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For Information Only

Solid Waste Strategy - 2015 to 2020

Recommendation

For Information Only

Background

The 2015-2020 Solid Waste Strategy is enclosed for the Committee's review. Staff will present the highlights of the document, followed by a question period.

Signed By

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2015 - 2020

Solid Waste Strategy



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Our Mission

To ensure the delivery of an integrated, cost-effective, and environmentally sound solid waste management system while promoting waste reduction, reuse and recycling.

Our Values

Responsiveness and Education

Continually educating ourselves and our community regarding recycling and proper waste management processes, while anticipating and providing timely responses in an honest and professional manner to our community.

Innovation and Continuous Improvement

Embracing new and better ways to achieve improved results through creativity, cross-training, coordination, inventiveness, teamwork, and adoption of appropriate new processes and technology amongst ourselves and with various stakeholders and organizations.

Environmental Responsibility

Ensuring the collection and management of solid waste and recovered materials in an environmentally sound and safe manner and in accordance with regulatory requirements.

Strategic Thinking

Committed to implementing projects, programs, and processes that promotes the 3R's and that extends the lifespan of our assets while meeting our current needs and challenges while anticipating the needs and challenges of the future.

History

In 2001, the former Regional Municipality of Sudbury and the lower-tiered municipalities, along with two unorganized townships amalgamated as the City of Greater Sudbury. The former Region was responsible for solid waste landfill sites and all waste diversion collection & processing programs. The lower tiered municipalities were responsible for garbage collection services.

The first two years of the 'new' City was focused primarily on the transition process and equalizing service levels.

In 2003, staff identified the need to review the overall solid waste system and Council supported the review. A Waste Optimization Study was commissioned later in the year. The objective of the study was to identify methods or programs in which to increase waste diversion from 15% to 65% while simultaneously reducing greenhouse gas emissions associated with solid waste programs (i.e. co-collection or dual purpose collection vehicles).

A Technical Steering Committee was formed to review study phases and to make recommendations to Council. The Technical Steering Committee comprised of a maximum of 8 individuals, including two members of City Council (chair and vice-chair), the City's Director of Waste Management, the Consultant (no voting privilege) and a minimum of two public members.

In 2004, the Technical Steering Committee narrowed the study approach to the residential waste stream and developed a "Long List" of 13 alternative waste collection and processing management systems. The long list was screened down to a more manageable "Short List". The "Short List" consisted of four systems which were considered the most suitable long term alternatives due to technical, economic/financial, social and/or environmental considerations.

The Study purpose, goals, the existing system and the four short listed systems were presented at several public input meetings throughout Greater Sudbury in October 2004.

The 'Short List' was increased to five systems by the Technical Steering Committee following the review of the 2004 public input meetings.

In 2005, a detailed evaluation of the five systems was conducted, reviewed by the Technical Steering Committee and additional public meetings were held in early 2005.

The Technical Steering Committee reviewed the public input comments and approved the preferred system.

Staff presented the preferred system to Council in February 2005. The preferred system was adopted in principle on February 23rd, 2005.



Preferred System

Co-collection

Household Garbage

- Up to 3 bags per week

Leaf & Yard Trimmings and Christmas Trees

- Unlimited quantity per week

Co-collection

Blue Box Recyclables

- Unlimited quantity per week
- One stream

Household Organics

- Unlimited quantity per week
- One stream

Ensure that the **four waste streams** will be collected:

- on the same day;
- at the same collection location; and
- no earlier than 7 a.m.

Processing

Blue Box Materials

- Invest in a one-stream processing system
 - To facilitate co-collection of blue box recyclables with another stream of waste (green cart organics).
 - To attract blue box recyclables generated from municipalities outside City of Greater Sudbury boundaries.
- Expand and segregate the drop-off pad at the Recycling Centre

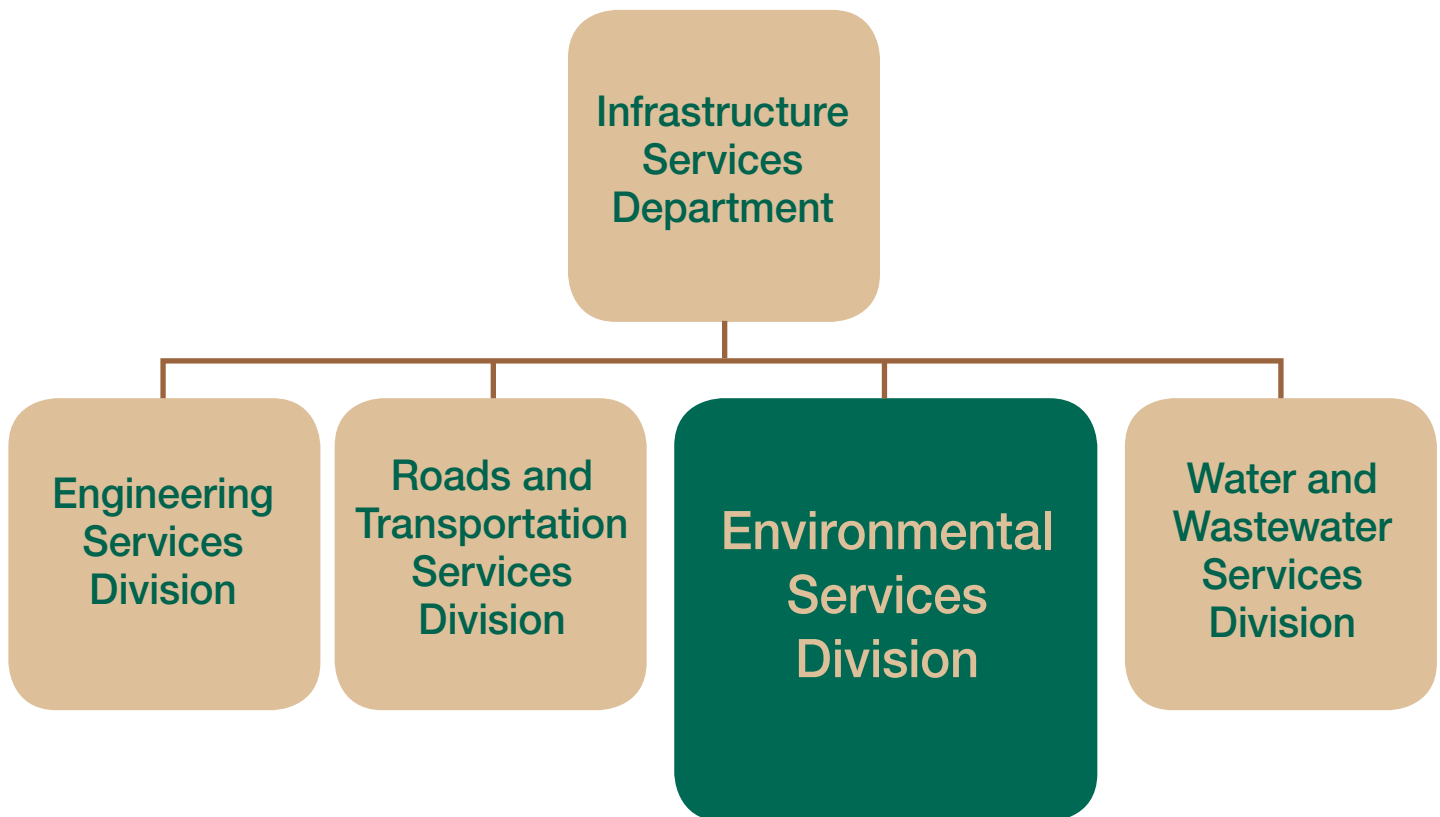
Organics

- Establish windrow organic pad within the Sudbury Landfill Site
 - Cost to construct organic pad to be funded from Solid Waste Reserves
 - Turning equipment – use existing landfill equipment
- Review “Greener” processing systems (i.e. anaerobic digester) at a later date

Disposal

- Residue to be landfilled
- Generate electricity from the landfill gas collection system
- Greater Sudbury should continue to lobby the federal and provincial governments to support municipalities with waste management programs with appropriate legislation, funding and fiscal policy
- Greater Sudbury should monitor the waste composition regularly to provide feedback on the effectiveness of the overall waste management system and public communication program
- Review additional waste diversion options for the high density residential, multi-type, commercial, institutional and industrial sectors.

A Summary of What We Do



Solid Waste Advisory Panel

Mandate:

Function as Council's public liaison committee on current solid waste management issues.

Primary Objectives:

- increase waste diversion and recycling efforts
- dissemination, review and exchange of solid waste information

Membership:

- One (1) to two (2) Members of City Council (Optional)
- Six (6) to eight (8) citizens

Time Commitment:

The Solid Waste Advisory Panel meets twice per year, with additional meetings schedules as required.

Term:

To coincide with the term of Council.

The Environmental Services Division's principle responsibility

is the planning, design, approvals and operation of all solid waste programs and facilities.

Additional details are provided on page 6 to 12.

A Summary of what we do:

Collection Services

Environmental Services provides the following waste collection services to residents within the City of Greater Sudbury:

Low-density residential buildings (6 units or less) receive:

- Weekly garbage collection for up to 3 approved garbage containers
- Weekly leaf and yard trimmings collection for an unlimited amount of approved containers
- Weekly furniture and appliance collection
- Weekly blue box recycling collection for an unlimited amount of approved containers
- Weekly Green Cart organics collection for an unlimited amount of approved containers
- Collection of household hazardous waste by appointment



High-density residential buildings (7 units or more) on a curbside collection system receive:

- Weekly garbage, leaf and yard trimmings, recycling and Green Cart organics collection by agreement with property owner
- Collection of household hazardous waste by appointment

High-density residential buildings (7 units or more) on a centralized collection system receive:

- Weekly garbage and recycling collection by agreement with property owner
- Collection of household hazardous waste by appointment

Industrial, commercial and institutional buildings receive:

- Weekly yellow box recycling collection by agreement
- Weekly yellow bag garbage collection by agreement

Multi-type properties receive:

- Weekly waste collection services to the residential dwellings within the property (based on terms and conditions listed in agreement with the property owner)

Diversion Services

The following waste is processed for residents of the City of Greater Sudbury:

- Blue box recyclables
- Leaf and yard trimmings, Christmas trees
- Scrap metal and white goods
- Electronic waste
- Clean and non-treated wood waste
- Other wood waste
- Sod
- Concrete, brick and block
- Tires
- Reusable cloth items
- Organics
- Household Hazardous Waste

Leaf and yard trimmings, Christmas trees



CLEAN
CONCRETE

Concrete, brick and block



Other wood waste



Wood Chipping Process



Household Hazardous Waste Depot



Organics



Disposal Services

The City of Greater Sudbury owns and operates (via private contractors) three active landfill sites, two closed landfill sites and one small vehicle transfer station.

The operating landfill sites are located in Sudbury, Hanmer and Azilda.

The small vehicle transfer station is located in Walden.

Anatomy of a Landfill



Landfill



Capped landfill with passive gas vents



Scalehouse



Small Vehicle Transfer Station



Clean Up Programs



Adopt-a-Road: Adoption of 2 km section of roadway. The group would have the responsibility of picking up litter in that section of the roadway twice a year.

Adopt-a-Spot: Adoption of a public spot. The group would have the responsibility of picking up litter in their spot twice per year.

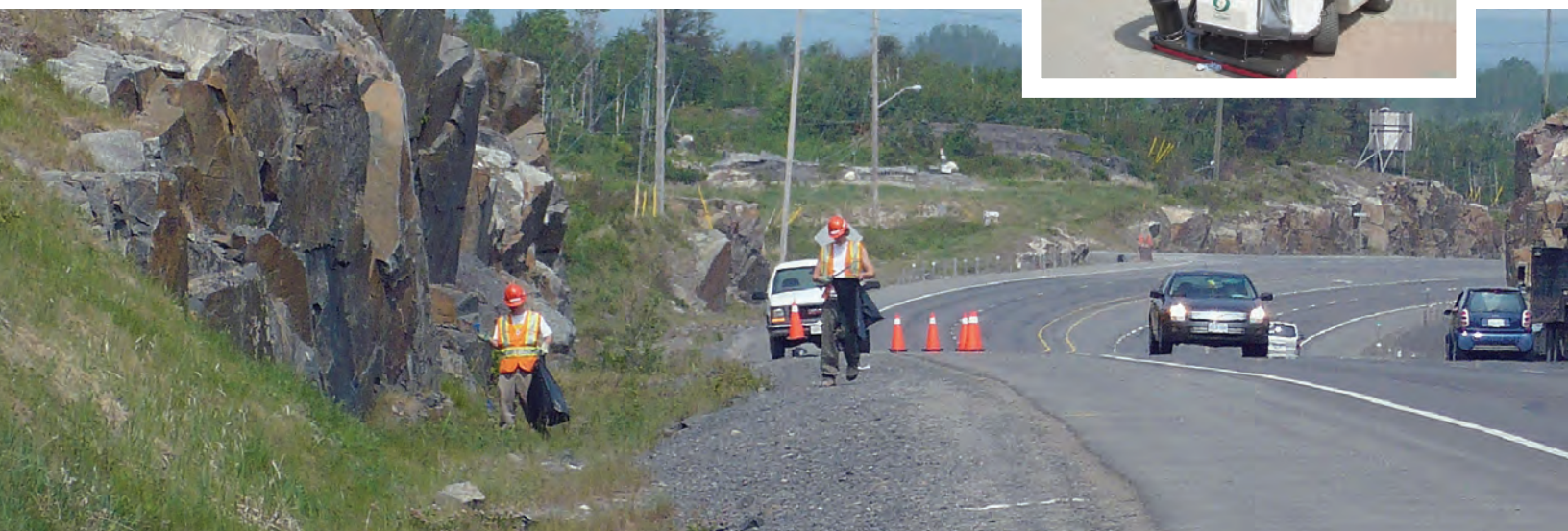
Adopt-a-Bin: Adoption of a public roadside litter bin. The group would have the responsibility to service that bin over and above the once a week service provided by the City.



Get rid of that old vehicle from your yard and give it a second life with the Derelict Motor Vehicle Removal and Recycling Program. The parts will be reused and the metals and fluids recycled.

Litter Abatement

One part-time City crew collects roadside litter and maintains litter containers across the City. This service is supplemented each spring with two Automated Litter Collection Units and with student crews that collect roadside litter.



The 20 Minute Makeover is scheduled every April. Interested individuals are asked to collect loose litter on their property and adjacent public property. Residents that register and

provide the before, during and after photographs of their clean-up efforts will have an opportunity to win a prize.



The annual two-hour Clean Up Blitz is scheduled every Spring. Interested individuals are asked to pre-register to participate in this two hour collection of roadside litter.



3R Equipment

The provision of:

- Backyard composters
- Green carts and Kitchen collectors
- Blue Boxes
- Big Blue large-capacity recycling container with lid
- Big Yellow large-capacity recycling container with lid (for businesses)
- Yellow Recycling Boxes (for businesses)
- Big Green large-capacity leaf and yard trimmings container with lid (Pilot Project)



Educational Services

The Promotional and Educational Program is intended to provide residents with the necessary information to properly dispose of waste and to encourage the 3R's - reduction, reuse or recycling of waste.

The program is reviewed annually and typically includes the following activities:

- Letters, flyers or newsletters to residents
- In person at the resident's home
- Public Service Announcements
- Oops Stickers
- By phone via City Services at 3-1-1
- By electronic mail
- In person at City Locations
- Information sheets or flyers at Citizen Service Centres
- Local newspaper ads or articles
- Local radio spots
- Local television spots
- City's website
- City's Facebook and Twitter Page
- Signage
- Posters
- Presentations and Training at the Education Centre
- Displays at various functions
- Videos

Oops! Désolés!

Help us to better serve you. Aidez-nous à mieux vous servir.

We had to leave items at the curb because:

Leaf and Yard Trimmings

- ❑ Unapproved bag or container - use compostable paper bags only
- ❑ Other waste mixed with leaf & yard trimmings - remove unacceptable waste.
- ❑ Apples - place apples in a certified compostable bag in or beside your Green Cart.
- ❑ Heavier than the 18kg/40 lb weight limit.
- ❑ Loose branches - branches must be securely bundled.
- ❑ Bundles too large - cut to no more than 1.2 m/4 feet in length by 60 cm/24 inches in width.
- ❑ Stump or root ball - call 3-1-1 for disposal options.
- ❑ Sod - call 3-1-1 for disposal options.
- ❑ Soil - call 3-1-1 for disposal options.
- ❑ Saw dust - place in an approved garbage bag.
- ❑ Christmas tree in bag or packaging - remove bag or packaging.
- ❑ Christmas tree still has decorations - remove decorations.

Feuilles et résidus de jardin

- Sac ou contenant non approuvé - Utilisez uniquement des sacs en papier compostable
- Déchets parmi les feuilles et résidus de jardin - Retirez les déchets inacceptables.
- Pommes - Placez les pommes dans un sac certifié compostable ou à côté de votre bac vert.
- Les articles pèsent plus des 18 kg (40 lb) permis.
- Branches en vrac - Les branches doivent être bien attachées.
- Dimensions des boîtes - Les boîtes ne doivent pas dépasser 1,2 mètre (4 pieds) de longueur, 60 centimètres (2 pieds) de largeur.
- Souche ou racines - Composez le 3-1-1 pour connaître vos choix d'élimination.
- Mottes de gazon - Composez le 3-1-1 pour connaître vos choix d'élimination.
- Terre - Composez le 3-1-1 pour connaître vos choix d'élimination.
- Souche de bois - Placez la souche de bois dans un sac à ordures approuvé.
- L'arbre de Noël est dans un sac ou emballage - Enlevez le sac ou l'emballage.
- L'arbre de Noël est décoré - Enlevez les décorations.

3-1-1 Service 

www.greatersudbury.ca/wastemanagement | www.grandsudbury.ca/gestiondesdechets

Household Hazardous Waste Depot
1853 Frobisher Street, Sudbury

Don't throw hazardous waste in the garbage, down the sink or in the sewer. Bring it to the Household Hazardous Waste Depot for free disposal.

Examples of materials accepted

Common examples of household hazardous waste include:


- medicines
- car wax
- motor oil
- paints
- rust removers
- fire extinguishers
- fluorescent tubes
- household batteries
- antifreeze
- thinners
- ammonia
- pool chemicals
- thermometers
- butane lighters and cylinders
- kerosene
- windshield washer
- stains and preservatives
- aerosols
- propane tanks and cylinders
- weed and bug killers
- transmission fluid
- car batteries
- glues
- turpentine
- drain openers
- fertilizers
- brake fluid
- gasoline
- cements
- paint strippers
- oven cleaners
- syringes

Materials not accepted:
No commercial, industrial, institutional, pathological, PCB, explosive, radioactive or unknown waste will be accepted.

Please note:

- All waste must be clearly labelled and in sealed containers.
- Reusable containers will not be returned (i.e. plastic gas cans).
- Do not mix different products together.
- Syringes must be in a puncture-proof container.

For further information, please call City Services at 3-1-1 or visit our website at www.greatersudbury.ca/wastemanagement.

It starts with you! We'll take it from here. 

Place these items in the Blue Box.

Déposez ces articles dans la boîte bleue.









Environmental Services Division

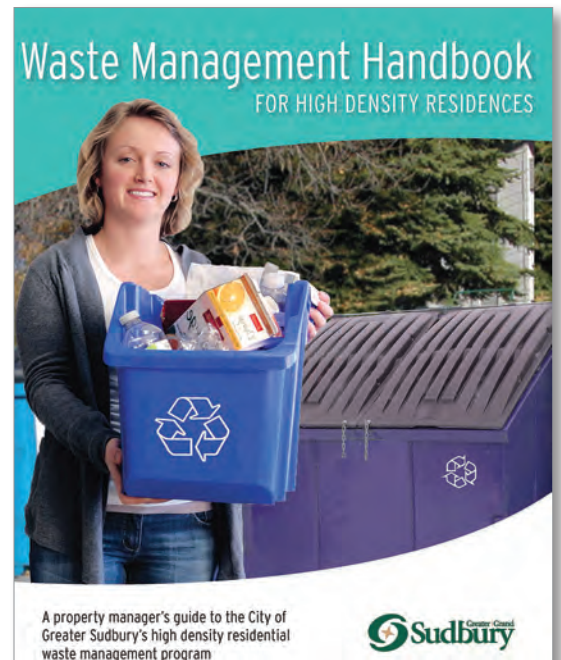
Tel: 3-1-1

Fax: 705-671-1148

wastemanagement@greatersudbury.ca

www.greatersudbury.ca/wastemanagement





Legislated Changes – Waste Reduction

Pending Legislative Change

On September 24, 2014, Premier Kathleen Wynne advised Glen Murray, Minister of the Environment and Climate Change to prioritize Waste Diversion Efforts.

“*Developing and implementing improved approaches to waste diversion. Your ministry will do so by building on the release of the Waste Reduction Strategy and working with industry, municipalities and other stakeholders toward the objective of re-introducing waste reduction legislation.*

The goal for your ministry is to ensure the ongoing sustainability and appropriate governance of waste diversion programs. This is critical to protecting the environment, recovering economic value in the waste stream and reaping GHG reduction benefits by using resources more efficiently.”

New waste management legislation is expected to be introduced in the Ontario legislature in 2015. The new legislation is based on the new Waste Reduction Act.

If passed the Act would:

- Make individual producers responsible for the end-of-life management of their products and packaging.
- Kick-start waste diversion to recycling in the industrial, commercial and institutional sector by designating wastes for diversion, beginning with designating paper and packaging supplied to the sector.
- Recognize the important role that municipalities – and property taxpayers – play in recycling waste by lifting the producer funding cap on the Blue Box program so that over time, producers pay more than 50%.
- Protect consumers from surprise eco-fees by requiring recycling costs to be included in the advertised, displayed and shelf prices of products.
- Transform Waste Diversion Ontario into the Waste Reduction Authority, with robust compliance, oversight and enforcement responsibilities. The Authority would also be responsible for ensuring a timely transition of existing diversion programs in a way that is easy and convenient for residents.

Strategic Goals – 2015 to 2020

Strategy 1 to 5 were reviewed and supported by the Solid Waste Advisory Panel.

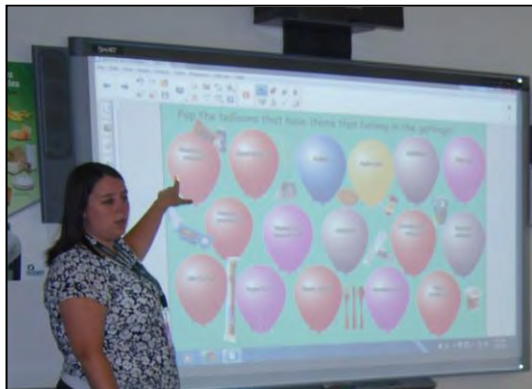
Strategy 6 is a compilation of Divisional improvements developed in-house.



Strategy 1

Focus on Education



Planned Actions	Status
Develop interactive learning tools – Smart Board	Completed and on-going
<p>Learning games and activities have been developed with Smart Board technology and students can interact with smart response remotes. This allows us to quiz the students on what they learned and have them answer anonymously through use of the remotes. The remotes connect to a responder which displays the submitted answers on the smart board. Getting this feedback instantly allows us to realize if the students have thoroughly understood a question and if not, gives us the opportunity to elaborate or re-explain the information.</p>	
	
Develop interactive learning tools – Hands-on	Completed and on-going

Craft or Activity	Description	Time (min.)
Grade 3, 4 and 5		
Newspaper Gift Bows	Create bows to put on gift wrap from old newspaper and flyers	20
Newspaper Wrapping Paper	Create your own wrapping paper out of old newspaper. Paint it how you like or use some of our stamps created from Styrofoam.	30
Redesign that package!	Students are given flyers and are asked to pick out an item that they would redesign to be more sustainable or have less packaging. This activity can be done in small groups and will develop the students' creative writing, thinking and communication skills. Students will then present their ideas to the class.	40
Who am I?	The students will have pictures taped to their back showing compostable, recyclable, garbage and hazardous waste items. By asking yes or no questions, they must figure out exactly what item they are.	20
Conduct a waste audit	A garbage bag full of recyclables, hazardous waste, garbage and compostable items is given to the students. They must work together to correctly divert the items and see just how little we should actually be placing in the garbage. Divide your group in two and have them race to the finish. For younger students, a 'lighter' version of the game is available, using plastic imitations of the items.	60
Grade 4 and 5		
Jeopardy!	The classic game with a waste diversion twist! Subjects include Green Cart, Blue Box, Plastics, Garbage and Household Hazardous Waste.	45

Planned Actions		Status	
Develop a 3R curriculum for school aged children		Completed and on-going	
The curriculum was developed in-house and based on the Ministry of Education’s guidelines. Schools on the City’s organic program are invited to participate. The lessons are provided at the Education Centre, located at 1805 Frobisher Street. Transportation costs from the schools to the Education Centre have been graciously donated by Canada Fibers Ltd. and Waste Management of Canada.			
Subject and sub-category	Curriculum section and lesson	City Environmental Program	Time (min.)
Grade 3			
Science and Technology Understanding Life Systems – Soils in the Environment Suggested additional activities related to this lesson: - Who am I? - Conduct a waste audit (See crafts and activities section).	2.4 Investigate the process of composting, and explain some advantages and disadvantages of composting	Students are introduced to the school and residential organic composting programs in Sudbury. Students will learn which items are and are not acceptable in the program, how to package the organics and why composting is beneficial. They will learn what happens to their organics after they place it at the curb and how it eventually becomes compost. Home composting methods will also be explored. After the lesson, the students’ knowledge will be tested and key points will be reinforced via SMART quiz.	60
Science and Technology Understanding Earth and Space systems – Soil in the environment	3.2 Identify additives that might be in the soil but that cannot always be seen (e.g., pesticides, fertilizers, salt)	Students are introduced to natural soil composition (humus, air, water, minerals). They will discuss what can and can’t be seen in soils. A distinction will be made between natural and chemical fertilizers and pesticides. They will explore the disadvantages of chemical products and how they can be replaced by less harmful natural products. Students will learn about hazardous waste, how to dispose of it properly and why it is important that they do not throw it in the garbage or pour it down the drain. After the lesson, their knowledge will be tested and key points will be reinforced via SMART quiz.	45

Planned Actions		Status
Develop a 3R curriculum for school aged children - continued		Completed and on-going
Grade 4		
Science and Technology <i>Understanding Earth and space systems</i> <i>Suggested additional activities related to this lesson:</i> - Tour of the Recycling Centre - Create a newspaper gift bow - Create newspaper gift wrap - Create a cereal box pencil case - Redesign that package - Conduct a waste audit (See crafts and activities section).	1.2 Analyze the impact on society and the environment of extracting and refining rocks and minerals for human use, taking different perspectives into account	Students are introduced to the lifecycle of a product via a case study of an aluminum can. They will learn the destination and end product of each waste stream (green cart, blue box and garbage). Emphasis is placed on the importance of recycling rather than depleting non-renewable resources. The lesson is concluded with tips on how to reduce, reuse and recycle. After the lesson, the students' knowledge will be tested and key points will be reinforced via SMART quiz. It is suggested that the teacher goes over mining and its effects before coming to education centre.
		75
Grade 5		
Science and Technology <i>Understanding Matter and Energy</i> <i>Suggested additional activities related to this lesson:</i> - Jeopardy! (See crafts and activities section).	1.2 Assess the social and environmental impact of using processes that rely on chemical changes to produce consumer products, taking different perspectives into account and make a case for maintaining the current level of use of the product or for reducing it	Chemical changes can be dangerous and they are a common practice today. The lesson focuses on household hazardous waste (HHW): what makes waste hazardous, different properties and symbols used to identify HHW, common examples of hazardous waste at home and school, where to dispose of HHW, the dangers of HHW products, safe disposal and unsafe disposal, environmental effects, and how some HHW is recycled. The lesson is concluded with tips on how to reduce hazardous waste usage and how one can help stay safe with hazardous waste at home. After the lesson, the students' knowledge will be tested and key points will be reinforced via SMART quiz.
		60
Science and Technology <i>Conservation of energy and resources</i> <i>Suggested additional activities related to this lesson:</i> - Tour of the Recycling Centre - Create a newspaper gift bag - Create a newspaper gift bow - Create newspaper gift wrap - Create a cereal box pencil case - Redesign that package - Conduct a waste audit - Jeopardy! (See crafts and activities section).	1.1 Analyze the long-term impacts on society and the environment of human uses of energy and natural resources, and suggest ways to reduce these impacts <i>(e.g., turning off the faucet while brushing teeth or washing and rinsing dishes conserves water; reusing or recycling products, or using fewer products, conserves natural resources and energy)</i>	In this lesson, students will learn about the lifecycle of garbage, recyclable and compostable items, as well as the positive and/or negative environmental effects of putting items in the garbage, Blue Box or Green Cart. The lesson focuses on 'closing the loop', or creating a continuous cycle where items get recycled rather than ending their life in a landfill. There will be an open discussion on how to use fewer resources at home. After the lesson, the students' knowledge will be tested and key points will be reinforced via SMART quiz.
		120

<i>Planned Actions</i>	<i>Status</i>
Pilot a Community Door to Door 3R Educational Campaign	Update in 2016
<p>Research suggests that one of the best ways to provide residents with meaningful information is to conduct a door to door campaign. Residents would be provided information, the information would be reviewed and the resident would have an opportunity to ask questions. Staff would also determine any barriers and seek a commitment from residents to participate in waste reduction and diversion efforts. These campaigns would then be followed up by a participation study or waste audit to determine a success rate.</p> <p>A door to door campaign was completed in August 2015 and staff will report back once the results of the Fall audit are finalized.</p>	

Strategy 2

The Construction and Demolition Material Recycling Site

Overview – The Construction and Demolition (C&D) Material Recycling Site

The dedicated C&D Material Recycling Site will receive, sort, store, and process C&D waste generated within Greater Sudbury for future use. The C&D area will be located within a buffer area of the Sudbury Landfill Site. The main objective of the C&D Area is to divert waste from landfill in order to extend the site life. The site will have an area that is flexible in design and layout, is capable of accommodating variations in C&D waste inflow, and allows the accepted C&D waste stream to be enhanced as viable market options occur.

Planned Actions

Status

Environmental Compliance Approvals

Completed

The establishment of a specific C&D area within the buffer area of the Sudbury Landfill required an amendment to the site's Environmental Compliance Approval. The application was submitted in 2012 and the approval was received in 2015.

Construction of the Site

To be finalized in 2016 – 2017





Phase 1 of the project was approved by Council in 2010 during the Capital Budget process; this involves site remediation, design, and Ministry of the Environment (MOE) approvals.

Phase 2 involves the actual construction of the site, including an internal road leading to and from the site, drop-off areas, processing pads, storage areas, and construction of a fire/emergency exit for the site; this portion was approved by Council in the 2011 Capital Budget process.

Construction of the site began in 2012. This involved the removal of a pole line, clearing and grubbing the area, fencing and the commencement of an internal access road. Staff held off completing the site in the event the MOE had specific requirements.

The site is expected to be finalized in 2016/17.



<i>Planned Actions</i>	<i>Status</i>
Review expanding the current program	Update in 2018-2019
<p>The City currently processes various categories (wood waste, scrap metal, concrete, brick and block) of source-separated construction and demolition waste materials.</p> <p>Staff will review expanding the program to include the processing of mixed materials and the processing of additional source separated materials. The additional source separated items will include:</p> <div> <div> <h3>Asphalt Shingles</h3>  </div> <div> <h3>Non-Recyclable Glass</h3>  <p><i>Includes broken window panes, mirrors, glass tiles, etc.</i></p> </div> <div> <h3>Non-Metal Fixtures</h3>  <p><i>Includes toilets, sinks, granite counter tops, etc.</i></p> </div> <div> <h3>Non-Wooden Flooring</h3>  <p><i>Includes carpeting, vinyl flooring, etc.</i></p> </div> </div> <p>The site may also be used to sort mixed granular materials from City projects.</p>	

Strategy 3

Increase Policies that Induce Waste Diversion



<i>Planned Actions</i>	<i>Status</i>
Reduce the Residential Garbage Bag Limit from Three (3) to Two (2)	Update in early 2016.
<p>In 2011, the recommendation to reduce the garbage bag limit from three to two was defeated. Staff was requested to re-introduce the motion in a few years.</p> <p>A more detailed report (business case) will be provided by staff in late 2015 or early 2016.</p>	
<i>Planned Actions</i>	<i>Status</i>
Change the Garbage Collection Frequency from Weekly to Every Other Week	Update in early 2016.
<p>Municipalities that have switched from weekly garbage collection to every other week garbage collection have experienced an increase in waste diversion and a reduction in garbage generation. Net savings associated with this change varies across municipalities.</p> <p>A more detailed report (business case) will be provided by staff in late 2015 or early 2016.</p>	
<i>Planned Actions</i>	<i>Status</i>
Eliminate the weekly residential landfill exemption (from 50kg to 0 kg)	Not recommended at this time.
<p>This item was reviewed but not recommended at this time.</p> <p>Staff can re-introduce this item at a later date or proceed to implementation. Direction from the Committee is requested.</p>	

Strategy 4

Solid Waste Processing and Disposal Capacity

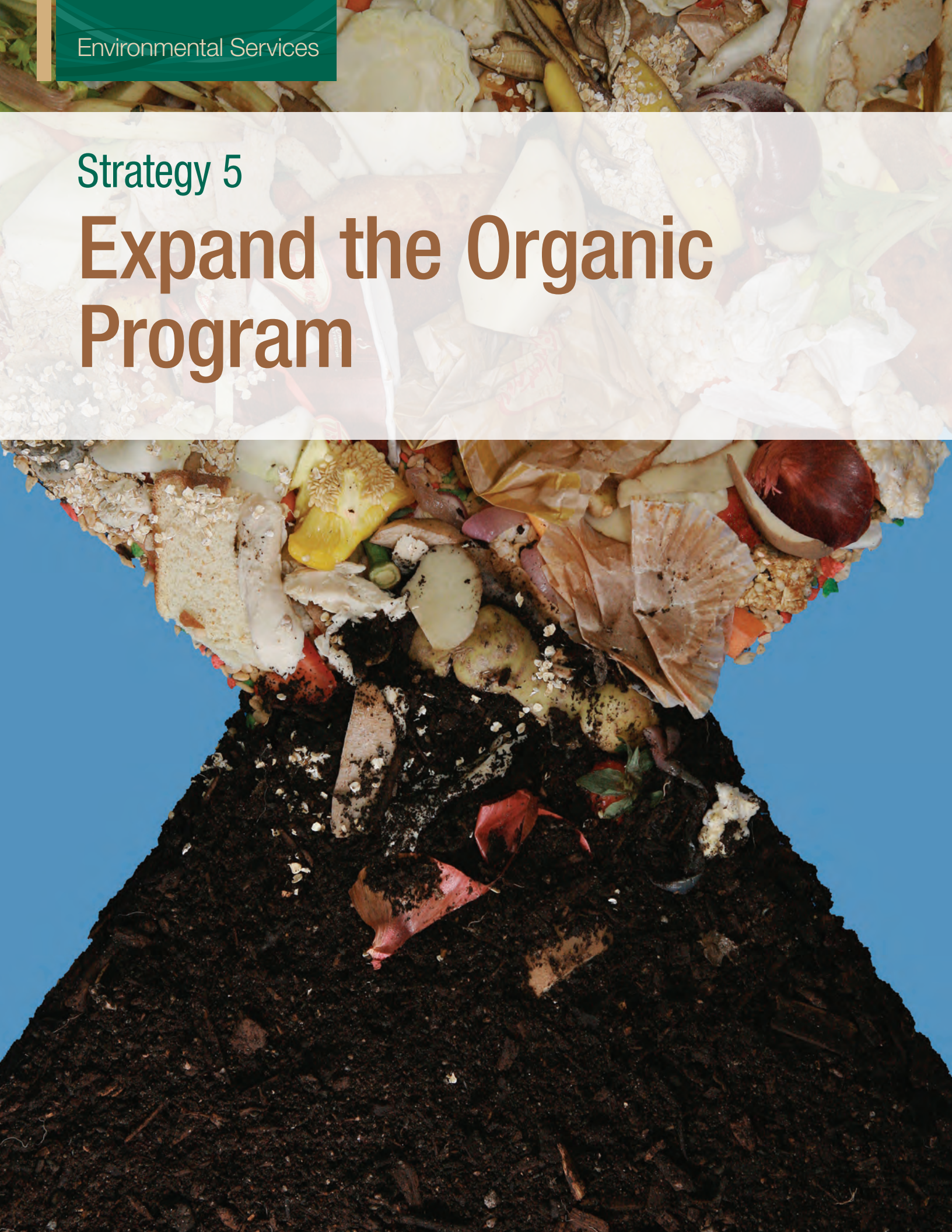


<i>Planned Actions</i>	<i>Status</i>
Participate in the Development of the RPWCO Landfill Disposal Capacity Value Model and Input Details	2016
<p>Golder Associates was retained by the Regional Municipality of Halton on behalf of the the Regional Public Works Commissioners of Ontario (RPWCO) to develop a detailed model template that can be used by municipalities in Ontario that own and/or operate landfill sites. The purpose of the model is to calculate and develop site specific projections of the value of landfill disposal capacity (on the basis of dollar per tonne disposed).</p> <p>The City of Greater Sudbury participated on the sub-committee that reviewed the development of the model. The model is based on the US EPA handbook on full cost accounting to assess the true cost of landfill disposal. Once completed, the model will be used to estimate the tipping fee that should be charged to cover the full costs of landfill disposal.</p>	
<i>Planned Actions</i>	<i>Status</i>
Future Disposal Requirements	2017-2018
<p>Staff will be bringing forward a few options for the funding of future disposal requirements in either 2017 or 2018.</p> <p>The Solid Waste Advisory Panel had previously recommended a phased increase to the tipping fee, however staff will review the previous estimate based on the new model presented above.</p>	

<i>Planned Actions</i>	<i>Status</i>
Update Landfill Life Projections	One year following the program expansion of the Construction & Demolition Material Recycling Site
<p>The expansion of the Construction & Demolition Material Recycling Site is expected to have significant impacts on landfill life if fully developed. Staff will undertake a detailed exercise to update landfill life projections approximately one year following the full development of the site. This information will impact the amount required to fund future sites and will be valuable information for any master plan updates.</p>	
<i>Planned Actions</i>	<i>Status</i>
Review Options to Increase Processing Capacity for Organics	2019-2020
<p>The City currently has sufficient capacity to process organic waste materials. Additional capacity may be warranted, if the program is offered to other sectors. This will be reviewed at a later date and the review will include processing at other City locations and the processing capacity of private facilities (local and non-local).</p> <p>The review will be required for the master plan update, tentatively scheduled to commence in 2021.</p>	

Strategy 5

Expand the Organic Program



<i>Planned Actions</i>	<i>Status</i>
Organic Collection for Multi-Unit Residential Properties on a Centralized Collection System	Update in 2017
<p>Multi-unit residential properties on a centralized collection system are currently not mandated to have a source separated organic collection system. However, property owners may request the service and the service would then be provided on a cost recovery basis.</p> <p>Staff will be requesting pricing for the provision of this service in the next collection contracts. Staff will then report back to the Committee seeking direction on whether the program should be mandatory (similar to recycling) and how the program should be funded.</p>	
<i>Planned Actions</i>	<i>Status</i>
Industrial, Commercial & Institutional Organic Waste	Update in 2017
<p>The City currently does not provide collection or acceptance of organic materials from the Industrial, Commercial & Institutional sector.</p> <p>To establish a program, City staff would:</p> <ul style="list-style-type: none"> - take in service request applications and meet with the applicant at their facility - draft the service agreement and finalize execution - train the staff contact - co-ordinate collection services with the designated collector <p>Collection costs would be fully paid by the IC&I facility.</p> <p>The Solid Waste Advisory Panel recommended that the processing fee be waived and that the additional operational costs be funded by the tax levy.</p> <p>Staff will be requesting pricing for the provision of this service in the next collection contracts. Staff will then report back to the Committee seeking direction on whether the program should be offered and how the program should be funded.</p>	

<i>Planned Actions</i>	<i>Status</i>
Special Events Organic Collection Program	Update in 2017

The Special Events Organic Collection program, if approved, would be set-up similar to the City's Special Event Recycling Program.

Special Event Organizers would submit an application and City staff would review the application. If approved, the City would arrange for the delivery and servicing of the equipment.

Staff will be requesting pricing for the provision of this service in the next collection contracts. Staff will then report back with additional details and seek direction.



The above photograph is an example of a portable special event station.

Strategy 6

Divisional Improvements



<i>Planned Actions</i>	<i>Status</i>
The Waste Wizard	2016
<p>The Waste Wizard is an online waste sorting tool that provides information on how to properly handle and dispose of waste items. This web-based program will be imbedded within the Division's website section. The program will allow employees and residents to determine how to dispose or recycle various waste items. The user simply has to type in the waste material and hit the search button. The tool will also be used by 3-1-1 operators responding to call ins from the general public.</p>	
<i>Planned Actions</i>	<i>Status</i>
What's my collection day?	2017
<p>Residents will be able to access their personal collection day by simply entering their home address in the on-line program. This web-based program will be imbedded within the Division's website section. The tool will also be used by 3-1-1 operators responding to call ins from the general public.</p>	
<i>Planned Actions</i>	<i>Status</i>
Custom integrated software for AVL/GPS technology systems	2016-2017 for City owned vehicles 2020-2021 for Contractor vehicles
<p>Staff have been working diligently with the service provider to develop a customized software program that will provide an inventory of collection points, collection point details, a digital route sheet and a touch screen exception reporting mechanism. The system will provide near real time details to the administrative office. This will improve customer service, reporting and routing capabilities.</p>	



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2015-2020

Solid Waste Strategy

Presented by:
Chantal Mathieu & Renee Brownlee
November 16, 2015



Overview

- History
- Preferred System
- What we do
- Pending legislated changes and future plans
- Strategy 1 to Strategy 6
- Questions

History

- Waste Management System Plan initiated in 1994
 - Approved 2002
 - Planning period of 20 years (2022)
- Amalgamation in 2001
- Preferred System review initiated in 2003
 - Adopted 2005
 - Major components in place by 2009

Preferred System (main components)

Co-collection

Household Garbage

- Up to 3 bags per week

Leaf & Yard Trimmings and Christmas Trees

- Unlimited quantity per week

Co-collection

Blue Box Recyclables

- Unlimited quantity per week
- One stream

Household Organics

- Unlimited quantity per week
- One stream

Ensure that the **four waste streams** will be collected:

- on the same day;
- at the same collection location; and
- no earlier than 7 a.m.

Preferred System (main components)

Co-Collection

- Household Garbage
 - Up to 3 bags per week
- Leaf & Yard Trimmings and Natural Christmas Trees
 - Unlimited quantity per week



Preferred System (main components)



Co-Collection

- Blue Box Recyclables
 - Unlimited quantity per week
- Green Cart Organics
 - Unlimited quantity per week

Preferred System (main components) – con't

- Blue Box Processing
- Organic Processing
- Landfill Disposal



What we do – Collection Services



- Residential curbside co-collection
- Residential centralized collection
- Specialized collection
- Limited IC&I Sector

What we do – Diversion Services



- Blue Box Recycling Materials
- Household Hazardous Waste
- Leaf & Yard Trimmings
- Organics
- Electronic Waste & Tires
- Miscellaneous Items

What we do – Disposal Services

- Landfill & Waste Diversion Sites
- Small Vehicle Transfer Site
- Closed Sites



What we do – Various



- Clean-up Programs
 - Adoptions, The Blitz, Trash Troopers, roadside litter containers and automated litter collection units
- 3R Equipment
 - Recycling and Composting
- Education
 - Training, website, print & video, education centre

Pending Legislation & Future Plans

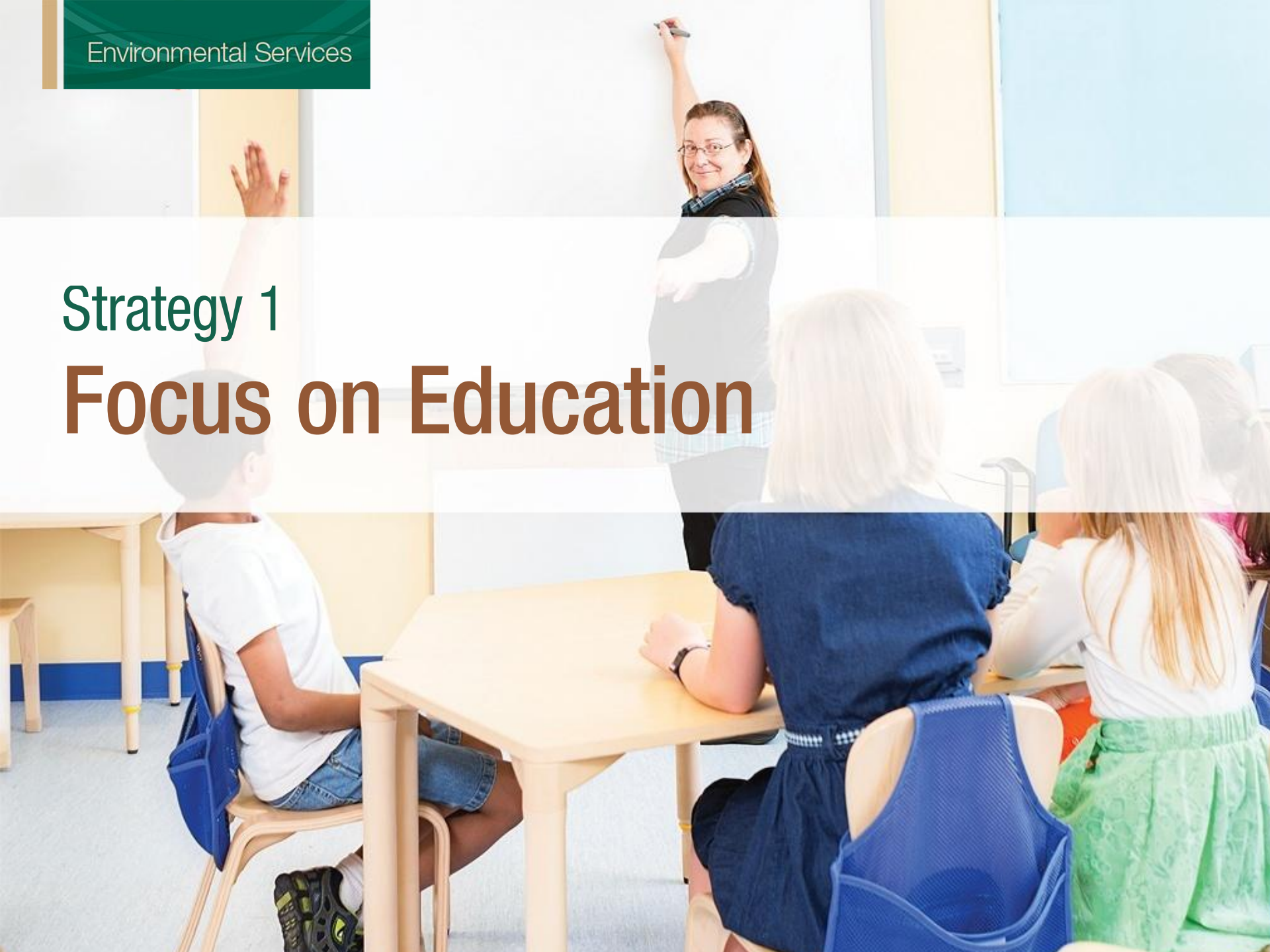
- Pending changes for waste reduction expected in 2015
 - High level, enabling legislation
 - Expected to transfer 100% responsibility for end of life management of designated packaging and products to producers
 - Anticipate that all the details and transition will need to be worked out in development of regulations
- Preferred System (Master Plan) update tentatively scheduled to commence in 2021

Solid Waste Strategies

- Strategy 1 – Focus on Education
- Strategy 2 – The Construction & Demolition Material Recycling Site
- Strategy 3 – Increase Policies that Induce Waste Diversion
- Strategy 4 – Solid Waste Processing & Disposal
- Strategy 5 – Expand the Organic Program
- Strategy 6 – In House Initiatives

Strategy 1

Focus on Education





- Develop interactive learning tools – Smart Board
- Develop interactive learning tools – Hands on
- Develop a 3R curriculum for school aged children
- Pilot a Community Door to Door 3R Educational Campaign

Completed & Ongoing

Completed & Ongoing

Completed & Ongoing



Thank you to Canada Fibers Ltd. and Waste Management of Canada for their generous donations towards reimbursement of transportation costs.

Update in 2016

Strategy 2

The Construction and Demolition Material Recycling Site



- Environmental Compliance Approvals
- Construction of the Site
- Review expanding the current program

Completed

To be finalized in 2016-17

Update in 2018-19

Asphalt Shingles



Non-Recyclable Glass



Includes broken window panes, mirrors, glass tiles, etc.

Non-Metal Fixtures



Includes toilets, sinks, granite counter tops, etc.

Non-Wooden Flooring



Includes carpeting, vinyl flooring, etc.

Strategy 3

Increase Policies that Induce Waste Diversion





- Eliminate the weekly residential landfill exemption (from 50kg to 0 kg)
- Reduce the Residential Garbage Bag Limit from Three (3) to Two (2)
- Change the Garbage/Leaf & Yard Trimmings Co-Collection Frequency from Weekly to Every Two Weeks

Not recommended at this time.

Update in early 2016

Update in early 2016

Strategy 4

Solid Waste Processing and Disposal Capacity





- Participate in the Development of the RPWCO Landfill Disposal Capacity Value Model and Input Details
- Future Disposal Requirements
- Update Landfill Life Projections
- Review Options to Increase Processing Capacity for Organics

Update in 2016

Update in 2016/17

One year following the full expansion of the C&D Material Recycling Program

2019/2020

Strategy 5

Expand the Organic Program



- Organic Collection for Multi-Unit Residential Properties on a Centralized Collection System
- Industrial, Commercial & Institutional Organic Waste
- Special Events Organic Collection Program

Update in 2017

Update in 2017

Update in 2017

Strategy 6

Divisional Improvements





- The Waste Wizard
- What's my collection day?
- Custom integrated software for AVL/GPS technology systems

2016

2017

2016-2017

City owned vehicles

2020-2021

Contractor vehicles

QUESTIONS?