facilities (including four active landfill sites), four permanent household hazardous waste (HHW) depots, and five composting facilities for leaf and yard waste. The County is also responsible for the management of 32 closed landfill sites.

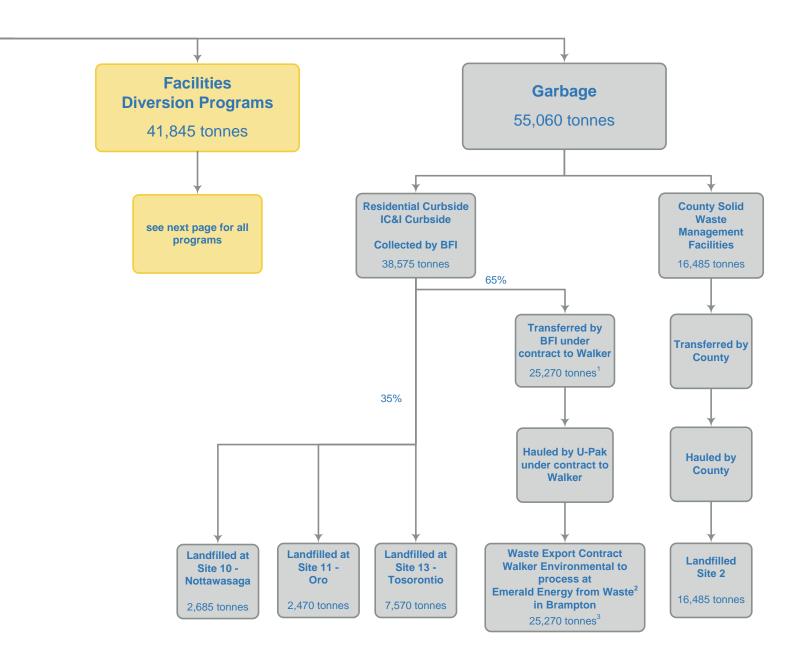
Diverted material and garbage are processed or disposed at various facilities both within and outside of the County, facilitated by County and contracted transfer and haulage operations.



2014 Solid Waste Management System



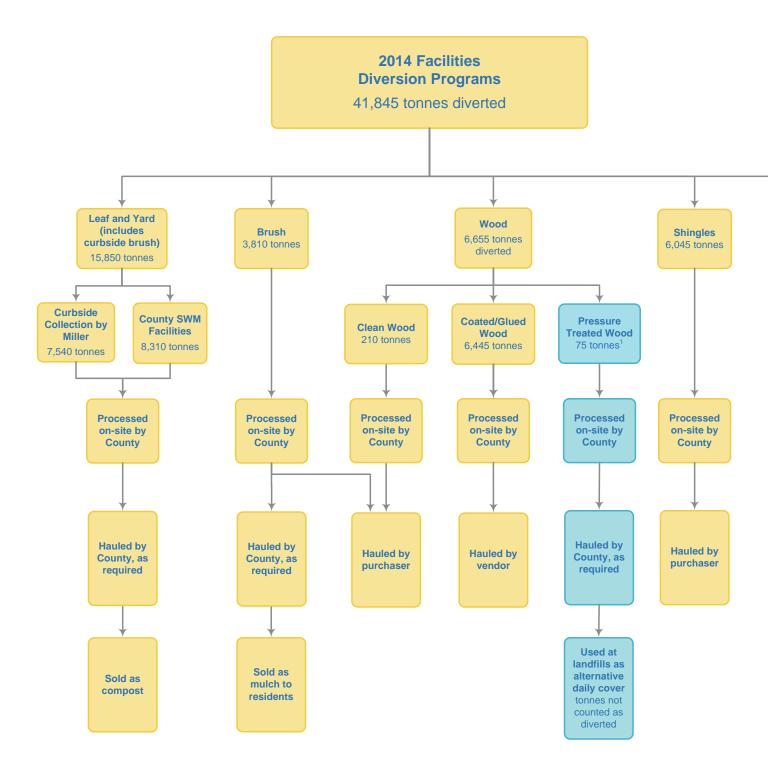




Notes:

- 1. Organics and garbage tonnages impacted by liquid loss at transfer.
- 2. Algonquin Power was purchased by U-PAK and renamed Emerald Energy from Waste Inc. (EEFW) in 2014.
- 3. In 2014, 8,589 tonnes of garbage was exported to landfill due to EEFW shutdown.

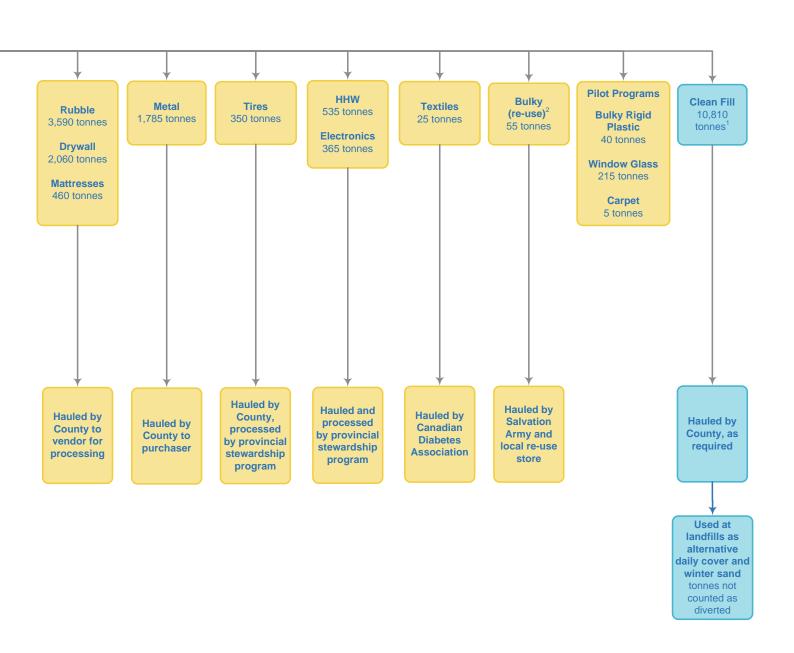
2014 Solid Waste Management System



Notes:

- 1. Not counted as diversion since utilized on a landfill as alternative daily cover.
- 2. Includes re-use materials from bulky call-in service and re-use days.









Collections

Collections

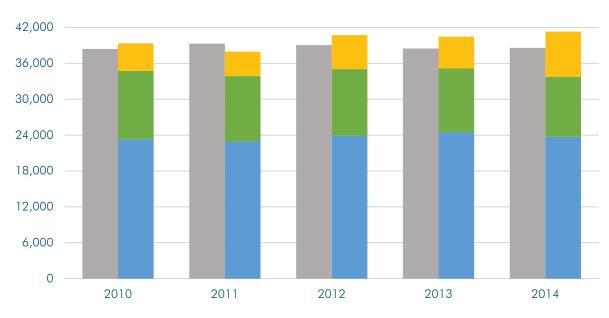
Prior to 2013, waste collection routes and boundaries remained essentially the same as when the County assumed responsibility for waste management services in 1990. There were five curbside collection contracts, established in 2005/2006, which serviced the County in four geographical zones – North Contract, East Contract, South Contract, and West Contract. In regards to special collections, there existed a lack of uniformity, as programs for leaf and yard waste, bulky items, and Christmas tree collection varied significantly between municipalities.

The Strategy noted changing the structure of existing collection contracts could improve collection efficiencies and lower service costs. This was to be considered with the next contracts, set to begin in 2012/2013. As directed by County Council, on April 1, 2013, a single County-wide contract for the regular weekly curbside collection of garbage, organics, and recycling began. In addition, a new contract for special collections (leaf and yard waste, Christmas trees, and bulky goods) began; bringing uniform collection and new efficiencies to the waste management system.





Curbside Collected Tonnages - 2010 to 2014





■ Blue Box Recycling

■ Organics

■ Leaf and Yard Waste, Brush, Christmas Trees



Collections

2013 Collection Contract – Waste, Organics, and Recycling

Progressive Waste Solutions (Progressive) (formerly BFI Canada Inc.) began collecting curbside garbage, two-stream recycling, and organics under a new 7-year County-wide contract in 2013. Overall, this contract has brought consistency and positive response from residents. Worth \$10.6 million annually, this represents a significant cost savings of \$2.6 million annually compared with previous collection costs, while at the same time providing service improvements and expanding service to include approximately 2,700 more units. Additional environmental benefits have been realized from the use of compressed natural gas (CNG) service vehicles.

Expansion of Services - IC&I Sector

Although the County has no legislated authority to provide service to Industrial, Commercial and Institutional (IC&I) sector locations, the Strategy recommended extending collection services, where reasonable, to this sector in order to provide uniform service levels County-wide.

Council had previously directed the County generally maintain the same service level provided by the local municipality prior to the County assuming responsibility for waste management. The result was vast differences in the level of service throughout the County. In turn, inconsistent service levels brought confusion and frustration. Bag limits were difficult to enforce without clear ownership of waste and lack of diversion was apparent.

Following the Strategy's recommendation, but with consideration of stringent bag limits and mandatory participation in diversion programs, Council directed all IC&I units be eligible for garbage collection services commencing with the start of the new collection contract in 2013. It is estimated there were more than 5,200 IC&I units eligible for County service in 2014.







Multi-Residential Collection

In 2011, County Council direction was to consider multi-residential locations without ownership of waste as IC&l locations. Service limits for the new waste collection contract were drawn up accordingly. This policy decision, however, was amended in early 2013, allowing a subsidy program for private waste collection and common collection points at multi-residential complexes even without ownership of waste, provided recycling programs are in place.

Collection in Seasonal Areas

The Strategy recommended the County move to a uniform level of service with the collection of garbage, recycling, and organics being provided, where reasonable, to seasonal households.

Under the new collection contract, Council direction on collection from seasonal areas is essentially a preference hierarchy. The greatest preference is for curbside collection where safe access and ownership of waste are present. If roads are not accessible or if an ownership group or cottage association does not wish to provide access, a provisional common collection point may be utilized as an alternative. If the residents do not wish to have a common collection point or if the provisions of the common collection point are not adhered to, landfill passes for disposal of weekly waste at County facilities are provided.

In 2014, there were 49 common collection points throughout the County and, in addition, 448 annual landfill passes were distributed.

Collections

Special Collections

The Strategy outlined various recommendations in regards to special collections; most notably that the County standardize service in regards to leaf and yard waste, Christmas trees, and bulky items. In 2013, the collection contract for these materials was separated from the County's collection contract for garbage, organics, and recycling. This has increased flexibility and service levels and the ability to use non-compacting trucks for the collection of bulky items, enabling the potential diversion of this material as reuse.

Curbside Leaf and Yard Waste and Brush

Prior to 2013, the collection of leaf and yard waste and brush varied widely in terms of both the number of collections provided (none in some areas to a high of five annually) and who provided the service. The County provided the majority of service but municipal resources were utilized in some areas under agreement with the County. This inconsistent service brought confusion and difficulties with standardized promotion and education.

Council directed collection service for yard waste be standardized County-wide, and services be increased to nine collections annually (four in spring and five in fall) and expanded to include brush, benefitting the County's composting operations. This service increase has been well-received and successful in promoting diversion. In 2014, residents diverted more than 7,300 tonnes of curbside leaf and yard waste and brush throughout the County, a significant increase of approximately 40% over 2013.





Curbside Christmas Trees

As with other special collection materials, there was no uniform County-wide collection of Christmas trees prior to 2013. Two service events for Christmas tree collection are now provided to all residents in January. This increased service level has been well received by residents, providing flexibility and convenience.

Bulky Collection Service

Beginning in June 2013, a County-wide, call-in bulky collection service was implemented on a fee-for-service basis. From June through September, residents may schedule an appointment to have up to five bulky items picked up at a cost of \$35 per scheduled pick-up.

Previously, collected material was loaded into a compacting garbage truck and the material landfilled as garbage. This new program, however, allows the contractor to sort the collected items and determine if they can be reused or recycled. In 2014, there were a total of 1,960 collection events with 42% of the collected tonnage being diverted through existing County programs, including reuse. The County will continue to partner with reuse organizations such as the Salvation Army to further develop this program.



The new bulky collection program allows the contractor to sort the collected items and determine



if they can be reused or recycled.

Collections

IC&I Diversion Programs

Municipal Buildings

Expanding collection service and encouraging diversion of recyclables and organics to target IC&I locations such as municipal offices, long-term care facilities, and schools was outlined within the Strategy.

This program has since developed from providing diversion programs at the County Administration Centre to other County facilities, such as the Museum and to many of the member municipal offices. The County has also been working to increase diversion at its long-term care homes; with Sunset Manor Home in Collingwood beginning organics collection in 2013 and Trillium Manor in Orillia and Simcoe Manor in Beeton coming online in 2014. Approximately 90 tonnes of source-separated organics were diverted through this innovative, successful partnership in 2014.





School Program - Learning & Living Green

In 2010, the Learning & Living Green program was implemented in more than 100 elementary schools across the County. In partnership with five local school boards, the County provides collection of recyclables and organics, as well as support to individual schools, faculty, and 'green teams'. The goal of the program is to create consistency between diversion programs at school and at home. Aligning with provincial curriculum on sustainability, important lessons on minimizing garbage and diverting material such as food waste are brought to the classroom in a tangible way.

Since its inception, the program has diverted more than 2,500 tonnes of recyclables and organics from local schools. Pilots are now underway to determine if the organics program can be expanded to secondary schools within the County.

This program received the Minister's Award of Environmental Excellence in 2013 for its capacity to foster knowledge and behaviour change through innovation, ultimately leading to environmental benefits.



Collections

Public and Open Space Pilot

The management of public and open space recycling is largely a local municipal matter and implementing these programs requires co-operative efforts between local municipalities and the County. As such, a pilot program was initiated in 2012 for public space recycling in partnership with the Town of Midland. The goal was to assess capture rates, determine if reduced contamination could be achieved, and to determine the feasibility of implementing such programs throughout the County. Receptacles for both food and beverage containers and paper fibres were placed in locations such as parks, the downtown core, and at the recreation centre.

Contamination of diversion materials is particularly high at public and open space locations due to the lack of ownership of waste. This results in material being collected as recyclable but the materials must ultimately be disposed of due to significant contamination. This has been observed at the piloted locations, with contamination levels continuing to be an issue. There has, however, been some improvement as the pilot progresses – with decreasing contamination and increasing capture rates, by approximately 60% and 35%, respectively.

The pilot will continue into 2015, with the County monitoring the receptacles, not only for capture and contamination, but condition of the bins (graffiti, damage, etc.).



The County initiated a pilot program in 2012 for public space recycling in partnership with the Town of Midland.





Special Event Recycling Program

In 2012, the County re-launched its special event recycling pilot program by purchasing specialized sorting stations and developing targeted signage and an event recycling training manual to assist event co-ordinators in maximizing diversion results. The results have been positive, with recyclable materials generated at the events generally having low contamination. The program, however, continues to be underutilized with only 15 events participating since 2012.

Feedback from event organizers is the program would be more desirable if the County delivered and set up the receptacles and removed and disposed of the materials; essentially provide full waste management services for special events at no cost.

In 2013, the Canadian Beverage Container Recycling Association (CBCRA) submitted an ISP to WDO for provision of public space recycling bins to locations such as parks, post-secondary campuses, municipalities, as well as a special event program. If approved, the CBCRA program may fulfill the intent of the County's pilots and avoid or minimize municipal spending for the capital cost of receptacles. The County is currently awaiting a decision by WDO before deciding how to proceed.



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Collections

Curbside Battery Collection

The County's first curbside collection of single-use batteries occurred in November 2014 with much success. The program, in partnership with Progressive, resulted in the collection of 17.8 tonnes or approximately 450,000 acceptable batteries. This exceeded the results of other Ontario municipalities on a per capita basis, with collected tonnages being almost four times that of what the County collects annually at its HHW facilities.

The benefits of this curbside diversion program include increased convenience for residents, improved/value-added service level perception, increased diversion of batteries, and a reduction in the environmental impact from batteries that might otherwise have been disposed of.



Waste Levy

Formerly, the waste levy was distributed to each municipality to recover waste collection costs, net of revenues, with each local municipality determining how it recovered the waste levy from ratepayers. This resulted in some significant disparity between the ways the funds were recovered, causing significant confusion. The Strategy noted there was no consistent method used to recover the waste levy from taxpayers. It outlined the simplest approach would be to calculate the waste levy based on the entire solid waste net system cost as a uniform method of calculating the levy across the County.

At the request of County Council, alternative methods were assessed and options presented for Council consideration in 2012. This resulted in the implementation of the property tax assessment method, whereby the cost of waste collection services were included in the County general levy commencing in 2013.



Facilities and Fleet



Facilities and Fleet

The County currently operates eight waste receiving facilities (four with active landfills), five leaf and yard composting facilities, and four HHW depots, each regulated under individual ECAs. These facilities are operated with continued commitment to environmental stewardship and vision to be leaders in diversion performance.

For reference, a map of waste receiving facilities is provided on page 91.

Environmental Monitoring and Site Remediation

When the County assumed responsibility for waste management in 1990, it inherited a substantial number of landfill and waste disposal facilities, many of which were poorly maintained and operated. There was indiscriminate disposal of waste, little or no monitoring, no protection of ground or surface water, open burning, and little site supervision. Although this is now considered poor waste management, this was once normal practice. Unusable land, such as a swamp or an old gravel pit, would be filled with garbage. To date, the County has since spent \$56 million on environmental programs and site remediation, which includes such upgrades as the installation of landfill liners and leachate collection systems. The County is responsible for 19 environmental monitoring programs.

The MOECC requires submission of annual reports for the County's active landfill sites, as well as many of the special operations and closed facilities. The requirements of each report are different but are meant to characterize the issues of each site and make recommendations to avoid potential negative impacts from the facilities.



The Creemore remediation project creates a framework for future landfill remediation projects.



A summary of the environmental monitoring program is provided annually to County Council and, in addition, consultant reports are available for viewing.

Site 25 - Creemore Remediation Project

In 2011, the County initiated a landfill mining and remediation work program at closed Site 25 – Creemore. The objective of this program was to remediate the site by systematically removing buried waste materials from the former landfill site as support for a potential future change to the land use designation of the property. This will ultimately eliminate costly monitoring and reporting requirements. The works were completed in 2012 and in total, more than 45,000 m³ (49,000 yd³) of waste and fill soil were removed and replaced with equal amounts of clean backfill. Two years of post clean-up monitoring are now complete and a final report to the MOECC will be submitted in 2015.

This initiative serves as a pilot project for the County and surrounding regions by creating a framework for landfill remediation via waste removal and declassification. With the success of this project and a commitment to environmental stewardship, further remedial efforts at other small closed landfill sites in the County is anticipated.

This work was awarded a prestigious Solid Waste Association of North America (SWANA) Bronze Award in the Landfill Remediation category, recognizing excellence in remedial action taken to address environmental protection and regulatory concerns.



Facilities and Fleet

Solid Waste Management Fleet (on-road)

Divertible material collected at waste management facilities is transferred and hauled between sites and to processing facilities located outside of the County. The Solid Waste Management fleet has been steadily growing in order to meet the increasing demands of moving these materials.

By the end of 2015, the fleet will consist of:

- Six roll-off trucks and four roll-off trailers
- Three highway tractors with six walking floor trailers
- One float and three van trailers
- the Learning & Living Green front-end truck

Added in 2013, the walking floor trailers have proven beneficial by increasing efficiencies – reducing haul times and moving larger quantities of material in one trip.



In 2014, this fleet transferred and hauled more than **3,100** loads of material.



Curbside Diversion



Curbside Diversion

The Strategy noted residents were already provided the tools to divert waste at the curb – programs for both blue box recycling and source-separated organics had already been established. However, in order to meet long-term diversion targets, further measures to encourage participation in these programs would be necessary.

Restrictions on Curbside Garbage Set-Outs

Restrictions on curbside garbage set-outs were outlined as important measures to increase diversion and reduce waste generation. The Strategy outlined a series of initiatives that would coincide with procurement of the County's new collection contract.

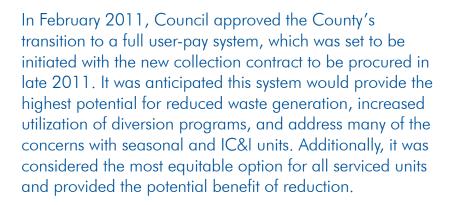
It recommended that within the five-year planning period, increased restrictions be considered in the following sequence:

- transition to a full user-pay program in Years 2 and 3 requiring residents to purchase a tag or special bag for all garbage set out at the curb;
- an increase in the cost of additional bag tags so as to allow residents flexibility for additional set-outs while discouraging their use on a regular basis;
- a clear garbage bag program considered either as an alternative to the above or as contingency in Year 5, if curbside diversion programs were not as successful as anticipated; and
- bi-weekly garbage collection to begin in Year 5, with recycling container capacity increased and a potential expansion of the organics program.

Council approved an increase in the cost of bag tags for additional garbage from \$2.00 to \$3.00 per tag.



Current Direction



The direction to proceed with full user-pay was subsequently reconsidered by County Council. Final direction, provided in September 2011, was to procure the next waste collection contract using the existing service level – provision of weekly curbside pick-up with a one-bag limit. Council approved an increase in the cost of bag tags for additional garbage from \$2 to \$3 per tag.

At a Special Session of Council on June 27, 2013, County Council met to review the Strategy, the current waste management system and performance, and to discuss strategic direction with respect to waste management. Council committed to maintain the current direction of the curbside collection program without implementing any changes prior to the 2015 Strategy review, deferring further restrictions on curbside garbage until that time.



Curbside Diversion

Increased Recycling Container Capacity

The Strategy recommended an analysis of blue box data be undertaken in 2011 to assess the amount of container capacity being utilized, as studies have indicated overflowing recyclables often enter the waste stream.



A County participation study was completed in 2012, which indicated recycling containers were on average at or very near capacity when placed out for collection. In spring of 2012, with partial funding from CIF, new blue boxes, approximately 30% larger, were distributed to all serviced units throughout the County. These larger blue boxes provided additional capacity for new plastic materials to be added to the blue box program, including clamshell packaging, plant pots and trays, small plastic yogurt and fruit cup containers, and coffee cup lids.

The addition of these light-weight plastic materials was significant as the total tonnes of blue box materials collected curbside following the launch of the program increased by 4% from the same period in 2011. Audit data indicates approximately 1,700 tonnes of these materials have been diverted since 2012.





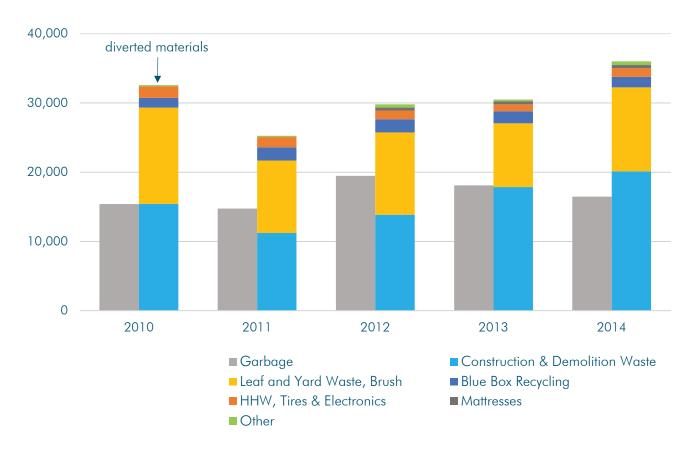
Facilities Diversion



Facilities Diversion

With respect to diversion initiatives at waste management facilities, the County continues to be a leader in the province. There are currently 19 diversion programs offered at County facilities, with one under development. Since 2010, these programs have resulted in more than 150,000 tonnes of material being diverted from disposal - extending the life of County landfills. The direct diversion rate at County facilities reached 68% in 2014 for drop off (non-curbside) materials.

Facilities Collected Tonnages - 2010 to 2014 Drop-off (non-curbside) Materials





Enhancements to Existing Facilities

The Strategy noted the County's drop-off facilities were very well operated, already managing a broad range of waste materials for recycling, and set-up in manner that encouraged diversion. It recommended further diversion initiatives be explored, including greater screening of bulky materials at the sites to remove any divertible materials, the addition of textiles to the County's diversion program, and increased staffing to ensure effective public use of the depots during busy periods.

Since 2010, facilities diversion continues to develop beyond what was outlined in the Strategy – from increased diligence at the sites to separate divertible material and the roll-out of textile diversion in 2011, to innovative processing programs and the addition of diversion programs for mattresses and box springs, rubble, bulky plastics, and window glass and pilot programs for carpet.



Facilities Diversion

Improving Diversion Areas

As more materials are separated and diverted at County facilities, site improvements have been necessary to facilitate these programs and improve customer service. Additional scales were installed at Site 2 – Collingwood, Site 10 – Nottawasaga, Site 24 – North Simcoe, and Site 16 – Bradford West Gwillimbury, substantially reducing wait times and improving traffic flow. Improved site layouts at Site 2 – Collingwood, Site 11 – Oro, and Site 24 – North Simcoe have created more efficient drop-off areas and resulted in positive response from residents. These modifications have become crucial to improving efficiency and decreasing wait times, ultimately encouraging greater participation in drop-off diversion programs.

Diversion of Wood and Brush

The County's diversion program for wood continues to evolve as market conditions fluctuate. In 2012, the County began separating clean, dimensional lumber from coated or glued wood for diversion to different markets. Although both materials are ground on-site as wood chips, the County now receives revenue for the 'clean' material. Processing areas at many sites have been paved to further facilitate this diversion program – improving recovery rates for processed materials and improving transfer operations and the marketability of the ground products.

In 2013, the County began separating pressure-treated wood from drop-off garbage. This material is now transferred to Site 11 – Oro and Site 10 – Nottawasaga where it is ground with the addition of water to minimize dust, and used as alternative daily cover.







The County began diverting shingles from landfill in 2010, sending them for processing to London. Although the program was successful, it was costly and involved hauling heavy shingles great distances. In 2011, the County received approval from the MOECC to process shingles at Site 10 – Nottawasaga. The process, which has evolved with experience, utilizes a Peterson horizontal grinder, grinding the shingles to 3/8" particle size. Purchase of a new grinder in 2013 and screen enhancements has resulted in significant improvements to recovery rates. Now receiving revenue for the material, the ground shingle product is used as raw ingredient (up to 5% by weight) in making new asphalt at local plants.

This successful, innovative program has already diverted more than 23,500 tonnes of shingles from landfill since the program's inception in 2010 and significantly decreased the County's external transfer and processing costs (estimated savings of more than \$500,000/year) by internally processing and marketing the resulting product.

Bulky Rigid Plastic Program

In 2014, a pilot project was implemented at Site 16 – Bradford West Gwillimbury to determine the viability of diverting bulky rigid plastic material. Items such as patio furniture, milk crates, storage boxes, pails, and laundry baskets were segregated into a diversion bunker and loaded into bins that were shipped for processing to Toronto.

The pilot was successful, resulting in significant volumes of material being diverted over the collection period and positive response from residents and site staff. It is expected this program will be rolled out at all County facilities in 2015.



Facilities Diversion

Window Glass Processing

Further work on a pilot program to divert window glass from landfill was undertaken in 2013. The joint effort with the County's Transportation and Engineering Department investigated the potential utilization of the glass product in road construction projects as excavation base fill material. Although this pilot was not successful, an alternate viable market was secured, and the processing program was further developed in 2014.

The MOECC approved processing of this material at Site 10 – Nottawasaga. Here, window glass will be processed through the County's trommel screener to separate the majority of the window frame material from the plate glass. The processed material will be shipped and further processed into cullet, reused in the manufacturing of glass containers and fibreglass. Metal from the window frame material will also be recovered and diverted from landfill, achieving a revenue.

This program will be rolled out at all County sites in 2015.





Development of Permanent Reuse Storage Areas

The Strategy recommended one or more reuse areas be developed at County facilities and interested community organizations be sought to divert reusable items from landfill through donation and re-sale.



The County has partnered with Habitat for Humanity, Salvation Army, and a local reuse business to divert reuse items, such as furniture, brought on-site through the call-in bulky service or delivered to the sites by residents. It is anticipated that continuing to work with additional reuse organizations will be beneficial in further developing this program.

In 2012, the County investigated the feasibility of constructing reuse storage building at each of its operating waste management facilities. It was determined these centres would be developed at four County facilities: Site 10 – Nottawasaga, Site 11 – Oro, Site 13 - Tosorontio, and Site 24 – North Simcoe Transfer Station. Construction of reuse buildings was completed in 2014.

Facilities Diversion

Tipping Fees

Standardizing Landfill and Transfer Station Rates

The Strategy indicated it was not reasonable to charge a differential rate for materials dropped off at a landfill versus a transfer station, since the 'dry waste' program would be transferring all residential drop-off garbage to Site 2 – Collingwood for disposal. It recommended the County consider a uniform charge of \$155/tonne for garbage brought to either a transfer station or a landfill site.

In 2011, Council approved a staged, 4-year increase in the tipping fee for garbage brought to the County's landfills – with the final increase occurring on January 1, 2014 – bringing a uniform tipping fee for garbage at all County sites to \$155/tonne.





Divertible Material

In 2010, there was no charge at County facilities for separated electronic waste, HHW, tires, blue box recyclables, and residential loads of brush and yard waste. The Strategy recommended tipping fees for scrap metal and large quantities of leaf and yard waste and brush (quantities >200 kg) also be waived in order to encourage diversion of these materials and reduce lineups at County facilities for weighing out. Also, it recommended tipping fees for drywall and shingles be lowered and chlorofluorocarbon (CFC) appliances became a flat rate per unit, encouraging customers to properly separate and divert these materials in the appropriate diversion area.

In consideration of these recommendations, Council approved a revised tipping fee schedule in 2011 with the intent to encourage and increase diversion at all County facilities. The tipping fee for large quantities of commercial brush was subsequently reinstated in 2014 as there was a concern commercial customers were abusing the free tipping rate.



Facilities Diversion

Mixed Waste Policy

As part of the development of a mandatory diversion bylaw, the Strategy recommended an increase in the rate for disposal of mixed waste of up to five times the fee for normal waste to discourage mixed waste disposal and promote the use of depot diversion programs. For comparison, the County's mixed waste disposal policy, effective since 2001, required recoverable materials mixed with other wastes to be charged at the mixed/recoverable waste rate of twice the basic tippage fee whether placed at the tip face or in the recoverable materials area.

As of January 1, 2014, the mixed waste tipping fee at all County facilities is \$310/tonne, twice that of the garbage rate. The increased tipping fee allows for any incurred costs to the County should the material require sorting by site staff. Further gains in diversion at the sites by dramatically increasing this rate may not be proportionate to the increased resources and potential customer dissatisfaction.





Transfer



Transfer

Potential short- and long-term options for transfer were outlined in the Strategy, but noted however, longer-term transfer requirements were less clear, as the next collection contract had yet to be procured, future processing arrangements for recycling and organics were unknown, and Council direction on waste export was uncertain. The Strategy recommended completion of procurement processes for the next collection contract and for waste export prior to final determination of the preferred transfer system.

Short-term transfer contracts have been secured as development of a County facility continues.



Current System

Since 2010, various options for transfer have been assessed. It was determined, based on the tonnage of recycling managed by the County, 'Transtor' units for recycling (hydraulic bins that receive incoming material and store it temporarily) proposed in the Strategy would not be a viable option. In 2011, the County began working with CIF on an application for funding construction of a single, central transfer facility as this would provide the most efficiency, resulting in greater economies of scale and reduced operating costs. In the interim, short-term transfer contracts were secured, which have provided costing for comparison with development of a County-owned transfer facility.

Approximately 63% of curbside garbage, or 24,500 tonnes per year, is transferred from the Progressive facility in Barrie and hauled to Brampton for processing. In addition, approximately 10,000 tonnes per year of curbside source-separated organics are transferred and hauled to Hamilton. More than 25,500 tonnes of curbside and facilities-collected recycling are also brought to Progressive for transfer.



In 2014, an initial financial comparison between continuing the current system of contracting transfer services and construction of a County transfer facility was completed. The analysis considered in projected annual operating expenses over a 20-year period in comparison with estimated capital costs. The payback period of a County facility was estimated to be between five and six years, dependent on funding.





Transfer

Materials Management Facility (MMF) Project

In consideration of the financial analysis, in August 2014, County Council endorsed development of a Materials Management Facility (MMF) for the transfer of garbage, organics, and recycling. The MMF, a transfer facility, will be an integral part of the County's waste management system – the link between collection operations and moving material to final waste disposal/processing locations. This facility will allow for the County to securely manage materials in-house, protect against increased future contract costs, and allow for flexibility to adapt to collections changes and tonnage fluctuations.

CIF funding for this project was secured in late 2014. It guarantees funding 47% of blue box-related project costs to a maximum funding limit of \$2,187,840. This funding is contingent on the potential for the facility to be jointly utilized by other local municipal jurisdictions on a cost recovery basis and design of the facility to allow for potential future expansion to accommodate a full Materials Recovery Facility (MRF).

Project Development to Date

Development of the MMF is expected to take approximately four years, with the facility being brought online in early 2019. This will follow a comprehensive siting, approvals, procurement, and construction process. Initial works on this project were begun in 2014 with the scope of work assigned to Conestoga-Rovers & Associates (CRA) being extended to provide engineering services related to siting. CRA was originally retained in May 2014 as the County's consultant for the Organics Processing Facility (OPF) Project. Extending CRA's work to including siting of the MMF will avoid duplicating consulting services.

Development of the MMF is expected to take approximately four years, with the facility being brought online in early 2019.





On December 2, 2014, public information sessions were held at the Simcoe County Museum to formally introduce this project, summarize the proposed siting process and methodology for both infrastructure projects, and to obtain public feedback on site evaluation criteria. Defining a clear siting methodology and evaluation criteria at the onset of this process, seeking both public input and Council direction, will be imperative to ensuring a transparent and defendable siting process.

Conestoga-Rovers & Associates first siting report, Part 1 – Planning – Siting Methodology and Evaluation Criteria, was presented to and endorsed by County Council in early 2015.

Next Steps

CRA's next report, Part 2, will describe the long list evaluation process and short-listed sites, while Part 3 will detail the evaluation of the short-listed sites and the identification of a preferred site. Reports to County Council will summarize the findings, input received from the public, recommendations, and key items for Council's consideration and direction. It is anticipated the preferred site will be presented to County Council in early 2016.

Information and updates can be found at simcoe.ca/mmf.





Recycling Processing



Recycling Processing

Historically, with the exception of material managed at the North Simcoe Materials Management Facility (MRF), the County's waste collection contractors were responsible for the processing of blue box materials and retained the revenues from their sales. The Strategy recommended in the short term, the County contract for the processing of its two-stream recyclables separately from collections in order to have greater control of the management of materials, markets, and to secure recycling revenues. Further, it recommended consideration for developing a new MRF for recycling processing capacity within the County. It noted, however, the future role of municipalities in the provincial recycling system is uncertain.

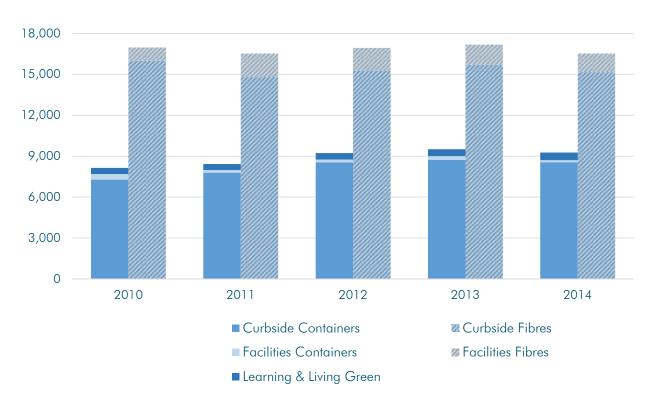
Current System

Concurrent with the commencement of the new waste collection contract, the County took responsibility for collected blue box materials and, as such, procured services for the processing of this material. Separate two-year contracts for the transfer, haulage and processing of recyclables began in April 2013, with approximately 25,500 tonnes of paper fibres and containers being processed annually at Canada Fibers in Toronto.

With the end of the two-year processing contract, in early 2015 a Request for Proposal (RFP) for recyclables processing was issued. There was favourable response to this RFP – indicating substantial processing capacity within southern Ontario. New three-year contracts, which began on April 1, 2015, were awarded for paper fibres and containers.



Tonnes of Blue Box Recycling Managed - 2010 to 2014





Approximately **25,500** tonnes of paper fibres and containers are processed annually.

Recycling Processing

Development of County Processing Capacity

Since 2010, the County has continued to assess the feasibility of developing recycling processing capacity within the County. This has been complicated by anticipated changes to the WDA and the provincial Blue Box Program.

In 2014, with one year of detailed tonnage and recycling contract data, an analysis for a County transfer facility with a potential fibres processing line was completed and presented to County Council. It noted the payback period for a transfer facility indicated great potential for savings, but there was no increased financial benefit to the processing of fibres. This included consideration CIF would not increase its funding to cover additional capital for a fibres processing line.

CIF funding for the MMF is contingent on the potential expansion of the facility to a full MRF. Siting will consider the facility has the potential for expansion to process both fibres and containers should it prove to be a viable option in the future.





Organics Processing



Organics Processing

In the short term, the Strategy recommended the County initiate discussions with its current organics processor to determine capacity and potential to extend the existing contract. In the longer term, it recommended development of a centralized composting facility within the County. Public input indicated support for processing within the County, as well as for the addition of pet waste and diapers to the organics program.

Current System

Leaf and Yard Waste Composting

Leaf and yard waste and brush is processed at five compost sites located at various open and closed landfills throughout the County. In 2014, more than 15,500 tonnes of leaf and yard waste and brush was diverted through curbside collection and drop-off at waste management facilities. This material is placed in windrows, regularly turned, and monitored as per MOECC guidelines. To further facilitate this diversion program, the County expanded its compost operations at Site 10 – Nottawasaga, Site 11 – Oro, and Site 15 – Wasaga Beach in 2013.

More than 8,100 tonnes of finished compost were sold to residents and commercial landscapers in 2014, an increase of 4,200 tonnes from 2013. This successful diversion program has benefited from increased uniform curbside collection of leaf and yard waste and brush.

Source-Separated Organics (SSO)

In 2012, the County secured an extension to its existing organics processing contract with AIM Environmental. Export of SSO under this five year contract began on October 1, 2013, with material being hauled by the County's waste management fleet to Hamilton using roll-off bins. This system continues to work well, is cost effective, and will provide some flexibility as in-County processing is considered. In 2014, the County transferred and hauled more than 300 loads (equating to 9,500 tonnes) of SSO for processing.







Organics Processing Facility (OPF) Project

In 2012, GENIVAR Inc. completed an initial viability study in regards to an in-County OPF. This report outlined facility sizing and identified a number of potential processing technologies that could realistically incorporate additional materials County Council had indicated a desire to process (diapers, pet waste, and sanitary products). This report also outlined the next steps required to develop a facility.

On June 27, 2013, a Special Session of Council was held to provide County Council with an opportunity to discuss improving diversion. Council approved, in principle, the addition of pet waste and diapers to the County's source-separated organics program and requested additional information on costing – noting this would have an impact on development of a County facility.

More than **8,100** tonnes of finished compost were sold to residents and commercial landscapers in 2014.



Organics Processing

2014 Milestones

Costing information, a proposed project plan, and timeline for the Organics Processing Facility were endorsed by Council in early 2014. The current mandate seeks to provide siting, technology, and costing information to Council on developing an aerobic composting facility (Phase I) to manage the existing 'green bin' material collected, potentially adding pet waste. Siting will consider, however, the opportunity for future expansion to include anaerobic digestion (Phase II).

As was recommended by GENIVAR Inc., the siting process has been initiated first, a fundamental step in procuring technology. Conestoga-Rovers & Associates (CRA) was retained as the County's consultant to further tasks related to siting and procurement of processing technology. Council also endorsed the formation of a Community Engagement Committee – with a mandate of providing a forum for focused discussion on public engagement during the OPF siting and procurement process.

Public information sessions related to this project were held on June 17, 2014 and December 2, 2014. These sessions provided the public and interested stakeholders an opportunity to receive information, discuss the County's diversion program for source-separated organics, and to receive feedback on a proposed siting process and site evaluation criteria.

From this, CRA's first siting report, Part 1 – Planning – Siting Methodology and Evaluation Criteria, was presented to and endorsed by County Council in early 2015.





Next Steps

CRA's next report, Part 2, will describe the long list evaluation process and short-listed sites, while Part 3 will detail the evaluation of the short-listed sites and the identification of a preferred site.

Reports to County Council will summarize the findings, input received from the public, recommendations, and key items for Council's consideration and direction. It is anticipated the preferred site will be presented to County Council in early 2016.

Overall, development of Phase I is expected to take approximately five years, with final commissioning of the facility anticipated in 2019.

Information and updates can be found at simcoe.ca/opf.

Costing information, a proposed project plan, and timeline were endorsed by Council in early 2014.







Garbage Disposal and Processing



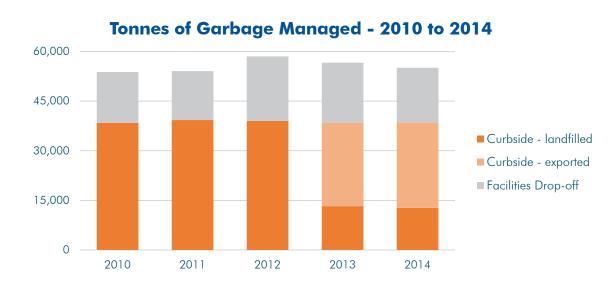
Garbage Disposal and Processing

With a mandate to increase diversion and reduce residual waste, the Strategy outlined various initiatives related to diversion both curbside and at County facilities. It cautioned, however, given the County's growing population and decreasing landfill capacity, examining both short- and long-term options for garbage disposal or processing would be necessary. Although diversion and other modifications to the waste management system may increase the lifespan of operating landfills, future planning for additional disposal and/or processing will be required.

The Strategy did not include consideration for new landfill capacity but focused on the continued use of existing landfill sites, export of a portion of the waste stream, and potential pursuit of partnerships.

Current System

Currently the County manages approximately 55,000 tonnes per year of garbage. In 2014, this equated to approximately 38,500 tonnes/year of curbside-collected and 16,500 tonnes/year of facilities-collected garbage. As indicated, the annual tonnage of garbage managed has not varied significantly since 2009.





Preserving Existing Landfill Capacity – Short-Term Approaches

Modification to Landfill Operations

There remain four operational landfills within the County. The Strategy noted these sites were run in an efficient manner but enhancements could be made to the management of facilities drop-off garbage. Curbside and facilities garbage is now managed separately – curbside garbage is landfilled at Sites 10, 11, and 13 and all facilities-collected garbage, or dry waste, is hauled by the County to Site 2 – Collingwood for landfilling. This system was initiated County-wide in 2011 to preserve capacity at landfills permitted to accept curbside waste and to effectively manage bulkier drop-off material at one site. This system has benefitted the County's landfilling operations and increased long-term landfill capacity.



Garbage Disposal and Processing

Shredding System at Site 2 – Collingwood

In an effort to preserve landfill capacity at Site 2 - Collingwood, the Strategy recommended the feasibility of shredding bulky waste at this site be explored. A 2012 study assessed the benefits of shredding/grinding equipment for processing of dry and bulky waste. It outlined shredding of oversized bulky items, such as furniture and non-recyclable plastics, would reduce their size, allowing for greater compaction and landfill density, and in turn, an extension of site life.

The County purchased a Doppstadt 3060K shredder and operation of the unit commenced in October 2013. Currently, all dry waste transferred from County facilities is passed through the shredder and then transported to the active landfill face where it is placed, compacted, and covered.

Substantially improved landfill densities were observed over 2014, the first full year of shredding operations. Landfill capacity assessment indicate the density has been increased by 47% from 2012 (the last full year without shredding), equating to four years of additional capacity at the site. It is estimated that utilization of the shredder will net a savings of approximately \$4.4 million in avoided waste export disposal costs.





Garbage Export

simcoe.ca

Prior to 2013, all waste managed by the County was landfilled at County sites. The Strategy recommended, however, the export of waste be considered as a short-term measure to lengthen the life of current operating landfill sites, allowing time for the exploration of longer-term options for garbage disposal or processing.

The County's waste export policy, which took form with direction from County Council, was put forth in March 1990 to ensure residential residual waste destined for disposal from outside of County limits would not be granted admittance. The County took a similar stance on the waste generated within its own borders; choosing instead to be 'masters of their own house'.

After some consideration, County Council rescinded the no import/no export policy on October 25, 2011 and a procurement process began to secure additional disposal capacity. Council approved a five year waste export contract, beginning in 2013, with Walker Environmental Inc. to transfer, haul, and process 25,000 tonnes/year (approximately 63%) of curbside waste at Algonquin Power Energy from Waste's Brampton facility (Algonquin Power). The Algonquin Power facility, now known as Emerald Energy from Waste (EEFW), converts approximately 500 tonnes of waste per day (176,000 tonnes per year) into steam, sold to neighbouring industry and to electricity, which is sold on the grid.

In the first two years of garbage export (2013 and 2014), 49,830 tonnes of County curbside garbage have been exported. This has resulted in a reduction in the amount of airspace used each year at County landfills (approximately 40,000 m³/year). This has been beneficial in extending the capacity at Sites 10, 11, and 13 by seven years.

Garbage Disposal and Processing

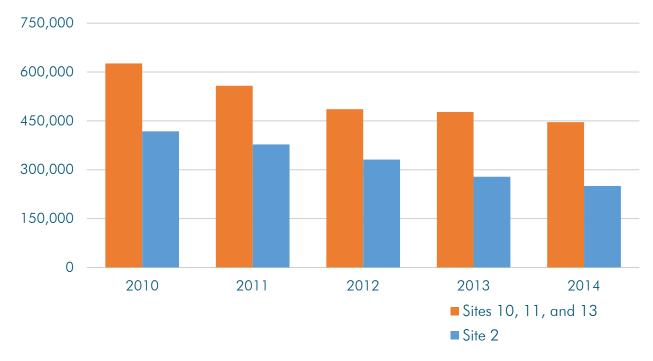
Assessing Remaining Capacity

The Strategy recommended annual landfill surveys be completed to assess the remaining capacity of current operating landfills. These assessments are valuable to long-term planning and provide information on gains made from modifications to landfilling operations and waste export. This is completed and reported annually to County Council.

Waste export has significantly increased the estimated lifespan of County landfills.



Remaining Landfill Capacity (m³) - 2010 to 2014





Site 2 - Collingwood

Recent survey data indicates the density of landfilled material has increased significantly in 2014 as a result of shredding operations. It is estimated the current capacity of this landfill has been extended to approximately nine years, with anticipated closure in 2024. It should be noted this does not consider an increase in drop-off garbage from growth or increased waste generation. This date reflects current tonnages and operating conditions.

Crucial to the County's current system, long-term planning will require Council direction for the disposal and/or processing of drop-off garbage with the closure of Site 2.



As expected, waste export in 2013 has significantly increased the estimated lifespan of landfills that currently accept curbside garbage (Sites 10 – Nottawasaga, Site 11 – Oro, and Site 13 – Tosorontio). Based on 2014 tonnages, the remaining lifespan has been extended to 22 years. This does not consider an increase in garbage from growth or increased waste generation. With this considered, remaining life is 10 years.

Capacity at these sites may also be impacted by the closing of Site 2. This is dependent on future Council direction for disposing or processing of drop-off garbage.



Garbage Disposal and Processing

Development of Contingency Capacity

Development of existing County landfills Site 9 – Medonte and Site 12 – Sunnidale for garbage disposal contingency was recommended in the Strategy. Both sites, being dormant for a number of years, require updated Design and Operations reports be submitted to the MOECC. Furthering the development of these sites has included analysis of gained capacity, addressing impacts from previous site works, and determining the cost/tonne to develop these sites as per MOECC design standards.

In 2013, Council was presented with the cost/tonne of developing Site 12 (the site with the largest remaining capacity). In consideration of the comparable costs of waste export, Council deferred further work on development of this landfill until the Strategy review in 2015.

Assessing Long-term Opportunities for Processing

The Strategy suggested a residual garbage processing facility would be more viable if pursued jointly with other municipalities or with the private sector. It noted given the County's projected tonnages, there would be insufficient annual tonnages to achieve any economies of scale. A garbage processing facility, such as an EFW facility, would require significant capital investment.

Further to this, the County continues to investigate potential partnerships, meeting with both neighbouring municipalities and private sector companies as opportunities arise. Council provided direction in 2013 that development of infrastructure projects within the Strategy be maintained, with priority given to development of the OPF Project.





Public Education Strategy



Public Education Strategy

The Strategy stated effective promotion and education of waste reduction and reuse initiatives should adopt a community-based social marketing approach. It summarized a number of media types including print, hotlines, websites, radio and television, presentations and other products and tools that could be used to engender waste behaviour change. Behaviour change, it noted, may be achieved through appealing to norms, prompts, and commitments.

Currently the County utilizes all of the media types outlined within the Strategy for regular promotion and education. The social marketing concepts identified are also widely used in waste campaigns in order to encourage residents to reduce and divert waste.





Enhanced Advertising, Promotion, and Education

The Strategy highlighted the need for an annual communication plan and indicated sustained communication programs are a best practice. Consistent and repetitive messages are a key approach toward changing behaviours and habits. As a result of the Strategy recommendations, higher impact campaigns, including professionally-developed radio and television commercials, are now used to promote programs such as the green bin, yard waste collection services, the call-in bulky collection and the new curbside battery collection service. These advertisements, which utilize humour to increase awareness and recollection, have proven extremely successful.

It was also recommended a dedicated staff resource be retained to ensure the successful implementation of marketing activities. To this end, a Promotion and Education Co-ordinator position was created in the Solid Waste Management Department to handle the creative development and procurement of various advertising and promotions pieces, and to conduct outreach to schools and various events throughout the County.

Finally, the Strategy recommended sustained funding of \$7 to \$8 per household per year would be required to address the comprehensive suite of waste management initiatives planned. Over the past few years, the average promotion and education expenditure has been \$4.90 per household annually.

Consistent and repetitive messages are a key approach toward changing behaviours and habits.

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Public Education Strategy

Current Approach

Promotion and education has incorporated a multi-facetted approach, due largely to the significant geographic area the County encompasses, the lack of a single major media outlet that residents can turn to for news and information, as well as the variety of demographics comprising the target audience.

Print Media

An annual waste management calendar is produced and distributed to all residents. The calendar is a 'one-stop shop' of detailed information on all aspects of waste management services in the County. In addition to the calendar, 'Managing Your Waste', a twice annual newsletter is



distributed to residents outlining new initiatives, provides feedback on program results and highlights areas for improvement.

Radio and Television Advertising

Radio advertising is used regularly with respect to ongoing programs such as the green bin, yard waste collections, collection schedules around holidays, curbside battery collections, and bulky collection service. Radio and television advertising has also been utilized for special campaigns such as 'Blue Grew' for the implementation of larger blue boxes and the 'It's Coming' campaign highlighting changes to curbside collections as a result of new contracts. These mediums have proved extremely successful, maximizing awareness over a short period of time.





Utilization of County Website and Social Media

The County's website has undergone significant changes since the Strategy was approved. The website, as a whole, has been revamped to improve navigation and accessibility. The Solid Waste Management portion of the website has also undergone significant improvement with the addition of a waste wizard tool, which clients can utilize to determine the appropriate way to manage particular types of waste. Additionally, the website has been upgraded with an online tool that provides residents collection reminders and instant messages if there are service disruptions or cancelations via iCalendar, voicemail, and email. This tool was implemented in April 2013 and has had more than 66,000 views since its inception. Social media is also utilized, with regular Twitter messaging disseminated according to the time of year or the initiative being promoted.

During the 'It's Coming' campaign to promote changes to curbside collection as a result of new service contracts, a variety of new mediums were utilized to maximize awareness by the target audience, including the use of billboard advertising, which included very short messaging for busy commuters, directing them to seek additional information.

Search engine optimization was another useful tool to ensure the more technology-savy target audience was aware of coming changes and could click through to find pertinent information from a variety of popular locations on the web.





Public Education Strategy

Community Outreach and the Mobile Education Unit

The County has continued with its efforts to reduce and divert waste through its Learning & Living Green partnership, which was developed in conjunction with local school boards. The program was implemented in recognition that children play an important role in influencing adult behaviours with respect to environmental initiatives. County staff visit local schools to educate students on how to reduce waste, best choices at point-of-purchase, processing of recyclables into new products, composting process, acceptable/ not acceptable items in the curbside program, and the importance of donating unwanted household items for reuse.

Other community outreach activities include visits to service clubs, groups, fairs, festivals and other local events with the Mobile Education Unit (MEU). This innovative educational tool is a travelling activity centre, which is graphically wrapped inside and out. It utilizes touch screen monitors and interactive games to educate children on proper diversion of materials, making environmentally responsible choices and product lifecycles. Since 2011, the MEU has been used more than 120 events throughout the County, and reached more than 29,000 participants.

Waste Reduction Initiatives

Waste reduction initiatives include implementation of the Recyclelinks webpage in 2011, which provides a one-stop link to a number of existing reuse and diversion organizations, including Freecycle, Habitat for Humanity's ReStore, OES, and OTS. To date, the site has had more than 2,000 views. Other waste reduction initiatives include promotion of reuse and refurbishing of goods, recommending the purchase of durable goods, reusable items over disposable, and provision of free reusable grocery bags, water bottles, and coffee mugs.



Current System Performance



Current System Performance

The Strategy outlined several best practices and various initiatives related to monitoring and measuring of system performance. It also recommended as part of the annual Strategy reporting process, the County take the opportunity to report to residents on general performance, as well as areas where the County and residents could collectively improve performance.

The data management system has evolved since 2010. As was recommended in the Strategy, new scale data management software was brought on-line in 2012 and has become a valuable tool as more materials are diverted at County facilities. In addition, systems have been refined to manage data in a more centralized manner, resulting in better tracking of the movement of materials and reporting. Quarterly performance measures such as curbside and facilities diversion rates are reported regularly to County Council.

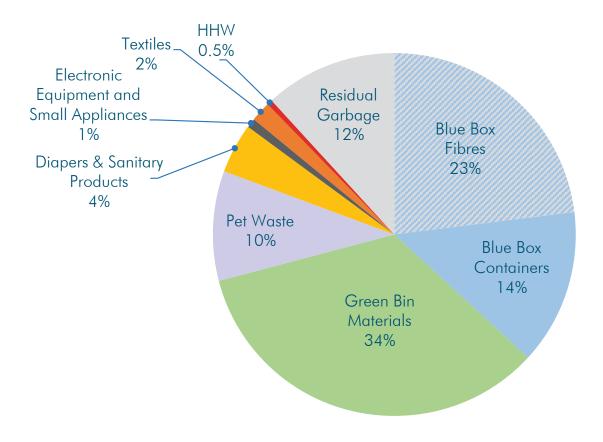




Curbside Audit Data

Curbside waste audits were recommended in the Strategy as a performance indicator to sort and measure per household waste generation rates and the quantity and types of materials set-out curbside. A full four-season audit was completed in 2012, with another initiated in early 2015 to coincide with the Strategy 5-year update. Although only half of the audits of four have been completed in 2015, initial data indicates there has been little change in the County's curbside waste composition from 2012.

Curbside Waste Stream Composition - 2012



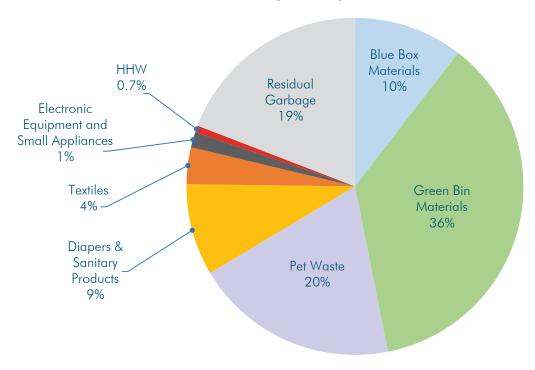
Current System Performance

While the County continues to be a leader in diversion, achieving capture rates of blue box recyclables of more than 85%, the green bin organics program has seen a decrease in capture rates since its inception in 2008. Full 2012 audit data suggests only 44% of curbside organics are being captured and curbside garbage comprises almost 50% of materials that could be diverted through existing programs. Initial 2015 audit data indicates the capture of curbside organics has continued to decrease.

Curbside Capture Rates - 2010 to 2015

Material	2010	2012	2015 (two audits)
Blue Box - fibres	86%	87%	86%
Blue Box - containers	82%	85%	87%
Green Bin - organics	47%	44%	37%

Curbside Garbage Composition - 2012





Waste Diversion Ontario – Municipal Datacall Results

In order to receive Blue Box Program funding, the County is required to complete an annual Waste Diversion Ontario (WDO) Municipal Datacall. The Municipal Datacall is Ontario's comprehensive online reporting system and database for residential waste and provides annual statistical information on residential waste generation and diversion in the province.

On February 26, 2015, WDO released the results of the 2013 Municipal Datacall. For the fifth year in a row, the County ranked in the top 10 Ontario municipalities for waste diversion, placing seventh, with a 2013 residential diversion rate of 55.7% (a decrease from 2012's 57.6%). The County's diversion rate has been relatively stagnant with no significant increase since the inception of the organics program in 2008. However, it is well above the 2013 provincial average of 47.3% diversion.

Diversion Rate and Provincial Ranking - 2006 to 2014

Year	Diversion Rate (%)	Provincial Ranking - Diversion	Disposed (kg/capita)	Provincial Ranking - kg/capita Disposed
2014	59.0	unaudited	191	unaudited
2013	55.7	7 of 226	204	51 of 226
2012	57.6	7 of 230	199	54 of 230
2011	56.9	4 of 231	178	23 of 231
2010	58.4	2 of 223	164	15 of 223
2009	57.1	2 of 216	160	15 of 216
2008	46.9	14 of 216	196	22 of 216
2007	40.5	42 of 206	224	59 of 206
2006	33.1	75 of 201	284	90 of 201

Current System Performance

Total Residential Waste Generated, Diverted, and Disposed - 2006 to 2014

	Diversion Rate	Total Residential Waste (kg/capita)				
Year	(%)	Generated	Diverted	Disposed		
2014 (unaudited)	59.0	465	274	191		
2013	55.7	461	257	204		
2012	57.6	469	270	199		
2011	56.9	413	235	178		
2010	58.4	394	230	164		
2009	57.1	374	214	160		
2008	46.9	370	174	196		
2007	40.5	377	153	224		
2006	33.1	424	140	284		

The County's diversion rate is relatively stagnant and the per capita waste generation rate continues to increase.





Performance Targets

Diversion

The Strategy outlines two measurable diversion targets:

- 71% diversion rate by 2020
- 77% diversion rate by 2030

The County continues to be a leader in diversion with respect to reuse and recycling initiatives at waste management facilities. In 2014, approximately 36,000 tonnes of material was diverted through many innovative on-site diversion programs. Curbside blue box recycling is equally successful and capture rates of both paper fibres and containers are excellent. However, there is decreasing capture curbside SSO. Most often compensated by increased diversion at County facilities, a relatively stagnant overall diversion rate has been observed.

Per Capita Waste Reduction

In 2011, Council approved Resolution No. 2011-048, which stated 'that a minimum of 1% annual decrease be established as the per capita waste reduction target as outlined in Item CS 11-042.'

The per capita waste generation rate, as determined through the 2010 WDO Datacall, serves as the baseline for comparison. Although the per capita residential waste generation rate decreased by 1.9% in 2013, overall the waste generation rate per capita has increased from 394 to 465 kg/capita (18.0%) since the Strategy's inception in 2010.

Given 2015 audit data, diversion statistics, and increasing waste generation rates, it is obvious the two diversion targets set for 2020 and 2030 cannot be met without substantial system changes. The Strategy outlined further restrictions on curbside garbage set-outs would be necessary to increase diversion rates and reduce waste generation.

Moving Forward

Since 2010, much has been accomplished in regards to fulfilling recommendations and initiatives outlined in the Strategy. This has brought uniformity to curbside collection, extended the life of County landfills, and maintained the diversion rate. The County, however, deferred discussion on further restrictions on curbside garbage and development of contingency landfill capacity at Sites 9 and 12. It is anticipated these outstanding recommendations will form the basis of this 2015 review.

Updating the Strategy will be a comprehensive, multi-staged process – allowing for preparation of reports, presentations to County Council, public consultation and community stakeholder meetings, and final direction.



Where are we?

summary of the current state of the waste management system, progress towards long-term performance targets

Report No. 2 – Potential Options and Initiatives

Where do we want to go?

 opportunity for County Council to re-evaluate existing waste diversion and/or per capita waste reduction targets

How do we get there?

potential options and initiatives to achieve diversion goals and long-term collection, transfer, and processing/disposal requirements

Report No. 3 – Approved Recommendations and Initiatives







Waste Management Facilities



Notes









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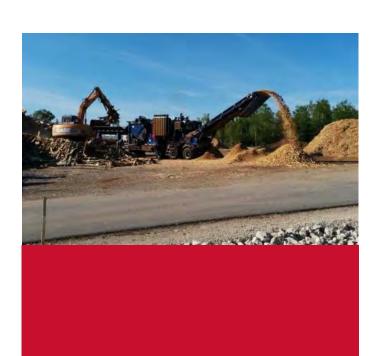
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Technical Memorandum No. 1





Technical Memorandum #1

Solid Waste Management Strategy Update

Simcoe County November 27, 2015



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1 Introduction

In 2010, Council approved a comprehensive, multi-staged Solid Waste Management Strategy (SWMS) designed to guide short and long-term diversion and waste disposal programs for the next 20 years. Since that time, more than 25 of the recommended initiatives in the Strategy have been implemented, allowing the County to achieve higher diversion rates, synergies and efficiencies in waste collection and innovations in waste management.

The SWMS update documents the results of implementation of the first five years of the Strategy and identifies potential options and initiatives for the County to consider as well as final recommendations for the next 5 years.

This technical memo addresses the following steps of the SWMS update;

- Step 1: Documents the current baseline system and determines needs;
- Step 2: Assesses the Strategy and system performance;
- Step 3: Provides research on waste management initiatives, legislation and waste policy trends; and,
- Step 4: Identifies options and recommendations for consideration, which will be brought forward for stakeholder/public consultation.

2 Document Baseline System and Determine Needs

Simcoe County provides a comprehensive suite of solid waste management services to the residential and Industrial, Commercial and Institutional (IC&I) sectors with curbside collection of garbage, recyclables, organics, leaf and yard waste, and bulky waste. Additional opportunities for diversion and disposal are located at various County waste management facilities.

The County prepared a Strategy 5-Year Update – Current Status Report which provides a very thorough review of the County's waste management programs and current status. The purpose of this section is not to duplicate the information found in that report, but rather to highlight key areas relevant to the Strategy review which will be used as a baseline for the development of recommendations for the next 5 years of the program.

The following sections provide an overview of the County's customers, waste generation and composition, diversion rates, projected waste quantities, landfill capacity, waste management infrastructure, service providers, fees and promotion and education activities as part of the baseline system.

2.1 Description of Services Provided

In 2014, Simcoe County had an estimated population of 298,208 including a seasonal population of 9,890. The County provides waste collection services to 125,763 single family residences, including many condominiums and mobile parks accessible to curbside service. The County has instituted a bag limit program, with the first bag free and up to 7 additional tagged bags, for a maximum of 8 bags weekly, eligible for collection. Bag tags cost \$3 per tag; the cost per tag was increased from \$2 to \$3 as of January 1, 2012. Revenues from bag tags indicate that on average approximately 2 tags per eligible residence per year are purchased, although actual per household use of tags is not

tracked. Recyclables (two stream) and organics are collected weekly. Leaf and yard waste is collected bi-weekly in the spring and fall. Christmas trees are collected bi-weekly in January. Bulky items are collected on a call-in basis from June through September at a cost of \$35 per scheduled pickup of a maximum of five items.

The County of Simcoe provides uniform access to waste collection services to the IC&I sectors, and multi-family residences with six or more units per property. Approximately 4,830 IC&I units and 3,055 Multi-residential units receive waste collection from the County. All locations are eligible to receive curbside waste collection service providing they meet the following requirements:

- One untagged bag of garbage weekly per property (not per individual business or dwelling on the property);
- Up to seven tagged bags of garbage weekly per property (for a total of eight bags weekly);
- The equivalent of up to six standard-sized recycling bins weekly (or two-wheeled carts) per
- Up to six standard-sized green organics bins weekly per property;
- IC&I locations must reasonably participate in the recycling and organics programs in order for their garbage to be collected; and,
- Any additional waste generated at an IC&I location must be managed by the business at its own expense.

The County has implemented an application process for waste collection on private roads and multiresidential developments. Now, in order to be eligible for waste collection, materials must be placed at the curbside in front of individual units and roads must meet the County's design standard policy. In 2013, a subsidy program was instituted for private waste collection at multi-residential complexes that are not eligible for the County's curbside collection service, with the condition that recycling programs are in place at those locations. In 2014, there were 102 approved properties (4,024 units) receiving subsidies.

The County also provides collection to seasonal households. Where possible, curbside collection of waste is provided, however, provisional common collection points are utilized where roads are not accessible. In 2014, there were 49 common collection points. If residents do not wish to have a common collection point or provisions of the common collection point are not adhered to, the County provides landfill passes for weekly drop-off of waste at County facilities. In 2014, 452 annual landfill passes were distributed.

The County partnered with five local school boards to implement a "Learning & Living Green" program in 102 schools (as of 2014) to provide recyclables and organics collection and to support schools, faculty and "green teams". There are 14 high schools involved with the "Learning & Living Green" program for recycling; 5 are participating in the organics program.

Table 2-1 presents an overview of the generators and number of units serviced by the County in 2014.

Table 2-1: Number of Units Serviced (2014)

Generator	Number of Units	
Single Family Units		
Single family dwellings	119,430	
Condos receiving CS services	2,112	
Mobile Parks receiving CS services	4,221	
Condos not receiving CS services	3,520	
Landfill passes (depot only)	452	
TOTAL UNITS	129,735	



Number of single family units receiving service	125,763	
Multi-Residential Units		
Multi-residential (not including condo units)	4,645	
Condos	1,169	
TOTAL UNITS	5,814	
Number of multi-residential units receiving service	3,055	
Other Units Receiving Service		
IC&I Total Units	4,830	
School Units	102	
Total Number of Units Receiving Service	133,750	

Source: Simcoe County, 2014 Unit Calculations

2.2 Current Waste Generation Patterns

In 2014, the County collected 80,431 tonnes of waste at the curb, of which 41,857 tonnes were diverted, resulting in a 52% curbside diversion rate. At its various facilities, 52,501 tonnes were collected of which 36,017 tonnes were diverted, resulting in a 68.6% facility diversion rate. Table 2-2 presents the tonnes managed by the County from 2010 to 2014 at the curb and at waste management facilities.

Table 2-2: Managed Tonnages and Direct Diversion Rates (2010-2014)

Material	2010	2011	2012	2013	2014			
CURBSIDE COLLECTION (reported as collected tonnes)								
Curbside Garbage – Disposed in County Landfills	38,393	39,285	39,034	13,235	12,729			
Curbside Garbage - Exported	n/a	n/a	n/a	25,235	25,846			
Curbside Garbage Total	38,393	39,285	39,034	38,471	38,574			
Organics	11,460	10,939	11,159	10,698	10,036			
Recycling	23,275	22,908	23,865	24,434	23,709			
Leaf & Yard and Christmas Trees	4,594	4,103	5,693	5,311	7,537			
Batteries	n/a	n/a	n/a	n/a	18			
Learning & Living Green Recycling	452	468	470	506	557			
Total Curbside Diversion Tonnage	39,780	38,418	41,187	40,950	41,857			
Total Curbside Tonnage Collected	78,173	77,703	80,221	79,421	80,431			
Curbside Diversion Rate	50.89%	49.44%	51.34%	51.56%	52.04%			
FACILITIES DROP-OFF (reported as processed	or marketed t	tonnes)						
Facility Garbage to Disposal	15,407	14,759	19,475	18,101	16,484			
Organics	14	30	294	89	194			
Recycling	1,388	1,910	1,895	1,751	1,526			
Mattresses	n/a	n/a	433	446	457			
Textiles	n/a	3	18	21	25			
HHW	309	443	519	408	535			
Electronics	623	585	385	327	364			
Scrap Metal	1,787	1,812	1,378	1,802	1,786			
Tires	741	449	352	262	352			
Rubble	n/a	180	2,166	1,008	3,587			
Shingles	4,099	3,676	3,212	6,211	6,045			
Drywall	1,814	2,099	1,988	2,130	2,058			
Wood Chips - Painted/glued	7,730	3,452	2,918	4,774	6,446			
Wood Chips - Clean	n/a	n/a	2,193	1,921	210			
Bulky (re-use)	171	160	154	136	54			

Material	2010	2011	2012	2013	2014
Brush Chips	6,860	625	4,918	2,207	3,809
Bulky Rigid Plastics - PILOT	n/a	n/a	n/a	n/a	42
Window Pane Glass - PILOT	n/a	n/a	n/a	n/a	216
Carpet - PILOT	n/a	n/a	n/a	n/a	6
Leaf & Yard	7,054	9,836	6,978	7,004	8,307
Total Facilities Diversion Tonnage	32,589	25,258	29,799	30,497	36,017
Total Facilities Tonnage Collected	47,996	40,018	49,274	48,599	52,501
Facilities Diversion Rate	67.90%	63.12%	60.48%	62.75%	68.60%

Source: Simcoe County, Managed Tonnages and Direct Diversion

Although the County's facility diversion rate changed by less than 1% from 2010 to 2014, there were larger changes from year to year over this 5-year period with a low of 60% in 2012, compared to a diversion rate of 69% in 2014. Fluctuations in the facility diversion rate can be anticipated based on climactic events (e.g. storms resulting in additional yard waste generated) and the periodic pattern of waste generated and self-hauled by residents to County facilities (e.g. home renovation, garage clean-outs). Overall, the higher facility diversion rate is expected given the types of materials diverted at County facilities (e.g. rubble, shingles, wood chips etc.) which all contribute to the weight based diversion rate metric. At the curb, the quantity of materials generated and potential diversion is affected by some factors outside the County's control including changing waste composition (i.e. less newsprint, more plastics, light-weighting of materials etc.) as well as changes in demographics and consumer purchasing habits.

Figure 2-1 presents the tonnes of curbside waste collected and diverted. Quantities of each major waste stream remained relatively consistent from 2010 to 2014 with an increase in the curbside diversion rate of about 1% over this time period.

45,000 52.5% 40.000 52.0% 35,000 51.5% **Tonnes Collected** 51.0% 50.5% Diversion Rate 49.5% Q 30,000 25,000 20,000 15.000 10,000 49.0% 5.000 48.5% 48.0% 2012 2014 2010 2011 2013 Recycling Crganics Curbside Garbage Total — Direct Curbside Diversion Rate

Figure 2-1: Curbside Waste Collected and Diverted (2010-2014)

Source: Simcoe County, Managed Tonnages and Direct Diversion



The overall per capita waste generation rate has increased 18% since 2010, averaging a 3.6% increase annually¹. Council had approved of a performance target of a minimum of 1% annual decrease in waste generation rates in the SWMS. The increase in overall per capita waste generation rates is a pattern that is similar to that across Canada, which has seen an increase in per capita waste generation rates over the past 25 years.²

In order to better understand its residential waste composition and generation patterns, Simcoe County has conducted three sets of waste composition studies; one in 2010 serving as the baseline, one in 2012 after approval of the SWMS and one in 2015, 5 years after approval of the SWMS. Simcoe County distributed larger blue boxes in 2012 to accommodate the inclusion of mixed plastics in the recycling stream including thermoforms.

Figure 2-2 to Figure 2-5 present a comparison of the household generation rates of major curbside material categories for various waste streams for 2010, 2012 and 2015³ overall, and as placed by residents at the curb. On average, household generation of paper and paper packaging (i.e. fibres) is decreasing which is not surprising given the changes in consumer habits (e.g. more online reading, fewer newspapers). Household generation of organics and other materials is increasing both overall and in regards to the quantity of organics placed in the garbage stream which is consistent with the decrease in capture rates of organics and the stagnant curbside diversion rates the County is experiencing. Household generation rates of fibres and containers in the recycling stream remained virtually the same in 2012 and 2015.

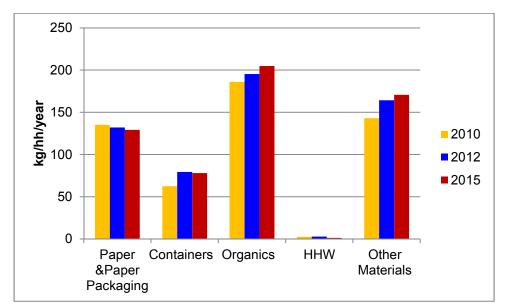


Figure 2-2: Comparison of Curbside Generation Rates for Major Material Streams (2010-2015)

¹ County of Simcoe, Strategy 5-Year Update, Current Status Report

² Conference Board of Canada, Municipal Waste Generation (International Rankings)

³ Simcoe County, 2010-2015 Waste Audit Comparison

Figure 2-3: Comparison of Curbside Generation Rates for Materials Placed in the Garbage Stream (2010-2015)

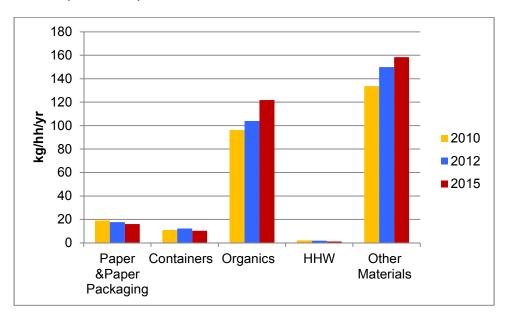
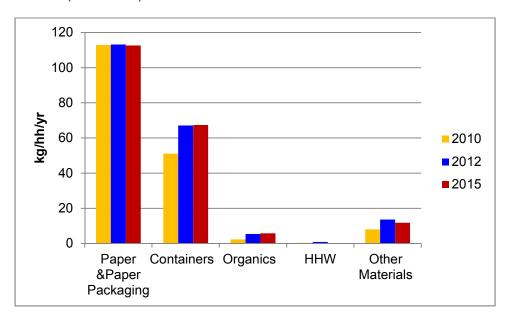


Figure 2-4: Comparison of Curbside Generation Rates for Materials Placed in the Recycling Stream (2010-2015)



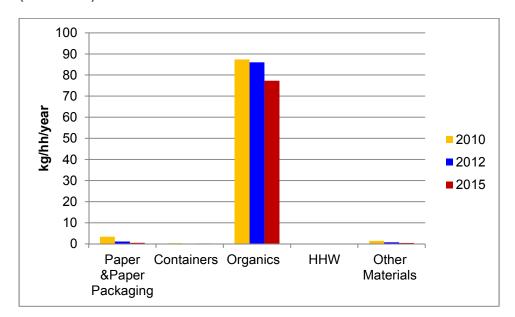


Figure 2-5: Comparison of Curbside Generation Rates for Materials Placed in the Green Bin (2010-2015)

Figure 2-6 presents the comparison of the overall capture rates for major material categories in the County's recycling and Green Bin program. There have been incremental increases in the capture rates for paper fibres and containers from 2010 to 2015, since the distribution of the larger blue boxes and changes to the program implemented in 2012. There have been consistent decreases in capture rates of organics in the Green Bin over the same time period. As discussed later in Section 4, the County has the highest per capita diversion rate for containers in its Blue Box program for large municipalities in Ontario and is one of the top three for per capita diversion of paper fibres, with little room for improvement. An increase in household organic material diversion rates is the key area for improvements in program performance.

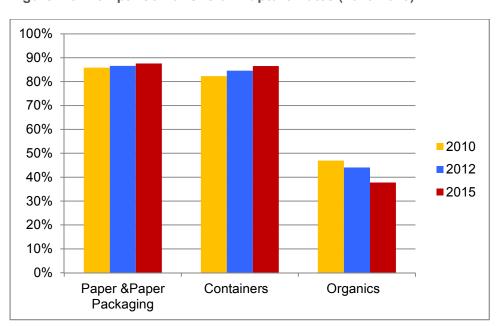


Figure 2-6: Comparison of Overall Capture Rates (2010-2015)

2.3 Current Waste Composition

One of the recommendations in the Strategy was the use of curbside waste audits to examine changes in key performance indicators such as waste generation rates, material capture rates and composition of curbside material streams. The County 2010 waste audit provides a baseline as it was conducted prior to any recommendations in the Strategy being implemented. In 2012 a full four season audit was completed, with the expectation that the results would reflect the changes to the County's waste management program since 2010. In 2015, another four season waste audit was conducted, which represents the period over which new programs would have matured.

Figure 2-7 presents a comparison of the overall curbside waste stream composition (recycling, organics, garbage) for the three audits. There has been a decline in the percentage of blue box fibres, WEEE and HHW at the curb since 2010; an increase in blue box containers and diapers & sanitary products as well as residual garbage; and generally no change from 2010 to 2015 for the other material streams. While the capture and diversion of curbside Green Bin materials has declined (see below) there appears to be no real change in the generation of curbside green bin materials since 2010.

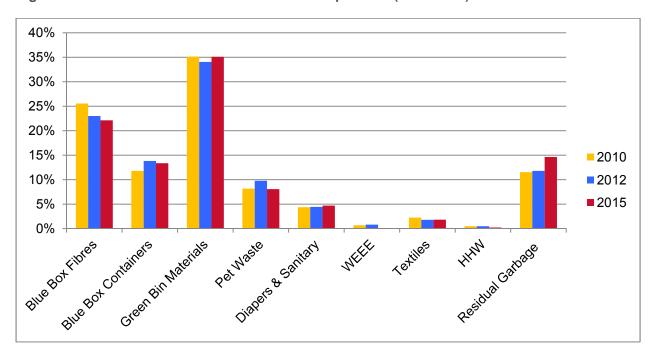


Figure 2-7: Overall Curbside Waste Stream Composition (2010-2015)

Figure 2-8 presents a comparison of the composition of garbage collected curbside for the three audits. While the quantities of some divertible materials in the garbage stream have been declining (Blue Box fibres, WEEE (Waste Electrical and Electronic Equipment), HHW (Household Hazardous Waste)), the quantity of Green Bin materials remaining in the garbage has increased from 2012 to 2015. In addition, the amount of residual garbage has also increased over this period.

Review of the curbside garbage composition (Figure 2-8) clearly indicates that the material streams that remain within the County's curbside garbage which offer the greatest potential for improvements in diversion are Green Bin materials and pet waste followed by diapers & sanitary products.

A change in the curbside diversion rate for Green Bin materials from 38% (2015 audit) to 60% could divert in order of 6,000 tonnes per year of additional material at 2015 waste generation rates. Inclusion of pet waste in the green bin, at a 40% capture rate, could divert in the order of 2,400 tonnes per year of additional material, at 2015 waste generation rates. There is relatively small potential for improvements in overall diversion for Blue Box materials; a change from the current 87% to a 95% capture rate for paper fibres could divert in the order of 1,300 tonnes per year of additional material, and change from the current 86% to a 91% capture rate for containers could divert in the order of 400 tonnes per year of additional material.

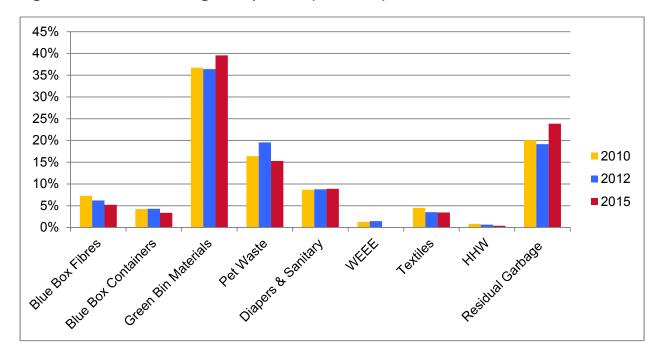


Figure 2-8: Curbside Garbage Composition (2010-2015)

2.4 Diversion Rates

The County's overall diversion rate has increased from a low of 33.1% in 2006 to a high of 59.0% in 2014; it has remained fairly static since 2009. Figure 2-9 presents the annual diversion rate from 2006 to 2014. In this period, the County has consistently been one of the top diverting communities in Ontario, but some other communities have experienced more significant improvements in this timeframe.

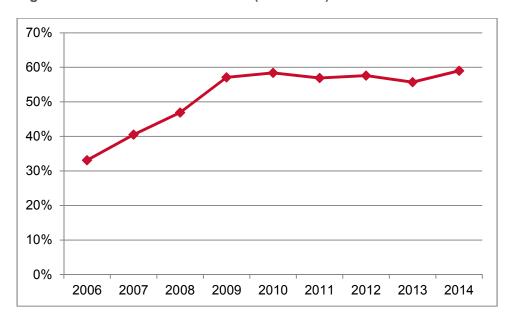


Figure 2-9: Annual Diversion Rates (2006-2014)

Source: County of Simcoe, Strategy 5-Year Update, Current Status Report

2.5 Projections

Population and employment growth projections for each municipality in Simcoe County were provided based on projections developed by the Ministry of Municipal Affairs & Housing (MMAH).

Population projections were developed for Simcoe County as a whole based on the 2014 population of 298,208 as provided by the County and the 2031 population of 416,000 as developed by the MMAH. Waste generation rates for each major waste stream collected at the curb and at drop-off facilities were developed based on the tonnes managed in 2014 and the 2014 population. Table 2-3 presents the per capita waste generation rates calculated based on the 2014 population and tonnes managed at the curb and at drop-off facilities for the major waste streams. Other materials collected at the curb include batteries and Learning and Living Green Recycling. Other materials managed at the facilities drop-off include items such as mattresses, textiles, electronics, wood etc.

Table 2-3: Waste Generation Rates (Kilograms Per Capita, 2014)

	Curbsic	de Collection	Faciliti	Total				
Garbage	Organics	Recycling	LYW	Other	Garbage	LYW	Other	Waste Generated
129	34	80	25	2	55	28	93	446

In order to calculate the tonnes of waste requiring management over the next 20 years, an annual population increase of 2% was assumed, similar to the MMAH projections. An annual increase of 1% in the per capita waste generation rates was also assumed, consistent with the increase in per capita waste generation rates in the County. The per capita waste generation rates were applied to the population numbers to calculate the tonnes of waste generated annually.

Table 2-4 presents the 2014 base year tonnes of waste generated and managed by the County, and the projected tonnes of waste generated from 2015 to 2030 that would require management under the existing waste management programs in the County. With no program changes, the overall



diversion rate would remain static at 59% and the quantity of waste sent to disposal will increase. Just over 1 million tonnes of disposal capacity would be required for the period from 2015 to 2030.

Table 2-4: Projected Tonnes of Waste Generated (Based on Population and Waste Generation Rate Increases)

			Cur	bside Collection	on		Fac	ilities Drop	o-off	Total
Year	Population	Garbage	Organics	Recycling	LYW	Other Diversion	Garbage	LYW	Other Diversion	Waste Generated
2014	298,208	38,600	10,000	23,700	7,500	600	16,500	8,300	27,700	132,900
2015	304,172	39,800	10,300	24,400	7,700	600	17,000	8,600	28,500	136,900
2016	310,136	40,500	10,500	24,900	7,900	600	17,300	8,700	29,100	139,500
2017	316,100	41,300	10,700	25,400	8,000	600	17,700	8,900	29,700	142,300
2018	322,065	42,100	10,900	25,900	8,200	700	18,000	9,100	30,200	145,100
2019	328,029	42,900	11,100	26,300	8,300	700	18,300	9,200	30,800	147,600
2020	333,993	43,700	11,300	26,800	8,500	700	18,700	9,400	31,300	150,400
2021	339,957	44,400	11,500	27,300	8,600	700	19,000	9,600	31,900	153,000
2022	345,921	45,200	11,700	27,800	8,800	700	19,300	9,700	32,500	155,700
2023	351,885	46,000	11,900	28,200	8,900	700	19,700	9,900	33,000	158,300
2024	357,850	46,800	12,100	28,700	9,100	700	20,000	10,100	33,600	161,100
2025	363,814	47,600	12,300	29,200	9,200	700	20,300	10,200	34,100	163,600
2026	369,778	48,300	12,500	29,700	9,400	800	20,700	10,400	34,700	166,500
2027	375,742	49,100	12,700	30,200	9,500	800	21,000	10,600	35,300	169,200
2028	381,706	49,900	12,900	30,600	9,700	800	21,300	10,700	35,800	171,700
2029	387,670	50,700	13,100	31,100	9,800	800	21,700	10,900	36,400	174,500
2030	393,635	51,500	13,300	31,600	10,000	800	22,000	11,100	36,900	177,200

^{*}LYW includes Leaf and Yard waste and Christmas Trees Rounded to the nearest 100 tonnes.

These projections will be used to identify the potential effects of the recommended options on diversion, processing and disposal requirements.

2.6 Landfill Capacity

The County currently has four operational landfills; Sites 2, 10, 11 and 13. All garbage collected at drop-off facilities (i.e. dry waste) is landfilled at Site 2. All curbside garbage is landfilled at the other three landfills or is exported. This system, initiated in 2011, has contributed to preserving landfill capacity at landfills permitted to receive curbside garbage and to more effectively manage bulkier drop-off material at one site. All waste received at Site 2 is shredded prior to being landfilled; this practice has resulted in improved landfill densities (an increase of 47% from 2012) which equates to four years of additional landfill capacity.

One of the recommendations in the Strategy was to export waste outside Simcoe's borders to preserve landfill capacity. In 2011, Council rescinded the no import/no export policy and the County procured disposal capacity with a private disposal facility. In 2013 and 2014, almost 50,000 tonnes of garbage was exported, resulting in an extension in landfill capacity at Sites 10, 11 and 13 of seven years.

Based on the status quo, the County estimates its remaining landfill capacity is as follows:

- Site 2 Collingwood: The current capacity has been extended to approximately nine years, with anticipated closure in 2024; and,
- Site 10 Nottawasaga, Site 11 Oro, Site 13 Tosorontio: Based on 2014 tonnages, the remaining lifespan has been extended to 22 years, with anticipated closure in 2037.

These anticipated closure dates do not consider any increases in garbage from growth or increased waste generation, nor any major changes to the system (e.g. closure of Site 2). These dates also do not account for preserving some landfill capacity to provide contingency/emergency capacity for the County's future needs.

Preservation of one full year's worth of landfill capacity, assumed increases in garbage from growth and increased waste generation is likely to result in the need to export all curbside waste as of 2023/2024.

2.7 Current Infrastructure

The County owns and operates a number of waste management facilities as summarized in Table 2-5. The County operates a number of waste management facilities, some are open to the public for receiving and managing garbage and divertible materials, and others are strictly used for yard waste processing. The quantities of materials managed at these facilities in the past five years were identified in Table 2-2. Table 2-5 identifies the activities undertaken at each facility.

Table 2-5: County Waste Management Facilities

	Public Waste Facility	Landfill	HHW Depot	LYW Composting
Site 1 - Alliston				✓
Site 2 – Collingwood Landfill	✓	✓		
Site 7 – Mara Transfer Station	✓			
Site 8 – Matchedash Transfer Station	✓			
Site 10 – Nottawasaga Landfill	✓	✓	✓	✓
Site 11 – Oro Landfill	✓	✓	✓	✓
Site 13 – Tosorontio Landfill	✓	✓		
Site 15 – Wasaga				✓
Site 16 - Bradford Waste Gwillimbury Transfer Station	✓		✓	



	Public Waste Facility	Landfill	HHW Depot	LYW Composting
Site 24 –North Simcoe Transfer Station	√		✓	√

The County owns and operates a fleet of vehicles and equipment to conduct various activities associated with solid waste management, for example, transfer and haulage of material between sites and to processing facilities located outside the County. As of the end of 2015, the County's solid waste management fleet will consist of:

- Two 1,000 horsepower horizontal grinders;
- · One screening plant and one shredding plant;
- Six roll-off trucks and four roll-off trailers;
- Three highway tractors with six walking floor trailers;
- One float and three van trailers; and,
- One front-end truck for the Learning & Living Green program.

2.8 Service Providers

Table 2-6 provides an overview of the County's contracted service providers for various waste management services.

Table 2-6: Contracted Service Providers

Service Provider	Services Provided	Contract Term
Progressive Waste Solutions	Weekly co-collection of garbage and organics and weekly co-collection of recyclable fibers and containers, from all serviced units, weekly collection of organics from schools, weekly collection of litter bins.	Seven years, commencing April 1, 2013 and ending March 31, 2020 with an option to renew contract for 2 additional years.
Miller Waste Systems Inc.	Special collections - Two (2) collections of Christmas tree, nine (9) collections of leaf and yard waste, call in bulky service.	Three years, commencing April 1, 2013 and ending March 31, 2016 with an option to renew contract for two (2) additional one (1) year periods.
Canada Fibres Ltd.	Processing of paper fibres	Three and a half years, commencing April 1, 2015 and ending September 30, 2018 with an option to renew contract for up to 3 additional years.
City of Guelph	Processing of containers	Three and a half years, commencing April 1, 2015 and ending September 30, 2018 with an option to renew contract for up to 3 additional years.
Progressive Waste Solutions	Transfer and haulage services for recyclable materials to Canada Fibres and the City of Guelph MRF.	Extension of original contract for three years, commencing April 1, 2013 and ending March 31, 2015 with an option to renew contract for up to two (2) additional two (2) year increments.
Aim Waste Management Inc.	Organics Processing	Extension of original contract for five (5) years, commencing October 1, 2013 and ending on September 30, 2018.
Walker Industries Inc.	Transfer, Haul and Disposal of waste from Progressive Waste Solutions to Emerald Energy from Waste in Brampton. Contingency disposal capacity at Walker Environmental landfill in Thorold.	Five years, commencing April 1, 2013 and ending March 31, 2018.

All of these current contracts will expire under their current contract term (not including extensions) during the period addressed in the Strategy Update (2015 to 2020). Recommendations regarding

various system components discussed later in this report, have the potential to affect the level of service and/or terms of the new contracts for some or all of the services noted above.

29 Fees

As noted earlier, the County has established a bag tag fee of \$3 per bag of additional curbside waste.

The County implemented a staged increase in tipping fees from 2011 onwards to implement uniform tipping fees at all County sites (landfills and transfer stations). As of 2015 the tipping fee was \$155/tonne for materials including garbage, commercial organics, stumps, contaminated soil, mattresses and box springs, bulky rigid plastic, carpet, window glass and pressure treated wood. There is a minimum charge of \$5.00 per load. Tipping fees have been set to encourage diversion and are waived for certain divertible materials such as: rubble, textiles, electronics, residential tires, scrap metal, HHW, cardboard, blue box recyclables and residential leaf and yard waste and brush. Other divertible materials such as asphalt shingles, drywall, wood waste, and oversized loads of brush have a preferential tipping fee of \$75.00/tonne. CFC (chlorofluorocarbons) appliances are accepted at a fee of \$10.00 each. Tipping fees for mixed waste are set at double the regular garbage rate (i.e. \$310/tonne) to encourage separation of divertible materials.

The current fee schedule can be found on the County's website at 2015 Waste Management Facility Rate Schedule.

The County recovers the net cost of the waste management program, being the cost of the system once all other revenues have been factored in, through the County tax levy requisition to member municipalities. For 2015, the operating expenditure for Solid Waste Management was set at \$44 million, with a Capital budget of \$3 million. Solid Waste Management made up 21.2% of the County's tax requirement. The net department requirement was \$27.5 million for 2015.

2.10 Promotion and Education

The County has developed a comprehensive promotion and education (P&E) strategy that utilizes a variety of media to ensure consistent and repetitive messaging about the County's waste management programs. The public education strategy uses the following media and resources:

- Print media annual waste management calendars and twice annual newsletter distributed to residents:
- Radio and television advertising used to advertise regular programming and special campaigns:
- County website upgraded to include tools such as a waste wizard, collection reminders, instant messages as well as on-line surveys;
- Social media (e.g. Twitter);
- Billboard advertising for new campaigns;
- Community outreach partnerships with schools through the Learning & Living Green program, visits to service clubs, groups, fairs, festivals;
- Mobile education unit a travelling activity centre used for community outreach with touch screen monitors and interactive games; and,
- Recycle Links webpage links to different sites to assist residents with solutions to recycle or reuse items (e.g. assistive devices, HHW, WEEE, tires, fridges, unwanted vehicles) and organizations to recycle materials (e.g. Freecycle, ReStore).



3 Assess Strategy and System Performance

This section provides an overview of some of the successes and challenges associated with implementing the recommendations of the 2010 Strategy.

3.1 Successes

The County has successfully implemented the majority of the recommendations contained within the Strategy. More than 25 major recommendations have been implemented with a number of on-going initiatives. The following sections discuss the successful initiatives undertaken by the County.

3.1.1 Collection

There were a number of recommendations in the Strategy related to waste collection.

Collection contract – The County had been managing a variety of contracts for different geographical areas and for collection of various materials, with varying levels of service within the 16 local municipalities. In 2013, a single County-wide contract for a uniform level of curbside collection of garbage, recycling and organics began. This seven year contract provided the County with savings of approximately \$2.6 million annually, collection efficiencies, service improvements and expansions. The expiration of these contracts will align with the next 5 year Strategy update in 2020 depending on whether the County seeks to extend any of these contracts. However, generally the lead time required to complete procurement, award new contracts and for a new contractor to secure a collection fleet is in the order of 18 months. Therefore, this Strategy update should identify recommended changes in collection service levels for consideration for procurement undertaken in 2018 for the new collection contracts.

Expansion of Industrial, Commercial and Institutional (IC&I) services – The services offered to the IC&I sectors varied across the County prior to implementation of the new collection contract in 2013. Council directed that all IC&I units be eligible for garbage collection services with the new collection contract if they met specific conditions. IC&I establishments now have a uniform level of service across the County as described in Section 2.

Special Collections – Prior to 2013, service levels for collection of leaf and yard waste (LYW) varied greatly throughout the County. Council directed that LYW including brush, be standardized County-wide and increased the number of collections which formed part of a new separate collection contract. This provided greater flexibility and increased levels of service to residents. As part of this new collection contract, residents were also provided with uniform County-wide collection of Christmas trees (now two service events). Lastly, the new collection contract provided for more reuse or recycling of bulky material where previously it was all landfilled with the exception of a small amount of scrap metal. An additional discussion on bulky waste collection is found in the Challenges section.

Expansion of service - The County has expanded collection service and diversion programs to additional municipal buildings and facilities, to schools through the Learning & Living Green program and through a pilot public and open space recycling program. The County has partnered with the Town of Midland to monitor waste receptacles for capture and contamination rates as well as physical condition of bins. The County also re-launched its special event recycling program in 2012; feedback about the program has been good but uptake has been low. The County may be partnering with the Canadian Beverage Container Recycling Association (CBCRA) for provision of bins to locations such as parks, post-secondary institutions, municipalities and special events. The County initiated a curbside battery collection program in November 2014 in partnership with their curbside collection service provider. This annual event is partially funded through Stewardship

Ontario's Orange Drop program and provides residents a convenient alternative to dispose of used, single-use batteries. In 2014, 17.8 tonnes of acceptable batteries were collected.

Cost recovery - In 2013, waste management services were included in the general levy based on property tax assessment, which is a simpler approach to funding the County's waste management system compared to the old system of individual municipal waste levies. This change in funding approach was implemented concurrently with the implementation the subsidy program for private waste collection at multi-residential complexes that are not eligible for the County's curbside collection service, with the condition that recycling programs are in place at those locations (see Section 2.1).

3.1.2 Curbside Diversion

As part of the County's auditing process in 2010, it was determined that recycling containers were often set out at or near capacity for collection. In the Spring of 2012, the County distributed larger blue boxes (approximately 30% larger than the old blue boxes) to all serviced units within the County. This additional capacity has allowed more recyclable materials to be diverted. Concurrent with the distribution of new larger blue boxes, the County added additional materials to the list of acceptable items. New plastic materials were added including clamshell packaging, plant pots and trays, small plastic yogurt and fruit cup containers and coffee cup lids. Diversion of these materials, along with the additional P&E regarding the County's recycling program, resulted in an increase of 4% of blue box materials compared to the same period in 2011.

As noted in Section 4, the County diverts the highest kg per capita of overall blue box materials, is one of the top three jurisdictions in regards to kg per capita of paper fibre diverted and has the highest kg per capita diversion of plastics/metals/glass (Table 4-4), nearly twice that of all other large jurisdictions. As observed in Section 2, the results of the 2015 residential curbside audits indicate that the County is achieving an overall capture rate for containers of 86%, which is significantly better than other jurisdictions in Ontario. There is little remaining room for improvement in the curbside recycling program.

3.1.3 Facilities Diversion

The Strategy noted how well operated the County's drop-off facilities were and made recommendations on further diversion initiatives. The County has implemented these initiatives and additional programs extending beyond those recommended in the Strategy as discussed below. The combination of these changes has resulted in exceptional performance for facilities diversion. As noted in Section 4 (

Table 4-5), the County diverts the most material and has the highest per capita diversion rate for materials managed at its facilities compared to all other large jurisdictions in Ontario.

Site Improvements – New scales were installed at four diversion facilities which reduced wait times and improved traffic flow. Two facilities were reconfigured to create more efficient drop-off areas. These improvements have improved efficiencies, decreased wait times and encouraged greater participation in drop-off diversion programs.

Diversion of Wood and Brush – In 2012, the County began separating clean lumber from coated/glued wood, however this pilot was discontinued in 2015. In 2013, the County began separating pressure-treated wood from drop-off garbage. Improvements to the processing areas at many sites have been made to improve recovery rates and the marketability of end-products (e.g. wood chips from clean wood for which the County receives revenue). The County grinds pressure treated wood and uses it as alternative daily cover at two landfill sites.

Asphalt Shingles Processing – In 2011, the County began processing asphalt shingles and over time, has made improvements to the process to improve recovery, allowing the County to divert



significant quantities of shingles from landfill, receive revenue for the ground material, and reduce external transfer and processing costs.

Window Glass Processing – In 2013 and 2014, the County began diverting window glass through a pilot project. This program has been refined and was rolled out to all sites in 2015. The program allows processed glass to be reused in the manufacturing of glass containers and fiberglass and metal from the window frame recovered and sold for revenue. Given the cost of the program, disposal fees of \$155/tonne are charged for this material.

Bulky Rigid Plastic Recycling – The County diverts a range of bulky rigid plastic items that cannot be accepted at the curb, through its facilities. Removal of this material from landfill disposal, can offer proportionately higher savings in landfill capacity than diversion, based on the size and shape of these materials. Given the cost to recycle these types of plastic, disposal fees of \$155/tonne are charged.

Reuse Areas – Further to a Strategy recommendation, the County developed permanent reuse storage areas at four sites and has partnered with several non-profit agencies and a local reuse business to divert items brought to the sites by residents or through the call-in bulky service.

Mattress Recycling - The County accepts mattresses through its bulky item collection program and at their facilities. Given the cost to recycle this material, disposal fees of \$155/tonne are charged.

Anything with a Plug - A new program was implemented in 2015, expanding the existing electronics program, to include diversion of anything with a plug (some limitations apply). These electronic and electrical items are accepted free of charge and sent to a local processing company.

3.1.4 Disposal and Processing Capacity

The Strategy focused on increasing diversion and reducing residual waste and did not include new landfill or other disposal capacity, instead focusing on the use of existing operating landfill sites, export of waste and potential partnerships.

The County has spent considerable funds on site remediation and environmental monitoring programs for the landfill and waste disposal facilities it assumed responsibility for in 1990. The County is responsible for 19 environmental monitoring programs as well as for annual reports for the County's active landfills, special operations and closed facilities. In 2013 the County undertook site remediation at Site 25 (Creemore), as a pilot project for landfill remediation through waste removal and declassification. The County won a SWANA (Solid Waste Association of North America) Bronze award for this work in the Landfill Remediation category. This type of remediation has subsequently been undertaken again in 2015 at Site 56 (Innisfil).

Modifications to Landfill Operations – In 2011, the County separated the management of curbside garbage and garbage dropped off at the County facilities. Curbside garbage is landfilled at three landfills while garbage dropped off at facilities, or dry waste, is hauled to Site 2 (Collingwood Landfill) for landfilling. This has assisted with preservation of landfill capacity at sites permitted to manage curbside garbage and has allowed the County to implement processes to manage bulkier waste more effectively at Site 2 as discussed below.

Shredding System – The County conducted a study to assess the benefits of shredding/grinding bulky items to reduce their size, which would allow for greater compaction and less landfill airspace utilization. The County purchased a shredder in 2013 for use at Site 2 and has been shredding all dry waste received from County facilities. Use of a shredder has resulted in substantial increases in the material densities, consuming less space per tonne of waste disposed, which has increased the remaining life of Site 2. The County estimated that the shredder will net \$4.4 million in avoided waste export disposal costs.

Garbage Export – Prior to 2011, the County had a no import/no export waste policy; however, in order to allow export of waste as a short term measure to lengthen the life of current landfill sites and allow time to explore longer term options to manage waste, this policy was rescinded in October 2011 by County Council. A five year contract commenced in 2013 with a private service provider to transfer, haul and process 25,000 tonnes of garbage annually.

Remaining Landfill Capacity – The County conducts annual landfill surveys to assess the remaining capacity at current operating landfills.

3.1.5 Promotion and Education (P&E)

The Strategy recommended that the County implement a community-based social marketing approach to support increased diversion and provided examples of media which could be employed to promote waste reduction and reuse initiatives. The County utilizes all the recommended media types and has developed effective, award winning campaigns.

Enhanced advertising and P&E – The County has several successful professionally developed radio and TV advertisements to promote their programs. For example; the "It's Coming" campaign created to promote the changes in the County's collection program in 2013 was the recipient of the Municipal Waste Association Gold Award, and the Recycling Council of Ontario Gold Award for Communication and Promotion, and a SWANA Gold Award for marketing.

Dedicated Staff resource – A Promotion and Education Coordinator position was created in the Solid Waste Management Department to manage P&E campaigns and conduct outreach.

Print, Radio, TV and Internet – The County utilizes a variety of media to reach different demographics. These campaigns have been used to promote changes to curbside collection programs and special campaigns, provide feedback on results and general information on programs and facilities.

The County has tracked activity regarding pages on its website since 2011. Activity tracking has indicated the following⁴:

- The number of page views peaked in 2013, as would be expected, due to the roll-out of the new collection service but has declined since.
- Visits to the Waste Reminder Tool, page, launched in 2013, appears to have peaked in 2014.
- Visits to the Recycle Links webpage continue to rise annually since its launch in November 2011.
- Waste Wizard usage peaked in 2013 after its launch in November 2011.
- The Battery Collection webpage experienced high traffic upon its rollout in late 2014. Usage of this webpage spikes, as expected, during the curbside Battery Collection timelines and declines at other times of the year.
- Webpages with information about the new Organics Processing Facility (OPF) and Materials Management Facility (MMF) were made available in 2014, visits to these pages continue to increase in 2015 as work on these projects progresses and more information, particularly in regards to facility siting, is available.

3.1.6 Performance Measures

Several recommendations were made in the Strategy related to monitoring and measuring of system performance.

⁴ Simcoe County, SWM Webpage Statistics



- Data Management In 2012, the County started using new scale data management software which has assisted with managing data in a more centralized manner.
- Results reporting Quarterly performance measures (curbside and facilities diversion rates) are reported regularly to County Council. The County also communicates results to the public through newsletters and the annual calendar.
- Curbside Audits The County conducted full seasonal audits in 2012 and 2015 to monitor waste composition, capture, participation and generation rates and quantity and types of materials set out for collection.
- WDO Datacall The County is required to complete the Waste Diversion Ontario (WDO) Municipal Datacall annually. This Datacall process tracks performance of municipalities throughout the province for residential waste diversion and generation. According to the results of the 2013 Municipal Datacall (the most recent Datacall which is publicly available), the County ranked in the top 10 Ontario municipalities for waste diversion (for the fifth year in a row). Although the County's waste diversion rate has not changed significantly over the past few years, it is still well above the provincial average of 47.3%.
- Information organization and presentation The County maintains a very well-organized website. Information is well laid out and easily found.

This Strategy update will examine whether additional or adjusted performance measures would be appropriate to measure and communicate program successes.

3.2 Challenges

The County has made significant improvements to its waste management system and has implemented numerous recommendations from the Strategy. There remain however, a number of issues that have proven to be more challenging to address.

3.2.1 Collections

IC&I Waste - Council directed that all IC&I units be eligible for garbage collection services with the start of the new collection contract in 2013. Shortly thereafter, staff were asked to prepare a feasibility report on providing enhanced recycling services to the industrial manufacturing sector⁵. The current level of service is for weekly collection of a maximum of six standard size recycling boxes (or two caddy carts) at each Industrial Commercial and Institutional (IC&I) property. Staff recommended the existing level of service be maintained for the following reasons:

- The County is not mandated to provide any waste service to this sector.
- It is not practical for the County to collect large quantities of materials at any given location.
- Provision of enhanced recycling service to industrial manufacturing properties may set a precedent.
- There will be an increased cost of enhanced service.
- Difficulty in determining eligibility.
- Uncertainty regarding the future Waste Reduction and Resource Recovery Act.

Any enhanced level of recycling service would have to find a reasonable approach to address these issues.

Multi-residential Waste – In early 2013, the County instituted a subsidy program for private waste collection subject to provision of recycling programs. The current level of service allows a maximum of two caddy carts of recycling materials for collection at multi-residential complexes which was intended to provide a common level of service. Multi-residential complexes have other options to manage additional recyclables including, placing material in recycling boxes, purchasing additional services from the County and obtaining private service and receiving a subsidy from the County of

⁵ Report number CCW 13-034

\$1.00 per week per unit to offset the costs. The County received complaints about these options and Staff were directed to prepare a report on this issue for direction from Council⁶. It was recommended that the Status Quo be maintained.

Collection in seasonal areas – The County continues to provide collection in seasonal areas which can be challenging due to lack of safe access, provision of access to private roads, common collection points and expectations of residents regarding levels of service. In general, the County has observed that participation in diversion programs in seasonal areas is less than that for single family properties, and system changes that may impose disincentives for garbage generation and incentives for increased diversion may not be as accepted in seasonal areas. Collection from islands and private roads can be challenging and Council also provided direction on preference hierarchies for collection from residential condominium and apartment complexes according to safe access or ownership of waste and the process for determining how collection will be provided⁷.

Special Event Recycling – In 2012, the County made several enhancements to their special event recycling program; however, the program remains underutilized. Feedback from event organizers indicated that they would prefer the County to be responsible for set-up, take down, signage, as well as removal and disposal of materials at no cost. Special event recycling falls under the IC&I category for which the County has no mandate to provide service.

Public Space Recycling – This activity is challenging for all municipalities, due to contamination and damage to bins. County staff are continuing a pilot with the Town of Midland to determine capture and contamination rates. Public space recycling also falls under the IC&I category; the County is not obligated to provide this service. County staff believe this service should continue to be maintained by the local municipalities. There is a possibility that the Canadian Beverage Container Recycling Association (CBCRA) could provide bins for special events and public space recycling which would lessen the burden on municipalities.

3.2.2 Facilities Diversion

Diversion of Wood and Brush – Council approved a revised tipping fee schedule in 2011 which waived the tipping fees for large quantities of leaf and yard waste and brush. In 2014, a tipping fee for commercial brush was re-introduced due to a concern about abuse of the free tipping rate.

Mixed Waste Policy – The Strategy recommended an increase in the tipping fee for mixed waste of up to five times the regular tipping fee. The County felt a doubling of the rate would be more acceptable and proportionate to the increased resources required for any sorting of material.

Carpet Recycling - The County conducted a pilot at one of their facilities; however, as the single processor able to accept this material has discontinued this line of business the pilot has been suspended. Note: the County has continued and expanded two other pilots, for window glass and bulky rigid plastic recycling to all facilities, as markets for these materials continue to be available.

3.2.3 Public Education Strategy

The County has developed an effective communications strategy. Development of effective P&E materials that engage various demographics will continue to be a challenge for the County. There is increasing competition for "eyeball" time; the County needs to identify which measures provide the greatest return on investment. Advances and changes in the way the public uses electronic media as a source of information should be considered.

⁶ Report number CCW 13-022

Report number CS 13-073



3.3 Current System Performance

The County has undertaken three sets of seasonal audits over the last five years to assess system. performance. As outlined below and in Section 2.3, system performance has not yet achieved the expected targets indicating that substantial system changes are likely required.

Capture rates - Capture rates for recyclable paper fibres have remained relatively stable at approximately 86%, capture rates of recyclable containers has increased with each audit to a high of 87% in 2015 which is an exceptionally high rate in comparison with most municipal audits in Ontario. This indicates that there is little additional room for improvement in the County's system related to curbside recycling. Additional analysis regarding the County's performance regarding recyclable material capture and diversion is presented in Section 4.

Conversely, the capture rate of organics has decreased since 2010, to a low of only 37% in 2015. The most recent assessments of participation in the Green Bin program indicates that this is increasing, while capture rates have dropped. This indicates that there is greater willingness to use the program, but residents are not effectively pulling food and other acceptable organic materials out of their garbage. With declining landfill capacities and a proposed Organics Processing Facility (OPF), the County will need to develop options that will encourage participation in the Green Bin program to divert additional quantities of organics from landfill and into the Green Bin for processing.

Diversion rates – The County's 2014 diversion rate was 59% which places it in the top 10 Ontario municipalities for waste diversion. While this is a considerable achievement, the County's annual diversion rate has remained relatively unchanged since the implementation of the Green Bin program in 2008. The County has achieved this diversion rate primarily through the diversion of heavier, dense materials such as wood and asphalt shingles through its successful facilities diversion program and through performance of its curbside recycling system, but not through improvements in performance of curbside organics collection.

Attaining a weight-based performance metric is challenging with the diversion of curbside recyclables. There are greater quantities of lighter plastic containers replacing glass and metal, fewer fibres (e.g. newspaper) and light-weighting of traditional containers (e.g. water bottles). The Strategy outlined a measurable diversion target of 71% by 2020 and 77% by 2030. An issue that will be addressed in this Strategy update is the potential for the County to achieve a 12% overall increase in diversion rates by 2020.

Waste Generation Rates – A 1% annual decrease in per capita waste generation was the target approved by Council in 2011. As reported in the WDO Datacall, the County has not met this target. The overall per capita waste generation rate has increased 18% since 2010, averaging a 3.6% increase annually8. This Strategy update will identify measures for consideration that could curb further increases in waste generation rates that could reasonably be implemented by the County.

3.4 Known and Future Issues for Consideration.

The following sections present a discussion on known and future issues that will be considered in this SWMS update.

3.4.1 Incentives/Disincentives on Garbage Disposal

Restrictions on Garbage/Bag Limits – Currently one free bag and seven (7) tagged bags will be collected at the curb. One of the drawbacks of continuing to provide this level of service is evident when completing the WDO Municipal Datacall process where this 8 bag limit is viewed as a negative

⁸ County of Simcoe, Strategy 5-Year Update, Current Status Report

practice. It is also likely one of the factors contributing to the stagnating curbside diversion rate, as the existing \$3 per bag fee does not seem to act as enough of a disincentive for residents/businesses who may choose to set out additional garbage in lieu of directing materials to other alternatives. Another option identified for consideration would be a full pay as you throw (PAYT) program, where bag tags would be required for all garbage at the curb.

Biweekly Garbage Collection – A move to biweekly (i.e. every other week) collection of garbage is likely to assist with improving diversion based on experiences in other jurisdictions, assuming Green Bin materials continue to be collected weekly. Residents are more likely to put more organic materials in the Green Bin every week rather than leaving them in the garbage for two weeks. Communities with biweekly garbage collection generally have a higher kg per household annual diversion of organic materials (see additional analysis in Section 4). Weather-related issues may make this option less palatable to residents who may have to wait for a month for garbage collection if collection is missed or cancelled due to inclement weather (e.g. snow storm). Consideration of a Saturday collection in the event of weather cancellations/delays in service may alleviate this issue but is likely to result in some increase in the cost of garbage collection service. Biweekly garbage collection may also be less acceptable in highly seasonal areas due to the length of time garbage is set out prior to collection.

Mandatory Diversion By-law – A by-law mandating source separation of Blue Box and Green Bin materials was a recommendation in the Strategy. Council opted to defer the implementation of such a by-law until a review of the Strategy had been completed, in part due to the high level of enforcement that would be required for such a by-law to have an effect on participation in curbside diversion programs. Without enforcement, a by-law would demonstrate the County's commitment to diversion in policy, but is unlikely to contribute in a measurable way to an increase in diversion.

3.4.2 Collection

Single Stream Recycling – The County currently operates a dual or two stream recycling program. An option to consider is a switch to single stream recycling which would facilitate co-collection of materials (discussed below) and cart-based collection. A move to single stream recycling would require additional P&E to explain the program to residents; however, many seasonal residents are already likely to be familiar with this practice as many GTA (Greater Toronto Area) municipalities have implemented single stream recycling programs. Less sorting can result in an increase in contamination. Improvements in participation and material capture rates are unlikely to be realized as the participation and capture rates in the County are already very high. The existing blue boxes may continue to be used or the County may wish to consider a cart-based program which can increase capacity and reduce the recyclables ending up in the garbage due to overflowing boxes. Cart-based collection can improve the quality of recycled materials by reducing the effect of rain or snow on the moisture levels in the material and has been associated with less litter. However, carts can be more difficult to move and place at the curb when there are large snow banks and may require more physical effort to move to the curb depending on the length of the driveway etc. There is also a significant initial cost to purchase and deliver carts, and ongoing maintenance/replacement costs that can be higher than the ongoing costs associated with conventional blue boxes.

Co-collection of Materials – Depending on the frequency of collection selected by the County, there may be opportunities to co-collect materials and reduce the number of vehicles or passes required to collect material. Garbage and organics are already collected in one vehicle and recyclables co-collected in another vehicle. Reducing the number of vehicles or passes required to collect curbside material is difficult with two-stream recycling. Should the County move to biweekly garbage and single stream recycling, collection of garbage and Green Bin materials could alternate with weekly collection of single stream recyclables and Green Bin materials. This could reduce the number of collection vehicles required, costs for curbside collection, wear and tear on roads and greenhouse gas emissions.



Cart-based Collection – The County could consider a move to cart-based collection for all or some waste streams. The County has indicated that the current Green Bins will be at the end of their expected life by the time the current collection contract expires (2020 or 2022 if extensions are exercised). The County could move to fully automated cart collection for all waste streams which may improve collection efficiencies, provide increased capacity for recyclables, while reducing worker injuries. Similar to the volume based rate system used in the City of Toronto, bins could be sized according to need with small, medium, large and extra large bins available with costs increasing with capacity of carts. Funding for recycling carts may be available through Stewardship Ontario. As noted above, there are advantages and disadvantages for cart based collection.

3.4.3 Transfer

The County does not have a central transfer station to support the transfer of garbage and other materials outside the County. The Strategy made a number of short and long term recommendations for transfer; a long-term approach is in the planning stages.

Short term options – The County has secured short term transfer contracts for garbage, organics and recycling. In 2014, the County conducted a financial comparison of short term contracts and construction of a County transfer facility. The analysis indicated the payback period of a County facility would be between five and six years, dependent on the level of funding.

Long term Options – The County began working with CIF (Continuous Improvement Fund) for funding of a single, central transfer facility in 2011 (known as a Materials Management Facility or MMF). In 2014, the County was awarded funding of 47% of Blue Box related project costs for the MMF, contingent on the facility being available to other local jurisdictions on a cost recovery basis and design capacity to accommodate a future Materials Recovery Facility (MRF). To-date a short list of sites for the facility, either stand alone or combined with the organics processing facility (OPF), has been published and public consultation on these sites took place in October 2015. Site selection, approvals, procurement and construction are still pending. It is expected the facility will be complete in 2019.

3.4.4 Processing and Disposal

The County does not own any recycling or organics processing facilities and relies on contracted processing capacity. The County has implemented short term processing options for recycling and organics and is developing long term processing options for these materials. The County composts leaf and yard waste at five locations across the County, at various open and closed landfills. Operational improvements to the management of garbage have contributed to extending landfill capacity and waste export has also helped to preserve County landfill capacity however, long term disposal capacity is still an issue for the County. The Strategy recommended initiatives such as development of contingency capacity at County-owned landfills (Site 9 – Medonte and Site 12 – Sunnidale) and public or private partnerships for residual waste processing (e.g. energy-from-waste (EFW) facility).

3.4.4.1 Recycling

Short term options – The County recently (April 2015) awarded a three year contract for paper fibres to the private sector and containers processing to another municipality.

Long term options – In 2014, as part of the analysis of the feasibility of a County transfer facility with a potential fibres processing line, it was determined there would be no increased financial benefit to include the processing of fibres. As described above in the transfer options, CIF funding for a MMF is contingent on the potential future expansion of the facility to a full MRF, capable of processing both fibres and containers. The anticipated Waste Reduction and Resource Recovery Act intended to replace the existing Waste Diversion Act and place more emphasis on full producer

responsibility may have an impact on the feasibility of a County-owned MRF (Material Recovery Facility).

3.4.4.2 Organics

Short Term Options – The County hauls Green Bin organics to a processing facility outside the County using roll-off bins. The County has secured processing capacity until October 2018 with the negotiation of a five year contract in 2013. Although this system works well, and is cost effective, it does not provide any long term processing certainty to the County. A County-owned facility would provide greater control over future processing costs, reduce environmental impacts (including Greenhouse gases from transportation), will ensure future capacity and provide flexibility to add additional materials.

Long Term Options – In 2012, the County commissioned a viability study for an in-County organics processing facility (OPF) which outlined facility sizing and potential technologies to manage regular Green Bin waste and potentially other organics such as diapers, pet waste and sanitary products. In 2013, Council approved, in principle, the addition of pet waste and diapers to the list of materials requiring processing (and therefore accepted in the future in the County's Green Bin program). In 2014, Council endorsed the costing information, a proposed project plan and a timeline for development of an aerobic composting facility to manage the existing Green Bin materials and potentially adding pet waste. Siting will consider potential future expansion to include anaerobic digestion. Seven short-listed sites have been identified for the OPF, separate and/or part of the MMF, which were presented to the public in October 2015. It is anticipated that development of this facility will take approximately 5 years with final commissioning in 2019. Additional short-term processing capacity will be required after the current contract expires in 2018 and before the facility is operational. The role of mixed waste processing (see below) could be considered to extract additional organics from the garbage stream, and increasing the required facility capacity.

3.4.4.3 Garbage

Short Term Options – The County is exporting a portion of residual waste to a private sector disposal facility to preserve landfill capacity. The contract to provide this service ends in 2018. The viability of longer term export depends on the trends in landfill disposal costs and availability of capacity within a reasonable haul distance from the County.

Long Term Options - Consultation undertaken during the Strategy development clearly indicated a lack of public support for the development of new landfill capacity in the County. The Strategy recommended consideration of development of landfills (Site 9 and 12) for garbage disposal contingency at some point during the planning period; however, during the recent OPF siting process, it was determined that both sites are within sensitive Source Protection areas. The Strategy also recommended consideration of a residual garbage processing facility as a joint venture with other municipalities or the private sector. A mixed waste processing facility could be considered to remove additional recyclables and organics from the garbage stream to increase diversion and decrease residual waste requiring disposal.

3.4.5 Other Diversion Issues

Some issues have been identified by the County with respect to materials collected as part of the special collections contract.

Leaf and Yard Waste – The County has increased the levels of service for leaf and yard waste collection; however, residents in some areas of the County have expressed a desire for an enhanced level of service (e.g. additional collections / weekly collection throughout the summer). Staff have been requested to prepare a report outlining various options and the implications of each option. Many urban municipalities in Ontario currently provide regular weekly collection of leaf and yard waste during the growing season, or year-round.



Bulky Waste – The County's bulky waste program, although popular with those who utilize it and successful at diverting waste from landfill, did not experience the expected uptake. This has presented challenges for the County's contracted service provider. The County will be initiating a separate procurement process for this service and, depending upon the results, may consider taking on this service in-house.

3.5 Waste Management Performance Targets

The SWMS identified specific targets related to the performance of the waste management system. Performance of the system relative to these targets is examined below.

3.5.1 Waste Reduction

The SWMS identified a target of a 1% per annum decrease in the per capita waste generation rate. Decreases in waste generation rates can offset the potential growth in waste quantities associated with population growth in the County. The concept was that the combination of promotion and education initiatives undertaken in the County, as well as program changes such as the increase in the cost for bag tags etc. would combine to encourage behavior change with County residents.

However as noted in Section 2.2, the overall per capita waste generation rate has increased 18% since 2010, averaging a 3.6% increase annually. The increase in overall per capita waste generation rates is a pattern that is similar to that across Canada, which has seen an increase in per capita waste generation rates over the past 25 years. It should be noted however, that the explanation of the change in waste generation rates in the County is not as simple as assuming that residents are simply generating more garbage.

As noted in Table 2-2 and Figure 2-1, the quantity of curbside waste managed by the County has remained relatively static. Over the past five years, the per capita generation of curbside waste has remained relatively static at around 270 kg/capita.

As noted in Table 2-2, the quantity of waste managed through County facilities has increased over the past five years, increasing from around 167 kg/capita to 176 kg/capita over that period. The increase in per capita waste generation rates since 2010 is clearly associated with use of the County facilities. The increased quantities of materials managed at the facilities may not be associated with actual increases in waste generation, but with residents choosing to use the County facilities in lieu of other options (use of private services, storage of materials) or out of increased interest in the facilities as the County has expanded the ability to divert materials at these locations.

As part of the SWMS update, the target of a 1% per annum decrease in per capita waste generation will be examined. It may be reasonable to set a target specific to curbside waste generation rates, over a more extended period of time in lieu of an overall target.

3.5.2 Diversion Rates

The SWMS identified the following diversion targets:

- 71% diversion rate by 2020
- 77% diversion rate by 2030

As noted in Section 2.4, the County's overall diversion rate has increased from a low of 33.1% in 2006 to a high of 59.0% in 2014; it has remained fairly static since 2009. Figure 2-9 presented the

annual diversion rate from 2006 to 2014. In this period, the County has consistently been one of the top diverting communities in Ontario, but some other communities have experienced more significant improvements in this timeframe.

In order to achieve the SWMS target of 71% by 2020, the County would have to increase diversion by 12% over the next five years. This will require some significant changes to the waste management system. Based on the review of the current system, the area with greatest potential to change overall diversion rates would be measures that encourage increased diversion of organic materials in the waste stream.



4 Research Waste Management Initiatives, Legislation and Waste Policy Trends and Programs

4.1 Comparison to Other Municipalities in Ontario

Waste Diversion Ontario (WDO) has grouped Simcoe County with Durham Region, Waterloo Region, Niagara Region, City of Ottawa and Essex-Windsor Solid Waste Authority in the "Urban Regional" municipal grouping of municipal waste programs. Compared to the other municipalities in this grouping, Simcoe has the lowest number of single and multi-family households and the largest number of seasonal households. Overall, Simcoe serves the smallest population (297,695 - regular and seasonal); the City of Ottawa serves the largest population (943,319) at over triple the population compared to Simcoe. Simcoe has the largest area served, with the lowest population density which affects certain metrics like the efficiency of curbside collection service.

Figure 4-1 indicates that within the Urban Regional municipal grouping, Simcoe County had the highest kg/capita diversion and the highest diversion rate.

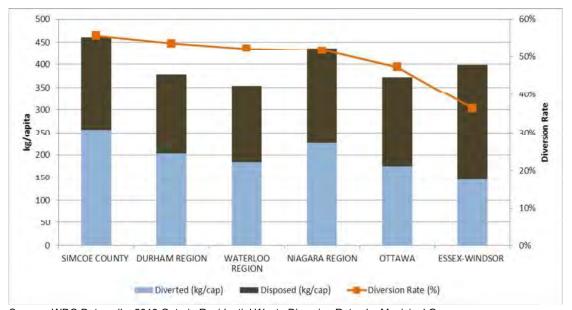


Figure 4-1: Comparison of Urban Regional Diversion and Disposal Rates (kg/capita)

Source: WDO Data call – 2013 Ontario Residential Waste Diversion Rates by Municipal Group

Table 4-1 presents a comparison of the types of programs operated by the municipalities within the Urban Regional municipal grouping. There are a variety of types of programs (partial or no user pay), bag limits, and collection frequencies in effect in these jurisdictions.

Table 4-1: Comparison of Residential Program Data for Urban Regional Municipalities (2013)

Municipality	Type of user pay system	No. of untagged bags allowed	No. of tagged bags allowed	Bag Tag Cost	Collection Frequency	Generated (kg/cap)	Diverted (kg/cap)	Disposed (kg/cap)	Diversion Rate (%)	Program Notes
Simcoe County	Partial	1	7	\$3.00	Weekly	461	257	204	55.7%	
Durham Region	Partial	4	No limit	\$2.50	Biweekly	378	203	175	53.8%	2 lower tier municipalities responsible for garbage collection.
Waterloo Region	None	10	n/a	n/a	Weekly	354	185	169	52.3%	
Niagara Region	Partial	1	No limit	\$2.00	Weekly	437	226	211	51.8%	
City of Ottawa	None	6 items	n/a	n/a	Biweekly	372	176	196	47.3%	Items allowed at curbside for collection include bulky.
Essex-Windsor Solid Waste			,	,					00.40/	Garbage collection conducted by lower tier municipality.
Authority	None	varies	n/a	n/a	Weekly	399	145	254	36.4%	Limits vary by municipality

Source: WDO Datacall - 2013 Ontario Residential Waste Diversion Rates by Municipal Group, Municipal Websites.

In order to determine potential correlations between program types and design, and to examine performance at a more detailed level, a more in-depth examination of performance data for both the Urban Regional and Large Urban group was undertaken. The outcome of this analysis is presented in Tables 4-2 through 4-5.

Table 4-2: Comparison of Key Residential Program Diversion Performance for Large Urban and Urban Regional Municipalities (2013)

									Residential Waste Diverted (% of Generated)		
Municipal Program	Reported Population		Total Residential Waste Generated		Total Residential Waste Diverted		Total Residential Waste Disposed		Residential Organics Diverted	Total Residential Diversion Rate	Garbage Collection Frequency
		Tonnes	Kg/Cap	Tonnes	Kg/Cap	Tonnes	Kg/Cap	%	%	%	
Large Urban											
HALTON, REGIONAL MUNICIPALITY OF	511,522	207,764	406	113,447	222	94,317	184 ⁵	23.71%	25.27%	54.60%	bi-weekly
HAMILTON, CITY OF	540,449	222,233	411	105,999	196	116,233	215 ⁵	21.28%	20.50%	47.70%	weekly
LONDON, CITY OF	389,410	155,964	401	68,196	175	87,767	225	22.66%	13.23%	43.73%	42 times a year
PEEL, REGIONAL MUNICIPALITY OF	1,359,900	497,226	366	217,482	160	279,745	206	23.47%	15.70%	43.74%	weekly
TORONTO, CITY OF	2,659,772	843,503	317	443,906	167	399,596	150	20.93%	25.10%	52.63%	bi-weekly
YORK, REGIONAL MUNICIPALITY OF	1,130,386	370,626	328	217,097	192	153,528	136	24.86%	27.75%	58.58%	bi-weekly
Totals or Average	6,591,439	2,297,315	348	1,166,128	177	1,131,187	172	22.82%	21.26%	50.76%	
Urban Regional											
DURHAM, REGIONAL MUNICIPALITY OF	639,655	241,826	378	129,972	203	111,854	175	22.99%	21.49%	53.75%	bi-weekly
ESSEX-WINDSOR SOLID WASTE AUTHORITY	388,611	155,099	399	56,461	145	98,639	254	18.64%	12.70%	36.40%	weekly
NIAGARA, REGIONAL MUNICIPALITY OF	448,900	196,228	437	101,589	226	94,639	211 5	24.57%	19.88%	51.77%	weekly
OTTAWA, CITY OF	943,248	350,657	372	165,739	176	184,918	196	20.27%	22.75%	47.27%	bi-weekly
SIMCOE, COUNTY OF	293,532	137,279	461	76,505	257	60,774	204 ⁵	34.58%	16.18%	55.73%	weekly
WATERLOO, REGIONAL MUNICIPALITY OF	563,000	199,032	354	104,061	185	94,971	169	20.68%	24.46%	52.28%	weekly
Totals or Average	3,276,946	1,280,121	390	634,327	193	645,794	197	23.62%	19.58%	49.55%	

Yellow highlights indicate performance that is better than the average.

Source: WDO Datacall – 2013 Ontario Residential Waste Diversion Rates by Municipal Group.



Table 4-3: Comparison of Organics Program Performance for Large Urban and Urban **Regional Municipalities (2013)**

Program Title	Reported Population	Total Organics Collected (tonnes)	Kg per Capita of Organics Diverted	Kg per Capita Yard Waste Diverted	Kg per Capita Household Organics Diverted	Garbage Collection Frequency
DURHAM, REGIONAL MUNICIPALITY OF	639,655	52,755	82	40	43	bi-weekly
ESSEX-WINDSOR SOLID WASTE AUTHORITY	388,611	19,693	51	51	-	weekly
HALTON, REGIONAL MUNICIPALITY OF	511,522	57,641	113	58	55	bi-weekly
HAMILTON, CITY OF	540,449	49,687	92	34	58	weekly
LONDON, CITY OF	389,410	21,717	56	56	-	42 days per year
NIAGARA, REGIONAL MUNICIPALITY OF	448,900	42,476	95	67	28	weekly
OTTAWA, CITY OF	943,248	85,379	91	17	74	bi-weekly
PEEL, REGIONAL MUNICIPALITY OF	1,359,900	84,750	62	40	23	weekly
SIMCOE, COUNTY OF	293,532	23,065	79	42	36	weekly
TORONTO, CITY OF	2,659,772	232,929	88	38	49	bi-weekly
WATERLOO, REGIONAL MUNICIPALITY OF	563,000	48,681	86	70	16	weekly
YORK, REGIONAL MUNICIPALITY OF	1,130,386	114,565	101	36	66	bi-weekly

Source: WDO Datacall – 2013 Ontario Residential Organic Waste Tonnes Collected

Table 4-4: Comparison of Blue Box Recycling Program Performance for Large Urban and **Urban Regional Municipalities (2013)**

Municipality	Reported Population	TOTAL Reported and/or Calculated Marketed Tonnes ¹	Kg per Capita Diverted	Kg per Capita Paper Fibre Diverted	Kg per Capita Plastics, Metals, Glass Diverted
DURHAM, REGIONAL MUNICIPALITY OF	639,655	45,939	72	53.42	18.40
ESSEX-WINDSOR SOLID WASTE AUTHORITY	388,611	25,081	65	51.18	13.36
HALTON, REGIONAL MUNICIPALITY OF	511,522	43,542	85	66.44	18.68
HAMILTON, CITY OF	540,449	40,292	75	57.19	17.37
LONDON, CITY OF	389,410	26,333	68	51.21	16.41
NIAGARA, REGIONAL MUNICIPALITY OF	448,900	38,702	86	63.12	23.10
OTTAWA, CITY OF	943,248	62,866	67	51.02	15.63
PEEL, REGIONAL MUNICIPALITY OF	1,359,900	92,688	68	53.32	14.84
SIMCOE, COUNTY OF	293,532	26,043	89	57.38	31.34
TORONTO, CITY OF	2,659,772	150,742	57	44.39	12.28
WATERLOO, REGIONAL MUNICIPALITY OF	563,000	34,768	62	47.25	14.50
YORK, REGIONAL MUNICIPALITY OF	1,130,386	74,677	66	49.27	16.79

¹ Calculated Blue Box Marketed Tonnes is the summation of Reported Blue Box Marketed Tonnes and Reported Blue Box Collected Tonnes less a residual calculation of 7% for multi-stream collections and 13.04% for single-stream collections. Source: WDO Datacall – 2013 Ontario Residential Blue Box Tonnes

Table 4-5: Comparison of Non-Blue Box Recycling Program Performance for Large Urban and Urban Regional Municipalities (2013)

Municipality	Reported Population	Total Other Recyclables Collected (tonnes)	Kg per Capita Diverted	Textiles (tonnes)	Bulky Goods (tonnes)	Scrap Metal (tonnes)	Drywall (tonnes)	Wood (tonnes)	Brick & Concrete (tonnes)	Other C&D Recyclables (tonnes)
DURHAM, REGIONAL MUNICIPALITY OF	639,655	4,077	6	28	-	1,105	234	2,710	-	-
ESSEX-WINDSOR SOLID WASTE AUTHORITY	388,611	-	-	-	-	-	-	-	-	-
HALTON, REGIONAL MUNICIPALITY OF	511,522	1,986	4	-	-	896	596	-	494	-
HAMILTON, CITY OF	540,449	2,401	4	-	-	1,438	-	328	-	634
LONDON, CITY OF	389,410	6,670	17	600	-	720	-	1,160	-	4,190
NIAGARA, REGIONAL MUNICIPALITY OF	448,900	5,958	13	4	-	725	344	1,136	1,482	2,268
OTTAWA, CITY OF	943,248	1,640	2	-	-	463	-	-	1,177	-
PEEL, REGIONAL MUNICIPALITY OF	1,359,900	16,495	12	-	-	1,996	2,081	7,092	4,042	1,283
SIMCOE, COUNTY OF	293,532	23,133	79	21	476	1,557	2,049	11,379	1,188	6,463
TORONTO, CITY OF	2,659,772	4,827	2	125	4,616	-	86	-	-	-
WATERLOO, REGIONAL MUNICIPALITY OF	563,000	1,191	2	175	-	204	-	-	-	813
YORK, REGIONAL MUNICIPALITY OF	1,130,386	6,246	6	1,245	42	1,177	550	838	2,040	354

The following observations regarding diversion program performance in other large municipal jurisdictions in Ontario and the County are relevant to the consideration of the County's current diversion performance and potential for additional diversion:

- 1. Of all the large jurisdictions in Ontario (Table 4-2), the County has: the highest per capita diversion rate; a per capita waste disposal rate that is close to the median; and the highest overall per capita waste generation rate.
- 2. The key point of differentiation between the County and other large jurisdictions is the amount of residential material brought to and managed through the County's transfer stations and landfills. This volume of material contributes significantly to the measurement of overall waste generation and overall diversion. There is no real comparison in program performance for the County's per capita diversion rate for other materials that are managed through this system (Table 4-5) to any other large municipal jurisdiction, it is over four times higher than the City of London, and over six times higher than Peel Region and 14 times higher than York Region both of which have made significant capital investments in their community recycling centres. It is reasonable to assume, that that residents in those jurisdictions are utilizing a number of private disposal options whereas the County's waste generation (and diversion) rates are affected by the lack of private disposal options. Simcoe County has developed a system to accommodate self-haul by residents that offers as high a level of convenience as possible in regards to the number and location of facilities, operating hours and design. Individuals in large urban centres are unlikely to have access to appropriate vehicles to haul the same range of materials managed by County residents, generally have longer trips (time) to access locations which may not be as convenient to the broad sector of the population, and have easier access to private waste services that can manage these materials and remove them from the municipal system.
- 3. One area to consider for further focus and improvements regarding the diversion of 'other' materials through the County's facilities could be the management of textiles. Based on Table 4-5, both the City of London and York Region are achieving significantly higher per capita diversion of textiles (1.5 and 1.1 kg/capita), compared to Simcoe (0.07 kg/capita). However, there is no clear difference in the description of their programs as compared to Simcoe.
- 4. It is difficult to find a strong correlation between the bag/container restrictions and partial user pay programs available in these jurisdictions, to increased overall diversion performance, recyclables capture rates (% recyclables diverted) or organics capture rates (% organics



- diverted) (Tables 4-1 and 4-2). It is difficult to find a strong correlation between bi-weekly garbage collection and recyclables capture rates. There is a strong correlation between bi-weekly garbage collection and overall diversion rates in the large urban group, but not in the urban regional group.
- 5. There is however a very strong correlation between the implementation of bi-weekly garbage collection and organics diversion performance (Table 4-2). All of the large jurisdictions that have implemented bi-weekly garbage collection have organics diversion rates (% organics diverted) higher than the average in their municipal grouping. Generally those municipalities with bi-weekly garbage divert higher kg per capita of household organics than those that do not, although program variations in regards to allowed organic materials must be taken into consideration (Table 4-3).
- 6. The County diverts the highest kg per capita of overall blue box materials, is one of the top three jurisdictions in regards to kg per capita of paper fibre diverted and has the highest kg per capita diversion of plastics/metals/glass (Table 4-4), nearly twice that of all other large jurisdictions. As observed in Section 2, the results of the 2015 residential curbside audits indicate that the County is achieving an overall capture rate for containers of 86%, which is significantly better than other jurisdictions. There is little remaining room for improvement in the curbside recycling program.

4.2 Waste Management Initiatives in Other Municipalities

HDR undertook a brief review of municipalities across Canada which are recognized as having high diversion performance, which have implemented new initiatives, or who have similar demographics or operate programs with similarities to those operated by Simcoe. Again, as mentioned above, it is difficult to determine which, if any, components of a program contribute the most to higher diversion rates and successful diversion programs. In the case of Guelph and Halifax, both jurisdictions have provided diversion programs, particularly a source separated organics program, for many years and their residents have become accustomed to participating in diversion programs. Simcoe's waste management programs incorporate components of many of the programs described below; however, there are some initiatives within these programs that are reasonable to consider as part of the County's Strategy update.

City of Guelph, Ontario

In 2012, the City of Guelph achieved a 68% residential diversion rate, in 2013, the City achieved an additional 1% for a residential diversion rate of 69.2% (2013 WDO Datacall). In 2012, Guelph also diverted the highest percentage of residential organic waste (31.6%) out of the total waste stream. The City easily surpassed their target of 65% diversion by 2016.

Guelph attributes its achievements to:

- a move to fully automated collection from a bag-based program;
- implementation of its new organics processing facility;
- residential participation;
- political support; and,
- enthusiastic staff.

Guelph's strategic waste management plan identified a number of recommendations⁹ including:

- construct a new Organics Processing Facility;
- improve special event and open space recycling;
- waste minimization and education initiatives in schools; and,
- refocus and redevelop waste reduction messages/promotion and education programs.

⁹ Compost Council of Canada, Presentation by D. Wyman, City of Guelph, 2014 – How did Guelph achieve 68% diversion in 2012.

Guelph's organics processing facility was completed in 2011 and is operated by Aim Environmental Group using aerobic in-vessel composting technology. Guelph's weekly three stream 'clear bag' collection program (garbage, recycling and organics) was recently replaced by a three stream automated cart program over three years, with the final phase completed in Fall 2014, to minimize the financial impact of the program.

Organics are collected weekly; recycling and garbage are co-collected on alternating weeks. Biweekly garbage collection is most likely one of the largest contributors to the success of the City's new organics program. Other programs Guelph operates include a Goods Exchange Weekend (twice yearly), a user pay Bulky Item Collection Program (\$30 for one item, \$24 for each additional item), and a bike reuse program.

Elements for consideration by the County would include bi-weekly waste collection and automated cart collection.

City of Markham, Ontario

The City of Markham is one of nine local municipalities within York Region. York Region processes residential recycling and garbage for the nine local municipalities and, as such, is responsible for reporting WDO Datacall information on an aggregate basis for the entire region.
The City of Markham collects data and reports on its own diversion rate representing curbside materials collected and materials managed through City facilities. The City of Markham's reported diversion rate does not include all materials originating in the City that are managed through York Region's facilities nor does it include residential bulky and construction materials that are likely to be managed by the private sector (e.g. shingles, wood etc.) that the County of Simcoe manages through its facilities. These rates are not verified by the WDO Datacall as Markham's information is aggregated within the Datacall information provided by York Region.

Markham is well-known in the industry for its waste diversion initiatives supported by Council and enthusiastic staff members. In 2012, Markham Council approved a strategy to achieve 80% diversion by 2014; a target that has been exceeded based on the City's diversion rate calculations in 2013, the City reported an 81% diversion rate (primarily through residential curbside programs). Markham has made a number of significant changes to their waste management programs including;

- Removal of its three bag limit and bag tag program; and,
- Implementation of a clear garbage bag program in 2013, which allows residents to set out an unlimited number of clear bags containing separated, non-recyclable garbage collected biweekly.

Other programs Markham has instituted include recycling collection at 1,500 Canada Post super mailboxes (for unwanted flyers, junk mail etc.), textile and carpet diversion program, a reuse depot for renovation materials, and spring and fall clean up days. Markham attributes a significant portion of its diversion efforts to the clear bag program which encourages participation in diversion programs.

Elements for consideration by the County would include bi-weekly collection of garbage, clear bag collection, recycling at Canada Post locations and reuse depots for renovation materials.

City of Surrey, British Columbia

The City of Surrey is a member municipality of Metro Vancouver and has a population of approximately 504,000. As a member municipality, Surrey is subject to waste management policies and practices set out by Metro Vancouver, such as the ban on clean wood from disposal.



Additionally, the Metro Vancouver Integrated Solid Waste and Resource Management Plan requires a regional waste diversion increase from 55% to 70% by 2015.

As part of their "Rethink Waste" program, designed to increase diversion, Surrey implemented a fully automated cart-based collection program in 2012 with organics collected weekly and recycling and garbage collected on alternating weeks. The reported performance of the new "Rethink Waste" program, one year after implementation was improvement of curbside diversion from 50.1% to 70%, an 81% increase in diversion of curbside organics and a 6% increase in curbside recycling. The City attributes success of the program to the communication and education efforts undertaken in advance of the introduction of the system and that continue, including a waste service hotline and their "MyWaste" smartphone app which has experienced a high number of downloads.

Refinements of the "Rethink Waste" program since 2012 have included: a campaign to reduce contamination in the organic waste stream from 4% (2012/early 2013) to 1% as of late 2013; implementation of on-board intelligence in the waste collection fleet; working with private service providers to offer a pilot cart washing program; examining options for improvements to multi-family diversion; and City Hall Office waste reduction.

The City's contracted collection service provider (the same provider as contracted by the County) uses CNG trucks with on-board intelligence systems. The City is currently developing a dry anaerobic digestion facility as part of the second phase of the "Rethink Waste" program which will process the City's organics and produce renewable natural gas that will be used to fuel the City's waste collection vehicles and service vehicles and provide a renewable fuel source for the new District Energy System. The organics processing facility is being developed as a public-private partnership with up to 25% of the capital cost funded by the Government of Canada as part of the P3 Canada Fund. The City recently entered into a design, build, operate and maintain agreement with Orgaworld Canada for an 80,000 tonnes per year anaerobic digestion facility which is expected to be complete in 2017.

Elements of the Surrey program for consideration by the County are automated cart collection and bi-weekly collection of garbage. The County is partway through the OPF process, the outcome of which would be a new municipally owned organics processing facility (Section 3.4.4.2).

Province of Prince Edward Island (PEI)

Waste management in PEI is conducted by Island Waste Management Corporation (IWMC), a PEI crown corporation with a mandate of developing, implementing and operating a waste management system in PEI. In 1994, the province's "Waste Watch" program was implemented, which paved the way for the province's current diversion and disposal programs. PEI has a population of 146,283 as of 2014, with 63,004 permanent and 8,279 seasonal residences, as well as over 1.3 million annual visitors. 10

The province has a Beverage Container Management System. Up until 2008, non-refillable beverage containers were not available for sale in PEI. Legislation was enacted after this time to establish a deposit-return system to include all beverage containers up to 5L with the exception of containers used for dairy and milk substitutes. Containers are accepted at 10 locations across PEI.

Diversion in the province is mandatory. Residents are provided with two carts, one for organics and one for waste which are collected on alternating weeks. Recycling is collected monthly using blue bags. In 2014, property owners paid an annual fee of \$205 on their property tax bill, seasonal properties paid \$95 for collection of waste from June to September with the option of extending the

¹⁰ Province of Prince Edward Island, 2014 Statistics

season from mid-May to end of October for \$120. Participation in recycling programs is also mandatory for the IC&I sector.

Four main facilities manage PEI's waste; PEI Energy Systems (Energy from Waste facility), East Prince Waste Management Facility (landfill), Central Compost Facility (organics processing) and GreenIsle Environmental Inc. (recycling facility). Tipping fees at IWMC's final disposal facilities are \$100/tonne. The IWMC has also established 5 "Waste Watch Drop-off Centers" which accept materials not collected at the curb and from small business owners who self-haul sorted material.

PEI had the highest household composting rate in Canada as of 2011, at 96%. 11 Its diversion rate for all programs as of 2014 was 56%. 12

No specific measures have been identified from programs in PEI that are not represented in the existing Simcoe County waste management system with the exception of the deposit-return system for beverage containers. Deposit-return is not a measure that can be implemented by the County but is an element of extended producer responsibility that falls under Provincial jurisdiction, and is not identified as a measure in the proposed new Waste Diversion Act.

Halifax Regional Municipality, Nova Scotia

The province of Nova Scotia has established a goal for waste disposal of no more than 300 kilograms per capita annually by 2015 and since 1996, has enacted bans on disposal of 21 different materials in landfills and incinerators, including organics. Nova Scotia also has a deposit/refund program for beverage containers.

In 1995, Halifax developed a Waste Resource Strategy, and, in association with the Province of Nova Scotia, developed and implemented policies and programs which made Halifax a leader in best practices for waste and recycling. Halifax currently diverts approximately 52% of its residential waste with a long-established organics program. The per capita disposal rate is currently 378kg¹³.

In August 2015, Halifax implemented a clear garbage program, with a limit of 6 bags collected (one of which can be opaque for privacy). Garbage is collected biweekly, organics are collected biweekly on alternating weeks from garbage, but weekly in July and August. Recycling is collected weekly in most areas, biweekly in rural areas. Materials must be set out separately; a blue bag for containers, regular or clear bag for paper and bundles of corrugated cardboard. There is a landfill ban on blue bag materials, fibre recyclables and organics, source separation programs for multi-residential facilities and commercial properties are mandatory.

Up until 2015, Halifax had a by-law which prohibited export or removal of waste generated within the Halifax Regional Municipality and required waste to be disposed of within Halifax (i.e. flow control). This by-law, which applied to residential, IC&I and C&D (Construction and Demolition) waste was amended as of February 2015, to allow for the export of IC&I waste outside the Halifax Regional Municipality.

Halifax also developed and operates a relatively unique 'Front End Processor and Waste Stabilization Facility" located at the only active municipally owned landfill, the Otter Lake Waste Processing & Disposal Facility, which recovers recyclables from the waste stream and composts the remaining material for 21 days to 'stabilize' the organic fraction of the waste stream prior to disposal. Recently, recommendations in an update to the Halifax waste management system have been made to close this facility, which are still under consideration. It was determined that less than 1% of the

¹¹ Statistics Canada, Composting by households in Canada.

¹² Island Waste Authority, 2014 Annual Report.

¹³ Solid Waste By-law S-609 Public Hearing Presentation



material arriving at Otter Lake was being removed and diverted through front end processing, and that the state of the materials entering the landfill was resulting in more rapidly released landfill gas. No decisions related to the closure of this facility have been made as of the date of this report.

No specific measures have been identified from programs in Halifax that are not represented in the existing Simcoe County waste management system with the exception of the front end processing and waste stabilization facility. However, performance of this facility does not indicate that there is value in considering this specific type of facility in the County's system. However, there are some front-end separation technologies (discussed later in this report) that could be integrated into the County's system, and the County's current approach to processing bulky materials prior to disposal at Site 2, is a measure that substantially reduces the consumption of landfill airspace.

Summary

Simcoe County generally performs well and offers a similar or larger suite of diversion programs in comparison with other major jurisdictions across Canada that are recognized for their diversion performance. System elements in other jurisdictions for consideration by the County include:

- 1. Bi-weekly garbage collection, which is clearly associated with high curbside diversion performance in other communities and particularly in relation to organics diversion.
- 2. Other disincentives related to garbage collection such as clear bags or pay as you throw where residents must pay for each bag of garbage, which may be associated with improved diversion performance. However, it is difficult to determine the actual improvement in performance associated with a measure like this. Some communities (e.g. Guelph) have improved performance having moved away from clear bag collection.
- 3. Automated cart collection which may offer some improvements to the efficiency of the waste management system.
- 4. Some measures applied in other communities that could contribute to improvements to the County's diversion performance including:
 - Recycling at additional Canada Post locations;
 - Reuse depots for renovation materials; and,
 - Front-end separation and mixed waste processing.

4.3 Waste Policy Trends

Extended producer responsibility (EPR) is a strategy that seeks to link financial and environmental responsibility for end-of-life management of waste materials to the production and use of those materials. The Canadian Council of Ministers of the Environment (CCME) prepared its "Canada-wide Principles for Extended Producer Responsibility" and defines EPR as,

"...an environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle."

The basic tenets of EPR form the structure for the previously proposed Bill 91, the Waste Reduction Act which was intended to establish a new framework for reduction, reuse and recycling of waste in Ontario. Had it been enacted, the Waste Reduction Act would have replaced the current Waste Diversion Act with the primary intention of shifting responsibility for the management of wastes from municipalities to producers of packaging and products.

Key elements of the proposed Bill 91 included:

- Establishment of regulatory authority for designation of wastes, definition of producers, producer registration and reporting requirements;
- Commitment to establishing regulated individual producer obligations for:

- o Waste reduction (i.e. collection and recycling) targets
- o Customer service level standards
- Promotion and education
- Funding of programs
- Labeling to support integrated pricing with diversion costs included in the pricing of the products
- o Registration, provision of information and reporting
- Revised rules around funding of programs (i.e. removal of Blue Box funding cap);
- Registration and mechanisms for municipalities to be compensated for waste collection; and,
- Replacement of the existing WDO with a new Waste Reduction Authority with a new structure and governance model intended to support its mandate to:
 - Oversee existing waste diversion programs and transition to a new individual producer responsibility framework
 - o Monitor and enforce producers' compliance with obligations
 - o Information management and reporting
 - Provide the government with advice on waste management issues and resolve disputes
 - o Report

If enacted, Bill 91 would have affected all municipalities in Ontario in terms of how waste would be managed, who would be responsible and how costs would be paid. The proposed Bill 91 and its accompanying plan, the Waste Reduction Strategy, outlined key principles to overhaul and improve waste diversion in Ontario, but also left many details still to be resolved during implementation. If enacted, it was anticipated that the requirements of the Waste Reduction Act would have been phased in over a five year period.

Bill 91 was proposed by the Ontario government in June 2013; went to second reading in the Ontario legislature beginning in September 2013 and had not yet been enacted (or defeated) at the time the sitting of the legislature was dissolved for election on May 2, 2014.

Since that time, municipalities and waste and non-profit organizations have provided input into the policy framework proposed for the new *Waste Reduction and Resource Recovery Act*. It is unknown when the new legislation will be announced; however, as a key element of waste management policy in Ontario, driving increased producer responsibility and influencing the role of municipalities in solid waste management, it is important that the County remain attuned to the status of Bill 91 or its successor legislation.

Another potential influence on County plans are the proposed EPR programs for CCME Phase 2 materials including; construction and demolition materials, furniture, textiles and carpets and appliances, including ozone depleting substances, with regulations expected in 2017 as part of the Canada Wide Action Plan (CAP).

4.4 Discussion of New Pending Waste Management Legislation and EPR

In April 2015, the Association of Municipalities Ontario (AMO) published a municipal discussion paper¹⁴ regarding the impact on municipal governments of the proposed *Waste Reduction and*

¹⁴ https://www.amo.on.ca/AMO-PDFs/Reports/2015/MOECC-LTR-New-Waste-Reduction-and-Resource-Recover.aspx



Resource Recovery Act. AMO listed a number of issues it feels should be addressed in the new legislation.

The following are some of the issues pertinent to the County:

- need for a waste diversion scheme targeting the IC&I sector;
- compensation for costs associated with IC&I waste managed by municipalities;
- implementation of three phases of designated municipal hazardous and special waste materials;
- unstable market for WEEE;
- lack of municipal funding for pharmaceutical and sharps programs;
- compensation for costs to collect and divert materials;
- compensation for costs to manage designated products and packaging in the municipal collection and disposal stream;
- compensation for stranded assets and investments in waste processing infrastructure;
- consideration of long term contracts, employees;
- consideration of key performance indicators and metrics, including changes to the current weight-based waste diversion metric;
- right of municipalities to maintain or reclaim the right to collect blue box material as part of an integrated waste management system to maintain efficiencies in collection and management of other materials;
- right of municipalities to compete fairly for blue box processing services on a level playing field with the private sector;
- right of municipalities to compete for provision of services for MHSW (Municipal Hazardous or Special Waste), WEEE, pharmaceuticals and any other designated toxic material on a level playing field;
- expansion of EPR management to include more products and waste streams such as furniture, C&D waste, branded organics, bulky items such as furniture and mattresses and small household items; and,
- funding by stewards for branded organics such as diapers, food packaging, disposable paper products etc.

It is unclear when the new legislation will be announced or what it will encompass but regardless, there are likely to be a number of items that could impact future decisions by the County; including;

- continued provision of collection services and/or subsidies to the IC&I and Multi-residential sectors which could be affected by changes in the requirements for diversion from these sectors;
- continued provision of blue box collection to the single family sector, should some form of provincial collection system by stewards be implemented as part of the new individual producer responsibility framework;
- future development of a MRF to process some or all of the County's recycling stream, should responsibility for recycling processing be integrated into a new individual producer responsibility framework;
- continued provision of bulky waste collection, should producer responsibility for bulky items be implemented;
- length of collection and processing contracts given uncertainty on potential system changes;
- development and operation of the OPF, particularly in regards to availability of funding sources, should some form of producer responsibility framework for branded organics be implemented;
- requirements for future waste disposal capacity should diversion increase through these additional provincial measures; and,
- continued management of MHSW and WEEE should there be changes to the producer responsibility programs for these materials.

5 Identification of Options

This section of the report identifies options for changes to the County's solid waste management system arising out of the assessment of the current solid waste program in the County in Section 3 and the assessment of waste management programs in other jurisdictions as presented in Section 4, as well as HDR's recent experience and research in solid waste management systems and programs in North America.

Options are identified that could be considered in the:

- Short-term, being the five year period from 2015 to 2020; or the
- Long-term, being the period from 2021 and beyond.

The advantages and disadvantages of each option are discussed, along with recommendations as to how these options could be integrated (or not) into the County's solid waste management system. These recommendations will identify system components that would be carried forward into detailed evaluation in the next steps of the Strategy update.

5.1 Reduction and Reuse

Options to reduce and reuse waste are essential for changing consumer mindsets and "wasteful" behavior. Reduction and reuse options have budget requirements for staff time and promotion and education initiatives, and very modest capital or on-going operating expenses. Reduction and reuse measures tend to have modest effects on the quantities of materials diverted from the waste stream, but can be useful in regards to targeting material streams that would not otherwise be diverted and encourage beneficial behavior change in generators.

For example, in 2013, the majority of large municipalities indicated that less than 1% of their residential waste stream was diverted through reuse programs. Only Durham Region reported a reuse rate over 1% (2.63%). For residential on-property diversion (e.g. grass-cycling and backyard composting) which is generally considered a waste reduction measure, all of the large municipalities reported that less than 6% of their residential waste stream was diverted through these measures. Reduction initiatives undertaken in other municipalities across North America have been drawn upon to guide the County in implementation of an expanded waste reduction program.

The County already offers many options to residents to divert materials such as textiles and other gently used materials and there are other organizations who offer recycling without the County's involvement, The County should continue with their existing efforts to promote reduction and reuse wherever possible. The concept of reduce and reuse can be built into the County's P&E program to reinforce this message to residents. The implementation of other options in the Strategy should result in reduced waste, including options that further restrict garbage which will force residents to rethink their waste generation habits. Standalone reduction and reuse options can consume staff time and resources, and are unlikely to result in any significant diversion results. The County can continue to conduct waste audits to identify those materials which are not being diverted (e.g. food waste) by residents to target through specific P&E campaigns.

There are a few tactics which, again are resource intensive and do not show immediate or significant gains in waste diversion, but have the potential to increase the County's diversion rate and reduce the waste generation rate. These are described in the following sections.

5.1.1 Food Waste Reduction

The County is currently involved in the Southern Ontario Food Collaborative along with York and Peel Region as well as other municipalities and non-governmental organizations. The Southern Ontario Food Waste Municipal Collaborative is an initiative with a goal of developing common key messages for food waste reduction, exploring collaborative projects and advocating for change in



policy to support food waste reduction. Extension of these efforts through development of a Countywide food waste reduction strategy would promote reduction of food waste generated primarily in the household but also in the small commercial sector. It would focus on information and outreach programs to educate residents about the benefits of food waste reduction from an economic. environmental and social perspective.

The County's 2015 waste audits indicated that, annually, single family households generate 174 kg of food waste. Results of the summer 2015 audit indicated that residents generated 1.78 kg/hh/week of edible food waste and 1.41 kg/hh/week of inedible food waste. Based on 125,763 single family units (including condos and mobile homes) and the summer 2015 audit results, at minimum, approximately 11,600 tonnes annually of edible food is wasted annually.

Removal of a portion of the food waste from the waste management system may affect waste diversion rates, by reducing the tonnes of organics that are managed via the green bin and composted. Overall, there would be a shift to focus attention and participation in sustainable food movement and food security issues.

Development of a food waste reduction strategy is a key waste reduction element that is recommended to be carried forward for further evaluation.

5.1.2 Disposal Bans, Mandatory Diversion By-laws

The County's By-law No. 6256 outlines the County's requirements for collection, processing, marketing transfer and/or disposal of waste. It does not require mandatory participation in diversion programs for the residential and IC&I sectors at curbside or at County waste management facilities. The County does not have any landfill bans in effect, nor any mandatory diversion requirements. The County has relied upon encouragement to use curbside services, and differential tipping fees at the County's facilities to encourage participation in diversion. In June 2013, County Council deferred the implementation of a mandatory bylaw until the Strategy review.

Many municipalities have implemented by-laws requiring mandatory participation in diversion programs and supporting initiatives such as differential tipping fees, clear bag programs etc., with the ultimate goal of waste reduction and diversion from final disposal. A phased-in approach to enforcement from voluntary compliance to increased enforcement is the norm, with many programs not proceeding to full enforcement (particularly for curbside initiatives). Staff time would be required to amend by-laws as required, for promotion and education and for additional enforcement. Landfill bans require active involvement of landfill staff to observe and reject if necessary, loads for disposal that contain banned materials. Some municipalities have set aside inspection areas for loads of material. Tipping fees for mixed waste are currently set at double the regular garbage rate (i.e. \$310/tonne) to encourage separation of divertible materials. While the current tipping fee for mixed waste loads encourages diversion, an escalated fee would encourage increased material separation. Implementation of a higher differential tipping fee (e.g. five times higher for mixed loads of material) could serve the same purpose as a waste ban and/or could be the means of implementing a ban.

The extent of bans and/or by-laws that would be appropriate would depend on the options chosen for the next phase of the Strategy.

Disposal bans and mandatory diversion by-laws are recommended to be carried forward for further evaluation.

5.1.3 Textile Collection

The County currently collects reusable clothing, shoes (in pairs), linens, blankets, bedding, hats, handbags, towels and drapes at local waste facilities for diversion into the Canadian Diabetes Association Clothesline Program drop box. Residents are advised to put items in poor condition in the garbage. Based on the County's 2015 single family audit, 10.62 kg/hh/year are disposed of in the garbage. Based on 125,763 single family units (including condos and mobile homes) and the summer 2015 audit results, at minimum, over 1,300 tonnes of textiles are being disposed annually.

The County collected 25 tonnes of textiles through the drop boxes at waste management facilities in 2014. This compares well to other municipalities. The only municipality with higher reported textile diversion is the City of London which had the highest per capita recovery of residential textiles in 2013, through a system similar to that in the County where residents can take textiles, books and small household items to Goodwill drop off locations at the City's two EnviroDepots. Based on the current performance of the existing system a continuation of existing efforts is recommended and that future P&E efforts include the promotion of textile collection opportunities in the County.

5.1.4 Advocacy

Simcoe County currently advocates on behalf of its residents through active participation in a number of organizations such as AMO (Association of Municipalities of Ontario), SWANA (Solid Waste Association of North America), and the OWMA (Ontario Waste Management Association. There may be some benefit in active participation in other organizations such as the National Zero Waste Council and PacNEXT to ensure representation and active involvement in advocacy by these organizations. Collective waste reduction and diversion advocacy efforts with other municipalities and organizations are critical to effecting changes in legislation promoting waste reduction. Multistakeholder groups have the best chance of bringing about regulatory change, as government perceives that the initiative has broad based support. Other, broader partnerships (e.g. PacNext) could help to bring about system change (in packaging design) which is good for municipalities in Ontario and across Canada.

Legislative and policy changes at the federal and provincial level are the most effective way to bring about waste reduction, as these levels of government have the ability to legislate changes that affect industry and as participation is mandatory (it is the law). Involvement with various organizations requires time and effort by County staff, much of which does not necessarily result in immediate or positive outcomes. However, this sort of involvement can create opportunities to facilitate exchange of waste diversion best practices among municipalities with similar waste diversion goals and objectives.

Based on the current performance of the existing system a continuation of existing efforts is recommended.

5.1.5 Summary of Reduction and Reuse Initiatives

The following provides a summary of the implications associated with the potential reduction and reuse initiatives as discussed above.

Option: Implement/Continue Reduce and Reuse Initiatives							
Short-term or Long-term Option	Implement in the short-term, sustain over the long term.						
Interaction with other System Components	Potential to reduce quantities of materials requiring collection, processing and disposal.						
	 Some options have the potential to impact the collection program from a compliance/monitoring standpoint as it increases the requirements for the collection contractor to enforce compliance. 						
Potential Cost Implications	 Low to moderate costs to implement, >\$5 per household per annum. Potential decrease in diversion processing and/or disposal fees by reducing the quantity of materials requiring management. Potential to reduce revenue from tip fees, and therefore higher net operating costs for disposal. Potential to increase revenue from tip fees, if higher differential tipping fees for mixed waste were implemented. 						
	 Increased staffing costs for enforcement. 						

Option: Implement/Continue R	Option: Implement/Continue Reduce and Reuse Initiatives							
	Some staff time required to attend meetings.							
Potential Change in Diversion	 In 2013 the County reported diversion of 0.1% of the residential waste stream through reuse programs and 3.4% by on-site management of materials. Based on reported program performance for top-performing larger jurisdictions, it should be possible for the County to increase the diversion rate by 1 to 2% (from 59 to 60%). 							
Potential for System Efficiencies and Improvements in Level of Service	 Limited potential for system efficiencies. Residents may see role of County in supporting these activities as an improvement to level of service. 							
Potential Processing or Disposal Capacity Requirements	Could reduce disposal and/or processing requirements							
General Implementation Requirements	P&E program to educate residents and promote reduction and reuse.							
Ability to Adjust Option to Changes to the WDA	Highly adjustable to any new legislation that targets waste diversion initiatives.							

5.2 Garbage Collection

The SWMS outlined a number of steps which would contribute to increased diversion through various disincentives for garbage set-out. Within the 5 year planning period, the Strategy recommended the following:

SWMS Recommendation	Implemented	Current Status
Transition to a full user pay program in Years 2 and 3 requiring a tag or special bag for all curbside garbage set out at the curb	*	Residents are allowed one free bag, with up to 7 additional tagged bags.
An increase in the cost of additional bags	✓	The cost of bag tags increased from \$2.00 to \$3.00 per tag as of January 1, 2012.
A clear garbage bag program	*	Proposed to be considered in Year 5 as a contingency if other measures were not successful.
Bi-weekly garbage collection	×	Consider for next collection contract in 2020

Council provided direction to Solid Waste Management in 2011 for consideration of full user pay in the next collection contract¹⁵, however, subsequently this direction was rescinded and the new collection contract implemented in 2013 allows for weekly garbage pick-up of one free bag with up to 7 additional tagged bags. County Staff have indicated that the current collection contract could be amended to include garbage restrictions; however, these changes may result in additional costs to the County¹⁶.

5.2.1 Clear Garbage Bags

Clear bag-based garbage systems have been used by many municipalities throughout North America. A number of municipalities in Canada currently have programs in place; Halifax Regional Municipality recently switched to a clear bag program (August, 2015) as has the Town of Markham (April, 2013). However, clear-bag programs have not resulted in the expected diversion in some communities; the City of Guelph recently switched away from a clear bag program, to cart based collection of garbage, organics and recyclables which was phased in from 2012 to 2014.

¹⁵ CS 11-026

¹⁶ CS 13-028

Based on studies that have been completed, clear garbage bag programs have been shown to increase the capture of divertible material and further, have led to a decrease in waste management costs. A study completed of 13 municipalities in Nova Scotia showed that a clear garbage bag program (programs had been in place for two years) assisted these municipalities in reducing residential garbage by 41%, increasing residential recycling by 35%, and increasing residential organics by 38%. The City of Markham implemented a mandatory clear bag program in April 2013; residents can set out as many bags of non-recyclable / non-compostable garbage as desired with no limits or bag tags required. Markham instituted this program in advance of their waste being incinerated at the Durham York Energy Centre to ensure the waste sent for disposal do not contain any potentially toxic materials such as batteries etc. An additional benefit of this program is a reduction in collection worker injuries from sharps and other materials such as broken glass. Garbage is collected biweekly and there is a limit of 4 privacy bags.

Clear garbage bags are a means of further restricting garbage collection, and providing a better mechanism for curbside enforcement of source separation and as an additional measure to encourage diversion. It could also be undertaken as an additional change to be considered in the short or mid-term based on the success (or lack thereof) of the overall diversion initiatives. The County could assess the applicability of clear bags as a mechanism to both increase recyclable and organic materials captured at the curb and decrease waste destined for disposal at landfill. It is unclear if this type of program would be necessary however, if other disincentives for curbside waste generation were implemented such as bi-weekly garbage collection.

This type of initiative may benefit from a pilot study that includes pre and post surveys of participants to gauge receptiveness and program challenges and successes. A pilot program could examine the implementation of such measures as the primary change to garbage collection, or in combination with other measures such as bi-weekly garbage collection.

Option: Implement a Clear Bag-k	pased Garbage System
Short-term or Long-term Option Interaction with other System Components	 Implement in the short-term (as of 2020), sustain over the long term. Preference to implement with new collection contract, as change can have an effect on garbage collection service costs (see below). Impact to collection program from a compliance/monitoring standpoint as it increases the ability of the collection contractor to enforce compliance. However, it would also draw on more time from the curbside collections staff to scan the bags and tag for non-compliance that could affect costs. Potential draw on by-law enforcement for non-compliance. Impact to MMF and OPF with increased tonnages. Anticipated to increase rates of recycling and organics diversion as
	 divertible material would be visible in clear bags and the collection contractor can be directed not to collect bags with visible divertibles. Potential to impact service delivery in the collection contracts depending on when option is implemented.
Potential Cost Implications	 Initial costs to implement would be small, <\$5 per household per annum primarily for promotion and education as residents are responsible for purchasing bags, and for increased volume of calls from residents during implementation phase Some additional costs anticipated related to by-law enforcement. Some additional costs anticipated for contracted collection services, due to lengthier stop times, tagging and reporting. Potential increase in per tonne recyclable and organic waste collection and processing fees with increased tonnages. Potential decrease in waste disposal costs.

¹⁷ Quinte Waste Solutions and Stewardship Ontario. 2008. The Use of Clear Bags for Garbage as a Waste Diversion Strategy: Background Research on Clear Garbage Bag Programs across North America.

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Option: Implement a Clear Bag-b	ased Garbage System
Option: implement a Clear Bag-b	Increased revenue from additional tonnage of recyclables diverted.
Potential Change in Diversion	 It is difficult to determine the actual amount of additional diversion that could be achieved, as this measure is not isolated from others in communities that have implemented clear bag programs. Based on 2015 curbside data, there is very little room for improvement in curbside recycling as recycling capture rates are already over 85%. Based on 2015 curbside here is a lot of room for improvement in curbside organics diversion as organics capture rates are less than 40%. Best estimates would be for an increase of 1 to 2% in the overall diversion rate (from 59 to 60%) depending on the level of enforcement employed.
Potential for System Efficiencies and Improvements in Level of Service	Residents may see this as an increase in level of service if unlimited clear bags are allowed. Works well with implementation some other programs and disincentives (e.g. biweekly garbage collection, bag tags).
Potential Processing or Disposal Capacity Requirements	 Could reduce disposal requirements by diverting more material from landfill. Could increase organics and recycling processing requirements. Sizing of the OPF considers improved organic capture.
General Implementation Requirements	 P&E program to educate residents and promote benefits. May require additional resources to address high volume of resident calls during first six months of implementation. Additional by-law enforcement resources. Consider the viability/necessity of undertaking a pilot program. Consider issue of privacy, whether or not to allow any opaque privacy bags within the larger clear garbage bag
Ability to Adjust Option to Changes to the WDA	Highly adjustable to any new legislation that targets EPR and waste diversion.

It is recommended that consideration of a clear bag-based garbage system be carried forward for detailed evaluation, considering the potential benefits of this approach as either a stand-alone measure to encourage curbside diversion or as a supporting measure as part of a group of initiatives.

5.2.2 Bag Tag Price Increase

Annual revenues for bag tags indicate that on average the County sells the equivalent of less than 2 bag tags per household per year.

Table 5-1 presents some examples of municipalities of comparable size to Simcoe County that operate a bag tag program in Ontario¹⁸. These programs ranged for full to partial user pay and also incorporate a variety of other disincentives such as clear bag programs and biweekly garbage. In general, Simcoe County, having increased the cost of bag tags from \$2.00 to \$3.00, is at the upper end for cost of bag tags with most municipalities charging around \$2.00 per bag.

¹⁸ Based on information available on municipal websites.

Table 5-1: Overview of Bag Tag Programs In Ontario

Municipality	Type of user pay system	No. of untagged bags allowed	No. of tagged bags allowed	Bag Tag Cost	Collection Frequency	Reported 2013 WDO Residential Diversion Rate	Program Notes
Simcoe County	Partial	1	7	\$3.00	Weekly	55.73%	
City of Kingston	Partial	1	No limit	\$2.00	Weekly	55.60%	
Niagara Region	Partial	1	No limit	\$2.00	Weekly	51.77%	
Dufferin County	Partial	1	No limit	\$2.00	Weekly	53.68%	Clear bag program
City of Kawartha Lakes	Partial	2	No limit	\$3.00	Weekly	38.60%	
Halton Region	Partial	3	3	\$2.00	Biweekly	54.60%	
Durham Region	Partial	4	No limit	\$2.50	Biweekly	53.75%	Oshawa and Whitby are responsible for their own garbage collection
City of Orillia	Full/Partial	0	No limit	\$2.00	Switched to biweekly garbage collection in September 2015	63.75%	Residents get 30 tags free
City of Sarnia	Full	0	3	\$1.50	Weekly	37.66%	
City of St. Thomas	Full	0	2	\$1.75	Weekly	43.37%	
Oxford County	Full	0	No limit	\$2.00	Weekly	55.07%	
Northumberland County	Full	0	3	\$2.75	Weekly	40.19%	
Township of Perth East	Full	0	5	\$3.00	Weekly	NA	Part of Bluewater Recycling Association (BRA) service area.
Municipality of Meaford	Full	0	3	\$2.00	Weekly	61.11%	
City of Owen Sound	Full	0	4	\$2.50	Biweekly	58.3%	
City of Stratford	Full	0	No limit	\$2.40	Biweekly	44.39%	Tag requirements depend on volume of waste – from ½ tag for small grocery bag to 3 tags for largest rigid container allowed.

As documented above, Simcoe County is one of the top municipalities in regards to diversion performance and is one of the jurisdictions with the highest bag tag fee. It would appear that County residents are generally able to fit all of their materials, including over 60% of their household organics in a single bag, generally only requiring additional bags occasionally. Residents of the County are effectively diverting high volume recyclable materials, which allow weekly waste quantities to fit in a single bag of garbage the majority of the time. It is doubtful that a further increase in bag tag fees would address the need to increase organics or recyclables diversion.



Option: Implement a Bag Tag Pri	ce Increase
Short-term or Long-term Option	Implement in the short-term, sustain over the long term.
Interaction with other System Components	 Small potential increase in rates of recycling and organics diversion. Some potential issues associated with transitioning from the old tags to the new ones, may require some additional time from the curbside collector in the short term.
Potential Cost Implications	 Cost implications are small, < \$2 per household per annum; new tag stock will be needed along with Promotion and Education. Fewer tags may be purchased; however, the fee per tag would be higher. Small potential for: increase in per tonne recyclable and organic waste collection and processing fees with increased tonnages; decrease in waste disposal costs; increased revenue from additional tonnage of recyclables diverted.
Potential Change in Diversion	 It is difficult to determine the actual amount of additional diversion that could be achieved, as this measure is not isolated from others in communities that have escalated bag tag fees. Based on 2015 curbside data, there is very little room for improvement in curbside recycling as recycling capture rates are already over 85%. Residents are also able to fit 60% of their organic waste in general in the one free bag per week. Of communities with high tag fees, Simcoe already has one of the highest diversion rates. It is estimated that the change in overall diversion would be very low < 1%.
Potential for System Efficiencies and Improvements in Level of Service	Works well with implementation of some other programs and disincentives (e.g. biweekly garbage collection, clear bags), but not with others (automated cart collection).
Potential Processing or Disposal Capacity Requirements	Could be a small reduction in disposal requirements by diverting more material from landfill and a small increase organics and recycling processing requirements.
General Implementation Requirements	 P&E program to educate residents and promote benefits. Printing and distribution costs, potentially replacing older stock.
Ability to Adjust Option to Changes to the WDA	Highly adjustable to any new legislation that targets EPR and waste diversion.

As a bag tag price increase is unlikely to have an effect on organics and recyclable capture rates and improvements in curbside diversion it is not recommended that it be brought forward for further evaluation.

5.2.3 Full Pay as You Throw (PAYT)

As noted in Table 5-1 above, there are a number of communities in Ontario that currently have full PAYT programs in effect.

It is possible that a shift to PAYT with no free bags could improve diversion rates however; there are few jurisdictions that exceed the County's current diversion rate without having implemented biweekly garbage collection in addition to PAYT.

Option: Full PAYT	
Short-term or Long-term Option	Implement in the short-term, sustain over the long term.
Interaction with other System Components	Small potential increase in rates of recycling and organics diversion.
Potential Cost Implications	Cost implications are low, < \$5 per household per annum, associated with the need for increased promotion and education, to address the potential increase in the volume of calls during the initial period of implementation and to address the need for additional by-law enforcement.

Option: Full PAYT	
	Small potential for: increase in per tonne recyclable and organic waste collection and processing fees with increased tonnages; decrease in waste disposal costs; increased revenue from additional tonnage of recyclables diverted.
Potential Change in Diversion	It is difficult to determine the actual amount of additional diversion that could be achieved, as this measure is not isolated from others in communities that have implemented full PAYT.
	 Based on 2015 curbside data, there is very little room for improvement in curbside recycling as recycling capture rates are already over 85%. Residents are also able to fit 60% of their organic waste in general in the one free bag per week.
	 Of communities with PAYT, Simcoe already has one of the highest diversion rates.
	 It is estimated that the change in overall diversion would be in the order of 1 to 2% (from 59 to 60%).
Potential for System Efficiencies and Improvements in Level of Service	Works well with implementation of some other programs and disincentives (e.g. biweekly garbage collection, clear bags), but not with others (automated cart collection).
	 A full PAYT program could be beneficial to seasonal residents, as it would allow them to pay to use the collection service at the rate they need, rather than these locations paying for a year-round collection service that is only utilized for a portion of the year.
Potential Processing or Disposal Capacity Requirements	Could be a small reduction in disposal requirements by diverting more material from landfill and a small increase organics and recycling processing requirements.
General Implementation Requirements	 P&E program to educate residents and promote benefits. Printing and distribution costs, potentially replacing older stock.
Ability to Adjust Option to Changes to the WDA	Highly adjustable to any new legislation that targets EPR and waste diversion.

Full PAYT, is more likely to have some effect on organics and recyclable capture rates and improvements in curbside diversion either as a stand-alone option or in conjunction with another measure like bi-weekly garbage collection, and is recommended to be brought forward for further evaluation.

5.2.4 Biweekly Garbage Collection

Since the County has implemented a curbside organic waste collection program, the option for biweekly collection of garbage is more viable. However, the current Green Bin program does not allow for source separation of all of the potentially odorous materials that are in the waste stream (e.g. pet waste, diapers and other sanitary paper products).

There is some potential for cost savings associated with a reduced collection frequency for garbage, depending on the configuration of the collection system that is selected. In the case of the County, garbage and organics are currently co-collected on a split vehicle. Shifting the collection system to collect garbage separately every other week, and organics weekly, is unlikely to have much savings. However, a shift to a single truck system which collects garbage and organics on one week, and recyclables and organics the next, could offer more substantive savings. This would require a transition to single stream recycling. The change in collection approach could be associated with a change to cart based collection of garbage and recyclables, but this is not necessarily required as for example there are programs that collect single stream recyclables in blue boxes.

In regards to diversion, residents are more likely to properly sort organics and recycling for collection if they have the most frequent and convenient collection cycle available for divertible materials (particularly effective with organics) and less frequent/convenient collection of garbage. Reducing the frequency of garbage collection and/or increasing the frequency of blue box collection have been demonstrated to have a positive effect on recovery rates for recyclable material.



Risks associated with this option, include communications challenges to ensure that residents are aware of and use the appropriate schedule for set-outs, and addressing winter collection cancellation problems/challenges.

Special consideration may need to be given to certain households (e.g. in-home daycares, homes with elderly residents) including special collection services, to address circumstances where excessive quantities of odourous materials would have to be retained for a two-week period.

Option: Bi-Weekly Garbage Col	lection
Short-term or Long-term Option	Implement in the short-term (as of 2020), sustain over the long term.
Interaction with other System Components	 Timing for implementation would coincide with the new collection contract in 2020. It would be difficult to realize full collection savings associated with the change in service level if implemented prior to the change in contracts. Would require a decision by 2018 in order to release Collection RFP with change in service level. Impact to MMF and OPF with increased tonnages. Anticipated to increase rates of recycling and organics diversion as residents utilize more frequent collection of these materials rather than leaving them in the garbage. Potential to increase materials managed at waste management facilities.
Potential Cost Implications	 Most municipalities experience savings in waste collection costs. Degree of savings depends on existing contracts as well as key decisions regarding co-collection and collection frequency of recyclables. Most cost effective service would be bi-weekly co-collection of garbage/organics one week, and single-stream recyclables/organics the next with the same fleet of two-compartment trucks. This could require additional implementation costs associated with cart purchase for automated collection or delivery of additional blue boxes to assist residents, and is likely to result in higher processing costs for the single stream recyclables. Overall it is anticipated that the change in overall system costs associated with the move to bi-weekly garbage collection could range from no change in costs, to savings of \$1 to \$2 million annually or around \$15 per household per annum. Extensive P&E campaign is required. Potential increase in recyclable and organic waste processing fees with increased tonnage. Potential decrease in garbage collection costs due to reduction in collection frequency. Potential for increased revenue from sale of recyclables due to increase in materials recovery. Potential for decreased revenue from bag tag sales.
Potential Change in Diversion	 As noted in Table 4-1, the largest municipalities in Ontario that have biweekly garbage collection, divert the highest % of residential organics. Based on the composition of the County's waste stream and room for incremental improvement in capture rates for various materials, it has been determined that an improvement in recyclable capture rates from 87 to 91 % for paper fibre and from 86 to 90% for containers may be possible, along with an increase in organics capture rates from 38 to 60% or more. This would increase residential curbside diversion from 47% up to 55%, and overall diversion from 59 to 65%.
Potential for System Efficiencies and Improvements in Level of Service	 Residents may see this as a reduction in level of service. Optimum system efficiencies when coupled with single stream recycling. Organics can be co-collected with another waste stream on alternating weeks.
Potential Processing or Disposal Capacity Requirements	 Potential for less disposal capacity requirements for garbage. Potential requirement of additional processing capacity for organics, and to a lesser extent, recycling.
General Implementation	P&E material development and distribution/notification.

Option: Bi-Weekly Garbage Col	lection
Requirements	 Impact to MMF with increase in capture rate for blue box materials. Impact to organic waste processing with increase in capture rate for organic materials. Reduced need for disposal capacity. May need to implement an exemption system for families and individuals requiring special considerations, as the SSO stream cannot easily be expanded to include diapers which tend to be a concern for some households. Actual update of special services to address households with concerns tends to be much less than originally anticipated (e.g. both Ottawa and Hamilton found that less than ½ the original estimated households that may want a special service to address diaper volumes, actually signed up for the service)
Ability to Adjust Option to Changes to the WDA	This option is flexible to changes in the WDA.

Bi-weekly garbage collection can be considered as a viable option for garbage collection service, considering the advantages and disadvantages discussed above. Considerable promotion and education would be needed to promote advantages of changing to this schedule.

In regards to a transition to bi-weekly garbage collection and the management of odourous materials, the key issue is where diapers and incontinence products would be directed. At this time, the County is not considering processing these products in its proposed OPF, but potentially would as a second phase. If these materials are left in the garbage stream, special considerations may need to be given to certain residential households, such as those with health issues, larger families or in-home daycares, where more odourous materials may be present in larger quantities in their garbage.

Bi-weekly garbage collection is recommended to be carried forward for detailed evaluation. Collection system modeling will be applied to quantify the potential savings in collection costs that could be incurred by the County.

5.2.5 Automated, Cart-based Collection

Many municipalities have moved to an automated cart-based collection system. This system is most advantageous for programs with single stream recycling programs; there are few to no examples of two-stream recycling programs that use automated carts.

Automated collection can be provided for garbage, organics and recycling and carts would be provided to residents for curbside set-out. Automated waste collection is considered to be a "best practice" in waste management to gain efficiencies, provide better working conditions for collection staff and can be more efficient than manual collection depending on the jurisdiction and the type of service provided. Automated collection also provides health and safety benefits to collection staff including injury prevention (e.g. slips, trips and falls, back injuries).

The City of Guelph recently completed its rollout of a fully automated collection system, phased in over three years (2012-2014). The cost of Guelph's program was reported to be \$8,812,743, including automated trucks. The City received funding from CIF for carts and trucks¹⁹.

Cart-based collection may also provide a waste reduction and/or diversion incentive if the municipality provides the resident with the flexibility to choose (and pay for in the case of garbage) the size of container that best meets their needs. While some municipalities provide carts to residents and offer choices of container sizes for no additional fees (e.g. Guelph, Peel's soon to be implemented program), other municipalities provide carts to residents but charge according to the

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The City of Guelph received a Continuous Improvement Fund (CIF) grant from Waste Diversion Ontario for -\$1,335,519. — approximately \$960,000 for the carts and \$375,000 for new trucks. www.guelph.ca



size of the cart and therefore the volume of waste being collected (e.g. City of Toronto). Other jurisdictions (e.g. Winnipeg) have provided a single standard cart size for garbage and recyclables to their households. Progressive Waste is in the process of rolling out a cart-based program to communities it serves in South West Ontario; residents in the City of Chatham have recently received their new carts (September 2015). It appears that Progressive Waste provided the carts but it is unclear how this was accounted for in its collection contract (and pricing structure) with the targeted municipalities.

Concerns with automated cart collection include the need for outside storage space and the ability to manoeuver carts and place them at the curb during winter months with significant snowfall. Issues with storage space are less likely to be an issue with the small urban/rural population in the County. Concerns regarding handling of the carts in the winter months are likely to arise as the County falls within the snowbelt in Ontario. Other rural jurisdictions with high snow fall in Ontario such as the area served by the Bluewater Recycling Association are successfully transitioning to automated cart collection and expect to fully transition by 2015. The County also has a high proportion of country homes with longer, unpaved driveways, which can make movement of the carts to the curb more difficult.

Benefits associated with automated cart collection include:

- Providing additional storage capacity for recyclables;
- Improved quality of recycling materials by reducing impacts of water, ice and snow on materials:
- Reducing potential for blown litter and lost containers.

Other issues associated with automated cart collection include:

- Increased contamination/residue rates for recyclables, as it is more difficult to see and remove/leave behind unacceptable material;
- Less incentive for garbage reduction and/or diversion of high density materials like organics. unless garbage cart sizes are set at a small size equivalent to a single garbage bag;
- Potential for glass to contaminate other recyclable materials.

The County has indicated that the Green Bins currently being used are almost at the end of their useful life and will require replacement in the short term. This would allow for replacement of the Green Bins with a version suited for automated collection, should the County choose this approach. Cart design/automated collection design for organics has evolved, to include the ability for automated collection of smaller carts and to unlock lids. The County distributed larger blue boxes to residents in the spring of 2012 (Section 3.1.2). Some of the investment in these blue boxes would be lost, should the County transition to automated cart collection of recyclables as of 2020.

Option: Automated Cart-based	Collection
Short-term or Long-term Option	Implement in the short-term (as of 2020), sustain over the long term.
Interaction with other System Components	 Generally automated cart collection of garbage would replace the current service, including bag limits and bag-tags. Most jurisdictions do not allow for any additional containers next to the cart as this would negate collection efficiency, however, they may allow for larger carts/additional cart at a higher fee. Automated cart collection of recyclables would require a shift from two-stream to single stream recycling. Automated cart collection of organics would require distribution of new organic carts. If all three streams were fully automated, this would support transition to bi-weekly garbage and a co-collection scenario with garbage/organics collection week 1 and recyclables/organics collection week 2, however cart based collection is likely to reduce potential savings.
	The earliest this option could be implemented is with the next curbside

Option: Automated Cart-based	Collection
•	collection contract in 2020, as it requires acquisition of a modified collection fleet and as it requires the purchase and distribution of carts over a large rural area.
Potential Cost Implications	 Extensive P&E campaign is required. Direct cost to the County to roll-out automated collection will depend on whether County purchases carts or if the service provider purchases the carts. Regardless, the cost will be borne by the County either initially or as part of the contracted collection costs. Automated cart costs vary based on the cart volume and type, running in the order of \$35 to over \$55 per unit. Overall, this change could increase collection costs by > \$8 per household per annum. Potential increase in recyclable waste processing fees with increased tonnage. Potential for increase in revenue from sale of recyclables due to increase in materials recovery, improvements in material quality and/or increased contamination.
Potential Change in Diversion	 Decreased revenue from bag tag sales. Some municipalities in Ontario have or are moving to automated cart-based collection. Restrictions in size of garbage carts, or volume based fees can assist with increasing diversion. However, it should be noted that most residents seem capable to fitting their weekly garbage in a single bag, and the majority of automated carts have capacity for one garbage bag or more.
	 Automated cart collection can be associated with graduated fees, where households would pay a higher annual fee for use of a larger cart, and lower fees for the smallest available cart. It is difficult to determine the effect on diversion rates, as a change to automated cart collection is usually associated with other program changes such as the move to bi-weekly garbage pick-up. It is estimated that the change in overall diversion would be in the order of 1 to 2% (from 59 to 60%).
Potential for System Efficiencies and Improvements in Level of Service	 Residents may see this as an increase in level of service. Carts can reduce litter and interaction with wildlife (e.g. raccoons, crows etc.). If the County's recycling program is switched to single stream, there may be efficiencies in hauling recyclables to the County's recycling processor. Optimum system efficiencies when coupled with single stream recycling. Facilitates co-collection with additional storage capacity compared to blue boxes.
Potential Processing or Disposal Capacity Requirements	 Carts may improve participation in diversion programs which may increase processing costs. If the County's recycling program is switched to single stream, the County's recycling processor can still process this material as it is a single stream facility. Potential for less disposal requirements for garbage.
General Implementation Requirements Ability to Adjust Option to Changes to	 P&E material development and distribution/notification. Program may be phased-in over a number of years (depending on who is providing carts). Carts need to be delivered and current Blue Boxes and/or Green Bins exchanged. If alternate cart sizes are made available, will increase the complexity of administration and cost recovery for the program. Will need to develop a system for new/replacement/exchanged carts.
Ability to Adjust Option to Changes to the WDA	This option is flexible to changes in the WDA.

The County has indicated that their current contracted service provider has shown interest in moving to an automated cart-based collection program. The County could discuss this option with their



service provider to identify the implications associated with making changes to the collection contract before its expiry.

Automated cart-based collection is recommended to be carried forward for detailed evaluation. Collection system modeling will be applied to quantify the potential change in collection costs that could be incurred by the County.

5.2.6 Standard Garbage Container

Currently residents have a variety of options regarding the 'free' container of waste allowed at the curb, and compliance with the weight and volume limits specified by the County for this container varies with 'enforcement' of the limits being at the discretion of the collection staff.

Distribution of a standard container could remove the variability in the garbage set-outs, and provide a limit to the amount of material that can be set out for 'free'. Automated carts as noted above, would be one form of standard garbage container, however, there are many available options for manual containers that would hold in the order of a single bag of garbage.

Option: Standard Garbage Con	tainer
Short-term or Long-term Option	• Implement in the short-term (within the current contract) or mid-term (as of 2020) for the next collection contract, and sustain over the long term.
Interaction with other System Components	 Would support current system of bag limits and bag-tags, with the equivalent of one free bag allowed in the container and bag-tags for additional bags. This option could be implemented prior to the new contract in 2020 as the container is essentially the same or smaller. Standard garbage containers would make enforcement of volume requirements much easier. Requires the purchase and distribution of standard containers over a large rural area.
Potential Cost Implications	 P&E campaign is required. Direct cost to the County to purchase and distribute containers in the order of \$20²⁰per unit, or around \$2 million. Overall, this change could increase collection costs by < \$5 per household per annum. Potential increase in recyclable waste processing fees with increased tonnage. Potential for increase in revenue from sale of recyclables due to increase in materials recovery, improvements in material quality and/or increased contamination.
Potential Change in Diversion	 Restrictions in size of garbage container can assist with increasing diversion. It is estimated that the change in overall diversion would be in the order of 2 to 3% (from 59 to 62%).
Potential for System Efficiencies and Improvements in Level of Service	Residents may see this as an increase in level of service in that they would receive a 'free' container.
Potential Processing or Disposal Capacity Requirements	 May improve participation in diversion programs which may increase processing costs. Potential for less disposal requirements for garbage.
General Implementation Requirements	 P&E material development and distribution/notification. Program may be phased-in over a number of years. Containers need to be delivered. Will need to develop a system for new/replacement/exchanged containers.
Ability to Adjust Option to Changes to the WDA	This option is flexible to changes in the WDA.

 $^{^{20}}$ Based on retail price of a 77L garbage container of \$14 and estimated \$6 per household to deliver.

Provision of a standard garbage container is recommended to be carried forward for detailed evaluation.

5.2.7 Collection Services for IC&I, Multi-family and Seasonal Locations

Section 3.2.1 discussed the current issues related to collection service provision to IC&I units, multiresidential unit dwellings and in seasonal areas. The decisions that have been made by the County in determining the current level of service to IC&I and multi-residential units, has taken into consideration the need to balance provision of service, with the need to maintain reasonable costs. It is difficult to identify any other adjustment that would be reasonable to the collection service provided to these generators.

The County's approach is similar to that employed by other similar jurisdictions in Ontario which are not mandated to provide waste services to the IC&I sector or for larger multi-residential dwellings. The large majority of other municipal jurisdictions in Ontario, both large and small, have chosen to provide a level of service similar to the single family residential curbside level of service to IC&I and multi-residential locations. Those locations for which this level of service is insufficient are responsible for making their own collection arrangements.

The issues associated with collection for these locations, including the lower uptake in curbside diversion, and the difficulties in securing safe access, are expected to continue and potentially become more significant depending on the changes made to the overall collection system. Again, no other reasonable options or solutions have been identified beyond that offered by the County being: either the provision of curbside collection service where possible; or common collection points; or landfill passes for bi-weekly drop-off of waste at County facilities.

During the evaluation of other modifications to curbside collection services, ramifications and/or options for delivery of service to these locations will be identified as appropriate. For example, transition to a full PAYT program could be beneficial to seasonal residents, as it would allow them to pay to use the collection service at the rate they need, rather than these locations paying for a yearround collection service that is only utilized for a portion of the year. It will be critical to identify any adjustments to the level and/or type of services to these locations prior to procurement of the next collection contracts.

5.3 Curbside and Facilities Diversion

5.3.1 Expand Curbside Green Bin Collection

Simcoe County, along with many other municipalities has wrestled with finding a solution to diverting diapers, sanitary and pet waste. These materials are problematic, not only for their potential to generate odours but also due to the plastic content inherent in the item itself as well as its "packaging". Inclusion of these materials would increase the County's diversion rate, while also increasing the inorganic residue in the organic stream. Generally programs that do not allow diapers and sanitary waste have residue rates under 5% (by weight), while those that do have residue rates over 15% (by weight). Simcoe County currently reports residue rates of between 3.2 and 7%.

Discussion with current aerobic composting processors that manage Green Bin materials that include pet waste streams, indicates few management issues with this material, no documented processing issues have been identified. Processing of organic materials that include diapers and sanitary waste generally requires more intensive in-vessel processing, either aerobic composting or anaerobic digestion, coupled with extensive front-end pre-processing or back-end screening to remove contaminants. The availability of long-term processing capacity capable of managing these materials is an essential requirement that should be addressed prior to expansion of green bin programs to include these materials.



The following table provides an overview of the allowable green bin materials in other large jurisdictions in Ontario, as well as associated residue rates. As indicated below, there is indication that municipalities with both bi-weekly garbage collection and inclusion of pet waste and/or diapers, capture more organics per capita than other jurisdictions in Ontario.

Table 5-2: Overview of Green Bin Programs in Large Jurisdictions

Municipality	Garbage Collection Frequency	Allows Use of Compostable Bags	Green Bin Organics Kg/Capita diverted annually (2013)	Includes Pet Waste and/or Diapers	Reported Residue Rate (% by weight) – Updated Feb 2014
Simcoe County	Weekly	Yes	36	No	3.2 to 7%
York Region ²¹	Bi-weekly	Yes, and plastic bags	66 (may include non-compostable residues)	Pet waste and diapers/sanitary products	Approx. 17% (4% is film plastic bags and other contaminants, rest is diapers and pet waste bag 'drag through')
Halton Region	Bi-weekly	Yes	55	No	NA
City of Hamilton ²²	Weekly	Yes	58 (includes some LYW)	No	2% in inbound material, 4% when assessing materials sent to landfill which includes 'drag through' of organics within bags.
City of Toronto	Bi-weekly	Yes, and plastic bags	49	Pet waste and diapers/sanitary products	22% ²³
Durham Region ²⁴	Bi-weekly	Yes	43	No	5% (audits in 2010 and 2011)
Peel Region ²⁵	Weekly	Yes	23	No	1%
Niagara Region	Weekly	Yes	28	Pet waste	NA
City of Ottawa	Bi-weekly	No	74 (includes some LYW)	Animal bedding and cat litter, does not allow dog feces	2% ²⁶
Waterloo Region	Weekly	Yes	16	Pet waste	NA
City of Guelph	Bi-weekly	Yes	75	Pet waste	NA

According to recent waste audits, diapers and sanitary products and pet waste make up 4.7% and 8% respectively of the County's overall waste stream, and 9% and 15% of the residential curbside garbage. Overall, it is estimated that these two material streams would account for over 9,500 tonnes of the waste sent to disposal each year. Capture of 40% of the diapers/sanitary/pet waste

²¹ Source: confidential, curbside audit information, 2012/2013 residue rates provided via email.

²² Source: 2012 SWMMP Update, and 2011 Service Level Review data. 2012/2013 Residue rates provided via email

²³ Source: CWS symposium, November 13th, 2012, Toronto AD Processing Facility Review

²⁴ Source: 2010 Annual Report, Residue rates provided in 2013 Biocycle presentation.

²⁵ Source: 2011/2012 Organics Study, 2012/2013 Residue rates provided via email.

²⁶ Source: 2014 Organics Review for the City of Ottawa

streams has the potential to divert an additional 3,800 tonnes annually (2,400 tonnes of pet waste, 1,400 tonnes of diapers/sanitary).

The addition of these materials to the Green Bin would make biweekly collection of garbage more palatable to residents. There will likely be public resistance to the thought of these materials remaining in the garbage for two weeks, particularly during the summer months. Some municipalities have addressed these concerns through a diaper bag tag program for households with young children or residents with medical conditions, in lieu of allowing diapers in the green bin.

Option: Expansion of Curbsid pet waste	le Green Bin Collection to include diapers, sanitary products,
Short-term or Long-term Option	Add pet waste in the short-term, consider inclusion of diapers and sanitary over the long term.
Interaction with other System Components	 Addition of pet waste will reduce the tonnages of garbage collected and disposed, and will increase the quantity of organics requiring processing. Addition of diapers and sanitary will reduce the tonnes of garbage and increase the tonnes of Green Bin material, but will also increase processing requirements and residues. Modification to the OPF will be required before diapers and sanitary could be accepted.
District Control in the	Inclusion of one or both streams in the Green Bin program may make a move to bi-weekly garbage collection more acceptable.
Potential Cost Implications	 Additional operating expenses associated with processing additional volumes of pet waste.
	 Significant capital and operating expenses associated with developing front-end pre-processing capacity and/or more complex in-vessel composting or anaerobic digestion facility capable of processing an expanded organic stream including diapers.
	Overall it is estimated that expansion of the green bin program to include diapers would cost >\$5 per HHD per annum, minimal change in costs are expected with inclusion of pet waste.
	Some potential for revenue associated with biogas production/FIT program.
	Extensive P&E campaign is required to ensure residents only use compostable pet waste bags.
	 Potential for decreased revenue from bag tag sales. Potential savings in disposal costs (via export).
Potential Change in Diversion	Capture of 40% of the diapers/sanitary and pet waste stream would increase residential curbside diversion an additional 5 to 6%, and overall diversion an additional 3% (from 59 to 62%).
Potential for System Efficiencies and Improvements in Level of	Residents may see this as an increase in level of service, depending on whether it is coupled with a change to bi-weekly garbage collection.
Service	Removal of odorous materials will make transition to biweekly garbage collection more palatable.
Potential Processing or Disposal Capacity Requirements	 Provision of processing capacity for these materials will be built into OPF design. Potential for less disposal requirements for garbage.
General Implementation Requirements	 P&E material development and distribution/notification. Construction and operation of the aerobic composting facility, potentially including pet waste.
	Monitoring industry use of anaerobic digestion and potential for revenue/cogeneration/use of biofuel.
	 Business case/feasibility study on developing an anaerobic digestion facility. If warranted, construction and operation of an anaerobic digestion facility.
Ability to Adjust Option to Changes to the WDA	This option is somewhat flexible to changes in the WDA. It could be affected by implementation of EPR for branded organics, potentially in a



Option: Expansion of Curbside Green Bin Collection to include diapers, sanitary products, pet waste positive fashion by providing a funding source to support inclusion of diapers/sanitary products.

The Strategy recommended that any organics processing facility developed by the County should be able to accommodate these additional materials. The County's current plans for developing an OPF involve a phased approach with aerobic composting as an initial phase with the potential to add anaerobic digestion at a later date, if and when the energy market is proven. The higher capital and operating expenses of an anaerobic digestion facility would be offset by the potential for energy purchase through the Feed-in-Tariff program or utilization of natural gas.

To-date Council has approved the development of an OPF to manage existing feedstock and potentially pet waste, subject to Ministry of the Environment and Climate Change approval, with a future option to expand to process diapers and sanitary products. The County intends to apply for approval for a facility to manage existing Green Bin materials and pet waste and monitor the technology for anaerobic digestion (including other municipal experience) and determine the feasibility of expanding the facility to manage additional waste streams.

Expansion of the Green Bin program to include source separated diapers/sanitary products and pet wastes is recommended to be carried forward for further evaluation. This option would be compared to other options associated with processing the mixed waste stream to extract additional organic materials.

5.3.2 Expansion of Leaf and Yard Waste Collection

Prior to the Strategy, residents across the County received varying levels of collection service for leaf and yard waste (LYW). In 2013, the County standardized service to all residents with collection events in the spring and fall. Currently, leaf and yard waste collection is provided from the end of April to early June and from the beginning of October to the beginning of December. Four collection events occur in the spring and five collection events occur in the fall for a total of nine (9) collection events. Residents may also dispose of LYW year-round at any of the eight waste management facilities free of charge.

County staff face a number of issues when planning and scheduling collection of leaf and yard waste:

- The County covers a large geographic area which makes collection more costly and less efficient compared to more dense urban areas;
- There is considerable variation in the amount of snow from the north to the south of the County which affects when residents start their spring clean ups.
- Collections must be planned and booked well in advance, with the dates communicated to residents via multiple methods including the County's waste calendar which is published and distributed months before collection occurs. As a result, collection may be scheduled to begin or end outside of the primary LYW generation periods.
- Currently bulky collection utilizes the same resources as used for LYW collection, therefore any changes to LYW collection also impacts bulky collection.
- Changing climate conditions and weather fluctuations impact the timeliness of collection (e.g. large accumulation of snowfall which affects spring clean-up, warmer autumns delaying leaf drop).

The following table presents an overview of municipalities in the urban regional and large urban WDO municipal groupings, as well as a few other municipalities who share similar demographic and geographic characteristics. It appears that for the larger urban municipalities, either year round weekly collection, or seasonal biweekly collection is offered. Compared to other municipalities who provide more seasonal collection, Simcoe County provides an enhanced level of service at the curb and through drop-off facilities. Some municipalities (e.g. Counties of Oxford and Wellington) have

no provision for management of leaf and yard waste at the curb. Many of the upper tier municipalities have varying levels of service since lower tier municipalities are responsible for collection.



Table 5-3: Comparison of Municipal Leaf and Yard Waste Collection and Drop-off Services

	Time Period for Services	Collection	
Municipality	Offered	Frequency	Notes
County of Simcoe	End of April to mid-June and from the beginning of October to the beginning of December (10 collection weeks)	Seasonal	Free drop off at 8 waste management facilities
Regional Municipality of Niagara	Year round	Weekly	Free drop off at 4 landfills
City of Hamilton	Year round	Weekly	Free drop off at 3 CRCs + Carlisle LYW depot
City of Ottawa	Year round	Weekly	Free drop off at landfill
Regional Municipality of Waterloo	End of March to end of November	Biweekly	Drop off at transfer stations for a fee
City of Toronto	Mid-March until December	Biweekly	Can be dropped off at 7 drop-off depots, up to 20 kg is free.
Regional Municipality of Halton	March 30 to December 11	Biweekly	Burlington and Oakville provide loose leaf collection. \$5/load at Halton Waste Management Site
Regional Municipality of York	Varies by municipality (e.g. East Gwillimbury, Newmarket offers biweekly collection from April to November, Richmond Hill offers biweekly collection from end of March to beginning of December, Markham has bi-weekly collection from April to December)	Various	Can be dropped off at two waste management facilities. No charge for residential if less than one cubic yard (Bloomington). \$10/load minimum at Georgina.
Regional Municipality of Durham	Varies by municipality (e.g. Whitby offers biweekly collection from April to mid-December, Oshawa offers biweekly collection from April to November)	Various	Oshawa has a call-in Christmas Tree Collection service and specific pumpkin collection days.
Essex-Windsor Solid Waste Authority	Varies by municipality (e.g. urban areas in Leamington receive weekly collection from April to November, Windsor offers four collections in the spring (April and May), four collections in the summer (June, July, August and September) and four collections in the fall (October, November and December) with an additional yard waste and Christmas tree collection in January)	Various	
Regional Municipality of Peel	Various levels of service depending on municipality and whether urban or rural. (e.g. weekly in Brampton and Mississauga, biweekly in Caledon)	Various	Accepted free of charge at Bolton and Caledon CRCs only.
County of Northumberland	May to November	Monthly	Drop off at transfer stations/landfill (free <100kg, >100kg is \$40/tonne)
City of London	One week in April, one week in June, one week in July, one week in late August/early September, two weeks in October, one week in November, one week in December.	Seasonal	Free drop off at 3 enviro depots
District Municipality of Muskoka	Varies by municipality, typically only offered to those residences in urban areas receiving Green Bin service - appears that 4 collection events happen	Seasonal	

Municipality	Time Period for Services Offered in April (1) May (1), and November (2).	Collection Frequency	Notes
County of Norfolk	Offered in urban areas in May (3 weeks), October (2 weeks) and November (4 weeks)	Seasonal	Free drop off at transfer stations (2)
County of Oxford	No curbside collection offered		Free drop off at 11 brush, leaf and yard waste depots
County of Wellington	No curbside collection offered		Wood and brush diversion programs available at 4 waste facilities

The County has received requests for increased levels of service, particularly during the summer months. Some options that would be reasonable for the County to consider would be:

- Biweekly seasonal collection of LYW from March or April until November or December;
- One or more additional collection events during the summer; or,
- Monthly seasonal collection.

Based on the results of the County's 2015 waste audit, generation of leaf and yard waste is similar in Spring and Summer at 0.12 kilograms per household weekly, compared to 0.04 kilograms per household in the Winter (noting that this represents only LYW found in the Green Bin and not set out at the curb in separate bags). It appears there are similar amounts of LYW remaining in the waste stream in the spring and summer, regardless of whether curbside collection is offered.

The tonnes of LYW tracked and managed by the County have been steadily increasing over the last three years. In 2014, the County collected 7,537 tonnes of LYW at the curb, and 8,307 tonnes at drop-off facilities. In regards to drop-off facilities, the rate of use during peak generating periods (spring and fall) increases the line-ups and wait times for facility access.

The following table provides an overview of the preliminary considerations for enhanced levels of curbside collection of LYW that will be evaluated in more depth in following tasks in this Strategy update with consideration of impacts to other components of the County's waste management system.



Option: Enhanced Levels of Cu	rbside LYW Collection
Short-term or Long-term Option	Implement in the short-term (as of 2020), sustain over the long term.
Interaction with other System Components	 May decrease tonnes of LYW managed at drop-off depots. Potential to impact collection contracts depending on when option is implemented. May impact amounts of material managed at OPF since less LYW in Green Bin. May increase diversion rates for LYW.
Potential Cost Implications	 Extensive P&E campaign will be required depending on collection schedule. Potential increase in expenses related to composting increased tonnes of LYW. Increase in collection costs from increased curbside collection. Overall it is estimated that increasing the level of service for curbside LYW collection could increase costs by > \$5 per household per annum, depending on the change in level of service.
Potential Change in Diversion	 There may be some increase in tonnes of LYW set out at curb by residents previously unable/unwilling to deliver to drop-off depots and would dispose of LYW some other way. In all likelihood, it is unlikely to result in much change in diversion as a similar total tonnes of LYW will require management, with more collected at the curb and less delivered to drop-off depots. An increase in diversion of up to 1% (from 59 to 60%) is anticipated.
Potential for System Efficiencies and Improvements in Level of Service	 Residents may see this as an increase in level of service. Depending on technology chosen for OPF, LYW may be collected with Green Bin material to provide additional feedstock.
Potential Processing or Disposal Capacity Requirements	 May result in less material requiring hauling from drop-off depots. May result in additional tonnes of LYW set out for collection which will require processing.
General Implementation Requirements	 P&E material development and distribution/notification. Negotiation for increased level of service with current contracted service provider or issue RFP for new contract. Updates to website and collection calendars to reflect changes in collection schedule.
Ability to Adjust Option to Changes to the WDA	This option is flexible to changes in the WDA.

It is recommended that enhanced levels of curbside LYW collection be carried forward for further analysis. Collection modeling will allow comparison of the potential costs associated with different levels of LYW collection service as part of the County's overall collection system.

5.3.3 Single Stream Recycling

The manner in which recyclables are collected and processed across Ontario can generally be broken down into two types of systems: single-stream systems, in which all recyclables are comingled and placed by residents in one container, and two-stream systems, in which recyclables are separated by residents into two different containers (fibres and containers). Although many of the larger municipalities in Ontario (e.g., City of Toronto, Region of Peel, Region of York) and in the United States have switched from two-stream systems to single-stream systems over the past five years, it is unclear whether single-stream systems are the best option for all communities.

HDR authored a report²⁷ for CIF (Continuous Improvement Fund) which examined a number of published reports, studies and Datacall information (predominantly from large urban municipalities in Ontario), to assess whether Single or Dual Stream recycling offers better performance. The HDR report did not conclude definitively that one system is better than the other. The report indicated that

²⁷ HDR for CIF, An Assessment of Single and Dual Stream Recycling, Including Current Program Performance in Large Ontario Municipalities, 2012, updated in March 2013.

there are a number of best practices that can be applied to either system to improve capture rates, participation, diversion and to control program costs.

The move from two-stream recycling to single-stream recycling is often driven by the idea that residents are more likely to participate in a recycling program if it is more convenient. Generally, this has proven to be the case: municipalities who have moved to single-stream recycling report an increase in resident participation in the recycling program (at least initially) following the switch. That being said, the increase in participation following the switch to single-stream may not be solely due to the change in recycling system; it may also be influenced by a combination of other factors such as increased promotion of the recycling program, the introduction of bag limits, and the implementation of user pay changes which are often introduced concurrently with single-stream recycling. Moreover, any time a change is made to a municipal waste management system and is accompanied by a promotion and education campaign, there tends to be a surge in participation in diversion programs. This increase in participation tends to dissipate over time.

Currently, the County's two-stream curbside collection system achieves high capture rates for recyclable material based on analysis of the current system performance from the last three audits. Capture rates of recyclable material have increased consistently over the last three years. In 2015, the overall capture rate for fibres was 88% and for containers it was 86%. An increase in fibre capture rates up to 91 to 92% and container capture rates up to 90% could increase curbside diversion rates by 1%.

For multi-family residents, a switch to single-stream recycling would likely lead to increased capture rates for recyclables: as anything that makes recycling easier for multi-family dwelling residents, particularly those in high rise dwellings, may produce better diversion results. This is because of the higher turnover rate in multi-family dwellings makes it difficult to get out a common message, as people move into the area from other municipalities where the waste management system may not be the same. Single-stream recycling is less complex and easier to communicate to these residents. Also, as multi-family residents often have to go outside to the rollout carts for recyclables, single-stream makes it more convenient as no sorting is required in the cold (or wet).

Typically, it is assumed that recovery and diversion rates of recyclable material will increase with a switch from a two-stream to a single-stream recycling system. This however is not necessarily the case. Although the total quantity of material being collected and transported to material recovery facilities (MRFs) does indeed increase in most cases after a switch to single-stream recycling, generally the percentage of non-recyclable residues in the recycling stream also increases. Single-stream recycling collection systems tend to be more efficient than two-stream recycling collection systems. Automated single-stream collection (systems that utilize automated cart collection such as the system used in Toronto) can reduce the number and size of the collection crews, improve route efficiency, and reduce worker compensation costs.²⁹

In single-stream systems in urban jurisdictions, collection vehicles are used more efficiently since there is no separation of fibres and containers in the vehicle. In two-stream programs using split vehicles, often one side (typically fibres) fills up more quickly than the other, requiring a trip to the MRF to unload.

In rural jurisdictions like the County, the approach used for two-stream collection often already addresses the need for increased efficiency, by using larger capacity vehicles equipped with compaction, which minimizes the potential for increases in efficiency with single-stream collection.

²⁸ Container Recycling Institute. 2009. Understanding the Economic and Environmental Impacts of Single-Stream Collection Systems.

²⁹ Container Recycling Institute. 2009. Understanding the Economic and Environmental Impacts of Single-Stream Collection Systems.



The benefit of increased collection productivity resulting from single-stream collection is highest in large urban collection areas, where stop times represent a high portion of the on-route collection operation. In rural areas, most of the on-route time is comprised of driving time between set outs (as opposed to stop times), which minimizes the potential for increased collection productivity.

A 2007 presentation by the Solid Waste Association of North America (SWANA) estimates the collection savings from single-stream recycling at \$10 to \$20 per tonne as compared to two-stream collection.³⁰ Another study, which looked only at Ontario municipalities, compared the collection cost differences between single-stream and two-stream systems and found that costs savings associated with single-stream systems tend to be as low as \$0 to \$3 per tonne.³¹ Generally speaking, collection costs tend to be lower for single-stream systems than for two-stream systems, but the exact difference needs to be determined on a system by system basis (i.e., via collection system modeling) for specific municipal jurisdictions.

The KPMG Best Practices study³² found that as a general guideline, single-stream recycling was most applicable to programs collecting and processing about 40,000 tonnes or more per year. The County currently collects just under 24,000 (2014) tonnes per year.

The merits of single-stream recycling in the County can only be fully assessed when considering the full system cost for collection and processing, and in consideration of implications for the collection system as a whole.

The following table provides a summary of the implications associated with single stream and twostream recycling.

Table 5-4: Comparison of Single and Two-Stream Recycling

Criteria	Single-Stream Recycling	Two-Stream Recycling
Potential changes in level of service and acceptability to residents	Generally speaking, single-stream recycling seems to be more appealing and acceptable to residents as they are not responsible for sorting recyclables. This is especially true for multi-family residents. There is limited room for improvement in participation and capture rates for single family households. There is a potential for more significant increased participation from multi-family dwellers due to the increase in convenience. Often, a switch to single-stream recycling is accompanied by a surge in participation in the recycling program but this may not be due solely to the change. Often any change to a waste management system that is accompanied by a promotion and education campaign results in increased participation in the waste management system. This increase often dissipates over time.	No change to current level of service. Participation and capture rates in the current program are quite high.

³⁰ Scozzafava, L. July 19, 2007. To Single-stream or Not to Single-stream? Presentation by SWANA at US EPA Meeting, Philadelphia, PA.

³¹ Lantz, D. December 2008. Mixed Residuals. In Resource Recycling Magazine.

³² Blue Box Program Enhancement and Best Practices Assessment Project'; KPMG, R. W. Beck and Entec Consulting Ltd.; July 2007

Criteria	Single-Stream Recycling	Two-Stream Recycling
Anticipated effects on diversion	Small potential increase in participation and capture rates. Tends to result in collection of more contaminants resulting in increase in residues.	Diversion rate would likely remain steady. County is currently achieving very high participation and material capture rates.
Financial Implications Environmental Implications	Cost of new single stream MRF (capital and operating) would be in the order of 15 to 25% more than a comparably sized two stream MRF. 33 Cost of new carts if decision is made to switch to automated cart-based system. More amenable to co-collection alternatives with potential to decrease collection costs. Potential for less revenue from marketed materials due to possibility of cross-contamination. 34 Increase in P&E costs. Could be a reduction in collection costs. Results of collection system modeling for the County could be used to determine actual potential changes in collection costs. Overall, an increase in costs of >\$8 per household per annum is estimated.	Costs would likely remain steady as no change to program. ³⁵ Would remain steady, no change from
	collection vehicles are required, (depending on the configuration of the fleet) and as the vehicles would have less idling time at each stop.	current system.
Potential changes in Ontario regarding EPR and delivery of BBPP, and the flexibility of the collection options to accommodate those changes	Would provide more opportunity to partner with other municipalities (single-stream MRFs can accept comingled or separated recyclables) Some potential risk associated with investing in a new single stream MRF given uncertainties with the future of the Blue Box Program Plan (BBPP) in Ontario.	Less flexible in regards to offering a 'regional' processing option given the collection programs offered by surrounding municipalities. Compatible with programs in Barrie and Orillia. Less risk in regards to the uncertainties associated with the BBPP as minimal capital investment is required.
General implementation requirements/barriers.	Will require promotion and education program to educate public. Existing processor capable of processing single stream material. May require new recycling containers.	No change.

Single-stream recycling would be carried forward for additional assessment, as part of the potential change in the overall collection system associated with bi-weekly garbage collection. No real potential benefit to the County is apparent with implementation of single stream recycling as a 'stand alone' change to the collection system, given the current performance of the County's two-stream recycling program. This would have to be addressed in the procurement for the next collection contract that would be initiated in 2018, and would require new processing contracts for the near term and potentially a change in the MMF concept in the longer term.

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³³ Stantec Consulting Ltd. 2010. County of Simcoe Solid Waste Management Strategy: Phase 2 Task F: Diversion and Disposal Options.

³⁴ Stantec Consulting Ltd. 2010. County of Simcoe Solid Waste Management Strategy: Phase 2 Task F: Diversion and Disposal Options.

³⁵ WDO Datacall. 2009. Financial Highlights.



5.3.4 Examine Facilities Level of Service

As noted in Section 2, a considerable portion of the waste managed by the County, is received through the County facilities. Roughly around 2/5 of the waste managed by the County is hauled by County residents for management at these facilities. As noted in Sections 3 and 4, the County offers a range of diversion initiatives through the facilities, to manage and divert material that cannot be easily managed at the curb.

While the overall material quantities and diversion performance of the facilities is clear, it has been some time since the County has undertaken data collection to determine user profiles etc. While current performance suggests that the system of facilities offered by the County is relatively well used, there are some unknowns for example:

- What is the municipality of origin of the users of the facilities?
- Is there a difference in rate of use between more or less urban municipalities?
- Is there a difference in use between year-round and seasonal residents?
- How far are residents currently traveling to access the facilities?
- What is the average number of material types hauled on a single trip?
- How frequently do residents use the facilities?
- What are the peak and average wait times at each of the facilities?

It is recommended that County staff conduct surveys to collect the data needed to understand the current pattern of use of the County facilities, and to determine if there are any potential system improvements that would be needed to provide optimal service to County residents.

5.3.5 Expanded Facilities Diversion

Section 3.1.3 provided an overview of the existing diversion initiatives offered through the eight County facilities (landfills and transfer stations); as noted in Section 4, Simcoe County diverts the most material and has the highest per capita diversion rate for materials managed at its facilities compared to all other large jurisdictions in Ontario.

The majority of material streams managed through the existing facilities which are suitable for diversion, have already been targeted by the County in some fashion, either through full scale implementation (reuse areas, textile collection, mattress recycling, asphalt shingle recycling, drywall recycling, bulky rigid plastics) or through pilot programs (window glass recycling, carpet recycling). The County rolled out window glass recycling to all facilities in 2015.

The existing textile collection system and potential for improvement as part of a textile collection strategy, has been discussed previously (Section 5.1.8). In the order of 1,300 tonnes of textiles are estimated to be disposed annually and increased diversion of this material stream has the potential to increase diversion by 1 to 2%.

As noted in Section 3.2.2, the County conducted a carpet recycling pilot at one of their facilities; however, due to the fact that the single processor has recently discontinued this line of business, this pilot has not been continued. Very few other jurisdictions in Ontario have piloted carpet recycling. Implementation of carpet recycling could be considered in the future should other stable market options become available.

Other items that could be considered for collection at the County's existing facilities include recyclable or organic items that are not currently collected at the curb such as:

Polystyrene: Durham Region currently collects bulky white polystyrene cushion packaging
at its waste management facilities. It does not accept small materials like packing peanuts,
meat trays and clamshell containers. A company located in Ajax collects the material and

- recycles it in their production of fire resistant commercial insulation products. This material is a high volume, low density material which will not add significant tonnes to diversion, but would offer proportionately more landfill capacity savings. Expanded polystyrene makes up around 0.5% of the curbside waste stream, or around 380 tonnes per year. A reasonable capture rate target would be around 30%.
- Plastic Bags: A number of municipalities in Ontario collect film plastic bags through depots, either in-lieu of or in addition to curbside collection. This includes the City of Markham and many small municipal jurisdictions. The majority of large municipal jurisdictions do collect film plastic bags, however, York Region, the City of Ottawa and the Region of Durham direct film plastic bags to depot collection at retailers. Depot collection of film plastic at the existing facilities would provide another outlet for film plastic recycling in the County, and may be more successful than other options like curbside collection, considering that the County has a well used depot program. Film plastic makes up around 2% of the curbside waste stream or around 1,500 tonnes per year. A reasonable capture target would be around 30%.
- Cooking Oil: An organic stream that could be considered for collection at the existing facilities is liquid cooking oils. Depot collection of liquid cooking oils is practiced in some Ontario municipalities (e.g. York Region) and in other jurisdictions in North America. Generally residents find it difficult to manage/dispose of large quantities of used cooking oil and it is difficult to manage in the Green Bin. Depot collection of this material is similar to that practiced for restaurants and other generators of oils, with a number of service providers that can come and remove the materials. Some recyclers direct the material to biodiesel production, and others direct it to processing operations that recover valuable fats and other constituents.

Option: Expanded Facility Diversion		
Short-term or Long-term Option	Implement in the short-term, maintain over the long term.	
Interaction with other System Components	 Addition of the targeted material streams will increase the quantities of materials requiring processing, and will decrease tonnes disposed. 	
·	Total material quantities captured would be relatively modest.	
	County facilities would have to be assessed to determine if there is Sufficient recent to add the temperal metablic laterage.	
	sufficient room to add the targeted material streams. Inclusion of the targeted material streams in the facility diversion	
	program offers an alternative to curbside collection.	
Potential Cost Implications	P&E will be required.	
	Modest increases in processing costs will be incurred.	
	Some potential for capital costs, for installation of collection	
	containers/drop-off areas for the new materials at County facilities.	
	Potential savings in disposal costs.	
	 Overall it is estimated that this could cost < \$5 per household per annum. 	
Potential Change in Diversion	Capture of 30% of the textile, bulky polystyrene, film plastic and cooking the the polystyle of the division of the state of t	
	oil, has the potential to divert over 900 tonnes per year of material, increasing overall diversion by up to 1%.	
Potential for System Efficiencies and	Residents will see this as an increase in level of service.	
Improvements in Level of Service	Collection of these material streams at County facilities provides an	
	option in lieu of curbside collection.	
Potential Processing or Disposal Capacity Requirements	Provision of processing capacity for these materials through contracts with capacity providers will be required.	
Capacity Requirements	with service providers will be required. Potential for less disposal requirements for garbage.	
General Implementation	P&E material development and distribution/notification.	
Requirements	Installation of collection containers/drop-off areas.	
Ability to Adjust Option to Changes to	This option is somewhat flexible to changes in the WDA. Some targeted	
the WDA	materials (bulky polystyrene, plastic film, bale wrap) may be affected.	

It is recommended that this option be carried forward for further evaluation, and comparison to curbside collection of some of the targeted recyclable streams.



5.4 Transfer and Processing

5.4.1 OPF

The Strategy considered options for organics processing within and outside the County with short term recommendations to continue to export organics to an out-of County facility and long term recommendations to assess the construction of an organics processing facility (OPF) within its jurisdiction.

The County has continued to export organics to the same service provider and will continue to do so until the end of the current contract in 2018. In 2011/2012, the County undertook a feasibility study to review technologies, develop cost estimates and identify siting considerations. Consideration of provision of processing capacity to other municipalities and ability to process other organics such as diapers and pet waste were included in the study. In 2014, a plan to develop an OPF to handle existing source separated organic material and potentially pet waste with a future option to expand to process diapers and sanitary products was approved. The facility is expected to be operational in 2019 with initial planning, siting, and procurement expected from January 2014 to August 2016, approvals from September 2016 to September 2017 and construction from October 2017 to October 2018.

Planning and consultation continued throughout 2014 and 2015 including a siting process which covered the entire County. The County identified a long list of sites for the OPF and MMF through a search of County-owned sites, Multiple Listing Service (MLS) of the Canadian Real Estate Association and through Requests for Expressions of Interest (RFEI) from interested landowners. As of August 2015, two sites for the OPF only had been identified and 5 sites suitable for co-locating the OPF and MMF had been identified. Consultation on these sites was undertaken in October 2015 and the short-listed sites will now be re-evaluated after consultation to identify a preferred option, which could involve co-location of facilities.

There is no need for this report to revisit the studies and process that have been undertaken to-date for the OPF. A processing technology has not been selected as siting of the facility will be completed first. Options range from various in-vessel aerobic composting technologies through to the future inclusion of anaerobic digestion. Separate or combined processing of Green Bin organics along with LYW material is also under consideration.

Potential benefits of the OPF include:

- Providing a local solution for managing organic waste;
- Greater control over future processing costs and environmental impacts;
- Reduction in greenhouse gas emissions by reducing haul distances to processing;
- Ensuring sufficient capacity for growth;
- Providing flexibility for changes in the organic stream such as inclusion of pet waste and diapers;
- Generating valuable end-products available for local markets.

The OPF project is proceeding in parallel with the Strategy update. Recommended changes to the waste management system in the County may affect the quantity and quality of organic materials managed through the Green Bin, LYW collection and management of organic materials at County facilities. As the Strategy update proceeds, progress on the OPF project will be noted and changes in material and diversion projections and any other implications that could affect organics processing will be identified for communication to the OPF team.

5.4.2 MMF

The Strategy recommended assessing the current transfer locations to identify their ability to expand to manage additional materials, improve efficiencies and reduce costs. A Transtor system was recommended as a system for managing some or all of the materials. In the longer term, it was recommended that the County assess the future transfer needs as part of the overall waste management system. The County determined later that a Transfor system would not meet its needs and undertook a study to identify options for a central transfer facility for two stream recyclables and garbage. To support this study, the County also completed a financial comparison between the current system of contracting out transfer and developing a County-owned transfer facility, considering changes in tonnages as County landfills reach capacity, growth and capital and operating costs. Results of this study indicated that the payback period would be approximately 6 years resulting from savings in contracted transfer costs depending on the level of funding, and would provide the County with a level of security and flexibility to change.

To-date, the MMF study is following the same timelines and process as the OPF described above. The MMF, a transfer facility, will be an integral part of the County's waste management system – the link between collection operations and moving material to final waste disposal/processing locations. It will provide a location for consolidation of garbage, organics, and recycling from multiple collection vehicles into larger, higher-volume transfer vehicles for more economical shipment to disposal/ processing sites. There will be no long-term storage of materials or public drop-off at this facility.

Potential benefits of the MMF include:

- Savings in contracted transfer costs of \$13 million over the next 20 years:
- Protection from future increases in contracted transfer costs;
- Utilization of secured funding from CIF, at 47% of blue box related project costs;
- Secure management of County material and greater control over operations;
- Operational flexibility and ability to adapt to changes in collection and/or processing arrangements:
- Provision of a location to co-locate the County's truck servicing facility.

In addition, the MMF has the potential to benefit from additional economies of scale, as both the City of Barrie and Orillia have issued letters of intent to the County confirming that they would incorporate the proposed facility as an option for consideration in the procurement of their next collection and processing contract(s).

The outcome of the Strategy update could have the following implications on the MMF:

- Potential increases in the volumes of recyclable and other divertible materials and decreases in the volumes of waste that would be managed at the facility. This could affect the configuration/design of the facility, however, sufficient flexibility has been integrated in the facility sizing to date to accommodate this.
- Potential for locating/integrating some form of mixed waste processing at the MMF to increase material capture. For example, new technologies are available that can be used to extract additional organic materials from mixed solid waste.
- Potential changes to the future recycling processing that could be co-located at the facility, particularly if the County were to move to single-stream recycling.

The MMF project is proceeding in parallel with the Strategy update. As the Strategy update proceeds, progress on the MMF project will be noted and changes in material and diversion projections and any other implications that could affect organics processing will be identified for communication to the MMF team.



5.5 Garbage Disposal and Processing

5.5.1 Landfill Capacity in the County

The County has fewer options for garbage disposal and processing. The Strategy focused on continued use of existing landfill sites, waste export and potential partnerships for processing of waste but did not include consideration of new landfill capacity. The County cancelled plans to develop a new landfill at Site 41 in 2009.

The Strategy had identified the potential option to develop existing approved landfill capacity at Sites 9 and 12, however, recent findings related to Source Water Protection makes this option nonviable. Generally, there is less support for development of landfill disposal capacity in the County then there is for all other waste management options identified in the Strategy and in this update.

As a result, since 2010 the County has focused on successful efforts to preserve existing landfill capacity, including site remediation, and modifying operational practices and implementing shredding of bulky items destined for disposal (see Section 3.1.4).

It is anticipated that the existing capacity for bulky waste disposal at Site 2 - Collingwood, will be fully utilized as of 2023/2024. Recent estimates regarding use of landfill capacity at Site 10 – Nottawasaga, Site 11 – Oro, and Site 13 – Tosorontio and considering growth and increased waste generation, it is anticipated that there is approximately 10 years left of capacity at these sites.

These recent estimates also assume that the County would retain in the order of one year of landfill capacity at Site 11 – Oro, as a contingency measure. Access to internal contingency capacity could greatly reduce the cost of managing unexpected events such as severe weather which often have major costs associated with managing the waste that is generated from floods or power outages. It could also help manage situations where access to export capacity is limited due to labour unrest or contractual issues. It is recommended that the concept of retaining contingency disposal capacity in the County be brought forward as part of the Strategy update.

Once this landfill capacity is fully utilized, the County would cease to have any County-owned landfill disposal capacity. The potential for changes in costs for the disposal system will be further examined. There may be some savings associated with the cessation of landfill operations, however, this is likely to be offset by increases in export costs.

5.5.2 Export of Curbside Waste

In 2013 the County entered into an agreement for hauling and processing of curbside garbage to a private sector facility as a result of an RFP issued in December 2012. The RFP provided options for disposal or processing services and/or transfer and haulage. Proponents were invited to bid on one or both components; the County indicated they were considering partnerships with neighbouring municipalities for joint garbage disposal or processing services. The County received responses for disposal at landfills in Ontario, New York and Michigan as well as one for disposal at an Ontario incinerator. Landfill capacity is available in the U.S. as well as in Ontario; with additional landfill capacity planned and in the works. The County has contracted processing capacity at an Ontario incinerator (the Emerald facility in Peel Region) with contingency capacity at a Niagara area landfill site until March 31, 2018.

As of 2008, it has been estimated that of the 9.6 million tonnes of waste sent to disposal in Ontario, approximately 5.7 million tonnes was disposed in the province and the remainder in Michigan or New York State. It is difficult to quantify the remaining disposal capacity in Ontario facilities, but some estimates put the combined capacity of municipal and private sector facilities as 141 million tonnes as of 2008. The rate of consumption of this capacity will vary, depending on a number of

factors including waste generation rates, population growth and changes in diversion rates. Over time, it is anticipated that the deficit between the amount of waste requiring disposal and available capacity will increase.

It is likely that as of expiry of the existing contract in 2018, there will be a number of facilities with available capacity. However, in the longer term, securing disposal capacity may become more difficult. The success of new landfill siting projects and/or development of mixed waste processing and Energy from Waste facilities, as well as the success of diversion programs will affect the availability and pricing of longer term disposal capacity.

It is also worth noting, that in the five years since the Strategy was approved, no viable options for partnering in the development of new Energy from Waste capacity have come forward to the County.

5.5.3 Export of Facilities Garbage

Currently all bulky waste collected at County facilities is hauled to Site 2- Collingwood where it is shredded prior to disposal. Use of a shredder has resulted in substantial increases in the material densities, consuming less space per tonne of waste disposed, which has increased the remaining life of Site 2. The County estimated that the shredder will net \$4.4 million in avoided waste export disposal costs.

The capacity at Site 2 is expected to be fully utilized as of 2023/2024 based on the current rate of use. It is recommended that over the next 5 years that the County undertake analysis to determine the optimal export scenario for the facilities garbage. Options include:

- Cessation of shredding operations and direct haul of the bulky waste to disposal facilities out of the County. The direct haul of this material a larger distance outside of the County would be less efficient due to the lower material density. Also as this waste material has lower density and can be more difficult to manage, it is possible that a higher fee could be charged for disposal.
- Continuation of shredding operations at a consolidation point in the County, and export of shredded bulky waste material. This would result in more efficient haulage, and the potential to negotiate a more preferential rate for disposal of the material. This material could be managed at and hauled through the MMF as a combined stream with the curbside garbage, or managed separately at a different location (e.g. closed landfill).

5.5.4 Mixed Waste Processing

The Strategy recommended that the County continue to investigate potential partnerships with other municipalities and private sector companies for mixed waste processing. Since the Strategy was approved, there has been some evolution in mixed waste processing technologies.

Mixed waste processing facilities generally have a number of components depending on the nature of the incoming material and the desired outputs that are capable of recovering an organic stream for further processing and recyclable streams. The quality of the recovered organic stream will be affected by the nature of the process, and generally has some degree of inorganic contamination. The recovered organic stream can be directed to aerobic composting or to anaerobic digestion to produce biogas. Often the remaining material stream left after extraction of recyclables and organics is suitable for use as a refuse derived fuel (RDF). RDF and biogas can be used to generate energy.

Mixed waste processing is generally regarded as a supplement to source separated organics programs, not as a replacement. The increase in processing costs (capital and operating costs) required to obtain a 'clean' stream of organic materials should all mixed waste be processed. generally is not fully offset by the potential savings in collection costs. Note: in recent facility tours in Europe undertaken by HDR, all of the mixed waste processing facilities that were toured were



located in areas where there is source separated collection of organics. The focus of the technologies was to recover the remaining fraction of organics left in the curbside garbage.

Changes/modifications in mixed waste processing technologies based on recent technology assessments include:

- Application of new technologies designed to press or squeeze the organic fraction out of mixed municipal waste or highly contaminated organic material streams, that are capable of extracting more than 85% of the remaining organic material in the waste stream. This recovered organic fraction is suitable for aerobic or anaerobic processing with greatly reduced requirements to remove/manage inorganic residues based on the nature of the extraction process. These technologies have been developed and are in operation in Europe, but are not yet in use in North America.
- These systems press mixed waste or contaminated organics in a specialized chamber that
 results in liquefaction of the majority of the food waste and similar material which is
 squeezed through a screen or plate, leaving behind a much dryer mass of mixed materials
 that are available for further processing (e.g. extraction of recyclables). The liquefied organic
 material can be further 'polished' to remove fine inorganic material. Generally, the liquefied
 organic materials are directed to anaerobic digestion, however, it is possible that they could
 be combined with dry materials for aerobic composting.
- New bag breaking equipment and screen designs, to allow for more effective material separation.
- Improvements in the performance of optical sorters to more effectively remove targeted recyclable streams.

The cost of applying mixed waste processing technologies either as an integrated facility or individual directed components, has also improved. New technologies designed to squeeze/extract the organic stream from mixed waste, can cost in the order of \$6 to \$10 million CAD and for an integrated recycling processing system, in the order of \$9 to \$20 million CAD depending on the design capability of the system. This could increase the cost per household for waste management by over \$24 per household per year, depending on the configuration and cost of the system.

As noted previously, the County is in the process of developing an organics processing facility (OPF) and materials management facility (MMF) and is at the point where a short list of sites has been identified. The OPF will be designed to allow for an anaerobic digestion component in the future if required.

The County may wish to consider technologies that could be "bolted" onto the front end of the OPF to increase organics capture. Since the largest component of the County's waste stream is organic material, it makes more sense to develop a facility to recover additional organics. At an 85% recovery rate for more organic materials, implementation of a relatively simple front end processing system for mixed waste has the potential to capture in the order of 29,500 tonnes per year of organics, increasing curbside diversion to over 62%, and increasing overall diversion to over 70%.

Option: Mixed Waste Processir	ng
Short-term or Long-term Option	Implement in the short-term (as of 2020), sustain over the long term.
Interaction with other System Components	 Potential to significantly increase diverted organic material quantities. Potential to increase recyclable capture rates for some target materials (primarily metals). Reduction in disposal requirements. May impact amounts of material managed at OPF.
Potential Cost Implications	 Does not require extensive P&E campaign Capital expenditures in the order of \$6 to \$10 million or more, depending on the system chosen. Operating costs in the order of \$60 per tonne depending on the system chosen.

Option: Mixed Waste Processing		
	Overall this could cost >\$34 per household per annum.	
Potential Change in Diversion	 Significant potential change in diversion. Could increase organics material tonnes by up to 20,000 tonnes. Overall diversion could increase up to73%. 	
Potential for System Efficiencies and Improvements in Level of Service	 Residents are unlikely to see any changes in service. Allows for greater economy of scale for the facility. 	
Potential Processing or Disposal Capacity Requirements	May result in substantial increase in organics processing and decreases in waste disposal.	
General Implementation Requirements	Needs space, utilities etc. for integration within the MMF or OPF	
Ability to Adjust Option to Changes to the WDA	This option is flexible to changes in the WDA.	

This option is recommended to be carried forward for more detailed evaluation. Implementation of mixed waste processing, could replace the need for further garbage restrictions in the longer term achieving equal or better diversion performance in comparison with increased source separation of curbside organics.

Recommendations

It is recommended that the following options be brought forward for consultation and further evaluation in the Strategy Update:

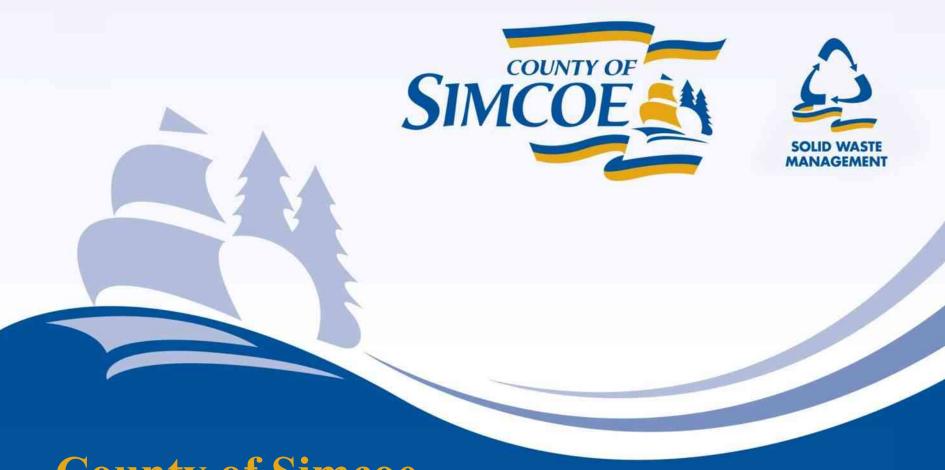
Reduction and Reuse	Food Waste Reduction
Initiatives	Disposal Bans, Mandatory Diversion By-laws
initiatives	Textile Collection Continuation
	Advocacy Continuation
Garbage Collection	Clear garbage bags
	Full Pay as you Throw (PAYT)
	Biweekly Garbage Collection
	Automated, Cart-based Collection
	Standard Garbage Container
Curbside and Facilities	Expand Curbside Green Bin Collection (pet waste, diapers)
Diversion	Expansion of Leaf and Yard Waste Collection
	Single Stream Recycling
	Examine Facilities Level of Service
	Expand Facilities Diversion
Processing and Transfer	Consider implications to the OPF project
	Consider implications to the MMF project
Garbage Disposal and	Consider use of landfill capacity in the County (reserving a year of
Processing	emergency capacity at Site 11)
3	Export of curbside waste
	Export of facilities garbage
	Mixed Waste Processing (to recover additional organics)

Depending on the selection of options that are brought forward out of the detailed evaluation process, there is potential for the County to achieve overall diversion rates between 65% and 73%.



Presentation to County Council

December 8, 2015



County of Simcoe

Solid Waste Management Strategy Update – Potential Options and Initiatives

December 8, 2015

simcoe.ca

Today's Objectives





- 1. Review existing Strategy, current system, and performance;
- 2. Consider potential options for the next 5-years;
- 3. Provide direction on two previously deferred items; and
- 4. Re-affirm or adjust existing performance targets.



Agenda





- Introduction
- 2. Proposed Legislative Changes Bill 151
- 3. Existing Performance Targets
- 4. Baseline System and Needs
- 5. Strategy and System Performance
- Waste Management Initiatives, Legislation, and Waste Policy Trends and Programs

Break - 10:15 to 10:30 am

- 7. Garbage Collection Options
- 8. Curbside and Facilities Diversion Options
- 9. Reduction and Reuse Options

Lunch - 12:00 to 12:30 pm

- 10. Transfer, Processing, Disposal
- 11. Performance Targets
- 12. Next Steps

Introduction





- approved in 2010, the 20-year Strategy:
 - encompasses integrated waste management principles;
 - provides a combination of techniques and programs;
 - considers the potential economic, environmental, and social implications of selected alternatives; and
 - establishes a planning framework and strategic direction for the next twenty years.
- provides a 'road map' with recommended initiatives requiring future
 Council direction and approval at various stages
- is a 'living' document with recommended periodic reviews

Introduction





- first 5-year update began in 2015
- given scope of the Strategy, will be multi-staged and flexible to align with changes to provincial legislation
 - Report No I. Current Status Report presented in May 2015
 - Report No. 2 Potential Options and Initiatives



Report No. 3 – Final Recommendations and Initiatives (anticipated mid-2016)



Proposed Legislative Changes - Bill 151





- proposed Waste-Free Ontario Act, released on November 26, would:
 - enact Resource Recovery and Circular Economy Act
 - enact Waste Diversion Transition Act
 - repeal the Waste Diversion Act (2002)
- draft legislation provides basic framework, enabling legislation and policy statements ("prescribed requirements") will follow
- "full" producer responsibility encouraging producers to turn more of their waste into new products
- reduction in greenhouse gas from landfilling of products that could be recycled or composted
- creation of Resource Productivity and Recovery Authority

Proposed Legislative Changes - Bill 151





Organics Action Plan

- could include entire supply chain pre-consumer organics, multi-residential
- regional infrastructure and harmonization of existing programs
- disposal bans

Blue Box Recycling

- lengthy and complicated transition, requires extensive consultation
- MOECC seeks to ensure services are maintained
- municipal integrated systems to support producer responsibility
- harmonization of materials across province

Timeline for Implementation

- to be enacted in 2016, supporting regulation and policy statements to follow
- MHSW, WEEE, and tires first targeted for completion within 4 years
- Organics Action Plan 2016 to 2018, Blue Box program last

Existing Performance Targets





71% diversion rate by 2020

77% diversion rate by 2030

Minimum 1% per year reduction in per capita waste generation





SIMCOE COUNTY SWMS UPDATE

December 8, 2015

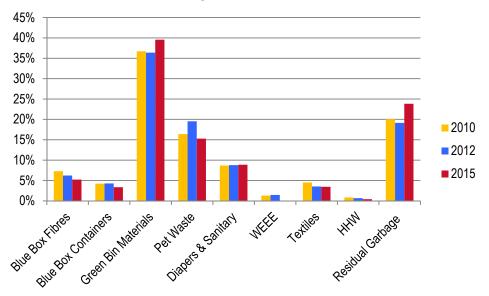




BASELINE SYSTEM AND NEEDS

- Curbside programs manage 60% of the waste stream, facilities manage 40%
- Curbside diversion around 52%, facilities diversion around 67%
- Overall diversion rate is 59%, fairly stagnant since 2009
- Quantity and composition of curbside waste is changing (less paper, more plastic, more organics)
- Greatest potential for diversion improvements in organics

Curbside Garbage Composition



STRATEGY AND SYSTEM PERFORMANCE: COLLECTION

NO ROOM FOR IMPROVEMENT:

- Consolidated contracts
- Expansion of service

AREAS FOR IMPROVEMENT

- Further restrictions on curbside garbage collection
- Consider potential role of single stream recycling
- Expansion of leaf and yard waste service

Program Title	Reported Population	Total Organics Collected (tonnes)	Kg per Capita of Organics Diverted	Kg per Capita Yard Waste Diverted	Kg per Capita Household Organics Diverted	Garbage Collection Frequency
DURHAM, REGIONAL MUNICIPALITY OF	639,655	52,755	82	40	43	bi-weekly
ESSEX-WINDSOR SOLID WASTE AUTHORITY	388,611	19,693	51	51	-	weekly
HALTON, REGIONAL MUNICIPALITY OF	511,522	57,641	113	58	55	bi-weekly
HAMILTON, CITY OF	540,449	49,687	92	34	58	weekly
LONDON, CITY OF	389,410	21,717	56	56	-	42 days per year
NIAGARA, REGIONAL MUNICIPALITY OF	448,900	42,476	95	67	28	weekly
OTTAWA, CITY OF	943,248	85,379	91	17	74	bi-weekly
PEEL, REGIONAL MUNICIPALITY OF	1,359,900	84,750	62	40	23	weekly
SIMCOE, COUNTY OF	293,532	23,065	79	42	36	weekly
TORONTO, CITY OF	2,659,772	232,929	88	38	49	bi-weekly
WATERLOO, REGIONAL MUNICIPALITY OF	563,000	48,681	86	70	16	weekly
YORK, REGIONAL MUNICIPALITY OF	1,130,386	114,565	101	36	66	bi-weekly

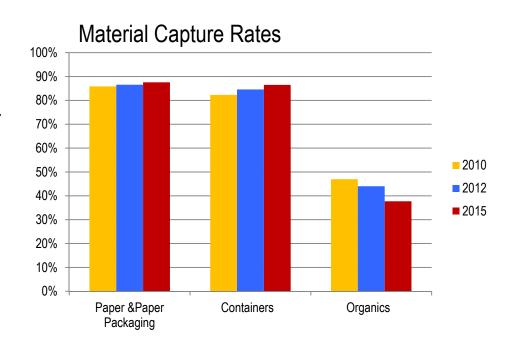
STRATEGY AND SYSTEM PERFORMANCE: CURBSIDE DIVERSION

NO ROOM FOR IMPROVEMENT:

- Great capture rates for curbside recycling
- County diverts the highest kg/capita of blue box materials
- Best performance in Ontario for container recycling

AREAS FOR IMPROVEMENT

- Capture rates for organics is low
- Has declined since 2010



STRATEGY AND SYSTEM PERFORMANCE: FACILITIES DIVERSION

NO ROOM FOR IMPROVEMENT:

- County diverts the most material and has highest per capita diversion through facilities in Ontario
- Has successfully implemented all SWMS recommendations and additional measures

AREAS FOR IMPROVEMENT

- Collect data to understand use of system
- Potential to expand for some material streams

Facility Diversion

Municipality	Reported Population	Total Other Recyclables Collected (tonnes)	Kg per Capita Diverted
DURHAM, REGIONAL MUNICIPALITY OF	639,655	4,077	6
ESSEX-WINDSOR SOLID WASTE AUTHORITY	388,611	-	-
HALTON, REGIONAL MUNICIPALITY OF	511,522	1,986	4
HAMILTON, CITY OF	540,449	2,401	4
LONDON, CITY OF	389,410	6,670	17
NIAGARA, REGIONAL MUNICIPALITY OF	448,900	5,958	13
OTTAWA, CITY OF	943,248	1,640	2
PEEL, REGIONAL MUNICIPALITY OF	1,359,900	16,495	12
SIMCOE, COUNTY OF	293,532	23,133	79
TORONTO, CITY OF	2,659,772	4,827	2
WATERLOO, REGIONAL MUNICIPALITY OF	563,000	1,191	2
YORK, REGIONAL MUNICIPALITY OF	1,130,386	6,246	6

STRATEGY AND SYSTEM PERFORMANCE: DISPOSAL AND PROCESSING CAPACITY

NO ROOM FOR IMPROVEMENT:

- Modifications to landfill operations
- Shredding of bulky waste

AREAS FOR IMPROVEMENT

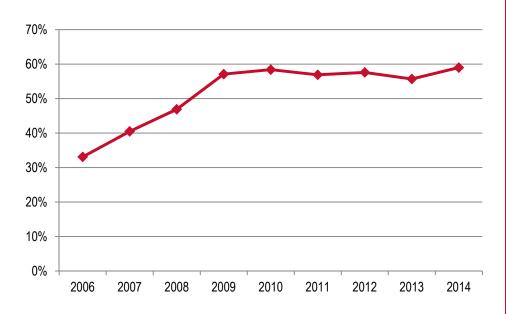
- Materials transfer addressed via MMF
- Prepare for closure of County landfills (Site 2 approx. 2024; Sites 10, 11, 13 approx. 2025)
- Identify options for export capacity
- Consider other disposal/processing options
- Address need for contingency disposal capacity

STRATEGY AND SYSTEM PERFORMANCE: PERFORMANCE MEASURES

DIVERSION

- 59% overall diversion, one of top 10 in Ontario
- SWMS targets:
 - o 71% by 2020
 - o 77% by 2030
- Need to increase diversion by 12% in five years to achieve upcoming target
- Will require significant system change

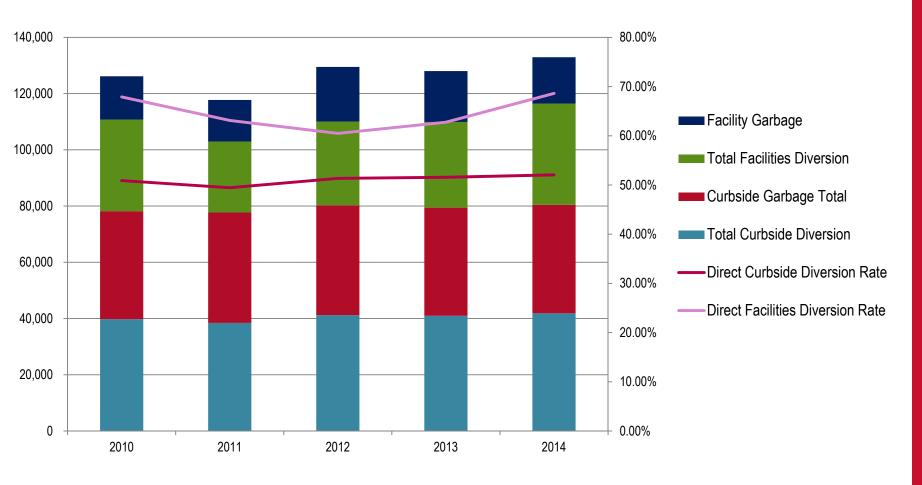
Annual Diversion Rates



STRATEGY AND SYSTEM PERFORMANCE: PERFORMANCE MEASURES

PER CAPITA GENERATION

- Per capita waste generation has increased since 2010
- SWMS target: 1% annual decrease in per capita waste generation



WASTE MANAGEMENT INITIATIVES, LEGISLATION, AND WASTE POLICY TRENDS AND PROGRAMS

Other municipalities in Ontario:

- Simcoe has highest per capita diversion rate for large municipalities, largest difference is diversion through facilities
- Hard to find correlation between bag/container restrictions and increased diversion
- Strong correlation between bi-weekly garbage collection and organics diversion performance

Other municipalities outside Ontario:

- Simcoe performs as well as (or better than) most other programs
- Offers similar range of programs

Things to consider:

- Bi-weekly garbage
- Other disincentives like clear bags
- Automated cart collection
- Front end separation and mixed waste processing





Questions?

Break









Presentation of Options

- options will be presented in 4 categories:
 - Garbage Collection Options
 - Curbside and Facilities Diversion Options
 - Reduction and Reuse Options
 - Transfer, Processing, and Disposal
- following each category's presentation and Q&A, there will be breakout sessions for discussion of options
- spokesperson for each group will report back, further discussion
- seek direction on Recommendation(s) for each category

GARBAGE COLLECTION OPTIONS

Option	Timeline		Potential Range in Cost	Potential Effect on Diversion	Considerations
Clear Garbage Bags	contract (2020)	Moderate: promotion and education, increase in calls. by-law	Low: <\$5 per HHD	Low: 1 to 2% increase in overall diversion rate (to 60%)	 Could allow unlimited clear bags (e.g. Markham) however would result in revenue loss from bag tags Perception of loss of privacy by residents Could address privacy issues by allowing limited number of opaque bags within larger garbage bag Difficult to enforce presence of organics in clear bags, easier with recyclables
	implemented prior	Low: promotion and education, new bag tag stock	Very Low: <\$2 per HHD	Very Low: < 1% increase in overall diversion rate (<60%)	·
	implemented prior to 2020	and education,	Low: <\$5 per HHD Additional costs for by- law enforcement	Low: 1 to 2% increase in overall diversion rate (to 60%)	 Few jurisdictions exceed County's diversion rate with Full PAYT alone Full PAYT could be beneficial to seasonal residents

GARBAGE COLLECTION OPTIONS

Option	Timeline		Potential Range in Cost	Potential Effect on Diversion	Considerations
Bi-weekly Garbage Collection	Next collection contract (2020)	Higher: promotion and education, increase in calls and by-law enforcement	Ranges from no additional cost to savings of \$1 to \$2 million annually (\$15 per HHD)	High: 5% or more increase in overall diversion rate (to 65%)	 Range in costs Most cost effective: no change in curbside containers; week 1 garbage/organics; week 2 single stream recyclables/organics Bi-weekly garbage collection correlates with increased capture of organics and higher diversion
Automated Cart-based Collection	Next collection contract (2020)	Higher: source and deliver carts, promotion and education, increase in calls	Moderate: >\$8 per HHD Cost for garbage and recycling carts: \$12 to \$15 million, \$1.7 million/year over 10 years. Collection savings < \$1 million/year	Low: 1 to 2% increase in overall diversion rate (to 60%), depending on size of garbage cart	Benefits: collection efficiency, better working conditions/reduced workplace injuries, reduces moisture in recyclables, reduced litter Issues: maneuverability in winter, long driveways, higher contamination/residue rates, contamination of materials with broken glass Allowing varying sized carts could promote higher diversion, but adds administrative complexity
Standard Garbage Container	Next collection contract (2020)	Higher: source and deliver container, promotion and education, increase in calls	Low: <\$5 per HHD Cost for container: \$2 million, \$300,000/year over 7 years. Loss of Bag Tag revenue.	Moderate: 2 to 3% increase in overall diversion rate (to 62%), depending on size of container	 Would encourage additional diversion by restricting volume of garbage allowed at the curb To encourage higher diversion, would have to disallow/limit extra bags of garbage





Recommendation

 THAT Garbage Collection Options as outlined in Schedule 2 of Item CCW 15-405 be presented for public consultation in 2016.



CURBSIDE AND FACILITIES DIVERSION OPTIONS

Option	Timeline		Potential Range in Cost	Potential Effect on Diversion	Considerations
Expand Curbside Green Bin Collection (Pet Waste, Diapers)	Phase 1:Pet waste, next collection contract (2020) Phase 2: Diapers for following collection contract	Moderate to High: extensive promotion and education, increase in calls, by-law enforcement. Likely require changes to OPF	Moderate: >\$5 per HHD Increased cost for processing associated with diapers not pet waste, unlikely to affect collection cost	Moderate: 3 % increase in overall diversion rate (to 62%)	 Diapers and sanitary make up 4.7% and Pet Waste 8% of the waste stream More programs include pet waste than diapers/sanitary Diapers/sanitary requires more pre and/or post processing to remove plastics and more complex facilities Can improve reception of bi-weekly garbage collection Phased approach to OPF would support inclusion of diapers/sanitary materials pending business case for anaerobic digestion
Expansion of Leaf and Yard Waste Collection	Next collection contract (2017/2018)	Moderate: promotion and education, increase in calls. Would have to be addressed in next RFP.	Moderate: >\$5 per HHD Additional cost for collection, will vary based on type of expansion	Low: 1 % increase in overall diversion rate (to 59%)	 Current issues with planning and scheduling collection events: weather, geographic area, correlation with peak generating periods, sharing resources with bulky collection Majority of larger municipalities in Ontario offer weekly or bi-weekly collection Options: Bi-weekly pick up from spring to fall; adding collection events during summer, monthly seasonal collection Bi-weekly collection from spring to fall most expensive Would shift materials from on-property management or depot to curbside pick-up

CURBSIDE AND FACILITIES DIVERSION OPTIONS

Option	Timeline		Potential Range in		Considerations
Single Stream Recycling	Next collection contract (2020)	Moderate: extensive promotion and education, increase in calls. High: associated with automated carts	Cost Moderate to High: >\$8 per HHD (stand alone) Up to \$750,000 to \$1,000,000 per year in additional processing costs. \$7.5 million for automated carts, extra \$7 per HHD.	Low: 1 % increase in overall diversion rate (to 59%)	 Potential collection savings if implemented as biweekly service, as part of shift to bi-weekly garbage collection Minimal to no collection savings if implemented as a 'stand alone' change Likely to increase processing costs Facilitated by automated cart collection, however blue boxes can be used Significant cost to purchase and deliver automated carts Current two-stream program achieves excellent participation and capture rates, little room for improvement for single family households Could facilitate multi-family recycling
Examine Facilities Level of Service	Prior to 2020	Low: Staff resource to collect and analyze data	TBD	TBD	 Collect data regarding current facilities usage (materials, type/location of user etc.) Analyze data to determine if the current facilities locations, wait times, and usage provide optimal service to residents
Expand Facilities Diversion	Prior to 2020	Low to moderate: market development, set up at facilities, promotion and education	Low: <\$5 per HHD Cost will depend on markets and partnerships	Low: 1 % increase in overall diversion rate (to 59%)	 Target materials include: polystyrene cushion packaging; plastic bags; used cooking oil Need to assess potential for material markets Assess space at facilities Offers alternative for materials that are difficult to manage at the curb





Recommendation

2. THAT Curbside and Facilities Diversion Options as outlined in Schedule 3 of Item CCW 15-405 be presented for public consultation in 2016.



REDUCTION AND REUSE OPTIONS

Option	Timeline			Potential Effect on Diversion	Considerations
Food Waste Reduction Disposal Bans and Diversion	Continue Within the next five years	Low to moderate		Low: 1 to 2%	 County is currently involved in the Southern Ontario Food Collaborative, goal of developing common key messages for food waste reduction 2015 waste audit indicates that residents throw away 1.78 kg/week of edible food waste, 11,600 tonnes annually In June 2013 County deferred implementation of a mandatory diversion bylaw until the SWMS review
By-laws			Low to moderate: >\$5 per HHD altogether	increase in overall diversion rate (to 60%) altogether	 There are currently no landfill bans in effect, however, tipping fee for mixed waste at facilities is set at double the regular rate for waste (\$310/tonne) to encourage separation of materials The extent of bans and/or by-laws that would be appropriate, depends on other elements of the strategy update
Textile Collection	Continue	Low to moderate		unogotiloi	 1,300 tonnes of textiles disposed annually Potential to expand work with community partners to increase opportunities to capture re-usable clothing and rags for recycling
Advocacy	Continue	Low			County staff currently advocate on behalf of residents on matters such as Extended Producer Responsibility etc. by participating in a number of provincial and national organizations





Recommendation

3. THAT Reduction and Reuse Options as outlined in Schedule 4 of Item CCW 15-405 be presented for public consultation in 2016.







Break for Lunch



TRANSFER, PROCESSING, DISPOSAL

Option	Timeline	Level of Effort	Potential Range in Cost	Potential Effect on Diversion	Considerations
OPF	Operational by 2019	High: siting and procurement process underway	TBD: costs will be identified based on procurement	NA	 Will facilitate processing of increase in organics tonnes associated with other options OPF process is proceeding in parallel with SWMS update
MMF	Operational by 2020	High: siting and procurement process underway	Moderate savings: <\$5 per HHD in contracted transfer costs	NA	 Will facilitate transfer of materials, could support shift to alternating bi-weekly collection program by providing common point of transfer or drop-off for garbage/organics/recyclables Provides security for the management of materials and County control SWMS options could affect volume of materials and/or type of operations MMF process is proceeding in parallel with SWMS update
Landfill Capacity in the County	Likely fully utilized as of 2024/2025	Low: procure capacity for dry waste from facilities, expand export contracts	TBD: as landfills close, may be some operational cost savings, however offset by increase in export costs	NA	 Option to develop Sites 9 and 12 not viable, located in Source Water Protection area Reserve one year of emergency capacity at Site 11

TRANSFER, PROCESSING, DISPOSAL

Option	Timeline	Level of Effort	Potential Range in Cost	Potential Effect on Diversion	Considerations
Export Curbside Waste	New contract required beginning April 1, 2018	Moderate: procure capacity for the next contract period, address closure of other sites	TBD: market price will depend on available capacity	NA	 Previous RFP for disposal/processing services had good response Cost for export will be affected by current rate of use, and approval of new capacity or cancellations of projects (e.g. cancellation of Region of Peel EFW project) No viable options for partnering in the development of EFW capacity for the County have come forward
Export Facilities Garbage	Export capacity needed in 2023	Moderate: procure capacity for the next contract period	TBD: market price will depend on available capacity	NA	 As Site 2 nears closure, conduct analysis to determine most cost effective means for exporting dry waste from facilities Could be combined with curbside waste or shipped separately (either whole or shredded)
Mixed Waste Processing	Earliest date of implementation could be 2020	High: more complex procurement for new technology	High: > \$24 per HHD, \$3 million or more in annual operating cost to recover organics. Could be offset by reduced disposal cost.	High: 10% to 15% increase in overall diversion (to 73%). Up to 20,000 tonnes of additional organics diverted per year (includes pet waste and diapers)	 Potential cost for mixed waste processing depends on components included Mixed reviews regarding performance of mixed waste processing systems Unlikely much benefit from recovering recyclables from single family garbage, County's capture rates are very high Continuation of source separated organics encouraged, lower cost Due to high cost of processing technology, focus on remaining organics left in mixed waste





Recommendations

- 4. THAT development of contingency garbage disposal at landfills Site 9 Medonte and Site I2 Sunnidale, as outlined within the 2010 Solid Waste Management Strategy, be abandoned and staff be instructed to prepare plans to permanently close these landfill sites.
- 5. THAT one year of contingency disposal capacity be preserved at County landfill Site II Oro as outlined within Item CCW 15-405.
- 6. THAT upon the closure of the landfill at Site 2 Collingwood anticipated to be in 2023/2024, all facilities garbage be exported for disposal/processing as outlined within Item CCW 15-405.
- 7. THAT mixed waste processing, a longer-term option for managing garbage, be further investigated and reported on to County Council as the technology advances.





Performance Targets

71% diversion rate by 2020

This would require:

- implementation of all recommended options
- 80 to 90% participation in diversion programs
- 80 to 90% capture of targeted materials

77% diversion rate by 2030

This would require:

- implementation of all recommended options
- over 90% participation in diversion programs
- over 90% capture of targeted materials

Minimum 1% per year reduction in per capita waste generation

This would require:

 changing societal behaviors and purchasing habits with respect to disposable and convenience items





Recommendation

8. THAT the performance targets outlined in the 2010 Solid Waste Management Strategy, 71% diversion by 2020, 77% diversion by 2030, and a minimum 1% per year reduction in per capita waste generation, be maintained.







Next Steps

- public consultation on Strategy components identified today
- Report No. 3 Final Recommendations and Initiatives (anticipated mid-2016)
- implementation over the next 5 years seeking Council direction at appropriate milestones



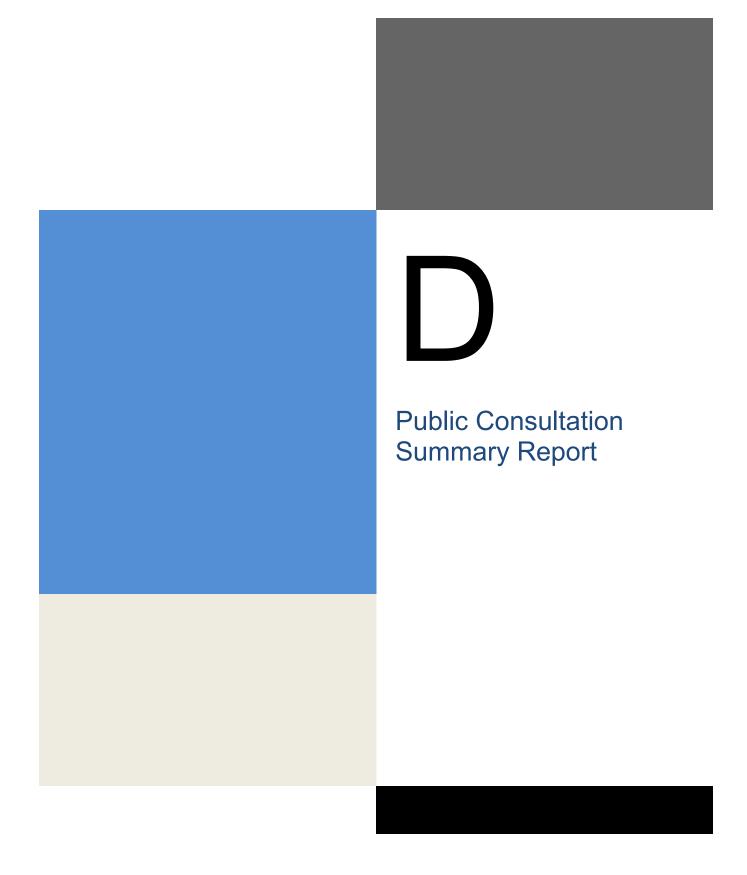




Recommendation

9. THAT the general process for updating the Solid Waste Management Strategy continue as outlined within Item CCW 15-405.









Appendix D Record of Consultation

Solid Waste Management Strategy Update Summary of Public Consultation

Simcoe County July 27, 2016

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Appendices

Appendix A: Promotion and Advertising Materials:

- A1: Spring Issue of Managing Your Waste (MYW)
- A2: Press Release
- A3: Media Advisory
- A4: Newspaper Advertisement

Appendix B: Public Consultation Session Materials

- B1: Presentation
- B2: Display Boards

Appendix C: Feedback form

Appendix D: Results of Feedback Form

- D1: Summary of Results of Feedback Form
- D2: Feedback forms and Emails

Appendix E: Public Consultation Session Comments:

- E1: Comments from the May 3rd Afternoon Session
- E2: Comments from the May 3rd Evening Session
- E3: Comments from the May 17th Afternoon Session
- E4: Comments from the May 17th Evening Session

1 Introduction

The County's Solid Waste Management Strategy, first approved in 2010, provides a framework for the County's implementation of diversion and waste disposal programs. The first update began in 2015 and focuses on identifying potential options that will form the basis for changes to the waste management system over the next 5 years. The first update included three major milestones;

- Outline the current state of the waste management system (completed May 2015)
- Identification of potential options and initiatives (Completed December 2015)
- The final report (Completed July 2016)

The following report summarizes all of the consultation activities that were conducted to help complete the first update to the Waste Management Strategy (the Strategy).

2 Purpose of Consultation

Public consultation and engagement is an essential part of the planning process. Consultation activities such as public consultation sessions provide an opportunity for the public to meet the project team, learn more about the Strategy and its components and provide questions, comments and feedback regarding the options being considered as part of the update to the Strategy. Public feedback obtained from the consultation activities to-date will be considered in the final recommendations presented to County Council and is a vital part of ensuring the Strategy's success over the next 20 years.

3 Overview of Public Consultation Activities

To properly inform the first update to the Strategy, the County undertook several public consultation activities. The purpose of these activities was to gather feedback from the County's residents on the various waste management options and then consider that feedback to inform decisions on how to implement, monitor and structure the County's waste management programs over the next several years. The main consultation activities for the Strategy Update consisted of public consultation sessions and a survey regarding the recommended options.

Prior to the initiation of the Strategy Update, the County undertook a survey on the Green Bin Program. The results of this survey were considered during the update to the Strategy as they are specific to one of the key areas identified for performance improvement, but were not part of the consultation activities undertaken as part of the Strategy itself.

The County has also conducted public consultation on the proposed Organics Processing Facility (OPF) and Materials Management Facility (MMF), most recently with public information sessions held on April 19th, 2016. Although the OPF and MMF form part of the overall waste management system and are acknowledged in the Strategy, the planning process for these facilities has been undertaken concurrently to the Strategy update and the feedback received at these specific information sessions was not considered as part of the Strategy Update.

4 Promotion and Advertising

To ensure that residents of Simcoe County were made aware of the Public Consultation Sessions, the County used various methods and tools to promote and advertise the sessions. The following section summarizes the various methods used.

4.1 Public Consultation Sessions

To promote and advertise the Public Consultation Sessions the County released several advertisements in advance of the events. The following section highlights the types of advertisements released, the date they were released as well as the information included in each advertisement. All of the promotion materials can be viewed in **Appendix A**.

Spring Issue of "Managing Your Waste" (MYR) - March 2016

- 121,500 total issues mailed out;
- Included approximately a half cover colour advertisement dedicated to Public Consultation Sessions;
- Discussed the Waste Management Strategy and provided the various options being considered;
- Provided date and times of the Public Consultation Sessions; and,
- Provided a link to the Consultation Webinar

The Spring Issue of Managing Your Waste can be viewed in Appendix A1.

County of Simcoe Press Release – April 25 2016

- Provided background on County's diversion rates;
- Provided background on the Waste Management Strategy update;
- Provided date and time of Consultation Sessions; and,
- Provided a link to Consultation Webinar.

The press release can be viewed in **Appendix A2**.

Media Advisory – April 29 2016

- Discussed the Waste Management Strategy and identified the various options being considered;
- Provided date and times of Consultation Sessions; and,
- Provided a link to the Consultation Webinar.

The media Advisory can be viewed in **Appendix A3**.

Newspaper Advertisement – April 21st and 28th 2016 and May 5th and May 12th 2016

- ¼ Page full colour advertisement through Sunmedia including the following newspapers; Innisfil Examiner, Orillia Packet & Times, Collingwood Enterprise, Bradford West Gwillimbury Times;
- ¼ Page Full colour advertisement through Metroland Media including the following newspapers; Midland Penetangusihene Mirror, Alliston Herlad, Collingwood Connection, Innisfil Journal, Barrie Advance, Orillia Today, the Topic;
- Advertisement included information on the date, time, and location of the Consultation Sessions and identified the options for consideration. There was also a link to the consultation Webinar.

The newspaper advertisement can be viewed in **Appendix A4**.

County Website - April 20 to June 1st

 Slider Ad which when clicked re-directed residents to the Strategy Webpage: http://www.simcoe.ca/wastestrategy

Social Media

- Facebook April 25th 2016
 - Released a public post stating date, time and location of Public Consultation Sessions and link to Webinar.
- Twitter April 25th, 27th, 29th and May 2nd, 3rd, 9th, 12th, 16th, and 17th 2016
 - Released tweets regarding date, time, location of Public Consultation Sessions and link to Webinar.

Radio Interviews

- Chorus Radio Stations CHAY and B101 April 26th, 2016;
- The Dock KICX FM May 2nd, 2016;
- Interview regarding the Strategy Update and Public Consultation sessions conducted with Willma Bureau (Contracts and Collections Supervisor)

Newspaper Interview with Barrietoday.com (Online Publication) – May 10th 2016

 Interview regarding the Strategy Update and Public Consultation Sessions conducted with Willma Bureau (Contracts and Collections Supervisor)

5 Public Consultation Sessions

Date Time and Location

The Public Consultation Sessions took place on Tuesday May 3rd and Tuesday May 17th and were held at the Simcoe County Museum located at 1151 Hwy 26, Minesing, ON. There were two sessions held on each day, one afternoon session from 2pm to 4pm and one evening session from 6pm to 8pm. Sessions were held in person and live via webinar so that those located further away or unable to attend in person could participate from their home or mobile device.

Format of Sessions

The format of the consultation sessions included a presentation at the beginning of each session provided by County representatives (Gerry Marshall, Warden of Simcoe County, Willma Bureau, Contracts & Collections Supervisor, and Debbie Korolnek, General Manager, Engineering, Planning) and Janine Ralph of HDR, followed by a formal question and answer period including both the in person and webinar audiences. The Public Consultation Session presentation can be viewed in **Appendix B1**. Display boards were also available for the public to view. A copy of the display boards can be viewed in **Appendix B2**. At the end of each session there was time for participants to complete their feedback forms online or by hard copy, and those participating in person also had the opportunity for discussion with the Strategy update team if they wished. The feedback form (**Appendix C**) was made available to the public to be completed any time during the month of May on the Waste Strategy webpage.

Attendance

A total of 32 people attended the public consultation sessions. A total of 18 people attended the May 3rd Session (11 in the afternoon and 7 in the evening) and 14 people attended the May 17th Session (8 in the afternoon and 6 in the evening).

A total of 118 people attended the webinar. A total of 102 people attended the May 3rd Session (63 in the afternoon and 39 in the evening) and 16 people attended the May 17th Session (13 in the afternoon and 3 in the evening). The table below summarizes the attendance and overall totals.

Date/Time	Live Participants	Webinar Views	Total
May 3 rd 2 pm – 4 pm	11	63	74
May 3 rd 6 pm – 8 pm	7	39	46
May 17 th 2 pm – 4 pm	8	13	21
May 17 th 6 pm – 8 pm	6	3	9
Totals	32	118	150

Organics Processing Facility (OPF) and Materials Management Facility (MMF) Public Information Sessions

While promoting the Strategy Public Consultation Sessions, the County was also concurrently promoting the Organics Processing Facility (OPF) and the Materials Management Facility (MMF) Public Information Sessions. Two sessions (2-4pm and 6-8pm) took place on Tuesday April 19th 2016 at the Simcoe County Museum. Although these sessions were not part of the Strategy consultation, they have been noted for information purposes.

6 Survey Results

An integral part of the Public Consultation Sessions was the gathering of feedback from the public on the potential options to form the basis for future waste management operations in the County. Feedback forms were made available at the Public Consultation Sessions as well as online for approximately a month's time. The following section describes the form and the overall results of the Strategy survey and the Green Bin survey. The feedback form can be viewed in **Appendix C.**

6.1 Waste Strategy Options Survey

Feedback Forms

The County received approximately 35 public feedback forms regarding the options proposed as part of the update to the Waste Strategy. The feedback form asked a series of Yes and No questions about 3 sets of options and also provided the opportunity for residents to write general comments about each option or any other general concern, question or comment. The options that had been identified by Council Resolution in December 2015 for discussion with the public included;

1. Garbage Collection Service:

- a. Pay-as-you-throw;
- b. Bi-weekly garbage collection; and
- c. Standard-size garbage container

2. Curbside and Facilities Diversion Programs:

a. Expand Green Bin Service to include pet waste;

- b. Expand Green Bin service to include diapers and sanitary products;
- c. Expand yard waste collection;
- d. Examine the services at County waste facilities; and,
- e. Expand waste facilities diversion programs.

3. Reduction and Re-use;

- a. Food waste reduction;
- b. Implement disposal and diversion by-laws;
- c. Textile collection;
- d. Advocacy; and,
- e. Rewards Program.

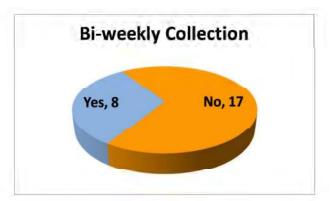
Full results of the feedback survey are provided in Appendix D. A summary of the general findings is discussed below.

Figure 6-1 presents the Yes/No responses received from participants regarding each option presented.

Figure 6-1: Summary of Public Feedback

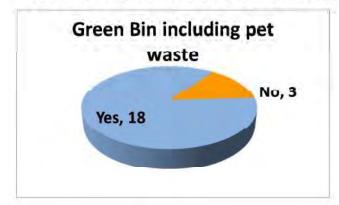
Garbage Collection Services





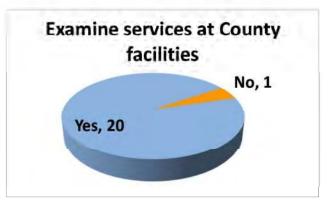


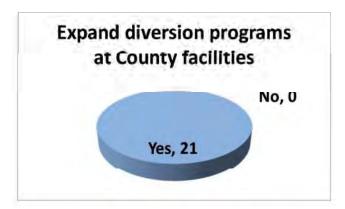
Curbside and Facilities Diversion Programs





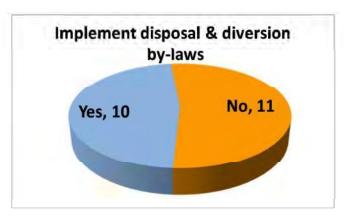




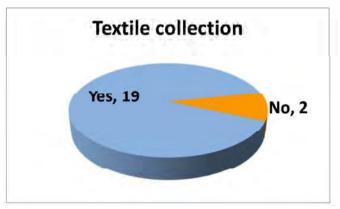


Reduction and Re-use











For the three garbage collection service options, people were generally against payas-you-throw and generally in favour of standard sized garbage containers. The majority of people were not in favour of bi-weekly collection and several of the comments addressed this question in particular. Of the residents who were in favour of bi-weekly collection some commented that this change may result in increased use the green bin. Of the residents who were against bi-weekly collection, many felt weekly collection is already working well and had concerns about changes such as increased smells in summer months. Most of the additional comments discussed how paying as you throw is not a good idea and that paying for additional garbage tags is unwanted.

For the four curbside and facilities options, most residents felt that expanding the yard waste collection program was not necessary, but that expanding the other diversion programs would be favoured. Overall, residents feel that both pet waste and diapers should be collected with the Green Bin program and that the County facilities services should be fully examined. Several additional comments addressed the need for adding diapers and pet waste to the Green Bin program.

For the four reduction and re-use options, it seemed that residents were generally split on implementing disposal bans and/or diversion by-laws and also implementing rewards programs, but were overall in favour of adding a textile collection program and increasing food waste reduction.

Additional Comments/Questions

During the Public Consultation Sessions on May 3rd the County received a total of 19 comments and questions which were tracked during both the afternoon and evening sessions. The questions and comments can be viewed in **Appendix E.** Generally, the comments were inquisitive in nature but overall positive. Many residents had questions regarding bi-weekly collection and how it would be implemented and if it would be a successful program. Several comments were made about textile diversion and how this already exists, but that it could also be improved. Several residents also had comments and questions on how the costs of programs would directly affect them.

During the Public Consultation Session on May 17th the County received a total of 21 comments and questions which were tracked during both the afternoon and evening sessions. The questions and comments can be viewed in **Appendix E**. Generally, the comments received during the May 17th Public Consultation session were positive in nature. Similar to the May 3rd session, several of the comments were inquiries regarding how bi-weekly collection would work. Several residents at this session had questions regarding the standard-sized garbage bin. There were also several comments on pay-as-you-throw and how this may lead to illegal dumping.

6.2 Organics Program Survey

The Organics (Green Bin) program surveys were undertaken over an eight week period during the summer of 2015. Although this survey is not a direct part of the

Waste Strategy consultation, they were undertaken as an additional component of the County's regular measuring and monitoring program. Some of the results will assist in informing the Solid Waste Management Strategy update regarding options to improve green bin program performance. The following section describes both the survey questions and overall results.

The survey's key questions asked residents how often they use their Green Bin and asked reasons for participating or not participating in the program. The survey also included questions related to new policies on curbside waste to promote Green Bin participation.

The table below summarizes the results of the key survey questions;

	Online Survey	Door-to-Door Survey	Overall Results
Number of Respondents	1,291	100	1,391
Respondents using Green Bin regularly	1,074 or 83.2%	60 or 60%	1,134 or 81.5%
Respondents not using Green Bin	156 or 12.1%	25 or 25%	181 or 13%
Respondents sometimes using Green Bin	61 or 4.7%	15 or 15%	76 or 5.5%

In general, of the respondents using the Green Bin, the most common motivators were that it was good for the environment. Respondents who do not use their Green Bin stated that mess and odour were the main factors for not participating in the program. Some residents also stated they already use a backyard composter and therefore do not need to participate in the curbside program.

Residents who stated that they sometimes use the Green Bin program indicated that weather played a factor and that they are more likely to use the bin during the winter months. It was hypothesized that there was reluctance to use the bin during hotter months due to the potential for odour and pests.

The survey included questions related to new policies on curbside waste to promote Green Bin participation which may be considered through the upcoming Waste Management Strategy Update process. Respondents were asked which of the following options they would prefer:

- Clear garbage bags
- Bi-weekly garbage pick-up
- A pay-as-you-throw program where all garbage bags would require a tag
- Allowing plastic bags in the Green Bin program
- Allowing pet waste/diapers in the Green Bin program
- None of the above

The respondents of both the door-to-door survey and the online survey who indicated that they use their Green Bin regularly or sometimes selected "allowing pet waste and diapers in the Green Bin" most frequently as a motivator to use the Green Bin more. The second most popular motivator selected by those that said they use their Green Bin was "allowing plastic bags in the Green Bin". Those that indicated they do not use their Green Bin selected "none of the above". Online respondents also selected "allowing pet waste and diapers" as well as "plastic bags in the Green Bin" with some frequency. County staff believe that these results indicate that those who are using their Green Bin would be supportive of some program changes to help improve Green Bin program participation whereas those who are not engaged would prefer no changes or some expansion of the Green Bin program as opposed to further reductions on curbside garbage as a stimulus to improved participation.

7 Other Feedback Received

The County received three emails regarding the Waste Strategy (two from the same person). Comments pertained to;

- Concerns about collection costs and illegal dumping;
- Suggestion to lobby the Province for a deposit on aluminum cans; and,
- · Concerns about recycled glass markets.

More details can be found in **Appendix D**.

8 Feedback Summary and Recommendations

Overall it can be concluded from both the Public Consultation Sessions and the Organic Program survey that the participating residents are open to and in support of certain program changes. In general, the residents participating in the consultation process do not want to pay any additional fees when it comes to managing their waste, even if it means higher diversion rates. It is also apparent that residents are overall content with the County's waste management programs, but that minor changes could be accepted. These residents generally feel that the Green Bin program could be expanded to include more items such as diapers and pet waste, that some sort of textile diversion program would be largely favoured and additional diversion options at County facilities was supported. Based on comments and questions around items such as; bi-weekly collection and standard sized containers, it seems that before any program changes take place, the County would need to focus on promotion and education so residents fully understand the changes and new programs. Greater understanding would likely garner more support and would lead to a more successful waste management program.

Based on public comments, additional research around potentially implementing bylaws as well as a rewards programs would be needed as residents were somewhat undecided on whether they are in favour or not. Further analysis and presentation of these options to the public may garner more or less support for one or both of these options. Any program change which infers direct costs to the resident such as 'Payas-you –throw' would not be well supported and may experience great opposition from County residents. Overall, to maintain the 71% diversion target, the County will need to consider implementing all or some of the recommended program changes and options discussed above despite potential public opposition or hesitation towards the changes.



Promotion and Advertising Materials



In 2015, the County conducted a curbside audit to determine the composition of waste, to assess the success of various waste diversion programs and determine areas for improvement.

The audit revealed that nearly 50% of the material in a typical household garbage bag could have been diverted through the existing blue box and green bin programs.

The curbside audit revealed the green bin program remains the greatest opportunity for improvement with 40% of the average residential garbage bag being comprised of food waste, tissues, paper towels, paper cups/plates and other divertible organic waste. When these items breakdown in the landfill environment they contribute to the production of methane, a greenhouse gas 20 times stronger than CO², and to the production of leachate, which can negatively impact groundwater resources.

Remember, food is NOT garbage.

Printed on recycled paper

The data also shows that County residents are doing an excellent job of utilizing the recycling program. However, some common types of recyclables such as aluminum foil, aerosol cans, cartons for broth and juice boxes are still being disposed of in the garbage.

Significant amounts of alcoholic beverage containers are also ending up in the recycling.
Remember, when you purchase wine, spirits and beer you pay a deposit on those containers. When included in the blue box, the County does not receive the deposit on your behalf — so keep your money in your pocket and return your empties for a refund.

For more information on the County's green bin program, please refer to the 2016 Waste Management Calendar or visit:

simcoe.ca/greenbin

Follow us: @simcoecountyCS



May 5 & 6 10 a.m. to 7 p.m.

May 7 8 a.m. to 2 p.m.

Bring your own shovel.
Supply is limited, while quantities last.

Back by popular demand, the County of Simcoe is pleased to be hosting its second "DIRT CHEAP" compost and mulch giveaway event May 5-7. The giveaway will be held in a NEW location this year at 1257 Anne Street North, Minesing, between Snow Valley Road and Highway 26.

Compost and garden mulch will be available free to residents of Simcoe County (excluding the cities of Barrie and Orillia).

"The compost and mulch giveaway was very successful in 2015, and residents were extremely pleased with the event. In total, the event distributed 1,703 tonnes of compost and 131 tonnes of mulch," said Rob McCullough, Director of Solid Waste Management. "We encourage Simcoe County residents to come out to the event in 2016 to continue discovering the natural benefits compost and mulch can add to your gardens."

A small skid steer will load residential trucks and trailers and self-loaders should bring their own shovel. Please note that this FREE compost and mulch giveaway is being held ONLY at 1257 Anne Street North and not at County Waste Management Facilities.

County Waste Management Facilities will have compost available for sale May 9 – 16, while quantities last. Mulch - Free of charge and Compost - \$5 per car load/\$20 per pick-up or small trailer load.

MANAGING your WASTE



Waste Management Strategy

Public consultation on options for garbage collection services, curbside and facilities diversion programs, and reduction and reuse, will take place in May at the Simcoe County Museum or via webinar at: simcoe.ca/wastestrategy.

The County's Solid Waste Management Strategy, approved in 2010, provides a framework for diversion and waste disposal programs. Updates were recommended to be completed at various times.

Waste Management Strategy

Public Consultation Sessions

Tuesday, May 3 & 17

Simcoe County Museum 1151 Highway 26, Minesing 2 - 4 p.m. and 6 - 8 p.m.

or via webinar at: simcoe.ca/wastestrategy on the same days and times The first update began in 2015 and will focus on consideration of potential options to form the basis for waste management operations over the next five years.

County Council has considered the options and the following alternatives will now be presented for public consultation.

Options being considered

Garbage Collection Service

- Pay-As-You-Throw
- Bi-weekly garbage collection
- Provision of a standard-sized garbage container

Curbside and Facilities Diversion Programs

- Expand green bin collection
- Expand yard waste collection
- Expand waste facilities diversion programs

Reduction and Reuse

- Implement disposal and diversion bylaws
- Continued political advocacy, food waste reduction, textile diversion and rewards program

March 2016



ONE SITE, ONE SOLUTION

2976 Horseshoe Valley Road West

is the preferred site for the proposed Organics Processing Facility (OPF) and Materials Management Facility (MMF)

OPF & MMF

Public Information Sessions

Tuesday, April 19

Simcoe County Museum 1151 Highway 26, Minesing 2 - 4 p.m. and 6 - 8 p.m.

Open house format (no formal presentation)



1-800-263-3199

simcoe.ca

2016 Spring MYW.indd 1 3/24/2016 4:45:47 PM



What's an OPF?

An Organics Processing Facility

is a location where organics (green bin material and potentially other items such as leaf and yard waste, pet waste, and diapers) are processed and converted into other products, such as compost or fertilizer.

What's a MMF?

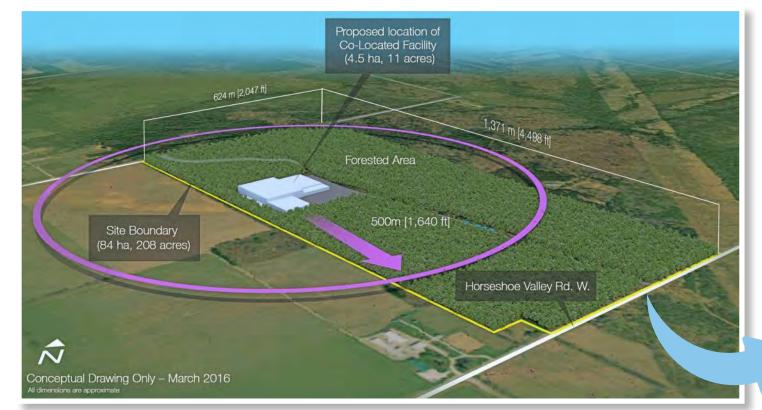
A Materials Management Facility

is a location where waste from multiple collection vehicles is consolidated and transferred. This allows for cost-effective shipment to other processing/disposal locations.

One site, one solution

- County transfer operations for garbage and recycling
- ▶ On-site organics processing
- ► Truck servicing facilities
- Potential public education space

2976 HORSESHOE VALLEY ROAD WEST



SITING PROCESS

The comprehensive siting process was modeled on the Ministry of Environment and Climate Change's *Statement of Environmental Values*. Although an Environmental Assessment (EA) is not required, the County has approached these projects with this framework in mind, applied by industry-leading consultants.

Siting involved three screening phases and extensive public and stakeholder consultation. 502 sites were evaluated using conditions such as the avoidance of sensitive groundwater areas, preservation of prime agricultural land, adequate size, and distance from neighbours.



WHY?

It's the right thing to do.

OPF

The County has set regional diversion targets of 71 per cent by 2020 and 77 per cent by 2030. Increased diversion of organic materials is critical to reach these targets. A County operated OPF will provide Simcoe County with the capacity to process your organic waste and allow for acceptance of more materials in our green bin program, thus contributing to increased diversion. An OPF will also reduce environmental impacts from export of waste and create compost or fertilizer products to support our local agriculture and landscaping sectors.

job creation

This facility is <u>not</u> a landfill.

MMF

The MMF will save residents an estimated \$13 million in contracted transfer costs over the next 20 years. Significant funding has already been secured for this project.



life spans of existing landfills and reducing the need for export of our waste



\$13 million

estimated savings in transfer costs over the next 20 years



 CO^2

reduction in greenhouse gas emissions due to shortened haulage distances

ADVANTAGES OF THIS SITE

Usable space

- ► site is approximately 208 acres
- the facility would have a footprint of approximately 11 acres, utilizing only about 5% of the property
- large usable space accommodates a co-located facility and allows for design and operational flexibility, as well as potential expansion

Transportation

- minimal impacts to current traffic volumes on Horseshoe Valley Road West (County Road 22)
- estimated maximum impact would result in a 6.2 per cent increase in vehicles
- excellent access to Highways 400, 27, 26, and 11

Environmental

- ▶ this site scored high among all environmental criteria used to evaluate 502 potential sites
- ▶ no net effects to Class 1-3 agricultural lands
- compensation for the forested areas cleared will be considered; this may include replanting of trees

Economic

- ▶ allows for a co-located facility that would share costs
- property acquisition savings
- ▶ good usable space and conditions means straightforward design
- provides easy access to major highways and County roads, resulting in cost savings associated with transportation

Distance from neighbours

- site has potential to place the facility footprint in a location with significant separation distances from nearby houses/ businesses
- ► all neighbouring houses could potentially be more than 500 metres (0.5 km) away from the facility, see illustration above

NEXT STEPS

- ► April 19, 2016 Public Information Sessions
- ➤ Spring 2016 Inititate engineering and environmental studies and procurement process for OPF technology
- ▶ 2017 Results of RFP and business case presented to County Council



County of Simcoe ranked fifth in waste diversion

Midhurst/April 25, 2016 – The County of Simcoe continues to be among the very best in the province when it comes to diverting waste from landfills. The County received fifth place out of 237 municipalities in the just released annual Waste Diversion Ontario Datacall (Ontario's standardized waste reporting and calculation process) with a 59 per cent diversion rate for 2014. This is the County's highest diversion rate since recordings began in 2006 and moves the County up from seventh place with a 55.7 per cent rate in 2013.

"Our residents deserve credit for their continued participation in our diversion programs," said Warden Gerry Marshall. "Having recently reaffirmed our diversion targets of 71 per cent by 2020 and 77 by 2030, we're gunning for first in the province. To get there we must continue to advance our current programs and invest in local initiatives to manage our own waste and advance our environmental stewardship."

Rob McCullough, Director of Solid Waste Management, says the results speak for themselves, but insists there is room for improvement. "We are provincial leaders in blue box participation and diversion, and we have extremely successful facility-based waste diversion programs," said McCullough. "In fact, we are so successful in these areas that there is little room for improvement—our only real opportunity to divert more materials is to expand and grow the use of our green bin organics program."

Data from a County waste audit indicates that Simcoe County residents are Ontario leaders in blue box capture rates at 87 per cent. The County has also seen great success at its waste drop-off facilities, where innovative programs for over 20 different materials, including asphalt shingles and window glass, have diverted more than 70 per cent of drop-off materials.

The County's Solid Waste Management Strategy Update also recommends a number of proposed options to help increase the use of the organics green bin program and foster more environmentally responsible waste habits among residents. County Council has provided initial direction and staff will host two Public Consultation Sessions on the Strategy Update on May 3 and 17, 2016 from 2 to 4 p.m. and 6 to 8 p.m. at the Simcoe County Museum, or via webinar at www.simcoe.ca/wastestrategy.

The Datacall report is based on 2014 data submitted to Waste Diversion Ontario last year. The full report can viewed at http://www.wdo.ca/news/News-Detail/ArtMID/494/ArticleID/155/2014-Residential-Waste-**Diversion-Rates**.

The County of Simcoe is composed of sixteen member municipalities and provides crucial public services to County residents in addition to providing paramedic and social services to the separated cities of Barrie and Orillia. Visit our website at simcoe.ca.

- 30 -

Contacts:

Allan Greenwood Director, Corporate Communications 705-726-9300 ext. 1230 705-794-9301 (mobile) Allan.Greenwood@simcoe.ca

Collin Matanowitsch Communications Co-ordinator 705-726-9300 ext. 1430 705-734-8386 (mobile)

Collin.Matanowitsch@simcoe.ca

Advisory



County hosts public consultation sessions on Waste Management Strategy

May 3 and 17, 2016 at the Simcoe County Museum

Midhurst/April 29, 2016 – The County of Simcoe is hosting public consultation sessions to obtain input on the update for the Waste Management Strategy. The sessions occur May 3 and 17, 2016 from 2 to 4 p.m. and 6 to 8 p.m. at the Simcoe County Museum. Residents can also join and provide input from home through a live webinar, which can be accessed at www.simcoe.ca/wastestrategy.

The Waste Management Strategy was first approved by County Council in 2010, with updates at various times. After receiving initial direction from County Council, these proposed options will now be presented to residents for their feedback. Updates to the Strategy will guide waste management operations over the next 5-year planning period.

"Help us shape the future of our waste programs and services," said Warden Gerry Marshall. "Last year our Council provided initial direction to a long list of creative options. Now we're looking for your feedback on the remaining initiatives aimed at identifying efficiencies, managing our own waste more responsibly and increasing our diversion."

The proposed initiatives will be presented for public consultation as:

Garbage Collection Service Options for Consideration

- "Pay as you throw"
- Bi-weekly garbage collection
- Provision of a standard sized garbage container

Curbside and Facilities Diversion Program Options for Consideration

- Expansion of the green bin program
- Expansion of yard waste collections

Expansion of waste facility diversion programs

Reduction and Reuse Options for Consideration

- Implementation of disposal and diversion by-laws
- Continued political advocacy, food waste reduction, textile diversion and rewards programs

Public feedback will be considered in the final recommendations presented to County Council later this year.

EVENT: Waste Management Strategy Update Public Consultation Sessions

Simcoe County Museum

Where 1151 Highway 26

Minesing, Ontario L0L 1Y2

May 3 and 17, 2016

2 to 4 p.m. and 6 to 8 p.m.

When

Live webinar can be accessed at: www.simcoe.ca/wastestrategy

The County of Simcoe is composed of sixteen member municipalities and provides crucial public services to County residents in addition to providing paramedic and social services to the separated cities of Barrie and Orillia. Visit our website at **simcoe.ca**.

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We want your feedback!

Waste Management Strategy

Public Consultation Sessions

Tuesday, May 3 & 17

Simcoe County Museum 1151 Highway 26, Minesing 2 - 4 p.m. and 6 - 8 p.m.

or via webinar at: simcoe.ca/wastestrategy on the same days and times

Follow us: **@simcoecountyCS**

The following alternatives will be presented for public consultation:

Garbage Collection Service

- Pay-As-You-Throw
- Bi-weekly garbage collection
- Provision of a standard-sized garbage container

Curbside and Facilities Diversion Programs

- Expand green bin collection
- Expand yard waste collection
- Expand waste facilities diversion programs

Reduction and Reuse

- Implement disposal and diversion bylaws
- Continued political advocacy, food waste reduction, textile diversion and rewards program

1-800-263-3199

simcoe.ca

В

Public Consultation Session Materials



County of Simcoe

Solid Waste Management Strategy Update – Potential Options and Initiatives

May 3 and 17, 2016

simcoe.ca

Welcome and Introductions





- Warden's welcome
- Presentation is live, via webinar and recorded for future reference
- 30 minute presentation
- 30 minute question and answer period
- Project team available after presentation for remainder of the session
- Please provide us with your feedback on the options



Introduction





- Approved in 2010, the 20-year Strategy:
 - encompasses integrated waste management principles;
 - provides a combination of techniques and programs;
 - considers the potential economic, environmental,
 and social implications of selected alternatives; and
 - establishes a planning framework and strategic direction for the next twenty years.
- Provides a 'road map' with recommended initiatives requiring future Council direction and approval at various stages
- Is a 'living' document with recommended periodic reviews



Introduction





- First 5-year update began in 2015
- Given scope of the Strategy, will be multi-staged and flexible to align with changes to provincial legislation
 - Report No I. Current Status Report presented in May 2015

Report No. 2 – Potential Options and Initiatives



Report No. 3 – Final Recommendations and Initiatives (anticipated mid-2016)





Why do we need a Strategy?





- County waste diversion rates are amongst the best in the Province but have been relatively stagnant for several years
- Waste generation rates are increasing
- Need to update the plan for managing waste for the 20-year planning period, including diversion, processing, and disposal
- Increases diversion of "resources" from disposal which has environmental, social, and financial benefits





What's working?





- County is one of the top-diverting communities in Ontario
- Residents do a great job of diverting recyclable materials (paper, plastics, metals, glass)
- There is little room for improvement in the curbside recycling program
- Drop-off facilities are well operated and significant quantities of materials are diverted



How can we improve?







- Overall waste generation has increased 18% since
 2010, averaging an annual 3.6% increase
- Waste diversion rates are not increasing
- Green bin performance is stagnant:
 - tonnages collected remain fairly consistent
 - increase in generation of organics (more food waste)
 - decrease in capture of organics in the green bin
- Current practice of allowing I free bag and up to
 7 tagged bags is a contributing factor in
 the stagnant diversion rate

Where do we need to go?



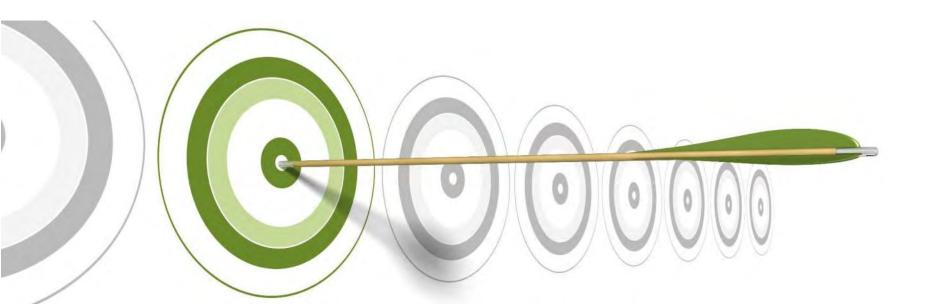


County Council Approved Targets are:

71% Diversion by 2020

77%Diversion by 2030

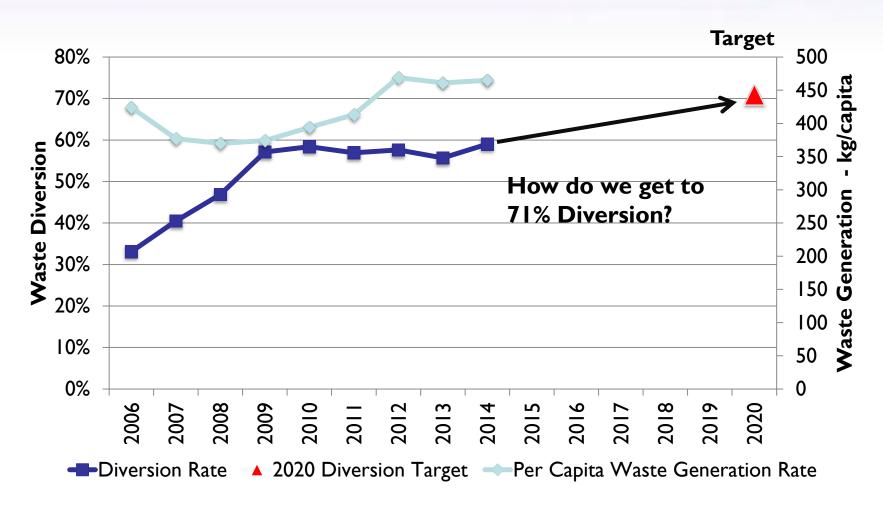
1%
Minimum annual reduction per capita in waste generation



Where are we now?



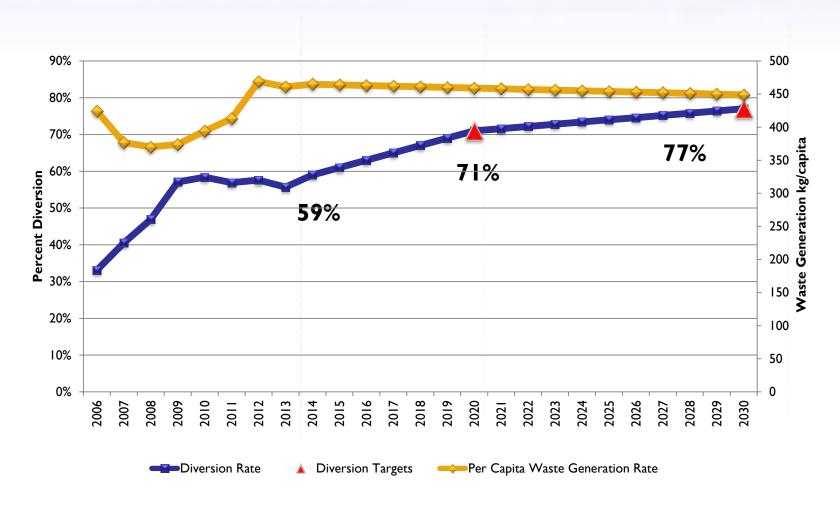




How do we reach our targets?







Options Considered





County Council special Strategy session in December 2015

- Council reviewed:
 - the current waste system performance
 - other municipal programs
- Council considered the options presented for:
 - Garbage Collection Service
 - Curbside and Facilities Diversion Programs
 - Reduction and Reuse
 - Transfer, Processing and Disposal



Garbage Collection Options





Option	Timeline	Potential Effect on Diversion and Cost	County Council Resolution - Approved Options for Consideration
Full PAYT (pay by bag and not taxes)	Could be prior to 2020	Low diversion: I to 2% increase\$2 to \$3 per household per year	\checkmark
Biweekly Garbage Collection	Next collection contract (2020)	High diversion : 5% or more increasePotential Collection cost savings	\checkmark
Standard Garbage Container	Could be prior to 2020	 Moderate diversion: 2 to 3% increase depending on size of container \$4 to \$6 per household 	✓
Automated Cart- based Collection	Next collection contract (2020)	 Low diversion: I to 2% increase depending on size of garbage cart \$10 to \$12 per household per year 	×
Clear Garbage Bags	Next collection contract (2020)	Low diversion: I to 2% increase\$3 to \$4 per household per year	×
Bag Tag Price Increase	Could be prior to 2020	 Very low diversion: < 1% increase \$1 to \$1.50 per household per year 	×

Question and Answer





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Curbside and Facilities Diversion Options

Option	Timeline	Potential Effect on Diversion and Cost	County Council Resolution - Approved Options for Consideration
Expand Curbside Green Bin Collection (Pet Waste, Diapers)	Pet waste, next collection contract (2020) Diapers, following collection contract	 Moderate diversion: 3 % increase in overall diversion rate (to 62%) \$4 to \$5 per household per year 	
Expansion of Leaf and Yard Waste Collection	Next collection contract (2017/2018)	 Low diversion: I % increase in overall diversion rate (to 59%) \$1.50 to \$6 per household per year 	✓
Examine Facilities Level of Service	Prior to 2020	• < \$1.00 per household per year	\checkmark
Expand Facilities Diversion	Prior to 2020	 Low diversion: I % increase in overall diversion rate (to 59%) \$2 to \$3 per household per year 	√
Single Stream Recycling	Next collection contract (2020)	 Low diversion: I % increase in overall diversion rate (to 59%) \$8 to \$15 per household per year 	×

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Reduction and Reuse Options





Option	Timeline	Potential Effect on Diversion and Costs	County Council Resolution - Approved Options for Consideration
Food Waste Reduction (encourage wasting less food)	Continue	Low diversion: I to 2% increase in overall diversion rate (to 60%) altogether	
Disposal Bans and Diversion By-laws	Within the next five years		
Textile Collection (Expand)	Continue		
Advocacy (Staff and Council)	Continue	\$5 to \$6 per household per year altogether	
Rewards Program (recognize resident's diversion performance)	Within the next five years		✓

Question and Answer





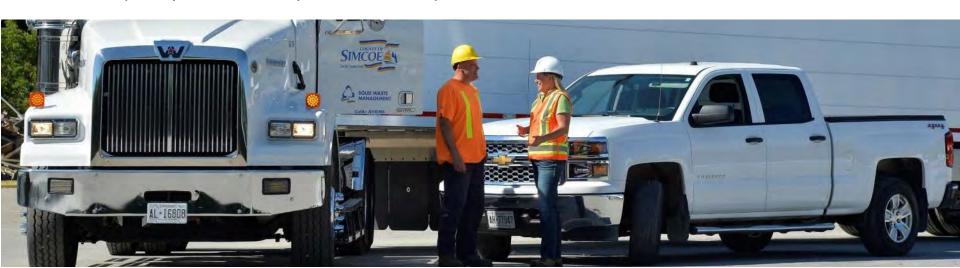
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Transfer, Processing, Disposal





- Estimated only 9 years remaining disposal capacity in the County resulting in increased transfer, haulage and processing/disposal costs
- Council has passed a resolution regarding garbage:
 - That Mixed Waste Processing be further investigated and reported on to Council as the technology advances
 - To permanently close Sites 9 Medonte and 12 – Sunnydale
 - To preserve one year of emergency capacity at Site II Oro
 - Upon closure of Site 2 Collingwood, that the County would export drop off facility garbage for disposal/processing
- Organics Processing Facility (OPF) and Materials Management Facility (MMF) planning process is happening separately and concurrently with the SWMS update



What's Next?





- Feedback received through these consultation events will be summarized and incorporated into the Strategy Update
- Final recommendations and initiatives will consider public input received
- Report No. 3 Final Recommendations and Initiatives will be presented to County Council summer 2016
- Solid Waste Management Department will proceed to implement Council approved recommendations and initiatives over the next 5-year period

We Want to Hear from You!





- Fill in a feedback form electronically at:
 www.simcoe.ca/wastestrategy
- Complete a hard copy today or mail it to: Solid Waste Management Strategy County of Simcoe 1110 Highway 26, Midhurst, Ontario, L0L 1X0
- Responses must be received by June 1, 2016

Question and Answer





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SOLID WASTE MANAGEMENT STRATEGY UPDATE

PUBLIC CONSULTATION SESSIONS

May 2016

WE WANT YOUR FEEDBACK



WASTE MANAGEMENT **PLANNING**

- The Solid Waste Management Strategy was approved by County Council in 2010, providing a planning framework for the next 20 years with periodic updates
- This first Strategy Update includes three milestones:
 - outline the current state of the waste management system (completed May 2015),
 - identification of potential options and initiatives (completed December 2015),
 - the final report (anticipated Summer 2016)









WHY ARE WE HERE?

- Discuss our waste management system and needs
- Strategy and system performance
- Initiatives, legislation, waste policy trends, and programs
- Identify the options presented to Council and seek your feedback on remaining alternatives:















GARBAGE COLLECTION OPTIONS

OPTION

Full Pay as You Throw (PAYT) (pay for all bags of garbage)

- Residents would pay directly for collection of all bags of garbage and not by taxes
- Difficult to achieve high diversion rates with full PAYT alone
- Need for promotion and education, some additional bylaw enforcement

TIMELINE

Could be implemented prior to 2020

POTENTIAL RANGE IN COST

\$2 to \$3 per household annually

POTENTIAL IMPACT IN DIVERSION

Low: 1 to 2% increase in overall diversion rate (to 60%)

OPTION

Biweekly Garbage Collection

- Garbage would be picked up every other week. Organics would be picked up every week
- Costs dependant on collection system configuration
- Biweekly garbage collection encourages use of Green Bin resulting in higher diversion

TIMELINE

Next collection contract (2020)

POTENTIAL RANGE IN COST

\$0 - \$15 per year savings annually per household

POTENTIAL IMPACT IN DIVERSION

High: 5% or more increase in overall diversion rate (to 65%)

OPTION 3

Standard Garbage Container

- County would provide a uniform sized garbage container
- Encourages additional diversion by restricting volume of garbage
- County would have to source and deliver containers, promote and educate

TIMELINE

Could be implemented prior to 2020

POTENTIAL RANGE IN COST

\$4 to \$6 per household (one time)

POTENTIAL IMPACT IN DIVERSION

Moderate: 2 to 3% increase in overall diversion rate (to 62%)

simcoe.caStoryboard 4







CURBSIDE AND FACILITIES DIVERSION **OPTIONS**

OPTION

Expand Curbside Green Bin Collection

- Could include pet waste and/or diapers
- Pet waste is 8% of residential garbage, diapers and sanitary products are 4.7%
- Diapers and sanitary products require more processing to remove plastics. Pet waste is easier to manage
- Easier to adjust to biweekly garbage collection

TIMELINE

Pet waste, next contract (2020) Diapers for following contract

POTENTIAL RANGE IN COST

\$4 to \$5 per household annually Cost benefit required for processing of diapers

POTENTIAL IMPACT IN DIVERSION

Moderate: 3% increase in overall diversion rate (to 62%)

OPTION

Expand Leaf and Yard Waste Collection Service

- Mostly large urbanized municipalities in Ontario offer weekly or biweekly collection
- Options:
 - biweekly pick up from spring to fall
 - adding collection events during summer
- Biweekly collection from spring to fall most expensive

TIMELINE

Next collection contract (2017)

POTENTIAL RANGE IN COST

\$1.50 to \$6 per household annually, will vary based on type of expansion

POTENTIAL IMPACT IN DIVERSION

Low: 1% increase in overall diversion rate (to 59%)

OPTION

Examine Level of Service at County Waste Facilities

- Examine facilities usage (material types, locations, and users)
- Determine if facility locations, wait times, and usage provide optimal service

vel of Expand Diversion

- Additional materials could be diverted:
 - polystyrene cushion packaging

OPTION

at Facilities

- packagingplastic bags
- used cooking oil
- Need to assess potential for material markets
- Need to assess cost benefit and space at facilities

TIMELINE

Prior to 2020

POTENTIAL RANGE IN COST

TBD

TIMELINE

Prior to 2020

POTENTIAL IMPACT IN DIVERSION

TBD

POTENTIAL RANGE IN COST

\$2 to \$3 per household annually will depend on markets and partnerships

POTENTIAL IMPACT IN DIVERSION

Low: 1% increase in overall diversion rate (to 59%)

simcoe.ca Storyboard 5







REDUCTION AND RE-USE **OPTIONS**

OPTION

Food Waste Reduction

(encourage less food waste)

- Currently developing key messages with other municipalities for food waste reduction
- 2015 waste audit indicates that residents throw away 1.8 kg (3.9 lbs) per week of edible food waste, 11,600 tonnes (12,760 tons) annually

TIMELINE

County would continue with this initiative

POTENTIAL RANGE IN COST

\$5 to \$6 per household annually for all options combined

POTENTIAL IMPACT IN DIVERSION

Low: 1 to 2% increase in overall diversion rate (to 60%) for all options combined

OPTION

. .

Disposal Bans and Diversion Bylaws

(ban materials from landfill and/or require mandatory participation in diversion)

- Council deferred the mandatory diversion bylaw until the Solid Waste Management Strategy Update
- Tipping fee for mixed waste is double the regular rate (\$310/tonne) to encourage diversion
- The extent of bans and/or bylaws will depend on other elements of the Waste Management Strategy Update

TIMELINE

Within the next five years

POTENTIAL RANGE IN COST

\$5 to \$6 per household annually for all options combined

POTENTIAL IMPACT IN DIVERSION

Low: 1 to 2% increase in overall diversion rate (to 60%) for all options combined









REDUCTION AND RE-USE **OPTIONS**

OPTION

Textile Collection

(expand options to collect more materials)

- County residents dispose of approximately 1,300 tonnes of textiles every year
- Potential to expand diversion with community partners

TIMELINE

County would continue with this initiative

POTENTIAL RANGE IN COST

\$5 to \$6 per household annually for all options combined

POTENTIAL IMPACT IN DIVERSION

Low: 1 to 2% increase in overall diversion rate (to 60%) for all options combined

OPTION

Advocacy

(promote ideas such as producer responsibility)

 County Council and staff currently advocate on matters such as Extended Producer Responsibility (EPR)

TIMELINE

County would continue with this initiative

POTENTIAL RANGE IN COST

\$5 to \$6 per household annually for all options combined

POTENTIAL IMPACT IN DIVERSION

Low: 1 to 2% increase in overall diversion rate (to 60%) for all options combined

OPTION

Rewards Program

(recognize residents' diversion performance)

- Review successful 'rewards' approaches (e.g. City of Hamilton 'Gold Box' program)
- Develop methods to identify tangible recognition

TIMELINE

Within the next two years

POTENTIAL RANGE IN COST

\$5 to \$6 per household annually for all options combined

POTENTIAL IMPACT IN DIVERSION

Low: 1 to 2% increase in overall diversion rate (to 60%) for all options combined







NEXT STEPS

- Please complete feedback form at simcoe.ca/wastestrategy by June 1, 2016
- Your feedback will be reviewed and considered in preparation for the final Strategy Update report
- The final report will be presented to County Council for consideration of the various options during summer 2016











Feedback Form



We want your feedback

STRATEGY UPDATE PUBLIC CONSULTATION

May 2016

Simcoe County - Solid Waste Management 5-Year Strategy Update

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options provided on the following pages which are being presented for public consultation.

Please indicate which of the options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Garbage Collection Service

These options focus on changes to how garbage would be collected in order to motivate waste reduction and diversion.

YES 🗖	NO 🗖	Pay-As-You-Throw Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.
YES 🗖	№ □	Bi-weekly garbage collection Garbage would only be collected every two weeks, recycling and organics would continue weekly.
YES 🗖	NO 🗆	Standard-sized garbage container The County would provide everyone with a standard garbage container so that everyone uses the same size of container.
Comment	S:	



We want your feedback

STRATEGY UPDATE PUBLIC CONSULTATION

May 2016

Curbside and Facilities Diversion Programs

These options focus on ways to improve the diversion of materials at the curb or at the County's waste management facilities.

YES 🗖	№ □	Expand Green Bin collection to include pet waste
YES 🗖	NO 🗖	Expand Green Bin collection to include diapers and sanitary products
YES 🗖	NO 🗖	Expand yard waste collection Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.
YES 🗖	NO 🗖	Examine the services at County waste facilities Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.
YES 🗖	NO 🗖	Expand waste facilities diversion programs Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.
Comments:		



We want your feedback

STRATEGY UPDATE PUBLIC CONSULTATION

May 2016

Reduction and Re-use

These options continue and expand on the County's efforts to reduce and reuse materials so that they don't enter the waste stream.

YES 🗖	NO 🗖	Food Waste Reduction Continue and expand efforts to promote wasting less food.
YES 🗖	NO 🗖	Implement disposal and diversion by-laws Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.
YES 🗖	NO 🗖	Textile Collection Increase options to capture reusable clothing and rags for recycling.
YES 🗖	NO 🗖	Advocacy Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.
YES 🗖	№ □	Rewards Program Research and implement approaches to recognize resident's diversion performance.
Comments	3:	



Address:



We want your feedback

STRATEGY UPDATE PUBLIC CONSULTATION

May 2016

Do you have any other comments on the 5-year Strategy Update?
Notice of Collection, Use and Disclosure Personal information is being collected pursuant to Section 28 of the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA), and Section 11(3)(3) of the Municipal Act, and will be used for the purposes of garnering public input into the County's Solid Waste Management Strategy Update. Your comments and personal information provided will form part of the Strategy record and may be included in reports, in whole or in part, to County Council and/or other published documents.
Should you have questions regarding this, please contact the Strategy Project Coordinator at 705-726-9300.
Contact Information
Name:

Thank you for your feedback!

Submit a hardcopy today or by mail to:

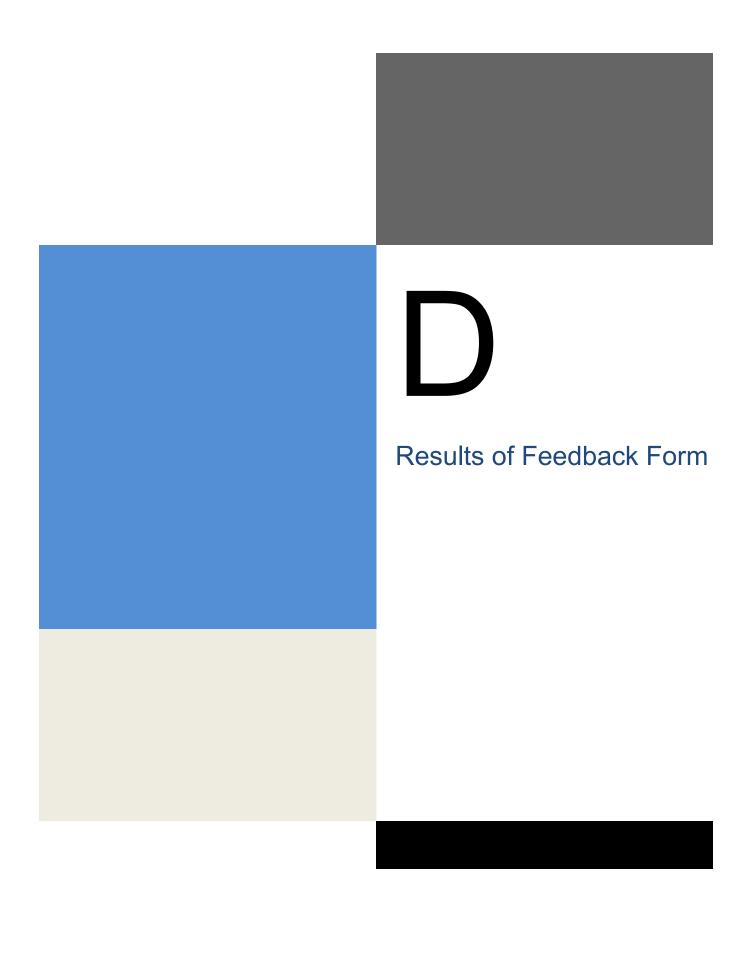
Solid Waste Management Strategy

County of Simcoe 1110 Highway 26 Midhurst, Ontario LOK 1X0



Responses must be received by June 1, 2016.

Accessible formats or communication supports are available upon request.



		Garbag	e Collection	Service	Curbside and Facilities Diversion Programs					Reduction and Re-use					<u>_</u>
Reference Number	Date Received	Pay-as-you-throw	Bi-weekly Collection	Standard-Sized Garbage Container	Green bin including pet waste	Green bin including diapers and sanitary products	Expand yard waste collection	Examine services at County facilities	Expand diversion programs	Food waste reduction	Implement disposal & diversion by-laws	Textile collection	Advocacy	Rewards program	Additional Comments
Public Feedback 01	12/04/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	If pay as you throw is implemented, believes 'waste collection costs' lines in County budget should be set to 0, and taxes should be lowered
Public Feedback 02	12/04/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	If user fees are implemented, there will be a rise in illegal dumping.
Public Feedback 03	12/04/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Wants County to lobby for 5 cent a can service on aluminum cans sold. Hopes there will be recycle conveyer belt in "one site solution"
Public Feedback 04	15/04/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Concerned nothing new is being proposed that other municipalities haven't already done.
Public Feedback 05	21/04/2016	No	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Believes the tag program is unecessary, one free bag or medium-sized receptacle system should be kept. Bi-weekly collection should be implemented.
Public Feedback 06	21/04/2016	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Does not agree with paying for garbage tags.
Public Feedback 07	30/04/2016	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Weekly collection is needed, does not agree with pay as you go.
Public Feedback 08	02/05/2016	No	No	Yes	No	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Plastic bags should be collected and batteries should be collected more often
Public Feedback 09	03/05/2016	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Concerned with pay as you throw and how it would refelct back on taxes, agrees with diversion expansion, rewards program is a good incentive.
Public Feedback 10	03/05/2016	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Public Feedback 11	03/05/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Unsure about what standard bins would entail, wants County to consider twice a year battery pickup.
Public Feedback 12	03/05/2016	N/A	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Weekly collection system adequate, bi-weekly possible but could cause problems during summer months.
Public Feedback 13	03/05/2016	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	N/A
Public Feedback 14	04/05/2016	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No	Standard-containers would be a waste of existing units.
Public Feedback 15	04/05/2016	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Thinks there should be a diversion strategy for diapers
Public Feedback 16	04/05/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Provision of standard-sized containers needs to take into account the different residential footprints that get created, and the acceptance of textiles into the diversion stream needs greater clarity.
Public Feedback 17	05/05/2016	No	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	Standard-sized bin is a good option.
Public Feedback 18	06/05/2016	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Apartments, condos, and multiunit residences should be included in green bin program and collection.
Public Feedback 19	07/05/2016	N/A	No	No	N/A	N/A	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Against both bi-weekly collection and standard-sized bins, thinks there shouldn't be leaf and yard waste pickup.
Public Feedback 20	08/05/2016	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	Not sure how effective disposal and diversion by-laws would be or how they'd be enforced. Standard-sized container is a possibility - if so a one time collection service of old containers would be helpful.
Public Feedback 21	08/05/2016	Yes	No	No	Yes	Yes	No	Yes	Yes	No	No	No	Yes	No	Does not want an increase in costs with regards to garbage tags, undecided about how effective bi-weekly collection would be, unsure about the usefulness of standard container.
Public Feedback 22	09/05/2016	No	No	Yes	No	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Wants to keep weekly garbage collection, doesn't think bi-weekly would work.
Public Feedback 23	12/05/2016	N/A	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Is concerned with odour that would occur in summer months from bi-weekly collection.
Public Feedback 24	13/05/2016	No	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes	Yes	N/A
Public Feedback 25	15/05/2016	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Believes bi-weekly collection would make more people use green bin, increased yard waste collection in smaller towns would be beneficial. Recycle styrofoam. Rewards program unnecessary.
Public Feedback 26	16/05/2016	No	No	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	Addition of diapers to green bin is greatly needed, bi-weekly collection would not be beneficial.
Public Feedback 27	16/05/2016	No	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	N/A
Public Feedback 28	17/05/2016	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Pay-as-you-throw is the preferred method if it can be done without excess costs, bi-weekly collection could become a nuissance if pick-up is missed, wants yard pick-up to be expanded.
Public Feedback 29	19/05/2016	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Public Feedback 30	25/05/2016	No	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No yard waste pickup over summer is an issue - even one collection/month would be beneficial.
Public Feedback 31	26/05/2016	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Pay as you go would be expensive for the average homeowner.
Public Feedback 32	29/05/2016	No	No	No	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	No	Expand diversion program if there is no cost increase, do not separate waste disposal costs from property taxes.
Public Feedback 33	30/05/2016	No	No	No	Yes	Yes	No	Yes	Yes	No	No	Yes	No	No	Current collection system is fine, adding pet waste and diapers to green bin is good, don't increase yard waste collection.
Public Feedback 34	31/05/2016	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Tags would be seen as inconvenience, bi-weekly collection would be effective, small standard containers might discourage filling larger ones, expand yard waste during summer months, enforcement of bylaws would be difficult.
Total YES Responses		5	8	14	18	15	9	20	21	16	10	19	16	11	
Total NO Responses		20	17	8	3	6	13	1	0	5	11	2	5	10	

Sent: Tuesday, April 12, 2016 10:06 AM

To: Customer Service < Customer Service @ simcoe.ca >

Subject: Waste Management Strategy

I see in the March 2016 issue of "Managing Your Waste," that one option under consideration is 'pay-as-you-throw.'

All well and good, but if you do move in this direction, note that any 'waste collection costs' lines in the County budget should be set to zero, and property taxes should reflect this change by being lowered!

If you're expecting collection to be paid for via a user's fee, the taxpayer should not also bear this burden. That is essentially 'double taxation' and 'double dipping.'

Tay township

Sent: Tuesday, April 12, 2016 10:18 AM

To: Customer Service < Customer Service. Service@simcoe.ca>

Subject: Re: Waste Management Strategy

A further consideration should also be that if 'user fees' are implemented, there will most likely be a rise in the number of 'unofficial' dump sites in the county. By that I mean unregulated, uncontrolled ad hoc garbage piles which would include toxic materials, buried haphazardly deep in the woods somewhere. This would be a definite step backwards in environmental conservation, and in the protection of ground waters. It would thus be a most highly UNrecommended change to waste management.

On 16-04-12 10:06 AM, jjwaub wrote:

- > I see in the March 2016 issue of "Managing Your Waste," that one
- > option under consideration is 'pay-as-you-throw.'

>

- > All well and good, but if you do move in this direction, note that any
- > 'waste collection costs' lines in the County budget should be set to
- > zero, and property taxes should reflect this change by being lowered!

>

- > If you're expecting collection to be paid for via a user's fee, the
- > taxpayer should not also bear this burden. That is essentially 'double
- > taxation' and 'double dipping.'

> >■

> Tay township

Sent: Tuesday, April 12, 2016 8:10 PM

To: Customer Service < Customer Service. Service@simcoe.ca>

Subject: Re: Reuse/recycle

Dear reader: Three Points.

As a resident of Simcoe county I hope the county is lobbying the province of Ontario to impose a 5 cent a can service fee on every aluminum can sold in Ontario. I also hope that in this newly proposed "One site solution" you set up a recycle conveyor belt to take advantage of present alcoholic beverage containers in recycle boxes. The resulting count published per week/month and or year, thus educating our school students and home owners. The resulting funds contributing to employment.

Lastly: I hope you are not selling glass containers to be melted and turned into glass. That process has proven to environmentally unsound, producing more emissions than new glass. Under what I believe is the current system smelted glass is better buried than smelted. Please acknowledge receipt of this email.

Thank You

Every great pearl starts as a annoying grain of sand in the mouth of a clam.

Survey Response: We Want to Hear From You Response GUID: 757df250-4465-4228-b0e2-

160b1583d11c

Started: 4/15/2016 10:12:42 AM Completed: 4/15/2016 10:55:00 AM

Name:

Email:

Comments:

Re. Waste Management Strategy

You aren't proposing anything new that the other municipalities haven't already proposed/implemented ...your just following all the other monkeys! This is typical narrow-sighted thinking in this society today; make the consumer/taxpayer pay so that the corporations don't have to!

Instead of driving up the taxpayer's costs as usual, why aren't you getting together with other municipalities and lobbying Queens Park to stop allowing plastic packaging and other similar waste in this province?

Why do we pay a deposit on wine bottles for heaven's sake when a lot more milk, water, etc is consumed in this province. Nor do we need plastic bags when we can us paper; aren't we closing pulp mills in this province?

When are we going to stop all this nonsensical thinking that everything should be dumped on the consumer?

Survey Response: We Want to Hear From You Response GUID: a6b1d350-ad06-4aed-befb-

3589865176f2

Started: 4/21/2016 4:05:55 PM Completed: 4/21/2016 4:17:08 PM

Name:

Email:

Comments:

Having received your March 2016 flyer concerning waste management I wanted to offer my opinion on a couple of items. My wife and I are seasonal residents in Simcoe County. First of all the county appears to be doing a good job when compared to other municipalities but understandably there is still room for improvement. We understand the tag program but have never had a need to purchase tags. We believe the system allowing for one free bag or medium sized garbage receptacle should be maintained. After all everyone pays for garbage disposal in their taxes already and the county should be expected to provide a basic service. Biweekly waste collection should be considered but weekly green bin collection should be maintained. Weekly recyclable pickup should also be maintained. Not sure if it is possible but the inclusion of items such as beer bottles and liquor bottles should not be included in the blue box collection. These items should be returned to the source for a refund. The addition of some yard waste collection should be considered for the summer months even if it is just once a month. At this time we store yard waste until it is collected in the fall but would prefer not to do that. Thanks for allowing citizens to provide input.

Survey Response: We Want to Hear From You Response GUID: 0a4e50ab-f0a5-4c60-a766-3c713a29eaf2

Started: 4/21/2016 8:38:51 PM Completed: 4/21/2016 8:44:35 PM

Name:

Email:

Comments:

http://www.therecord.com/news-story/5728606-waterloo-s-eco-failure-green-bins-not-well-used/ Check out the problems Waterloo region has after years of Green bin use.

I don't use the green bin at all. I have two composters, live in the country and use our waste for the garden (50X50 approx.). The blue bin we have a large one we put out twice a month as it takes a while to fill it . . . I recommend Simcoe county do that.

I do not agree with paying for garbage tags - it cost money to go by the things, gas to get there and what are we paying taxes for (charge a few dollars more if necessary). If you charge for tags, you find more dumpsters full that weren't, more public garbage cans and park cans overflowing. The people that empty those are not as cheap as picking up garbage on a regular basis.

Survey Response

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: 071936b2-79b9-4eca-b422-fb1ae0f7dcd9

Started: 4/30/2016 11:40:05 PM Completed: 4/30/2016 11:43:11 PM

Name



Collingwood

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

NO

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

YES

Comments:

Most deffently need garbage going every week don't agree with paying as u go

Expand Green Bin collection to include pet waste

YES

Expand Green Bin collection to include diapers and sanitary products YES

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

YES

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

YES

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

YES

Textile Collection – Increase options to capture reusable clothing and rags for recycling. YES

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

YES

Rewards Program – Research and implement approaches to recognize resident's diversion performance. YES

Survey Response

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: 53ed24bd-f4aa-44d0-bac1-76066ba1182a

Started: 5/2/2016 7:12:43 PM Completed: 5/2/2016 7:19:21 PM

Name

Address

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

NO

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

YES

Comments:

Collect plast bags as well

collect batteries more often

Start a tool/toy sharing library in Simcoe to save every household to have to buy these things individually only to be thrown out when broken/used.

Expand Green Bin collection to include pet waste NO

Expand Green Bin collection to include diapers and sanitary products

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

NO

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Comments:

Teach residents how to composte, reuse. Teach residents how to make their own natural household cleaners instead of using chemical cleaners.

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

YES

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

NO

Textile Collection – Increase options to capture reusable clothing and rags for recycling. YES

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

NO

Rewards Program – Research and implement approaches to recognize resident's diversion performance. YES

Survey Response

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: de631ff1-3691-48e4-ae78-f4f3d6207df0

Started: 5/3/2016 6:17:16 AM Completed: 5/3/2016 6:36:54 AM

Name

Address

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

YES

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

NO

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

YES

Comments:

My only concern is the Pay as you throw. This would be my option as I am a single household and do not create even a white kitchen bag of garbage per week. But in actuality how would they reflect taxes? Will they automatically give you a tax deduction on your tax bill? If so would it reflect the purchase price of at least 1 tag per week? Pay as you throw would really not change they way things are done now other than everyone purchasing garbage tags. Great idea if they can get the quirks out. I would like to hear more on this.

Expand Green Bin collection to include pet waste

YES

Expand Green Bin collection to include diapers and sanitary products YES

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

NO

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Comments:

I totally agree with expanding the waste facility diversion programs. There is so much horrible stuff going into our landfill that could be recycled like styrofoam, plastic bags etc. If they expand green bin collection and recycling products, most households should hardly have any waste. I so understand not all people agree with the green bin or recycling but for the most part everyone is due diligent.

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

YES

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

YES

Textile Collection – Increase options to capture reusable clothing and rags for recycling. YES

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

YES

Rewards Program – Research and implement approaches to recognize resident's diversion performance. YFS

Comments:

A rewards program is wonderful incentive for people to participate in their waste management. I think a perfect reward would be to have a percentage discount on your property taxes at the end of the year for participating in keeping waste down.

Do you have any other comments on the 5-year Strategy Update?

I think it is a step in the right direction. Do I think it could work absolutely! I do think this needs to be brainstormed from all ends and carefully managed. As I mentioned I am a single household and my property taxes are ridiculous for the services I use, size of home and lot etc. I have no children and never will have but insanely I pay for the schoolboard etc. So a tax incentive is perfect.

Survey Response

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: 5bef7dff-6528-463d-9fc6-22850a0ecdd6

Started: 5/3/2016 9:19:39 AM Completed: 5/3/2016 10:01:31 AM

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

NO

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

YES

Expand Green Bin collection to include pet waste

YES

Expand Green Bin collection to include diapers and sanitary products

YES

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

YFS

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Food Waste Reduction – Continue and expand efforts to promote wasting less food. YES

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

YES

Textile Collection – Increase options to capture reusable clothing and rags for recycling.

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

YES

Rewards Program – Research and implement approaches to recognize resident's diversion performance. YES

Do you have any other comments on the 5-year Strategy Update? no

Survey Response: We Want to Hear From You Response GUID: 96963c85-8c20-413f-90b4-c6e1e04fc018

Started: 5/3/2016 3:13:06 PM Completed: 5/3/2016 3:21:23 PM

Name:



Comments:

I have some follow up questions from todays consultation.

Standard Garage container: does that mean you can put many bags in the container?

On the examine facilities: suggestion for drop off location from plastic bags, styrofoam etc., where would they be located?

Other suggestion:

What about twice a year battery pickup? drop off for rags (Goodwill did this), might be worth looking into.

I find it confusing regarding the diversion at the waste site. Do you remove the items before you weigh that are to be diverted or weigh and then take them to diversion places. That when you have mixed waste.

I think you'r doing a good job in managing waste.

 $missing_fields_redirect: \ \ \, \underline{ http://www.vvcnetwork.ca/simcoe/wastestrategy/textbox 02.html} \\$

subject: ***Webcast Questions

print_blank_fields: 1

required: name_organization,email,

comments: Please enter your question here. For technical assistance please click the help

button on your webcast page

I believe that our current garbage collection service is adequate with one collection / week paid by our residential taxes but I could see us following some other communities as I had in Newmarket/Aurora with a Bi-weekly pickup of one bag / week , no-charge . The only drawback is that in the summer the matter in the green bins decompose more quickly and start to smell . Many people started to move these bins from the garage to outside thus inviting critters for a feast. You may have to look closely at the green bins now being used in Toronto to

keep Racoons at bay.

name_organization:

email:

action: Submit

This form was submitted at 07:00 PM UTC - 03 May 2016.

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: 7d651487-58e2-4461-ac8c-80034b766e14

Started: 5/3/2016 6:43:47 PM Completed: 5/3/2016 6:46:34 PM

Name

Address

Severn twp.

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

NO

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

YES

Expand Green Bin collection to include pet waste

YES

Expand Green Bin collection to include diapers and sanitary products YES

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

YES

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

NO

Textile Collection – Increase options to capture reusable clothing and rags for recycling.

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

YES

Rewards Program – Research and implement approaches to recognize resident's diversion performance. YES

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: b66e1463-3d4d-4d11-9cf0-0f57aa800d73

Started: 5/4/2016 7:47:57 AM Completed: 5/4/2016 7:54:18 AM

Name



Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

YES

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

NO

Comments:

3 would be a total waste of existing units.

Expand Green Bin collection to include pet waste

Expand Green Bin collection to include diapers and sanitary products YES

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

NO

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Comments:

#4 I would have expected that to be on going.

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

YES

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

YES

Textile Collection – Increase options to capture reusable clothing and rags for recycling.

YES

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

NO

Rewards Program – Research and implement approaches to recognize resident's diversion performance. NO

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: 0e6d990f-da38-434e-9d22-6d5b6f7a7482

Started: 5/4/2016 10:52:37 AM Completed: 5/4/2016 10:59:22 AM

Name

Address

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

YES

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

YES

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

YES

Expand Green Bin collection to include pet waste

YES

Expand Green Bin collection to include diapers and sanitary products NO

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

 $\label{prop:cond} \textbf{Food Waste Reduction-Continue and expand efforts to promote wasting less food.}$

YES

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

YES

Textile Collection – Increase options to capture reusable clothing and rags for recycling. YES

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

YES

Rewards Program – Research and implement approaches to recognize resident's diversion performance. YES

Do you have any other comments on the 5-year Strategy Update?

I was in attendance at the meeting and suggested the diversion strategy suggestion for diapers. The County should consider immediately implementing an education program for the community on the use of cloth diapers. The industry has changed significantly in the past few years and many people are unaware of the options that are very viable and both affordable and convenient. I am part of the Cloth Coalition - a new group based out of Barrie. We represent a variety of business owners and concerned community members with an aligned goal of reducing our disposable diaper usage and thus creating less garbage. I feel the County would greatly benefit from some interaction with our group even to become more aware of the options available to people. We would be more than happy to meet to discuss some strategic education programs that would be easy to implement and get to the masses. Thanks for your consideration.

Survey Response: We Want to Hear From You Response GUID: e70ea9b0-9fed-45b9-a6cf-f3592f9d292c

Started: 5/4/2016 3:58:38 PM Completed: 5/4/2016 4:12:32 PM

Name:

Email:

Comments:

Thank you for your public information sessions on this topics. Two points:

- 1. Any consideration of providing 'standard-sized containers' needs to take into account the wide range of residential footprints and the ability of residents to handle and store the containers. Many residents have small lots, no garages, may be elderly etc. My comment is based on the experience of Toronto which uses a machine-based collection system with standard-sized containers. Even the smallest container offered is quite large, resulting in many residents unable to store them inside, leaving them unsightly and prone to animal intrusion.
- 2. Any consideration of expanding the acceptance of 'textiles' in a diversion stream needs greater clarity. The County currently only accepts useable clothing which is collected on behalf of a partner agency. Not only is there likely a gap in perception of what is 'useable clothing', use of the term "textiles" seems to connotes a wide range of fabric products, such as clothing, draperies, etc. that could be re-processed into other products rather than simply re-used in their current state.

Page Score: 0

Survey Response: SWM 5-Year Strategy

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County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: a19833e8-0ec6-4179-809f-422c14d1a71f

Started: 5/5/2016 7:36:20 AM Completed: 5/5/2016 7:40:20 AM

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

NO

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

YES

Expand Green Bin collection to include pet waste

YES

Expand Green Bin collection to include diapers and sanitary products

YES

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

NO

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

YES

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

NO

Textile Collection – Increase options to capture reusable clothing and rags for recycling.

YES

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

YES

Rewards Program – Research and implement approaches to recognize resident's diversion performance. NO

Do you have any other comments on the 5-year Strategy Update?

I like the idea of the standard bins, many communities use them some (Caledon) offers different sizes for different prices on the taxes.

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: 282b9e63-06d3-4fe3-8882-b80c03898a7f

Started: 5/6/2016 9:34:01 AM Completed: 5/6/2016 9:39:04 AM

Name

Address

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

YES

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

YES

Expand Green Bin collection to include pet waste

NO

Expand Green Bin collection to include diapers and sanitary products NO

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

YES

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

YES

Textile Collection – Increase options to capture reusable clothing and rags for recycling.

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

YES

Rewards Program – Research and implement approaches to recognize resident's diversion performance. NO

Comments:

Include Apatments, condos and multiunit residences in recycling and green bin use.

Survey Response: We Want to Hear From You Response GUID: 9b6b6704-4b66-4a5a-a1fe-9f092f88c687

Started: 5/7/2016 8:47:02 PM Completed: 5/7/2016 9:27:03 PM

Name:

Email:

Comments:

First of all, I don't understand why we have a politically driven and motived garbage "crisis" in Simcoe County or Ontario for that matter. I have travelled throughout USA and own property in a populated state and there is no garbage crisis to be found there. Residential garbage pick up is twice per week in the southern hot state, recycling once, and yard waste on a different day weekly. Garbage there is affordable and no one has to worry over it. It's a shame politicians in Simcoe County and Ontario have turned it into a "perceived crisis". There is no real crisis, other than the fact Site 41 was a non starter from the beginning. Search for new sites that are sound from the start, not on top of pristine aquifers and close to the lake.... like duh....is Homer Simpson running the waste management decisions at Simcoe County?

Biweekly garbage collection? Hello...is anyone awake at the county offices? No one wants that and it is not realistic. For heavens sake, as a taxpayer and life long resident of Oro and the county, leave me the opportunity to have one measly bag of garbage picked up each and every week. Unless you simply want to continue turning our township concessions and lines into roadside landfills as they have become, continue with weekly collection of an absolute bare minimum of one bag per week. Further, that bag should be included in my property taxes, not surcharged on top of the garbage fees already collected in the taxes. I deeply resent the fact I have lived here all my life and may only be able to put out one bag of garbage every two weeks for the four people living in the home.

Standard garbage container? Hello... we don't need more costs and more bins. Leave the system the way it is. If I put out a tied black bag of garbage, I know how to make sure it is not oversize or overweight. Don't change that system. If it's overweight or oversized, the driver is to reject it and probably does. Don't change the system....we don't need more rules, red tape and more costs for well, garbage. It's already grossly over priced and exaggerated when it does not need to be.

If you wanted to do something useful, make residents leave leaf and yard waste on their own property. I leave mine on my own residential lot and compost leaves and branches myself. Why should taxpayers pay to pick up harmless materials like this in a rural area? This material rots, we know that. It's beyond me why pick up of this material is paid by taxpayers. Dumbest expense in the whole process! If people insist upon removing it from their property, let them move it to a compost area at a landfill or transfer station themselves, and leave it there free since it is harmless and breaks down.

In closing, I firmly believe the politicians in Simcoe county that oversee the waste management system should take an IQ test first to determine if they are capable of making the correct decisions. They need to understand they are elected by the people to serve the people. That should mean they do want the people want, not what they feel is "right" for the general good of the people. I don't care if they take the approach of being "masters of their own house". Rather noble or rather misguided? I find that approach remarkably similar and distasteful to the approach by the red Liberals in Ontario and now leading the government of Canada. They want to punish Ontario and Canadian residents with a new

carbon tax. All the while USA next door marches on business as usual and in China, they put masks on the statues. And people think these ridiculous policies on garbage in Simcoe County, Ontario and Canada are fair? Be thankful we don't get all the government we pay for.

Page Score: 0

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: 195cefb4-acc0-435c-a8c5-cea3da2232b5

Started: 5/8/2016 1:01:42 PM Completed: 5/8/2016 1:10:31 PM

Name

Address

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

YES

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

YES

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

YES

Comments:

If the County was to decide to move to a standard-sized container, perhaps it could consider a limited-time curbside collection of plastic and metal containers (I don't know if retail plastic containers are made from recyclable material)since many of us will be left with large containers we no longer have a use for.

Expand Green Bin collection to include pet waste YES

Expand Green Bin collection to include diapers and sanitary products

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

NO

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

YES

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

NO

Textile Collection – Increase options to capture reusable clothing and rags for recycling.

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

YES

Rewards Program – Research and implement approaches to recognize resident's diversion performance. NO

Comments:

By-Laws: While it sounds good in theory, I'm not sure how effective and enforceable by-laws related to mandatory diversion would be. I'm not sure what "bans on disposal of certain items" means. There are already guidelines on acceptable material for curb-side or facility disposal that are enforced by County staff and/or contractors.

Textiles: I have made previous comments regarding textile collection.

Survey Response: SWM 5-Year Strategy

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County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: c1cb8dfd-5f5a-476b-aca2-e6b49a60e5a9

Started: 5/8/2016 5:25:08 AM Completed: 5/8/2016 6:29:28 PM

Name

Address

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

YES

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

NO

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

NO

Comments:

- -As long as the cost of the tags be the same as now with 1 bag/week. I am opposed to any increase in costs.
- -bi-weekly would encourage wild life and smell but in the winter months that could be an option.
- -What would a standardized container do? We already have a weight allowance.

Expand Green Bin collection to include pet waste

Expand Green Bin collection to include diapers and sanitary products VFS

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

NO

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Comments:

- I am opposed to any increase as I feel that we do not get many services for our tax dollar in Innisfil - just garbage and snow plowing -I feel any increase will open the door for more increases

Food Waste Reduction – Continue and expand efforts to promote wasting less food. NO

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

NO

Textile Collection – Increase options to capture reusable clothing and rags for recycling.

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

YES

Rewards Program – Research and implement approaches to recognize resident's diversion performance. NO

Comments:

- -food waste reduction? I don't see how you can do this. This is just job creation.
- -by-laws will create more garbage dumping. In this day and age I am surprised at the amount of garbage in our community. By-laws would need more personnel to over see. Therefore increased costs.
- -we keeping getting phone calls from organizations for textiles. ie Diabetis. People should already be aware.
- -rewards? If people are not in that head space, I don't think rewards will be effective.

Do you have any other comments on the 5-year Strategy Update?

Last year I have inquired why there is no recycling in Innisfil beach park. The response was that it is too expensive. This year, council and Jason Inwood (parks) will 'look into it'. If our council is not proactive, why would the residents be?

The amount of garbage created by tourists in the park is huge!!!!! We spend too much money getting rid of tourists's garbage! They are disrespectful by throwing garbage all over the park when we have ampul containers. Please look into this aspect of garbage. I would like to see how much garbage they actual create and the cost to the town of Innisfil to dispose of it.

Survey Response: SWM 5-Year Strategy

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County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: 62afcd3c-9d8f-4e11-9faa-e6402f3d6426

Started: 5/9/2016 5:35:32 PM Completed: 5/9/2016 5:44:04 PM

Name

Address

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

NO

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

YES

Comments:

I really don't think bi-weekly garbage collection is going to work. I see far too much illegal dumping these days and it is getting worse. Driving along 5/6 side road in Oro yesterday is disgusting due to the garbage piles, about 8 or 9. This does not include garbage in Concession 1 which is clearly visible from the side road. Please let us keep our weekly garbage pick up.

Also, why can't we re-cycle styrofoam or film material like wrapping?

Expand Green Bin collection to include pet waste

NO

Expand Green Bin collection to include diapers and sanitary products NO

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

NO

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

YES

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

NO

Textile Collection – Increase options to capture reusable clothing and rags for recycling. YES

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

NO

Rewards Program – Research and implement approaches to recognize resident's diversion performance. YES

Do you have any other comments on the 5-year Strategy Update? Please keep weekly garbage pick up!

Survey Response: We Want to Hear From You Response GUID: 559c770e-f364-45d8-ac70-

c190d5638773

Started: 5/12/2016 11:06:39 PM Completed: 5/12/2016 11:22:23 PM

Name:

Email:

Comments:

It looks like we are in a 3th country, I am original from a European country where the garbage is picked every day, now with the summer coming I guess nobody likes the smell of a two weeks garbage in a garage or outside the door of the kitchen... but who am I, I am not seating behind a desk and I don't live where my garbage can go down a shoot of a building.

I sad my peace

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: 94598cc1-ac64-4db4-9fbc-1b1dfb97ce05

Started: 5/13/2016 12:44:13 PM Completed: 5/13/2016 12:47:24 PM

Name

Address

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

NO

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

YES

Expand Green Bin collection to include pet waste

YES

Expand Green Bin collection to include diapers and sanitary products YES

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

NO

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

YES

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

NO

Textile Collection – Increase options to capture reusable clothing and rags for recycling.

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

YES

Rewards Program – Research and implement approaches to recognize resident's diversion performance. YES



We want your feedback

STRATEGY UPDATE PUBLIC CONSULTATION **May 2016**

Simcoe County - Solid Waste Management 5-Year Strategy Update

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update begon in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options provided on the following pages which are being presented for public consultation.

Please indicate which of the options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Garbage Collection Service

These options focus on changes to how garbage would be collected in order to motivate waste reduction and diversion.

YES 🗖	NO 🗵	Pay-As-You-Throw Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.						
YES 🗷	NO 🗆	Bi-weekly garbage collection Garbage would only be collected every two weeks, recycling and organics would continue weekly.						
YES 🗖	NO 🖾	Standard-sized garbage container The County would provide everyone with a standard garbage contoiner so that everyone uses the same size of container.						
Comments	3:							
BI-WKLY WOULD MAKE MORE PEOPLE USE GREEN BINS								
MORE AS WELL AS MORE RECYCLING. PLSO MAY								
THINK OF GROCERY PURCHASING PKGING.								



ио П

YES 🔽

We want your feedback

STRATEGY UPDATE PUBLIC CONSULTATION

May 2016

Curbside and Facilities Diversion Programs

These options focus on ways to improve the diversion of materials of the curb or at the County's waste monogement facilities.

Expand Green Bin collection to include pet waste

123	110 =						
YES 🗷	№ □	Expand Green Bin collection to include diapers and sanitary products					
YES 🛛	NO 🗆	Expand yard waste collection Provide some yard waste collection during the summer to oll residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed volue household.					
YES 🔀	NO 🗆	Examine the services at County waste facilities Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.					
YES 🗵	NO 🗆	Expand waste facilities diversion programs Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoom used to package appliances) and cooking oil.					
BENE !	WASTE NK O EIT F DUCH OFOAR	NCE A MONTH YARD WASTE WOULD BE OF OR SMALL TOWNS & URBAN AREAS. BE A GOOD PLAN TO RECYCLE IN (BARRIE DOES IT)-					



We want your feedback

STRATEGY UPDATE PUBLIC CONSULTATION

May 2016

Reduction and Re-use

These options continue and expand on the County's efforts to reduce and reuse materials so that they don't enter the woste stream.

YES 🔽	NO 🗆	Food Waste Reduction Continue and expand efforts to promote wasting less food.				
YES 🗖	NO 🛚	Implement disposal and diversion by-laws Could include mandatory participation in diversion programs for residents and businesses and/or bons on disposal af certain items.				
YES 🔀	NO 🗆	Textile Collection Increase options to capture reusoble clothing and rags for recycling.				
YES 🔼	NO 🗆	Advocacy Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.				
YES 🗆	NO 🗹	Rewards Program Research and implement approaches to recognize resident's diversion performance.				
Comments		ORDGRAM .				
		THE REWARD. IS TO RE-USE - RECYCLE				
AND	MAKI	THINGS BETTER FOR THE FUTURE				
GENE	RATIO	NS.				
WE	N GC	OT NEED "GOLD STARS" FOR SOMETHING				
WEA	ARE ,	ALREADY PROUD TO BE DOING. (MY				
		OPINION				
200 O	PRI	ESENTATION & ANSWER PERIODS GOOD,				
		MTGS. NEED MORE PEOPLE TO COME.				
_		SURE NEWSLETTERS ARE BEING PASSED ON				
		CANADA POST.				





We want your feedback

STRATEGY UPDATE PUBLIC CONSULTATION

May 2016

Do you have any other comments on the 5-year Strategy Update?

THE COUNTY NEEDS TO ENSURE THEIR PUBLICATIONS DE QUARTERLY REPORTS & CALENDARS. ARE BEING PROCESSED. BY CANADA POST. WE HAVEL NOT REID EITHER THIS YEAR, THIS IS WHY THERE ARE SO FEW PEOPLE AT YOUR MEETINGS.

PLEASE PUT ME &N A MAILING LIST FOR THE A BOVE.

PLEASE DO FOLLOW UPS WITH CANADA POST. TO SEE WHY

Notice of Collection, Use and Disclosure

Personal information is being collected pursuant to Section 28 of the Municipal Freedom of Information ond Protection of Privacy Act (MFIPPA), and Section 11(3)(3) of the Municipal Act, and will be used for the purposes of garnering public input into the County's Solid Waste Monagement Strategy Update. Your comments and personal information provided will form port of the Strotegy record and may be included in reports, in whole or in part, to County Council and/or other published documents.

Should you have questions regarding this, please contact the Strategy Project Coordinator at 705-726-9300.

Contact Information

Nome		
Address		

Thank you for your feedback!

Submit a hardcopy today or by moil to:

Solid Waste Management Strategy

County of Simcoe 1110 Highwoy 26 Midhurst, Ontario LOK 1X0



Responses must be received by June 1, 2016.

Accessible formats or communication supports are avoilable upon request.

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: e7e3cd54-5dd3-4bad-9b4c-b4070971ec94

Started: 5/16/2016 5:01:40 AM Completed: 5/16/2016 5:30:24 AM

Name

Address

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

NO

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

NO

Comments:

I am strongly opposed to implementing a standard sized garbage container. The reality of it is residents, particularly those in newer subdivisions, do not have the space to store these containers out-of-sight. The result is a giant eyesore on everybody's front porch. Not to mention that in the summer months that eyesore will be a fragrant one as well, especially if bi-weekly garbage collection is adopted. My concerns are rooted in experience. I grew up in Toronto and I have seen firsthand the problems that these containers create. Furthermore, I do not believe that these changes are being put forth in an effort to reduce waste, but rather it is an effort to reduce cost. I do not think that this cost savings is worth the negative effects of the proposed changes. I'm sure, for example, there would be significant cost savings if we made it the responsibility of each resident to deliver their waste to their transfer stations themselves. I, for one, do not mind paying for the luxury of weekly garbage collection.

Expand Green Bin collection to include pet waste

YES

Expand Green Bin collection to include diapers and sanitary products

YES

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

YES

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Comments:

The addition of diapers to the green bin program is greatly needed. As a parent of two children in diapers, I can attest that these diapers account for 80% of my garbage.

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

NO

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

NO

Textile Collection – Increase options to capture reusable clothing and rags for recycling.

NO

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

NO

Rewards Program – Research and implement approaches to recognize resident's diversion performance. NO

Do you have any other comments on the 5-year Strategy Update?

I would like to thank you for asking for my input and giving me a voice in these decisions.

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: 9fbbadc0-4fdb-4f01-8887-95740a19182a

Started: 5/16/2016 10:48:22 AM Completed: 5/16/2016 10:49:38 AM

Name



Address

oro-medonte

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

NO

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

YES

Expand Green Bin collection to include pet waste

YES

Expand Green Bin collection to include diapers and sanitary products NO

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

 $\label{prop:cond} \textbf{Food Waste Reduction-Continue and expand efforts to promote wasting less food.}$

YES

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

YES

Textile Collection – Increase options to capture reusable clothing and rags for recycling. YES

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

YES

Rewards Program – Research and implement approaches to recognize resident's diversion performance. NO

Survey Response: We Want to Hear From You Response GUID: cd246d2c-7857-4580-9e0b-

389f24716ac9

Started: 5/17/2016 7:08:23 PM Completed: 5/17/2016 7:14:15 PM

Name:

Email:

Comments:

The "Pay as you trough" is the preferred method if the collection and accounting can be done without excessive costs.

The only problem with the bi-weekly collection is the nuisance of having to go to 4 weeks if one misses one for some reason.

Recommend the yard pick up be expanded and the pick-up day be better defined to avoid the waste sitting out for 5 days.

Page Score: 0

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: 47978472-203c-4cac-a02a-3bbb54a607cc

Started: 5/19/2016 10:42:47 AM Completed: 5/19/2016 10:45:54 AM

Name

Address

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

NO

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

YES

Expand Green Bin collection to include pet waste

YES

Expand Green Bin collection to include diapers and sanitary products YES

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

YES

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

YES

Textile Collection – Increase options to capture reusable clothing and rags for recycling.

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

YES

Rewards Program – Research and implement approaches to recognize resident's diversion performance. YES

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: 8b334d90-8c99-42bd-8ecf-c5db92370287

Started: 5/25/2016 11:08:59 AM Completed: 5/25/2016 11:22:00 AM

Name

Address

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

YES

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

NO

Expand Green Bin collection to include pet waste

YES

Expand Green Bin collection to include diapers and sanitary products NO

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Comments:

No yard waste pick up over the summer is an issue. If there is too much for the back yard composer, the only choices are to send to landfill or store somewhere until fall. Even one pick-up a month would be great.

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

NO

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

YES

Textile Collection – Increase options to capture reusable clothing and rags for recycling. YES

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

YES

Rewards Program – Research and implement approaches to recognize resident's diversion performance. YES

Comments:

With the current cost of food, I don't understand how there can be so much food waste. I don't think increasing promotion efforts will make a difference.

Survey Response: We Want to Hear From You Response GUID: d94b65fd-6a9c-467a-9170-8df0df01ddc8

Started: 5/26/2016 9:07:01 AM Completed: 5/26/2016 9:14:21 AM

Name:

Email:

Comments:

Pay as you go is a expensive for the average homeowner. You will find more garbage along ditches. I drive the area daily, and see lots of garbage. You should have 1 or 2 days a year that homeowners can take their garbage to the dump. This would stop a lot of illegal dumping. We pay enough taxes, so I don't like seeing it, but I do get why people dump. This very other week like barrie is crazy as well. You can talk to anyone in barrie, and nobody likes it. Just create more jobs, if its a problem keeping up. I KNOW YOU HAVE ALREADY MADE UP YOUR MINDS, BUT ITS CRAZY. Start thinking of the homeowners needs, it would be beneficial. Another example, what are people supposed to do with plastic chairs when they crack, the garbage wont pick them up at our driveways. But they will pick them up at the side of the road somewhere, just something to keep in mind. Thanks chris Page Score: 0

Survey Response

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: f7ed7525-1ca0-4b04-a59f-0f922e37f0c5

Started: 5/29/2016 12:59:20 PM Completed: 5/29/2016 1:17:17 PM

Name

Address

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

NO

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

NO

Comments:

THE CURRENT SYSTEM OPERATES ADEQUATELY. MY GARAGE IS ALREADY CLUTTERED WITH COUNTY CONTAINERS. GREEN WASTE BINS ARE A PAIN. MY WIFE WILL NOT HAVE ONE IN HER KITCHEN. IS THERE A WASTE BAG THAT IS LARGER AND WILL NOT BREAKDOWN WITH HANDLING A LARGER GREEN BIN THAT WOULD HOLD MORE WOULD BE OK.

Expand Green Bin collection to include pet waste YES

Expand Green Bin collection to include diapers and sanitary products

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

NO

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Comments:

EXPAND DIVERSION PROGRAM IF NO COST INCREASE

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

NO

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

NO

Textile Collection – Increase options to capture reusable clothing and rags for recycling. YES

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

YES

Rewards Program – Research and implement approaches to recognize resident's diversion performance. NO

Do you have any other comments on the 5-year Strategy Update?

DO NOT SEPARATE WASTE DISPOSAL COSTS FROM PROPERTY TAXES, THE RESULT IS ALWAYS HIGHER COST TO HOME OWNERS. THE VARIOUS LEVELS OF GOVERNMENT ALREADY EXTRACT FAR TOO MUCH IN TAXES.

Survey Response

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: 6586fefa-250c-42a0-b21d-1aceda79c0e1

Started: 5/30/2016 10:23:05 AM Completed: 5/30/2016 10:27:06 AM

Name

Address

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

NO

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

NO

Comments:

The current system is fine

Expand Green Bin collection to include pet waste

YES

Expand Green Bin collection to include diapers and sanitary products YES

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

NO

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Comments:

I can see that adding pet waste and diapers would improve the green bin. We are rural and don't ever use yard waste collection so please don't add more collection that we have to pay for. The Midland Transfer Station is great.

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

NO

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

NO

Textile Collection – Increase options to capture reusable clothing and rags for recycling. YES

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

NO

Rewards Program – Research and implement approaches to recognize resident's diversion performance. NO

Survey Response

Survey Response: SWM 5-Year Strategy

The County's Solid Waste Management Strategy provides a framework for the County's collection, diversion and waste disposal programs. Updates were recommended to be completed at five year intervals. The first update began in 2015 and focuses on potential options that will form the basis for waste management operations over the next five years and assist the County in achieving its diversion objective of 71% by 2020.

County Council is considering the options listed below which are being presented for public consultation.

Please indicate which of the following options you feel the County should implement in the next five years by selecting YES or NO for each option presented.

Response GUID: fa590f3f-f95e-4995-bd52-586e1c23745e

Started: 5/31/2016 8:09:46 PM Completed: 5/31/2016 8:19:13 PM

N	la	m	e

Address

Oro-Medonte, Springwater - former directors (dissolved)

Pay-As-You-Throw – Garbage tags would be required to be purchased and affixed to all garbage set out for collection. Property taxes would decrease by an amount corresponding to the cost of garbage collection and disposal.

NO

Bi-weekly garbage collection – Garbage would only be collected every two weeks, recycling and organics would continue weekly.

YES

Standard-sized garbage container – The County would provide everyone with a standard garbage container so that everyone uses the same size of container.

YES

Comments:

Tags would be seen as a nuisance and inconvenience.

Bi-weekly collection has been proven very effective elsewhere.

Small, standard-sized containers might discourage filling larger ones.

Expand Green Bin collection to include pet waste

YES

Expand Green Bin collection to include diapers and sanitary products YES

Expand yard waste collection – Provide some yard waste collection during the summer to all residents. Property taxes would increase by between \$1.50 and \$6.00 annually for the average assessed value household.

YES

Examine the services at County waste facilities – Assess the services, customers, materials managed and determine if the locations, services and operating hours provide optimal service to customers.

YES

Expand waste facilities diversion programs – Add materials such as plastic bags, polystyrene cushion packaging (like the Styrofoam used to package appliances) and cooking oil.

YES

Comments:

Pet waste is included in green bins in Waterloo. Adding diapers and sanitary products to the green bin needs to be studied more carefully.

Expanded yard waste collection during summer months will increase available compost.

Many Plastics and Styrofoam should be phased out and eliminated from use.

Food Waste Reduction – Continue and expand efforts to promote wasting less food.

YES

Implement disposal and diversion by-laws – Could include mandatory participation in diversion programs for residents and businesses and/or bans on disposal of certain items.

YES

Textile Collection – Increase options to capture reusable clothing and rags for recycling.

YES

Advocacy – Staff and Council would continue to advocate on behalf of residents, on issues like producer responsibility.

YES

Rewards Program – Research and implement approaches to recognize resident's diversion performance. YES

Comments:

Enforcement of bylaws will be difficult but it sends the right message.

The options provided in this survey will only reach 70-80 % diversion at best. Political advocacy must be undertaken in a much broader and more extensive way if we are ever to approach Zero Waste. For too long, Ontario Municipalities have done a commendable job managing the waste generated by our consumer society. It is time for those who produce and consume valuable resources to take responsibility for eliminating waste. The best vehicle for doing so at this time is through the province's Waste-Free Ontario Act. The County should reach out to the MOECC at the political level to encourage them to hasten the passing of the Waste-Free Ontario Act and the implementation of Extended Producer Responsibility and the Circular Economy.

The County must publically support the principle of Extended Producer Responsibility. EPR will force producers to develop research that will make their products and packaging either compostable, reusable or recyclable. This will take the responsibility off the shoulders of municipal governments, save on resources and reduce costs.

Simcoe County should also lobby the province through the Association of Municipalities of Ontario to aggressively enact Extended Producer Responsibility, and let County residents know we are doing so. Simcoe County should take the lead to initiate a Joint Waste Management Strategy committee with Barrie and Orillia. We suggest a Waste Management Summit where 3 municipalities present their respective programs and explore how the 3 programs can cooperate/blend to reduce waste to landfill/incineration.

Start substituting the term RESOURCE for waste. We must reduce the amount of our resources being landfilled and incinerated to ZERO. We must create a CIRCULAR ECONOMY.

The most important number to track is the amount of waste going to landfill/incineration. If that number is going down then progress is being made.



Public Consultation Session Comments



Main Line (705) 726-9300 Toll Free (866) 893-9300 Fax (705) 727-4276 simcoe.ca



Solid Waste Management Strategy Update
Public Consultation Session
Comments from Public
May 3, 2016
2:00 p.m. – 4:00 p.m.

- **#1:** Concern about bi-weekly garbage collection in rural areas regarding participation and illegal dumping.
- **#2:** Commented on the cost of services that taxpayers pay for but may not use, like processing pet waste.
- **#3:** Comment on the difference between textiles and clothing diversion programs. Should emphasize broader textile diversion. Clothing diversion programs already exist, but only manage a fraction of the textile stream.



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Solid Waste Management Strategy Update
Public Consultation Session
Comments from Public
May 3, 2016
6:00 p.m. – 8:00 p.m.

- #1: Why would there still be a cost to the household if a full PAYT program is put in place?
- #2: Why couldn't biweekly garbage collection be implemented prior to 2020.
- **#3:** Would there be cost savings if the collection contract was looked at in advance of the expiration of the contract?
- **#4:** Comment regarding the dollar value of a percent increase in diversion compared to the cost per household.
- **#5:** What additional percent diversion that would be attributed to collection of pet waste in the Green Bin program?
- **#6:** Suggested there is an opportunity for the County to work with small business owners to educate residents/parents about cloth diaper services. The County could include viable business options on their website and businesses would work with the County to deliver education programs.
- **#7:** What other municipalities have successfully implemented biweekly garbage collection in rural vs urban areas? Did Green Bin usage increase? Was there an increase in illegal dumping?
- #8: What is the current cost per household for the current system?
- **#9:** If the County can't make a change to the collection contract before 2020, what can be done to increase Green Bin participation before then? Need a shake up to get people to start participating again.
- #10: Has there been any consideration of distributing liner bags (for Green Bins) for free?
- #11: Has there been any thought given to biweekly collection of garbage and Green Bins?
- **#12:** There used to be more promotion of home composting, but haven't heard anything more about it for a while. It is good in the rural areas. We have moved away from residents taking personal responsibility for organic waste.
- **#13:** Surprised to see low diversion rates with clear bags. Has restricting the size of clear garbage bags been considered?
- **#14:** Suggested textile collection once or twice a year. Sometimes there isn't enough to go to a transfer station or don't want to go to Goodwill etc.
- #15: Wanted to know staff opinion and status of Extended Producer Responsibility.

#16: If the County's population doubles, how would this increased waste be managed?			



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Solid Waste Management Strategy Update
Public Consultation Session
Comments from Public
May 17, 2016
2:00 p.m. – 4:00 p.m.

- **#1:** Felt there was a pretty good handle on what they are diverting, what is left in the garbage? There are some materials in the garbage that we cannot do anything with at the present time, those materials need to be looked at. Felt we need to use alternative materials that can be recycled, is that something the County is considering? Would like to see research done at universities and industries to change the materials used in products, understands that this is not a role that the County can make.
- **#2:** Resident is in the recycling & re-useable textile business, looking at technical memorandum #1, questioned if audits were done in the summer? Surprised how low the textiles were in the audit, noted that they say on average 11% of what is in the garbage is garments, 50% of which is re-useable, 20% of a woman's closet is never used and an average person will buy 65 new garments, 7 new pairs of shoes per year and that is 37.2 kg/person/year in Canada. The County is showing an average of 1,300 metric tonnes of textiles in the County whereas her own calculation it should be 18,600 metric tonnes in the County. Felt it is on the rise, not enough for charities to take it, felt in a society today we like convenience, a drop box is not enough, felt we should have curbside pick-up.
- **#4:** Property taxes are separate from the garbage tax felt that the property taxes would just go up (*with regards to the pay as you throw*). Felt that illegal dumping is increasing because people will not pay the extra. Felt more people will throw it on the side of the road when there is change.
- **#5:** Felt that County residents should be allowed to take yard waste to the City of Barrie landfill as it is closer for the resident to go to Barrie than the Tosorontio landfill.
- **#6:** Aluminum is recyclable, plastic is recyclable but put the two together into a frying pan and it is not, why?
- **#7**: Standardization of the garbage container, noted that he is a senior and he has a garbage container with the wheels, concerned if get one without wheels and is small he will have difficulty bringing it to the end of the driveway. Questioned if the County could go with the bigger containers (automated cart collection) and get collection every couple of weeks.
- **#8**: (online) What is your experience with bi-weekly garbage collection in rural areas compared to built up municipalities and can it lead to more garbage placed incorrectly in the garbage bin.
- **#9**: Clear garbage bag, felt that it is partly peer pressure to not put recycling in the garbage as others can see if you do. Questioned what the cost difference was to go with clear garbage bags? Questioned if peer pressure was considered as a positive or negative in their decision.
- **#10**: Questioned if Ottawa switched to bi-weekly collection and the organics went from 30% to 70%? Does the 5% diversion rate (*estimated*) increase represent the doubling of the amount of material? Felt we should be looking at the amount of waste being landfilled/sent to incinerator rather than how much is being diverted, felt as long as we are reducing the amount going to landfill then we are doing well.

#11 : Felt terms garbage and waste imply there is no value to them however felt that everything that is in there is made from some kind of material that should be used over and over again, circular economy, should start to shift our terminology from garbage to resource which has a net worth.			



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Solid Waste Management Strategy Update
Public Consultation Session
Comments from Public
May 17, 2016
6:00 p.m. – 8:00 p.m.

- **#1** (online): What is your experience with bi-weekly garbage collection in rural areas compared to built-up municipalities? Can it lead to more garbage placed in the green bins? Does it lead to dumping on the side of the road in rural areas?
- **#2:** When will collecting diapers in the green bin happen? He is a father of 2 children, 80% of his waste is diapers, struggles to keep it under the weight limit and if go to bi-weekly collection felt it was not going to work with the smell and the quantity.
- **#3** (online): Will there be options for families with medical waste and despite using all the diversion options available still have large amounts of waste due to the medical supplies, will there be relief for those families?
- **#4:** Is bi-weekly collection still going to be one bag limit? Felt if it was the same limit it would not be reducing the amount of garbage put out however it would motivate us to use the green bin by making us hang on to the smelly garbage longer.
- **#5:** Standard size bin, thought there was already limits to the size of bins, what size bin are they proposing, will the standard size be smaller than what is allowed right now? Felt if they enforced the weight and size then they would not need to manufacture and distribute standard size containers, the rules are already there, they just need to be implemented. If someone has invested in an oversize bin and the County gives them an approved bin would that upset residents? Felt the County is not providing a container the resident is, and now I am buying a container and I am buying one for my neighbour who cannot abide by the rules that are already there, that is upsetting to him.
- **#6:** Sees a lot of garbage on the side of the road, do you think going bi-weekly is smart, understands that it may save money however a lot of people that have more garbage will just dump it on the side of the road unless you can make it so that a few times a year residents can go to the landfill and not pay as he does not blame people for doing it as they cannot afford it. Felt it would stop a lot of illegal dumping.
- **#7:** Felt the County is wrong (because of statement that the quantity of illegal dumping is not currently significant), when you go for a walk in the forest it is disgusting how much garbage there is and if not illegal dumping than people burn their garbage.
- **#8:** With regards to the proposed increase in tags, pay as you throw: does not think it is a good way to go as felt it would create a two tiered system where people who are more affluent do not need to sort their garbage as they can purchase more whereas people who need to save their money will have a harder time to buy the tags and will add to illegal dumping as they will be penalizing people for putting out even one bag of garbage, felt it would not get political support.

#9: Gold box program and monetary incentive will not be enough, what would happen if everyone sorted their garbage appropriately, we would go bankrupt?

#10: The only thing that is motivating for him is convenience, if he does not know where something goes, it goes in the garbage as he does not have time to figure it out. Felt he would love a world where he could put everything in one bag and it go to a processing facility and have it sorted there and everything ends up in the proper place. Understands it is expensive and technology is not there yet but we could be the leaders in that, felt that is where our focus needs to be, if we did it properly we would have 100% diversion rate. Eliminate the green bin and sorting behind the scenes would be the best thing to do to be green.