

A Waste Recycling Strategy for The City of Kawartha Lakes

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Table of Contents

1.0	Introduction	1
2.0	Overview of the Planning Process	2
3.0	Study Area	3
4.0	Public and Stakeholder Consultation Process	5
5.0	Stated Problem	5
6.0	Goals and Objectives	8
7.0	Current Solid Waste Trends, Practices, Systems and Future Needs	10
8.0	Planning a Recycling System	19
8.1	Possible Strategy to Increase Recycling	19
8.2	Overview of Planned Initiatives	22
8.3	Contingencies	28
9.0	Monitoring and Reporting	28
10.0	Conclusion	29

Appendix 1 CIF Agreements Project #508.8 (Polystyrene Densifier) & Project #508.11 (Transfer Station)

Appendix 2 Excerpt from Solid Waste By-law 2007-024

Appendix 3 Waste Recycling Option Scores

Appendix 4 Public Survey & Committee Summaries

1.0 Introduction

This Waste Recycling Strategy (Strategy) was initiated by the City of Kawartha Lakes (City) to develop a plan to increase the efficiency and effectiveness of its recycling program and to maximize the amount of Blue Box material diverted from disposal. This Strategy should be updated at least every five years. This document was developed with support from the Continuous Improvement Fund (CIF) with 75% of the costs provided from CIF. The document follows the guidelines set out in the 'Guidebook for Creating a Municipal Waste Recycling Strategy' (March 2010) and is intended as a high level strategic roadmap to assist the City with future decision making specific to the Blue Box program. The Strategy reflects only residential Blue Box information and relates to data in the most recent WDO Datacall reporting year (2009).

This Strategy was prepared as a standalone document to be used as a reference tool for staff when establishing Blue Box diversion rates and monitoring procedures to measure the effectiveness of the Blue Box program. The intent of the Strategy is to provide City staff with a baseline (2009) of the Blue Box program and compare upcoming years (2010-2015) to determine the effectiveness of the City's program.

The Strategy is a short term guidance document for staff and is specific to Blue Box only. All reference to diversion rates is specific to residential Blue Box diversion rates and does not incorporate overall waste diversion rates. This document will highlight best practices suited for the City's municipal grouping of Rural Regional as classified by Waste Diversion Ontario.

Specifically, this Strategy addresses the following:

- Sets a short term Blue Box diversion rate of 25%;
- Establishes methods to monitor the effectiveness of the Blue Box program;
- Offers examples of Best Practice suitable for Rural Regional Programs;
- Assists with securing Best Practice funding for upcoming 2010 and 2011 WDO Datacall once Strategy is implemented and monitoring is in place; and
- Clarifies Blue Box diversion goals/targets for the City.

This Strategy will put the City in a position to meet Waste Diversion Ontario's Best Practices funding requirements. By the year 2012, based on the funding allocation used by WDO, defining Blue Box diversion targets and measures cited in the Best Practice Section of the Datacall will represent 9% of the total funding available contingent on favorably answering Best Practices supporting defined Blue Box diversion targets and measuring these targets.

Program Background

The City's current program for managing residential municipal waste includes the following:

- Weekly residential curbside collection of waste on all public, private and unassumed roads that meet minimum City maintenance standards;
- Alternating weekly residential curbside collection of fibres and container recyclables on all public, private and unassumed roads that meet minimum City maintenance standards;
- Quarterly curbside collection of textiles and an annual fall curbside collection of leaf and yard waste on all public, private unassumed roads that meet minimum City maintenance standards;
- City owned and operated (5) open landfill sites;
- City owned and operated (2) Municipal Hazardous Special Waste, and (5) Blue Box depots at City landfill sites;
- Depot collection of scrap metal, tires, boat & bale wrap and electronics for recycling;
- Operation of a Reuse Centre at the Fenelon landfill site;
- Transfer of Blue Box material to a third party processor; and
- City leaf and yard waste drop off sites at each landfill site.

When compared to similar municipal waste management programs the City achieves an above average overall diversion rate. This does not imply, however, that the full potential of the program has been reached. Waste management challenges for the City, that this Strategy can address, includes:

- Large geographic area and extensive level of curbside service;
- Relatively high program cost;
- No formal agreement between current Blue Box processor and the City; and
- No curbside bans and minimal enforcement of recycling by-laws supporting Blue Box participation.

This Strategy was developed with financial support from the Continuous Improvement Fund (CIF). The CIF's *Guidebook for Creating a Municipal Waste Recycling Strategy* was used to help develop this Strategy.

2.0 Overview of the Planning Process

This Strategy was prepared by environmental consulting firm 2cg Inc and municipal staff.

The development of the Strategy included the following steps:

- Gather relevant data from municipality;

- Meet with municipality to review data and walk through Strategy format;
- Gather and compile additional information from municipality to prepare draft Strategy;
- Present draft strategy to City of Kawartha Lakes Environment Advisory Committee (CKLEAC) and Lindsay/ Ops Landfill Public Review Committee (PRC) to seek input; and
- Prepare final Strategy.

The next steps include:

- Council endorsement of this Waste Recycling Strategy;
- Council decision on which initiatives to implement; and
- Develop and issue tender to transfer and process recyclables.

3.0 Study Area

The study area for this Strategy is the amalgamated City of Kawartha Lakes, comprised of 17 municipalities linked by the Trent Severn Waterway approximately two hours northeast of the City of Toronto. The area of the City is approximately 3,000 square kilometers composed of a mix of urban and rural areas and over 250 lakes.

The geographic area of the City in relation to proximity of other urban centres is depicted in Figure 1.

This Strategy addressed the following sectors:

- Residential single family
- Multi-family residents
- Seasonal cottagers (City collects from all seasonal roads that meet the City's minimum maintenance standards)

Figure 1: Area Map depicting location of the City of Kawartha Lakes



4.0 Public and Stakeholder Consultation Process

Stakeholder groups included in this consultation included:

- Municipal staff;
- Environment Advisory Committee;
- Lindsay/ Ops Landfill Public Review Committee (PRC)
- Municipal website;
- On-site interviews with City residents at recycling depot sites; and
- Municipal Council.

The public and stakeholder consultation process followed the development of this Strategy and consisted of the following activities:

- Notification of Strategy on website with opportunity for public feedback;
- Meetings with staff, environmental advisory committee and Lindsay/Ops public review committee to present draft strategy and discuss current situation and receive input/guidance into possible enhancements to the current recycling program; and
- Submission of final Strategy to Council to adopt and post on the municipal website.

5.0 Stated Problem

Management of municipal solid waste, including the diversion of Blue Box materials, is a key responsibility for all municipal governments in Ontario. The factors that encourage or hinder municipal blue box recycling endeavors can vary greatly and depends on a municipality's size, geographic location and population.

The challenges facing the City are:

- High curbside collection costs due to large geographic service area; and
- Decrease in Blue Box weights and increases in Blue Box volumes (plastics).

The City offers weekly curbside waste collection with alternating weekly collection of fibre and container recycling. The City collects an expanded range of recyclable materials listed in Table 5.1.

Table 5.1: Accepted Recyclable Materials

Container (Blue Box) Recyclables	Fibre (Green Box) Recyclables
<ul style="list-style-type: none"> • Glass bottles and jars 	<ul style="list-style-type: none"> • Newspaper, flyers, magazines, inserts
<ul style="list-style-type: none"> • Metal food and beverage containers, aluminum foil containers 	<ul style="list-style-type: none"> • Office paper, fine paper, envelopes
<ul style="list-style-type: none"> • Empty aerosols and paint cans 	<ul style="list-style-type: none"> • Non-metallic wrapping materials, greeting cards
<ul style="list-style-type: none"> • Plastic containers (1-7) inclusive of film and plastic bags • Expanded polystyrene 	<ul style="list-style-type: none"> • Boxboard, corrugated cardboard, brown paper bags
<ul style="list-style-type: none"> • Polycoat 	<ul style="list-style-type: none"> • Hard and soft cover books

Residents use a 14 gallon green box for fibre recycling and a 16 gallon blue box for container recycling. The City has found that container material is continuing to increase in volume and decrease in weight. Typically, residents are using two or more boxes to set out their container material. The City offers larger capacity blue boxes (22 gallon) on a cost recovery basis (\$9.00/box) for container material.

Photos 1-2 depict recyclable curbside collection setouts.



Photo 1 Average Blue Box setout (Container Week)



Photo 2 Residents Use an Average of Two Blue Boxes each week

As part of the City's mandate to provide Blue Box accessibility to its ratepayers, the curbside blue box collection contract is structured to include service to all permanent and seasonal residents along all public, private and unassumed roads that meet the minimum City maintenance standards. The extensive collection service is supported by five recycle drop off depots at City landfill sites.

Photos 3-4 depicts the recycle drop off depots at City landfill sites.



Photo 3 Recycle Drop off Depot Bin at City landfill sites

The curbside and depot trucks deliver Blue Box material daily to the Lindsay/ Ops landfill site inside a 3,000 square foot transfer building equipped with two loading bays; maintaining two stream separation of the material. Blue Box material is loaded into 50 cubic yard roll-off bins and hauled two roll-off bins per load (train) to the Northumberland Materials Recovery Facility (MRF). This material travels approximately 1.5 hours hauling distance on a daily basis.

Photo 5 depicts the Lindsay/ Ops landfill transfer site.



Photo 5 Lindsay/ Ops landfill transfer building



Photo 6 Transfer of Blue Box material to Northumberland MRF

The Northumberland MRF has single stream processing capabilities. An informal agreement between the City and the Northumberland MRF is to process two stream material to reduce the City's processing costs. The Northumberland MRF currently processes all Blue Box material collected by the City.

The key drivers that led to the development of this Waste Recycling Strategy include:

- Maximize 'Best Practices'- Waste Diversion Ontario funding; and
- Curbside recycling tender due in 2011.

6.0 Goals and Objectives

This Strategy development process identified a number of goals and objectives for the City to consider. These are presented in Table 6.1 following the format depicted in the CIF Guidebook. These goals are broad based to help place some perspective to the Strategy and provide direction for staff to help set up targets to monitor and to compare to Rural Regional programs in upcoming years.

Table 6.1 City's Recycling Goals and Objectives

Waste Recycling Goals and Objectives	
Goals	Objectives
To improve the cost-effectiveness of recycling for City residents.	In 2011 reduce current collection cost per tonne by as much as 50% over the next 2 years through implementation of collection RFP incorporating a longer term collection contract (April 2011). Similarly, in 2011, aim to further reduce processing costs through implementation of a formal processing short term contract with Northumberland.
To maximize diversion of residential Blue Box program	In 2011 aim to divert 22% of municipal solid waste through the Blue Box program through implementation of simple measures (Priority Initiatives Table e.g. new collection tender, enhance P&E, improve signage/accessibility at depot sites). Beyond 2012 <u>consider</u> setting a target to divert 25% of municipal solid waste through the Blue Box program through the implementation of more comprehensive measures (Future Initiatives Table. e.g. consider Full user pay, increases to bag limits, increases to landfill tipping fees, by-law enforcements, etc).
To increase capture rate in the Blue Box program	To monitor current capture rate (46%) and strive to increase Blue Box capture rate to 75% as recommended by CIF for Rural Regional programs.

Throughout this Strategy, references are made to Blue Box capture rate and Blue Box diversion rate.

A **Blue Box diversion rate** provides specific reference to the City's Blue Box program. It does not include other divertible tonnes captured through leaf and yard waste, pilot organics program, backyard composting, MHSW, scrap metal, WEEE or commercial sector recycling. A Blue Box diversion rate is calculated using the total residential blue box tonnes divided by the total residential waste tonnes.

A **Blue Box capture rate** also provides specific reference to the City's Blue Box program and does not include other divertibles. The Blue Box capture rate represents the Blue Box tonnes that the City is capturing out of the waste stream based on composition data for Rural Regional programs.

7.0 Current Solid Waste Trends, Practices, System and Future Needs

Community Characteristics

For the 2009 WDO datacall, the reported population for the City of Kawartha Lakes was 84,266. The major urban areas are Lindsay (20,000 residents), Bobcaygeon (3,150 residents) and Fenelon Falls (2,800 residents). The area of the City is approximately 3,000 square kilometers composed of a mix of urban and rural areas and over 250 lakes.

The City reported 35,533 single family households and 2,860 multi-family households including seasonal cottagers for 2009. Seasonal residences are generally occupied during the months of May to October. A growing number of seasonal cottages are being converted into permanent residents.

Existing Recycling Programs and Services

Currently, the City has the following policies and programs in place to manage residential solid waste:

- Partial user pay (first two bags are free) and \$3/bag (fee increase from \$2/bag effective June 2010)
- Local public school board participation in the curbside program and promotion material
- Mandatory recycling as part of the Solid Waste By-Law 2007-024
- Tipping fees at landfill site

Waste and all recyclables (curbside and depot) are collected by Green for Life Environmental East Corporation (formally National Waste Services Inc.). They are currently operating on a seven year contract with three additional one year renewal terms which ends September 2011. The contract includes collection from the five landfill locations throughout the City.

Blue Box material is currently transported to the Northumberland MRF and marketed. The City receives revenue rebates from the Northumberland MRF.

The City offers both 16 gallon and 22 gallon recycle boxes to residents. Recycle boxes are available for purchase at all City Municipal Service Centres on a cost recovery basis only. Also, the City has worked with a local niche market business (The Green Marketing Company, based out of Cavan, Ontario) to design an adjustable blue box lid (Photo 7) that is available to purchase at all Municipal Service Centres at a cost of \$5.00/lid.



Photo 7 Adjustable metal Blue box lid

Effective November 2010, the City entered into an agreement with a contracted service provider (Pnewko Brothers Ltd., Vaughan, Ontario) offering recycling of used oil containers. The City was first notified of the service through CIF. An agreement was implemented on November 24, 2010 for Pnewko Brothers to collect and process all used oil, antifreeze and lubricant jugs or pails generated from the bulking of used oil at the two MSHW depots. The contractor provides each MSHW depot with collection tote bags to collect material at no charge. The collected materials are sent for recycling into plastic lumber applications.

Upcoming important collection-related milestones that may affect how collection services are administered within the City include:

1. On November 1, 2010, the City received approval from CIF (Project #508.11-Best Practices) for a transfer station upgrade. The project has been granted 46% of the blue box related project costs up to a maximum of \$432,732 of the total project cost of \$1, 007, 400, in funding from the Continuous Improvement Fund subject to:
 - Council approval to commit to the portion of the project costs not covered by the CIF grant in the amount of \$574,668;
 - A province wide service area condition in the Certificate of Approval for the transfer station for blue box recyclable material to allow the receipt from other jurisdictions;

- CIF involvement in the design to allow future expansion opportunities;
 - An agreement with the municipality to receive material from other jurisdictions; and
 - The municipality involve the CIF in its' negotiations and contract development for collection services.
2. The City has also received approval from CIF for the installation of a polystyrene densifier at the new transfer station location (Project #508.8-Innovation). The project has been granted 74% of the project cost up to a maximum of \$75,000 total project costs of \$100, 000 in funding from CIF. The intent is to use the densifier and to offer flexibility for the City to market polystyrene to local recyclers. This project is subject to:
- Council approval to commit to the portion of the project costs not covered by the CIF grant in the amount of \$25,000.
3. The City's waste and recycling collection contract with Green for Life Environmental East Corporation comes due the end of September 2011.

Current Waste Generation and Diversion

Table 7.1 Depicts total waste quantities managed by the City in 2009.

Table 7.1 2009 Total Waste & Blue Box material quantities	
Waste Stream/ Blue Box Material Collected (2009)	Quantities (Tonnes)
IC&I Self-Haul Waste	25,093
Residential Self-Haul Waste	6,035
Residential Curbside Collection: Waste	14,527
Residential Curbside Leaf & Yard Waste	310
Residential Curbside and Depot Collection: Blue Box Materials	6,300
MHSW	233
Residential Curbside Textile Collection	42
Scrap Metal	1,269
Electronic Depot Collection	146
IC&I	25,093
Residential	28,862
Total	53,955

In 2009, the City managed 53,955 tonnes of waste. Almost half (47%) of the waste quantities generated were privately delivered to the City's disposal sites by the IC&I sector.

Specific to the residential sector, 28,862 tonnes of residential waste was generated in 2009. Of this 6,300 tonnes (21.8%) was diverted through the Blue Box program. Table 7.2 summarizes the current waste generation and Blue Box diversion rates.

It is important to note that the Strategy focus is on the Blue Box program and reference to diversion rates and capture rates is specific only to Blue Box recyclables. This does not incorporate overall City waste diversion rates from other sources (SSO, MHSW, etc).

Table 7.2 City's Residential Blue Box diversion rate (2009)

Residential Solid Waste Generated and Diverted (Through Blue Box Only)		
Residential Waste Stream/ Blue Box Material	Tonnes	Percent of Total Waste
Total Waste Generated	28,862	-
Papers (ONP, OMG, OCC, OBB and fine papers)	4,618	16.0%
Metals (aluminum, steel, mixed metal)	489	1.7%
Plastics (containers, film, tubs and lids)	657	2.3%
Glass	536	1.9%
Total Blue Box Recyclables Diverted from Landfill	6,300	21.8%

Table 7.3 indicates the City's current Blue Box diversion rate is on par with the WDO Rural Regional Municipal Grouping.

Table 7.3 Residential Blue Box Diversion Rate Comparison to Rural Regional Rate (2009)

Average Blue Box Diversion Rate (2009)	
City of Kawartha Lakes	21.8%
Municipal Grouping: Rural Regional	22.5%

In 2009, the net overall Blue Box recycling cost for the City was \$2,733,334.06. This translates to a residential Blue Box program cost of \$433 per tonne, \$31 per capita or \$71 per household for the City of Kawartha Lakes. This represents all costs associated with the Blue Box program inclusive of curbside and depot contract costs with Green for Life Environmental East Corporation, processing fees from Northumberland MRF, Blue Box transfer station operating costs (fuel, maintenance

and taxes), City Call Centre costs and a portion of salaries from the depot attendants, Solid Waste staff and clerical staff.

As table 7.4 below shows, net annual recycling costs for the City are **above average** for the WDO Rural Regional municipal grouping for both gross and net Blue Box program costs.

Table 7.4 City's Residential Blue Box costs vs. Rural Regional program costs (2009)

Recycling Cost (per tonne per year)	
City of Kawartha Lakes (Net Program Costs)	\$ 433
Municipal Grouping: Rural Regional (Gross Program Costs)	\$ 401
Municipal Grouping: Rural Regional (Net Program Costs)	\$ 331

Itemizing the individual costs of the City's Blue Box program, Table 7.5 depicts that the collection contract represents 80% of the overall program costs. Processing and transfer costs representing approximately 9% of the Blue Box program cost.

Table 7.5 Composition of City's residential Blue Box costs (2009)

Item	Percentage of Blue Box Program Total Costs
BB Curbside & Depot Collection Contract	80%
BB Processing	5%
BB Transfer Costs	3.2%
BB Transfer Station Costs	.8%
BB Promotion Material and Staff Costs	1.9%
BB Administration Costs (Taxes, call centre, % salaries of depot attendants, supervisors and clerical staff)	9%
Total Cost Per Tonne	100%

The Rural Regional WDO municipal grouping encompasses 14 municipal programs. For comparison purposes, Table 7.6 depicts similar size programs within the Rural Regional Grouping that have similar rural/urban demographics and large geographic areas being serviced by curbside collection.

Table 7.6 Rural Regional program costs (2009)

Rural Regional Programs (Similar Geographic Size)	Blue Box Tonnes Marketed	Total Gross Costs	Gross Costs Per Tonne	Total Gross Revenue	Total Net Cost	Net Cost Per Tonne
Oxford County	6,900	\$2,209,807.	320	\$544,406.	\$1,665,401.	\$241
Kawartha Lakes	5,954	\$2,891,490.	485	\$158,156.	\$2,733,334.	\$459
Muskoka, District Municipality of	5,668	\$3,146,540.	556	\$263,339.	\$2,883,201.	\$509
Northumberland County	5,669	\$3,359,175.	592	\$500,493.	\$2,858,682.	\$504
Peterborough County	4,560	\$1,751,959.	384	\$406,665.	\$1,345,293.	\$295

Table 7.7 depicts service level details of these Rural Regional programs.

Table 7.7 Service levels for Rural Regional programs (2009)

Municipality	Disposal	Blue Box Diversion
City of Kawartha Lakes	Weekly collection all public and private roads 2 bag limit Additional bags \$3/bag 5 disposal sites (tipping fee)	Alternating weekly collection on all public and private roads (fibres week 1 , containers week 2) Depot service at all disposal locations. No free blue boxes.
Oxford County	Weekly collection All bag/container subject to \$1.50 tag Waste can also be dropped off at landfill (tipping fee)	Bi-weekly collection of two stream material. First blue box free.
District of Muskoka	Bi-weekly collection in winter, weekly collection in summer to urban areas (Towns, Villages, Hamlets). 2 bag limit for areas with green cart program. 3 bag limit for areas without green cart program. Additional bags are charged \$1/bag. Lake of Bays (Dorset area) only depot service-no collection.	Weekly collection to urban areas (Towns, Villages, Hamlets). Seasonal front-end bin service for water access cottagers (approx. 10 sites) Rural depots at waste disposal sites for private roads and seasonal residents on unassumed roadways. Two stream collection. No free blue boxes.
County of Peterborough	Weekly collection on public roads and urban areas. Depot service to rural areas and private roads.	Weekly collection along public roads for all urban areas within County (25,000 Households). Depot service to rural areas and private roads (10,000 Households). Two stream collection.
County of Northumberland	Weekly collection of all public roads. Weekly seasonal collection of select private roads (cottages). No free bags. All bags must be tagged (\$2.75) Max. 3 bag limit.	Weekly collection on all public roads (rural and urban). Weekly seasonal collection of select private roads (cottages). Depot service at all disposal locations. Fully comingled enhanced single stream program using a bagged based program and optical sort technology.

Potential Waste Diversion

In table 7.8 below, the City's waste composition was calculated using the Rural Regional waste audit sample (provided by WDO) from the District of Muskoka. The District of Muskoka has similar geographic and demographic composition to the City of Kawartha Lakes and is referenced in the CIF guidebook as a suitable sampling comparator to establish current Blue Box capture rates.

By referencing data from the Rural Regional waste audit sample, it has been estimated that the **City's capture rate of Blue Box material from the current waste stream is approximately 46%**. This was calculated by using the City's 2009 total residential waste generation of 28,862 tonnes and comparing it to the composition data from the Rural Regional sample audit. As a result, an estimated 13,565 tonnes of Blue Box material is available in the City's waste stream. Currently, the City has captured 6,300 tonnes of the Blue Box material (6,300 Blue Box tonnes/13,565 available Blue Box tonnes =46% capture rate).

Table 7.8 depicts potential Blue Box material available in the City's waste stream based on waste audit composition data from the Rural Regional sample audit conducted by WDO (District of Muskoka).

Table 7.8 Potential available Blue Box material

Current and Potential Diversion			
Waste/Resource Material	Composition (%) (Rural Regional Sample Audit-District of Muskoka)	Total Residential Waste Generated (tonnes)	Total Blue Box Material in Waste Stream (tonnes)
Papers (ONP, OMG, OCC, OBB and fine papers)	28	28,862	8,081
Metals (aluminum, steel, mixed metal)	3		866
Plastics (containers, film, tubs and lids)	9		2,598
Glass	7		2,020
Total Blue Box Materials	47	28,862	13,565

The CIF guidebook has recommended a target capture rate of 75% Blue Box material for the Rural Regional municipalities. Details of estimates of Blue Box material available for capture are listed in Table 7.9 below. The City's Blue Box Capture rate is calculated by using the City's 2009 residential waste generation of 28,862 tonnes

and comparing it to the composition data provided in the CIF guidebook for the Rural Regional sample audit (District of Muskoka). As a result, an estimated 13,565 tonnes of Blue Box material is available in the City's waste stream. Currently, the City has captured 6,300 tonnes of the Blue Box material (6,300 Blue Box tonnes/13,565 available Blue Box tonnes =46% capture rate).

If the Rural Regional municipalities are striving toward a target capture rate of 75% this would mean that the City would need to collect 3,873 tonnes of additional material through the Blue Box program, as depicted in Table 7.9.

Table 7.9 Capturing 75% of Available Blue Box Material from City's Residential Waste Stream

Current and Potential Diversion			
Waste/Resource Material	Total Available in Waste Stream (tonnes/year)	Currently Recycled (tonnes)	Potential Increase (tonnes/year)
Papers (ONP, OMG, OCC, OBB and fine papers)	6,061	4,618	1,443
Metals (aluminum, steel, mixed metal)	649	489	160
Plastics (containers, film, tubs and lids)	1,948	657	1,291
Glass	1,515	536	980
Total Blue Box Materials	10,174	6,300	3,874

Reflecting the 75% projected capture rate against the existing City's residential waste stream represents an additional 3,873 tonnes that could potentially be captured in the City's Blue Box program. Capturing 75% of Blue Box material from the City's residential waste stream would raise its **Blue Box diversion rate to about 35%** (i.e. 6,300 Blue Box tonnes + 3,873 projected tonnes / total residential waste of 28,862 tonnes).

Anticipated Future Waste Management Needs

The City's Growth Management Plan outlined in the recently prepared Draft Waste Management Master Plan (October 2010) depicts the City's growth rate to be 1.2% per annum over the next 10 year planning period. Table 7.10 below depicts the expected solid waste generation increase and Blue Box material recovery (based on a projected population growth rate of 1.2% and 75% Blue Box capture rate).

Table 7.10 Forecasting 75% capture of Blue Box material from City's residential waste stream

Anticipated Future Solid Waste and Blue Box Recovery Rates			
	Current Year	Current Year + 5	Current Year + 10
Population	84,266.0	89,444.8	94,941.8
Total Waste	28,716.0	30,480.8	32,354.1
Blue Box Material Available	10,122.4	10,744.5	11,404.8

8.0 Planning a Recycling System

The following section outlines some possible strategies that are suitable for the City to consider based on Best Practices outlined in the CIF guidebook and suitable for Rural Regional programs. The emphasis will be on reducing collection costs and increasing blue box diversion and capturing rates in the upcoming years.

Based on the recent decision (April 2011) to implement a Priority Initiative to prepare a longer term Waste and Recycling collection tender, a phased-in approach is proposed to the existing system with emphasis on promotion and education (P&E) in the local schools as well as for permanent and seasonal residents. This will ensure that results can be closely monitored by existing staff with possible support from part-time seasonal staff (summer students, volunteers, committee members, etc).

It should be possible to gradually increase the capture rate of the Blue Box program within the context and costs of the current program. This would be done by encouraging residents to recycle more of their wastes using the existing program infrastructures and by enhancing the program through greater awareness in areas beyond the home including public parks, community centres, cottage associations and the local schools. The enhanced community awareness can be supported with a Council 3 R's training session supported with handouts for distribution at events, training for the depot attendants and supplying literature to share with public and using public space Blue Box receptacles and signage.

It is important to note that until last year, the main challenge for the City was the increasing volume of collected material and rising cost of the current collection contract. With the recent release of a new longer term collection it is anticipated that the City will see favourable savings similar to the neighbouring municipality (Northumberland County) with a potential to reduce Blue Box collection costs by 50% over the upcoming years.

8.1 Possible Strategy to Increase Recycling

The City presently diverts **21.8%** of its wastes through its Blue Box program. The average for Rural Regional municipalities is **22.58%**. Interestingly, of the nine available municipal groupings, Rural Regional has the second highest average Blue

Box diversion rate. **Large Urban** (populations 379,000-2,511,995) is ranked with the highest Blue Box diversion rate of **22.62%**.

Given that the City is very close to the average Blue Box diversion rate for municipalities of its grouping, has a 46% Blue Box capture rate but has a higher than average costs for the Blue Box program a phased approach is proposed. This will ensure that program costs and results can be closely monitored by City staff on an annual basis.

It is anticipated that it should be possible to increase the capture rate of the Blue Box program within the context and costs of the current program. This would be done by encouraging residents to recycle more using the existing program infrastructures. Also, this program could be enhanced by supporting and enforcing existing recycling by-laws and reducing the number of free bags (e.g. full User Pay, bag limits, etc).

A reasonable preliminary goal would be to increase tonnages to exceed the average Blue Box diversion rate for Rural Regional to achieve a minimum **25%** Blue Box diversion rate.

A second and aspirational future goal would be to achieve a 35% diversion rate as a result of the Blue Box program and strive toward a 75% Blue Box capture rate from the waste stream. The minimum future goal would be to at least reach the average **25%** Blue Box diversion rate.

Table 8.1 highlights the estimated number of tonnes that would need to be captured to attain 25% and 35% diversion rates of Blue Box material from the waste stream. It includes consideration of the impact of population growth in the City (1.2%).

Table 8.1 Forecasting diversion rates			
Capture Rates to Meet Waste Diversion Goals			
	% Waste Diversion		
	Current (21.5)	25	35
	tonnes captured/year		
2010	6,300	7,179	10,051
2015	6,687	7,620	10,668
2020	7,098	8,089	11,324

Table 8.2 highlights attaining a 25% diversion rate as a result of the current Blue Box program.

Table 8.2 Forecasting 25% diversion rate

Meeting 25% Blue Box Diversion Rate		
Current Capture (21.5%)	tonnes/year	6,300
25% Capture	tonnes/year	7,179
Additional Tonnes (at 25% capture)	tonnes/year	879
Per household	kg/year	25
Per household	kg/week	0
Collection routes	#	5
Per route	tonnes/year	176
Per route	kg/week	3
Current program costs	\$/year	2,825,013
Current program costs	\$/tonne	433
New program costs	\$/tonne	394

On average attaining a 25% diversion rate would amount to each household recycling an additional 25 kg/year or 0.5kg/week.

This has potential to lower the current cost per tonne for recycling closer to the average for other similar municipalities. It is important to note that a challenge for the City and other programs in the Rural Regional grouping is the increasing volume of collected material. If the City improves on capture of additional plastic material, existing curbside Blue Boxes and truck capacity decreases and becomes an issue with handling and transportation costs. If the City improves promotion specific to capture of fibre material, there is less of an impact on available collection capacity.

The path to approaching or attaining a 25% diversion rate through the Blue Box program has been evaluated during the 2011 Waste and Recycling collection tender process.

It will be prudent to consider a longer term collection contract to reduce overall recycling costs. Best practices average a minimum of seven years allowing sufficient time for the contractor to recover the capital costs.

8.2 Overview of Planned Initiatives

The City must re-tender its waste and Blue Box collection contract in 2011 (April).

The best approach for increasing the capture rate and decreasing costs could be to stage possible changes to the current Blue Box program and try to develop improvements in the next collection/processing contract.

With that in mind a number of options were reviewed and scored based on a series of criteria, which included:

- Estimate of waste diverted (%);
- Proven results;
- Reliable processing facilities/end use;
- Accessible to public; and
- Ease of implementation.

A summary of the options reviewed with City staff and their scoring are provided in Appendix 2. Using the evaluation criteria table in the CIF guidebook that lists possible ranking of options surrounding promotion, collection, processing and Best Practices staff provided feedback on areas requiring consideration. This exercise does not commit to a final decision but acts as a guide to assist with making future decisions.

From there a refined list of options has been summarized into two tables:

- Possible Priority Initiatives; and
- Possible Future Initiatives.

These tables are tools to be considered and to reference as part of this Strategy.

Based on general comments from staff and taking into account comments from the public, a list of priority and possible future initiatives was developed.

Possible Priority Initiatives (Immediate Future)				
Initiative	Estimated Implementation Cost	Estimated Annual Operating Cost	Implementation Time Line	Comments
Enhance Existing Public Education and Promotion (P&E) Program (Comment from staff)	Staff time to develop P&E outreach materials.	\$3,000 to maintain new enhancements.	On-going consideration as waste management programs are updated and new opportunities arise.	Intent to better publicize program and capture more Blue Box materials-supported with changes to collection program (possible user fees, weekly blue box).
Following Generally Accepted Principles for Effective Procurement and Contract Management (Comment from staff-Collection Tender)	Staff time to develop a tender outline.	Low to Moderate costs-use of third party contractor to peer review document (~\$3,500).	April 2011	Templates for developing tender available on-line at WDO website. Staff developed a tender that will result in reply from a variety of contractors.
Weekly Blue Box Collection (comment from resident and staff)	Staff time and possible increase in curbside collection costs by approx. 7% based on CIF guidebook.	Could result in shift in collection costs from waste to blue box and possible overall reduction in costs.	Consider as program enhancement when opportunity arises.	Potential to increase capture rate to 75% and blue box diversion rate to 25%.

The following table outlines possible future initiatives to take into consideration to improve Blue Box diversion and capture rates.

Possible Future Initiatives				
Initiative	Estimated Implementation Cost	Estimated Annual Operating Cost	Implementation	Comments
Full User Pay - no free bags	Staff time and supported by enhancement of Promotion & Education costs.	Could result in increased capture of revenue for the City.	Consider as program enhancement when opportunity arises.	<p>This would reduce amount of waste collection.</p> <p>This would require discussions with Council. This would require SSO program.</p> <p>Would require significant Promotion & Education.</p>
RFP for Processing of Recycling Material	Staff time and peer review by third party contractor (~\$3,500).	Could result in decreased processing costs.	<p>Consider as separate tender document in 2011 or 2012.</p> <p>Subject to award of Waste and Recycling Collection tender.</p>	Important to maintain current level of service. Be cautious not to reduce list of blue box material in an effort to reduce processing costs. List of current BB materials in Appendix 2.
Separate Transfer Tender for Recyclables	Staff time and peer review by third party contractor (~\$3,500).	Could result in decrease in transfer costs.	Has been incorporated in 2011 Waste and Recycling Collection tender.	Incorporate possible back haul option of residuals as part of tender.

Possible Future Initiatives				
Initiative	Estimated Implementation Cost	Estimated Annual Operating Cost	Implementation	Comments
New signage at depot bin sites	CIF funds 50% of costs.	None	Consider applying for funding from CIF in 2011 for visual graphics on depot bins and depot signs.	Increases awareness and reduces depot bins contamination.
Compactors for depot sites	~\$50,000 per compactor.	Reduce frequency of lifts up to 90% for fibre and 50% for containers.	Consider applying for funding from CIF for capital grants.	County of Peterborough applied for funding for solar compactors and they are in use.

It was recognized that the actual implementation of immediate cost saving initiatives would be a function of the results of the next Waste and Recycling collection tender, followed by enforcement mechanisms such as Full User Pay and curbside bans.

To cite a recent example of a cost effective collection tender for a neighbouring Rural Regional program is the County of Northumberland. Tender results to co-collect (waste and single stream blue box material) from 38,000 households depicting similar geography and demographics resulted in a cost of \$4.32/household/month for an eight year term with two one year renewal options. The recycling portion represents approximately half of the costs (\$2.16/household/month), representing an average annual collection cost of approximately \$990,000 per year. This savings is approximately \$1.8 million less than the City's current annual collection costs. Furthermore, the County of Northumberland operates a Full User Pay program with a charge rate of \$2.75 per bag (no free bags) and a curbside enforced three bag limit.

Fundamental best practices, outlined in the CIF guidebook for creating a Waste Recycling Strategy are based on the KPMG /RW Beck Best Practices Report 2007. These best practices are for municipalities to use a combination of policy mechanisms and incentives to stimulate recycling and discourage excessive generation of waste. Economic incentives are diverse. The objective is to place a cost on disposing of residential waste and an importance on Blue Box diversion.

Full User Pay or Pay-As-You-Throw (PAYT) has the potential to recover a portion or all of waste management costs from system users. Currently, the City collects a nominal fee from a Partial User Pay program due to the allowable number of free bags (2/household/week). In 2009, the fees attributed from user pay were \$27,000. If the City were to implement a Full User Pay program, the potential savings in

collection fees may further be supported by a potential gain in revenue from bag tag sales. As an example, in 2009, the City collected 14,734 tonnes of waste from the curbside program. Using a broad assumption that a bag of waste averages 20 kgs, it can be estimated that the City collected approximately 736,700 bags of waste in the year or 20.5 bags per household per year; representing an average City-wide equivalent of one bag per household every other week. If the City operated under a Full User Pay program and a charge of \$3.00 per bag was applied to all 736,700 bags, the City could potentially have captured \$2.2 million in user fees to offset the Blue Box program. Realistically, it is anticipated that residents would reduce their curbside setout of waste or may default to bringing material a landfill site thereby reducing available fees. It will be important to support increases in user fees at the landfill sites to reflect curbside tag fees.

Although the City has a two bag limit, this is not stringent enough to encourage a reduction in weekly waste quantities setout by residents for curbside collection. Another best practice outlined in the KPMG/RW Beck Report is to increase participation and capture rate of a Blue Box program by employing a limit to the number of bags a household can setout for collection (e.g. 3-4 bags per household bi-weekly). The following table excerpted from the CIF guidebook suggests effective bag limit levels for various Blue Box recycling programs. Programs with alternating weekly Blue Box collection have a suggested bag limit of three bags per week and a further reduction to two bags per week when supported by an organics collection program.

Table 8.3 provides information depicted in the CIF guidebook.

Table 8.3 Suggested bag limits

Recycling System	Collection Frequency	Garbage	Suggested Bag Limit	Add Kitchen Organics	Suggested Bag Limit
Multi-Sort	Weekly	Weekly	3	Weekly	2
	Bi-weekly	Weekly	4	Weekly	3
Two Stream	Weekly	Weekly	3	Weekly	2
	Bi-weekly	Weekly	4	Weekly	2
	Alternating weeks	Weekly	3	Weekly	2

Bag limits can generally be administered without capital expense and are typically regarded as a low-cost initiative, but require significant and ongoing public education.

Upgrades for the drop off recycle depots at the City's landfill sites could be considered. It is suggested that the City consider new signage that incorporates graphics with limited descriptive text, improving material segregation.



Signage at Recycle drop off depot bin at City landfill sites

A report commissioned by WDO through the Effectiveness and Efficiency Fund titled Best Practices for Rural Depot Recycling (2006), outlines the following key factors for effective rural recycling depots:

- **Depot Accessibility** – clean, easy to load depot containers with sufficient turning radius for vehicular traffic and an area separate from congestion of waste disposal traffic;
- **Supportive infrastructure to reduce contamination and increase participation**-including provisions of Blue Boxes to seasonal residents to segregate recyclables at the cottage, illegal dumping and mandatory recycling by-laws and the use of clear bags and bag limits for waste;
- **Entrance signage at the depot site and simple messaging** on the depot container -using graphics and minimal text for easy reading;
- **Depot attendant actively involved in monitoring recycling depot** –hand out literature to new residents, sell blue boxes at the depot site for residents.

When considering the varying levels of financial investment required for improving depot participation, municipal staff noted that there is a very limited budget available to the recycling program. As a result, consideration to phasing in depot upgrades for future initiatives (2011, 2012) could be implemented. During this process, the City could apply for public education funding for depot signage and flyers for attendants to hand out to residents. In addition to public education, the City could apply for capital funding for new compaction depot containers from CIF.

Photos 8 and 9 depict new signage used by the County of Peterborough for their rural depot bins to increase participation and reduce contamination.

County of Peterborough Depot Signage- 2009



The implementation of priority initiatives would need to begin in 2011 to coincide with the preparation of the collection tender. The consideration of future initiatives could be undertaken in early 2011 or phased into 2012.

It is recognized that the actual implementation of future initiatives will be a function of the results of the next waste and recycling collection tender and costs. It may be that none of these initiatives are implemented. Alternately a selection could be implemented with actual implementation timing decided during the tender process.

8.3 Contingencies

The priority initiatives can be impacted if there is no municipal funding available.

The future initiatives will be decided as an outcome of the waste and recycling collection tender. If no future initiatives are implemented then the City will revert to priority initiatives.

9.0 Monitoring and Reporting

The monitoring and reporting of the City's recycling program is considered a Blue Box program fundamental best practice and will be a key component of this Waste Recycling Strategy.

Once implementation of the Strategy begins, the performance of the Waste Recycling Strategy will be monitored and measured against the baseline established for the current system. Once the results are measured, they will be reported to Council and the public.

The recommended approach for monitoring the City's Strategy is outlined in Table 9.1.

Table 9.1 Blue Box Monitoring Strategy

Recycling System Monitoring		
Monitoring Topic	Monitoring Tool	Frequency
Measurement of Blue Box materials captured.	Documented total weight data as outlined in this Strategy and compare it to target capture rates (75%).	Annual summary
Diversion rate (Blue Box)	Document Blue Box Diversion Rate Formula: (blue box materials diversion) ÷ total waste generated * 100%.	Annual summary
Program participation	Documented curbside setout studies or curbside participation studies to determine frequency of curbside setout, number of boxes, fullness and type of boxes used.	Once every 1-2 years.
Program cost	Document Blue Box program costs to reflect each cost area to determine overall cost composition. Incorporate a revenue column to depict annual revenues from Blue Box program.	Once every 1 year.
Customer satisfaction	Customer survey (e.g., telephone); tracking calls/complaints received by municipal office.	Every 3 years
Opportunities for improvement	Customer survey (e.g., telephone); tracking calls/complaints received by municipal office.	On-going
Planning activities	Describe what initiatives have been fully or partially implemented and what will be done in the future.	Annually
Review of Recycling Strategy	A periodic review of the Recycling Plan to monitor and report on progress and to move forward with continuous improvement.	Annual for current initiatives Every 5 years to re-evaluate and refine list of initiatives.

10.0 Conclusion

The City currently has a good Blue Box program diversion rate (21.8%) but pays a relatively high rate (i.e. \$459/tonne). A staged process to increase the Blue Box program diversion rate and reduce per tonne cost was **recommended**.

There are a number of **future** initiatives that could be implemented. These will be a function of the upcoming waste and recycling collection tender.

It is recommended that the City obtain updated and ongoing data on its Blue Box program to improve effectiveness and gain efficiencies. It is recommended that the City annually monitor its progress against this Strategy and update this Strategy as it sees fit. It is **recommended** that this Strategy be fully updated in 2015.

Appendix 1
CIF Agreements Project #508.8 (Polystyrene Densifier) &
Project #508.11 (Transfer Station)

November 1, 2010

Angela Porteous, Public Education Officer
City of Kawartha Lakes
12 Peel St.
Lindsay, ON K9V 5R8

Dear Angela,

**RE: Continuous Improvement Fund Project Approval, Project #508.8 (Innovation)
Polystyrene Densifier**

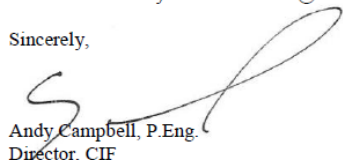
This is to inform you that your application to the Continuous Improvement Fund (CIF) for the installation of a polystyrene densifier at your new collection depot has received approval for funding.

The project has been granted approximately 74% of the project cost up to a maximum of \$75,050, including taxes, in funding from the Continuous Improvement Fund.

A draft of the project agreement will be forwarded shortly for your review and comment. Once you have reviewed the draft agreement, forward any comments to Mike Birett, Manager, who will then provide a final agreement for signing. Please note that the final project agreement will have to be completed and executed prior to the distribution of any funding for the project and that the CIF withholds 25% of the funding until the final report is submitted and approved.

If you have any questions in regards to this project, please feel free to contact Mike Birett at 905.936.5661 or by email at mbirett@wdo.ca.

Sincerely,



Andy Campbell, P.Eng.
Director, CIF

c: Mike Birett, Manager, CIF
Glenda Gies, Executive Director, Waste Diversion Ontario
Frank Daniel, Controller, Stewardship Ontario



November 1, 2010

Angela Porteous, Public Education Officer
City of Kawartha Lakes
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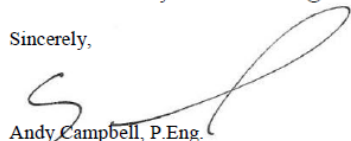
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If you have any questions in regards to this project, please feel free to contact Mike Birett at 905.936.5661 or by email at mbirett@wdo.ca.

Sincerely,



Andy Campbell, P.Eng.
Director, CIF

c: Mike Birett, Manager, CIF
Glenda Gies, Executive Director, Waste Diversion Ontario
Frank Daniel, Controller, Stewardship Ontario



Appendix 2
Excerpt from City's Waste By-law 2007-024

SCHEDULE “D” TO BY-LAW 2007-024

RECYCLABLE MATERIALS

1. In this By Law:

“recyclable containers” includes but is not limited to:

- (a) food and beverage glass bottles and jars;
- (b) metal food and beverage cans;
- (c) aluminum foil and trays;
- (d) #1 (PET) plastics, #2 (HDPE) plastics, #3 (PVC), #4 (LDPE) plastics, #5 (PP) plastics, #6 (PS) and #7 (OTHER PLASTIC) plastics and consisting of bottles, containers, trays, tubs, lids and film, but not including motor oil containers; bail wrap and twine, toys, and plant trays;
- (e) polycoat milk and juice cartons;
- (f) tetrapak drinking boxes;
- (g) empty and dry paint, stain and coating cans with lid removed;
- (h) empty aerosol cans; and
- (i) any other container designated by the Director to be a recyclable container.

“recyclable paper” includes but is not limited to:

- (a) newspaper and insert flyers
- (b) magazines, catalogues and telephone directories
- (c) household paper, including junk mail, writing and computer paper and envelopes;
- (d) paper bags;
- (e) fibre egg cartons
- (f) paper rolls such as the inserts for toilet paper and paper towels;
- (g) boxboard and waxed boxboard;
- (h) hard and soft cover books;
- (i) paper cups;
- (j) greeting cards and gift wrap;
- (k) “recyclable cardboard” includes, clean, unwaxed corrugated cardboard and
- (l) any other paper designated by the Director to be recyclable paper

- a. establish guidelines for the handling and disposal of prohibited waste and provide information to the public regarding such handling and disposal;
- b. suspend collection services in all or part of the City for a specified time in the event of inclement weather or other conditions which renders the provision of collection services unsafe;
- c. establish the terms of an agreement with any person for the acceptance of waste at the waste disposal site;
- d. establish the terms of an agreement with any person for the acceptance of recyclable materials at the waste disposal site;
- e. determine the guidelines for the disposition of asbestos waste in accordance with Regulation 347, R.R.O. 1990, as amended; and
- f. deal with any other matter assigned by this By-law or necessary for the collection, removal and disposal of solid waste and administration of this By-law;

2.03 Any waste lawfully placed out at collection locations for collection by the City may be salvaged, reclaimed, recycled, composted, disposed of or otherwise dealt with by the City as the City may deem fit.

2.04 The items described as Recyclable Materials in Schedule D, scrap tires, scrap metal and leaf and yard waste are banned from landfill sites in the City for the purpose of disposal.

Appendix 3
Waste Recycling Option Scores

Waste Recycling Option Scores

Suitable? Y/N	Description of Options/Best Practices (For more information: More information: Blue Box Program Enhancement and Best Practices Assessment Project Final Report, Volume 1)	Criteria (Score out of 5)						Total Criteria Score	Score x/100
		% Waste Diverted	Proven Results	Reliable Market/ End Use	Economically Feasible	Accessible to Public	Ease of Implementation		
Promotion and Outreach									
	Public Education and Promotion Program	1-3%	1	4	3	5	3	16	64%
	Training of Key Program Staff	1-3%	4	4	4	5	4	21	84%
Collection									
	Optimization of Collection Operations	0%							na
	Bag Limits	3-5%	4	-	4	4	4	16	64%
	Enhancement of Recycling Depots	3-5%	4	3	3	5	5	20	80%
	Provision of Free Blue Boxes	1-3%	-	3	1	5	1	10	40%
	Collection Frequency	3-5%	5	4	4	5	5	23	92%
	Broaden materials categories for Blue Box	1-3%	5	5	3	5	4	22	88%
Transfer and Processing									
	Optimization of Processing Operations	0%			2			2	2%

[illegible]

Appendix 4
Public Survey & Committee Summaries

Development of a Waste Recycling Strategy for The City of Kawartha Lakes

- Funding from Continuous Improvement Fund to undertake this Waste Recycling Strategy
- Completing this Strategy has a positive impact on future funding for Blue Box
- Current situation:

Residential Solid Waste Generated and Diverted (Through Blue Box Only)		
Residential Waste Stream/ Blue Box Material	Tonnes	Percent of Total Waste
Total Waste Generated	28,862	-
Papers (ONP, OMG, OCC, OBB and fine papers)	4,618	16.0%
Metals (aluminum, steel, mixed metal)	489	1.7%
Plastics (containers, film, tubs and lids)	657	2.3%
Glass	536	1.9%
Total Blue Box Recyclables Diverted from Landfill	6,300	21.8%

Average Blue Box Diversion Rate (2009)	
City of Kawartha Lakes	21.8%
Municipal Grouping: Rural Regional	22.5%

Current Blue Box program costs (2009) are high, reflecting a high collection contract costs.

This amounts to \$433 per tonne, \$31 per capita or \$71 per household. As the table below shows, net annual recycling costs for the City are above **average** for the City's Rural Regional municipal grouping.

Net Recycling Cost (per tonne per year)	
City of Kawartha Lakes	\$433
Municipal Grouping: Rural Regional	\$331

Itemizing the individual cost centres of the City's Blue Box program the table below depicts that the collection contract represents 80% of the overall program costs (\$368 per tonne), with processing and transfer costs representing approximately 9% of the program costs.

Item	Net Cost Per Tonne Cost	Percentage of Total Costs
BB Curbside & Depot Collection Contract	\$ 367.98	80%
BB Processing	\$ 21.84	5%
BB Transfer Costs	\$ 14.9	3.2%
BB Transfer Station Costs	\$3.68	.8%
BB Promotion Material and Staff Costs	\$ 9.15	1.9%
BB Administration Costs (Taxes, call centre, % salaries of depot attendants, supervisors, & clerical staff)	\$ 40.54	9%
Total Cost Per Tonne	\$ 459	100%
Tonnes Collected	6,165.9	

Possible Next Steps

Possible Priority Initiatives (Immediate Future 2011)				
Initiative	Estimated Implementation Cost	Estimated Annual Operating Cost	Implementation Time Line	Comments
Enhance Existing Public Education and Promotion (P&E) Program (Comment from staff)	Staff time to develop P&E outreach materials.	\$3,000 to maintain new enhancement.	On-going consideration as waste management programs are updated and new opportunities arise.	Intent to better publicize program and capture more blue box materials-supported with changes to collection program (possible user fees, weekly blue box).
Following Generally Accepted Principles for Effective Procurement and Contract Management (Comment from staff-Collection Tender)	Staff time to develop a tender outline.	Low to Moderate costs-use of third party contractor to peer review document (~\$3,500).	2011	<p>Templates for developing tender available on-line at WDO website.</p> <p>Staff developed a tender that will result in reply from a variety of contractors.</p>
Weekly Blue Box Collection (comment from resident and staff)	Staff time and possible increase in curbside collection costs by approx. 7% based on CIF guidebook.	Could result in shift in collection costs from waste to blue box and possible overall reduction in costs.	Consider as program enhancement when opportunity arises.	Potential to increase capture rate to 75% and blue box diversion rate to 25%.

New signage at depot bin sites	CIF funds 50% of costs.	None	Consider applying for funding from CIF in 2011 for visual graphics on depot bins and depot signs.	Increases awareness and reduces depot bins contamination.
Compactors for depot sites	~\$50,000 per compactor.	Reduce frequency of lifts by 90% for fibre and 50% for containers.	Consider applying for funding from CIF for capital grants.	County of Peterborough has applied for funding for solar compactors and they are in use.

Committee Feedback

Environmental Advisory Committee (EAC):

- Need to clarify between Recycle Rate verses Diversion Rate %
- What ever happened to the concept of 'Zero Waste'
- Would favour drop to one bag limit verses user pay system
- Should focus on IC&I sector more
- Should there be a waste management committee?
- should it be 2010 data to match MP

Lindsay/ Ops Landfill Public Review Committee (PRC):

- PRC Meeting Minutes, March 16, 2011

Moved by: Jeanette Myers

Seconded by: Barry Hodgson

"That the PRC does not accept the Draft Recycle Strategy, as the document does not present a coherent strategy." CARRIED.

Lindsay Ops PRC Additional Comments – Waste Recycling Strategy Options (Appendix 3)

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Waste Recycling Option	PRC Comments
Promotion and Outreach	The PRC is supportive of improving promotion and public education, to ensure all residents receive ongoing information & updates. The distribution of information will encourage higher recycling rates.
Collection	
Bag Limits	The PRC does not support decreasing bag limits at this time, until a Source Separated Organics program is implemented.
Enhancement of Recycling Depots	The PRC is supportive of providing graphical information for residents at recycling depots located at landfill sites, to assist residents in determining what material is acceptable.
Provision of Free Blue Boxes	The PRC is supportive of providing larger blue boxes to all residents to encourage recycling. The PRC is also supporting of the use of recycling carts (similar to those used in Toronto) for residential recycling collection.
Collection Frequency	The PRC is supportive of weekly collection for all curbside recyclable materials.
Broaden Material Categories for Blue Box	The PRC is supportive of weekly single stream curbside collection program. This will increase recycling capture by making it easy for residents to participate (i.e. everything goes in one bin and all recyclables are collected weekly).
Transfer and Processing	
Optimization of Processing Operations	The PRC is unclear about this option.
Partnerships	
Multi Municipal Collection and Processing of Recyclables	The PRC is supportive of standardizing municipal recycling programs so a common message can be distributed.
Standardized Service Levels and Collaborative Haulage Contracting	The PRC inquired if options presented in the Waste Recycling Strategy were incorporated into the Curbside Garbage and Recycling Collection RFP that is currently out for bids. City staff indicated the RFP was issued before the Waste Recycling Strategy was finalized. The contractors responding to the RFP have the opportunity to propose different collection options to the City through this process.
Intra-Municipal Committee	The PRC is supportive of neighbouring municipalities sharing information and coordinating

	efforts.
Additional Research	
Assess Tools and Methods to Maximize Diversion	The PRC interprets this option to be similar to distributing additional boxes or larger carts to residents and is supportive of this option.
Administration	
Following Generally Accepted Principles for Effective Procurement and Contract Management	The PRC is supportive of fair and transparent practices that follow procurement policies and ensure effective contract management.