

A Waste Reduction Recycling Plan for  
The Town of Smiths Falls

*Sensational*



*Too Good To Waste!*

November 4, 2010  
5 Year Plan

Prepared with assistance from  
Waste Diversion Ontario

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## 1. Introduction

The Town of Smiths Falls is aiming to increase our solid waste diversion rate to 70% by December 2015 through the implementation of an advanced waste management program, namely a redesigned recycling program. Through the identification of opportunities and the employment of the improved program, we intend to further conserve resources, reduce environmental impacts and greenhouse emissions, reduce the overall dependence on the landfill and in turn reduce costs associated with waste management. Mandated diversion rate set in 2004 by the Ministry of Environment 60% is now under review by the Minister and Stewardship Ontario (Industry Funding Organization that provides funds to municipalities) to increase to 70% in 2011 (Thinking beyond the box; Draft revised blue box program plan).

The Town of Smiths Falls is responsible for managing its residential solid waste. At present, the town is responsible for the weekly curbside collection of garbage and recyclables. This consists of two bags of waste with a maximum weight of 23kg (50lbs) each and unlimited recyclables, as long as they are contained within a bin, comprising of selected number 1 and 2 small mouthed plastics, clear and coloured glass, metal cans, newspaper, magazines, mixed household paper, aluminum trays and foils, empty aerosol and paint cans, corrugated cardboard and boxboard. Garbage tags may be purchased at town hall at \$ 2.00 each. Yard waste and brush is collected twice annually by town staff, while the compost site on Hwy 43 remains open to public drop off between May and November. Household hazardous wastes are accepted at the Carleton Place Waste Compost Facility as part of a shared municipal initiative open June to September annually. All garbage is taken to a transfer station namely Glenview Iron Metal and processed and taken to the landfill in Carp.

The Town of Smiths Falls faces a number of waste management challenges, which this Waste Recycling Strategy will help address. In particular, the primary concern is meeting the obligations of the WDO, which requires municipalities to have a Recycling Plan in place, while simultaneously addressing and conforming to the requirements of the Ministry of Environment's directives. Additionally, there has been an increase in public pressure to strengthen environmental consideration especially in respect to updating collection to mirror that of modern cities. Council hopes to address these public concerns. The town is also aiming to reduce the costs associated with waste management through the diversion of materials by recycling and composting, as well as an updated curbside collections schedule to maximize this process.

Beginning January 2011, the Town of Smiths Falls will begin an enhanced waste management strategy, as a new contract will begin with R. W. Tomlinson. Changes include extended recycling opportunities as plastics numbered 3 through 7, additional number 1 and 2's (wide mouthed containers) gable top cartons, aseptic drinking boxes and tetra packs will now be accepted, largely reducing the bulk of household waste. Recycling will alternate weekly between two bins, one for fibres (paper, magazines, cardboard), and another larger bin for containers (plastic, glass and metal). Household composting will continue to be encouraged in order to divert additional waste from the landfill. At present there are 1400 of a potential 4,223 backyard composters utilized by Smiths Falls' single family residents.

This Waste Recycling Strategy was developed with support from the Continuous Improvement Fund and Waste Diversion Ontario.

## 2. Overview of the Planning Process

This Waste Recycling Strategy was prepared through the efforts of the environmental services department of the Town of Smiths Falls.

In order to complete the waste recycling plan to a standard that satisfied municipal and public concerns, in-depth planning was required. Vanessa Bligdon-Bernicky (Environmental Services Coordinator) participated in a variety of seminars including the Continuous Improvement Fund's – 'Fundamentals, Data Management, and Promotion and Education' courses, while utilizing the 'Guide for a Municipal Waste Recycling Strategy,' which addressed best practices for both recycling planning and promotion and education. With the assistance of continuous improvement funding, Megan Blay, Environmental Planner in training, was hired to assist in the development of this plan. A waste audit was completed in 2009 in order to review our current recycling practices, and to estimate the outcomes of increased collected materials (i.e. Plastics numbered 3 through 7) and the encouragement of backyard composting and environmentally conscious shopping. Compost reports are also created annually. The Director has often brought these matters to the attention of council for discussion.

Extensive research has been completed, looking to both literature and the recycling programs of other municipalities, in order to make the best decisions for the Town of Smiths Falls. Cost effectiveness and environmental impact have been maintained as a constant priority throughout this process. Alternative government funding opportunities have been established, with the compliance of environmental standards, in order to make these changes possible. Additionally, the expiration of the previous waste management contract has allowed for negotiations of contract terms, including collected materials, marketed goods and collection practices.

The next steps in this process include:

- Promotion & education research, plan and action
- Work with local environmental group 'REAL' to create opportunities for future take-back programs
- Examination by Council of all future initiatives contained in this document: Organics Program and 1 bag waste limit, large item restrictions, targeting commercial businesses, institutions and multi-residential as well as public spaces recycling

To ensure the public and local stakeholders were able to participate in the preparation of this Waste Recycling Strategy, public consultation was performed through a telephone survey, selecting 100 residents through random sampling. This allowed for a general representation of public opinion. An online version was also created and put on the home page of the town website. For more details on our public consultation process, see Section 4.

### 3. Study Area

In order to assist in the success of the new Recycling Program, the recycling practices of a variety of municipalities were studied and compared in order to create what is felt to be the appropriate system for the Town of Smiths Falls. These municipalities include Perth, Kingston, Ottawa and Peterborough, as each offered unique ideas and strategies to learn from.

This Waste Recycling Plan will address the following sectors:

- Residential single and multifamily dwellings
- Small business's along our existing collection routes.
- \*small business defined by office area generating waste similar to a homeowner.

### 4. Public Consultation Process

The public consultation process followed in the development of this Waste Recycling Strategy and consisted of the following activities:

- Telephone survey
- Website survey

Stakeholder groups included in this consultation:

- The public
- Rideau Environmental Action League (REAL)
- Town Council

Telephone surveys were conducted from October 19, 2010 until October 21, 2010 from 1 pm until 8:30 pm, reaching our goal of 100 participants. Questions targeted the preferred form of recycling information and both recycling and composting behaviours. Results are summarized in the table below:

Questions		Responses %	Comments
Do you recycle?	Yes 97%	No 3%	- 'No' was usually on account of a non-participating apartment building - Note: Many complaints that we that we currently do not accept enough material types
How would you prefer to receive information about the new recycling program?	Brochure 49%	Calendar 40%	- The magnet was chosen on the condition that further information would be provided in the form of either a brochure or calendar - Others offered the idea of producing a calendar in year 1, then turning to a brochure for the remaining years to reduce costs
Do you currently backyard	Yes 33%	-	- Many 'no' responses came from people

As per the website survey, there were only 3 respondents between October 19, 2010 and November 5, 2010, proving the website to be an ineffective tool alone for marketing the new recycling program.

This feedback will be especially useful when creating a communications plan, in that the most frequent behaviours preventing participation will be targeted. This may also lead to future side projects targeting multi-residential and business participation in the new recycling program and future green bin program.

<p>compost?</p> <p><i>Note: 1400 backyard composters in use compared to 4223 homes that could potentially use this system.</i></p>	<p>No</p> <p>67%</p>	<p>Living alone, who felt they did not produce enough waste to bother</p> <p>Many others were living in apartments or did not have enough space in their backyard for a composter</p>
<p>Will you participate in a future Green bin/Organics program?</p> <p><i>Note: Perth is diverting 25% and City of Ottawa is diverting 23% from Curb side of total diversion programs</i></p>	<p>Yes</p> <p>66%</p> <p>No</p> <p>15%</p> <p>Maybe</p> <p>18%</p>	<p>Many 'no' responses were from those already backyard composting, or again from those living alone who felt they did not produce enough waste to make it worthwhile</p> <p>Some have heard stories of issues with the green bin program in other municipalities (namely Ottawa) – often regarding bugs, smell and animals</p> <p>Space to store additional bins and confusion with so many bins and rules were other concerns</p>
<p>Concerns about the new recycling or future organics program?</p>	<p>Yes</p> <p>17%</p> <p>No</p> <p>73%</p>	<p>The majority were very excited that we were updating our recycling program to include more materials</p> <p>Many supported the idea of a future green bin program, even if they themselves didn't think they would participate</p> <p>A few respondents mentioned they have been hearing about large businesses not actually recycling, despite having the appropriate containers</p> <p>Some were concerned about the success of a two bin system – too much work</p>

## 5. Stated Problem

The management of municipal solid waste, including the diversion of blue box materials, is a key responsibility for all municipal governments in Ontario.

New and existing residents within town are requesting enhancements as they are familiar with additional recycling programs from their former location and surrounding area initiatives. We are now more than ever a tourist town due to loss of industry. We need to provide and promote a cleaner and greener place to live in order to attract tourists, residents and the new (creative) economy. To do this, we need to keep our streets cleaner and ensure we are doing our duty to the environment, especially as the Rideau River – A UNESCO World Heritage Site – is located within the heart of our town.

Our Town logo, *'Sensational Smiths Falls - A place to live, work and Play'* is to be supported by providing avenues to enhance the appearance and pride within our Town limits. This can be furthered through the enhancement of our recycling and garbage management programs.

## 6. Goals and Objectives

This Waste Recycling Strategy has identified a number of goals and objectives for the Town of Smiths Falls. These are presented below:

Waste Recycling Goals and Objectives		Goals	Objectives	Deadline
		To maximize capture rates of blue box materials through existing and future programs	- Increase capture rate of new material by 25% - Frequent monitoring of capture rate of new material in order to continually increase it by 10% each year	December 2011 (Annual)
		To maximize diversion of residential/municipal solid waste through the blue box/recycling program	- Reach new waste management goal of an increase in total blue box diversion of municipal solid waste from 25% to 30%, through the blue box program	December 2011
		To improve the cost effectiveness of recycling in our community	- Reduce recycling costs by 20%	December 2011
		To improve recycling in our community	- Increase recycling in our town run buildings ( Arena, Town Hall, Child development centre, museum)	December 2011
		To maximize diversion of residential/municipal solid waste through the blue box/recycling program	- Reach new waste management goal of an increase in total blue box diversion of municipal solid waste from 30% to 41%, through the blue box program	December 2012

Community Goals and Objectives		Goals
January 2011	- To make residents aware of new material collection and increase recycling by all methods available within our town limits (REAL.)	To increase the sustainability of our community
January 2011	- Expanding the amount of recyclable materials now accepted; increase recycling decrease garbage costs	To enhance service/value for our taxpayers
April 2011	- Develop a workshop on the fundamentals of recycling	To enhance recycling within our multi-residential areas
September 2011 (Ongoing project)	- Develop a workshop to share with students on the fundamentals of recycling	To enhance recycling within our schools
February 2012	- Incorporate a separate mini brochure on 'green purchasing' information – less packaging, recyclable packages (E.g. encourage natural products like cleaners, whether purchased or homemade)	To encourage a green economy within our Organics Promotion & Education To encourage a green economy within our Organics Promotion & Education To encourage a green economy within our Organics Promotion & Education, (pending council approval of program initiatives).
<b>Deadline</b>	<b>Objectives</b>	

This Waste Recycling Strategy has also identified a series of broader community goals to which it can contribute. These broader community goals are presented below:

Summer 2012	- Make recycling services available to our Downtown Core public spaces	To increase recycling in our community
Summer 2013	- Make recycling services available to our public area Parks	To increase recycling in our community
Summer 2014	- Raise participation in blue box program to 80% - Increase small business participation by 10% and increase awareness of our blue box program and use service	To increase participation in the recycling program
December 2014	- Divert an additional 25% of solid waste through organics management, hazardous waste, take-back programs	To manage our waste in our community or as close to home as possible



Average Blue Box Diversion Rate 2009	
Town of Smiths Falls	24.82%
Municipal Grouping: Small Urban	21.99%

As the table below indicates, the Town of Smiths Falls' current diversion rate is above average for its WDO municipal grouping.

Residential Solid Waste Generated and Diverted through Blue Box		
Residential Waste Stream/Blue Box Material	Tonnes	Percent of Total Waste
Total waste generated	2,500	-
Papers (ONP, OMG, OCC, OBB and fine papers)	517.63	20.71%
Metals (aluminum, steel, mixed metal)	56.97	20.28%
Plastics (containers, film, tubs and lids)	32.57	1.28%
Glass	13.26.4	0.53%
Total Blue Box material currently diverted	620.44	24.82%

The table below summarizes the current waste generation and blue box diversion rates.

Currently, the Town of Smiths Falls generates approximately 2,500 tonnes of residential solid waste per year. Of this, 620.4 tonnes, or 24.82%, is diverted through the blue box program. The most common material is paper at 20.71% while the least is glass at 0.53%.  
 Note: Leaf and yard waste accounts for an additional 382 tonnes or 15.3%.

*Current Waste Generation and Diversion*

In 2006, the Town of Smiths Falls had a population of 8,777. The municipality is home to 4,223 total households or dwellings. Of these, 3,573 are single-family households and 650 are other household types. There are no additional seasonal dwellings

*Community Characteristics*

**7. Current Solid Waste Trends, Practices and Systems and Future Needs**

Summer 2014	-	By introducing recycling receptacles within all public areas of town. Increase participation rates in public areas by 20%
December 2015	-	Reduce municipal greenhouse gas by 10%
		To make our community a cleaner, greener place to live
		To reduce our emissions and carbon footprint

*Potential Waste Diversion*

To estimate the Town of Smiths Falls current waste composition, a waste audit was conducted in 2009. A total of approximately 1,026.95 tonnes of blue box recyclable materials are available for diversion, of which approximately 404.39 tonnes are still currently in the waste stream. Estimates of blue box material available for diversion are listed in the table below.

<b>Current and Potential Diversion</b>			
<b>Material</b>	<b>Total Available in Waste Stream (tonnes/year)</b>	<b>Currently Recycled (tonnes/year)</b>	<b>Potential Increase (tonnes/year)</b>
Papers (ONP, OMG, OCC, OBB and fine papers)	517.63	517.63	0
Metals (aluminum, steel, mixed metal)	68.4	56.97	11.43
Plastics (containers, film, tubs and lids)	4274	32.57	394.83
Glass	13.26	13.26	0
<b>Total</b>	<b>1,026.95</b>	<b>620.44</b>	<b>404.39</b>

Diverting the blue box material remaining in the Town of Smiths Falls waste stream could raise its waste diversion rate to 41%.

*Existing programs and Services*

Currently, the Town of Smiths Falls has the following policies and programs in place to manage residential solid waste:

- Bag limits 2/week
- Garbage tags \$2/bag
- By-Law #6079-94 (Recycling Definition)

These policies are set to change to the following when the new waste management plan beings in January 2011:

- Introduction of new materials
- Alternate week collection of recycling bins (fibres/containers)

<b>Anticipated Future Solid Waste Generation Rates and Available Blue Box Material</b>			
	<b>2010</b>	<b>2015</b>	<b>2020</b>
Population	8,777	8,953	9,128
Total Waste (tonnes)	2,500	2,551	2,600
Blue Box Material Available (tonnes)	1,027	1,045	1,066

Solid waste generated rates in the Town of Smiths Falls are expected to stay the same over the next 3 year planning period. The table below depicts the expected growth rates for solid waste generation and blue box material recovery (based on projected population growth rates).

*Anticipated Future Waste Management Needs*

<b>Net Recycling Cost (per tonne per year)</b>	
Town of Smiths Falls	\$110.60
Municipal Grouping: Small Urban	\$229.78

In 2009, the total net annual recycling costs for the Town of Smiths Falls were \$82,514. This amounts to \$110.60 per tonne, or \$9.40 per capita. As the table below shows, net annual recycling costs for the Town of Smiths Falls are below average for its WDO municipal grouping.

- New waste management contract with R.W. Tomlinson

administered include:

Upcoming important collection-related milestones that will affect how collection services are

Strategic Plan.

Collection services of regular waste and recycling are provided to the residents using municipal collection through Waste Management contract. Disposal and recycling services are paid for primarily through tax base and the purchase of additional tags. Once recyclable materials have been collected, they are taken to a multi recycling facility in Blacks Corners (via contractor Waste Management). Supplementary funding provided by WDO on the condition that data call analysis and best practices have been adhered to and are included in the Waste Management Strategic Plan.

- Bag limits 1 per week (To be implemented with Organics program in summer 2012 pending council review of recycling monitoring results and recommendation).

## 8. Planned Recycling System

### Overview of Planned Initiatives

The Town of Smiths Falls reviewed a number of options for consideration in its Waste Recycling Strategy. The options were then scored based on a series of criteria, which included:

- Percentage of Waste Diverted
- Proven Results
- Reliable Market/End
- Economically Feasible
- Accessible to Public
- Ease of Implementation

A summary of the options reviewed and their scoring are provided in Appendix A.

Once scored, the top ranking Waste Recycling Strategy options were organized into Priority Initiatives and Future Initiatives. The estimated cost for implementing the priority initiatives is estimated to be approximately \$54,000 while implementation of the future initiatives is estimated at \$189,000. The table below presents the Priority Initiatives and Future Initiatives and their estimated costs. A review of these initiatives and their steps for implementation are reviewed on the following pages.

Priority and Future Initiatives		
Initiatives	Implementation	Operation Costs
<i>Priority Initiatives</i>		
Optimization of Collection Operations	\$30,000	\$265,000
Public Education and Promotion Program	\$4,000	\$5,000
Partnerships		\$24,500
Communication Plan	\$4,000	
Swap Days		
Public Spaces – Town operated buildings Phase1	\$16,000	\$2,000
<b>Estimated Total Cost (Priority Initiatives)</b>		
	\$54,000.00	\$296,500
<i>Future Initiatives</i>		
Green Bin/Organics	\$100,000	\$141,000
Bag Limits	\$0	\$0
Assess Tools and Methods to Maximize Diversion	\$5,000	\$4,000
Large Item Limits	\$4,000	\$0
Public Spaces Recycling Phase 2 &3	\$80,000	\$15,000
<b>Estimated Total Cost (Future Initiatives)</b>		
	\$189,000.00	\$160,000

*Priority Initiatives*

**Initiative: Optimization of Collection Operations:**

- a) The addition of new materials accepted in the recycling program.
- b) Restructured collection and processing operations.

**Overview:** The purpose of optimizing collection operations is to collect more recyclables using fewer financial, capital and human resources. This requires critically assessing both collection and processing operations (as the two are closely linked) making changes that reduce costs, while at the same time increases capture rate of blue box materials.

**Implementation:**

The introduction of an additional, larger recycling container and new recyclable materials (Plastics numbered 1 through 7, gable top cartons and aseptic drinking boxes and tetra packs) will increase our diversion rate. Processing will be optimized through source sorted recyclables (paper one week and containers the next), limiting the material types present for sorting at one time. This will in turn reduce time spent on sorting at the curbside and again at the contractors' materials recovery facility (MRF) located in Carp. There will not be a need for additional staff, while the marketability of materials will increase as contamination will decrease, ultimately reducing the costs associated with the recycling program. Garbage will continue to be collected weekly.

**Initiative: Public Education and Promotion Program**

**Overview:** Public education and promotion programs are crucial for ensuring the success of local recycling programs. A well designed and implemented education and promotion program has impacts throughout the municipal recycling program, including participation, collection, processing, and marketing of materials. Furthermore, having a P&E plan contributes toward the amount of WDO funding a municipality receives as identified in best practice section of the WDO municipal data call. For example, benefits of public education and promotion programs include:

- Greater participation levels and community involvement
- Establishment of new recycling behaviours and reinforcement of emerging or existing positive patterns among residents
- Higher diversion rates
- Less contamination in recovered materials, potentially leading to higher revenues
- Lower residue rates at recycling facilities, resulting in higher recovery and lower costs

**Implementation:** Public education and promotion will consist of a mix of media including brochures, newsletters, an updated website and outreach programs. Print media will be included in the local paper in order to keep costs low. A communication plan will be created in order to ensure consistency throughout the program, as opposed to all focus being on the initial months of the program. This will ensure participation rates remain high and contamination remains low. Quantifiable goals will be created in conjunction with the communications plan, offering measurable methods of assessment, in order to assess the success of the program, while providing warning of issues.

**Initiative: Maximizing Partnerships and Other Initiatives**

**Overview:** Partnerships with existing local groups (R.E.A.L., Environmental Clubs at schools) can help municipalities work towards common goals. Committee members can identify opportunities for beneficial collaborations, profiting from each other's support, workforce, and shared resources. This collaboration may also result in a stronger effect on the public. Ultimately, it allows for the exploration of further opportunities to enhance solid waste diversion.

**Implementation:** The Town of Smiths Falls supports the Regional take-back programs being developed by our local environmental group 'REAL' (Rideau Environmental Action League). The council and 'REAL' alliance has been formed and was put into motion through the financial support of these initiatives by providing \$0.20/person (\$1,755) annually. The Town presently supports REAL through a financial grant (\$13,500.00) annually, encouraging green economy and environmental initiatives. Further take back programs within the Town of Smiths Falls limits and surrounding area will be reviewed and promoted through our waste management literature. A workshop program will be created in order to address our youth and partner with existing school environmental clubs to ensure recycling is completed in both schools and at home. Small businesses will be made aware of their ability to recycle through an existing local business newsletter. The town will also review and maintain our shared recycling facilities with other municipalities, namely the Municipal Household Hazardous Waste management (MHHW). The use of this site will be encouraged and promoted through our educational recycling material. Financial support of \$9,000 per year will continue.

**Initiative: Public Space Recycling**

**Overview:** At present we have some recycling within our Town limits relating to public spaces; At Town hall and other Town owned facilities there is recycling as initiated by members of staff. To ensure of public recycling, we would like to ensure Town employees are setting the example and doing all they can to facilitate the recycling within their offices/work space. Also due to costs of recycling containers for public spaces there has been a lack of implementation as funds are not available to purchase receptacles due to changes within our Towns tax base. Our focus at this time is on the tourism industry as well as an invitation to new residents to the area. We are inviting new residents to "Smiths Falls a great place to live, work and play" & "Sensational Smiths Falls"; we need to improve the appearance of our town and provide the ability for existing residents to do their part around town to keep it clean. By recycling, we have an ability to recoup costs through marketing materials collected and keep our buildings, downtown core and public spaces cleaner. Make our Town more inviting than it already is – too good to waste!!!

**Implementation:**

Due to associated implementation costs for receptacles we have proposed a phased approach to ensuring public recycling is put into place. In 2011, our first phase will concentrate on our existing infrastructure: Town Hall, Arena, Museums (2), Library and Day Care Centre.

**Initiative: Green Bin and Organics**

**Overview:** According to the environment ministry, organic materials make up as much as one-third of household garbage. Green bin or composting programs enable you to take advantage of nature's way of recycling, adding much needed nutrients to garden soil and lawns. By diverting organics from the landfill, methane, carbon dioxide and other ozone depleting gases that result in high levels when broken down in anaerobic environments are significantly reduced. By implementing a green bin program into the community, it not only provides an opportunity to divert an additional 1/3 of household waste from the landfill, but additionally offers revenue from compost sales to compensate collection costs, further reducing the total costs associated with waste management.

**Implementation:** An organics program will be implemented in year the summer of year two of the waste management program. Cost savings would be seen in the diversion of garbage cost/tonne compared to organics cost/tonne.

**Initiative: Bag Limits**

**Overview:** Bag limits restrict the number of bags of garbage a resident can dispose of per collection. This encourages residents to divert more recyclable materials, in order to not exceed the bag limit. Bag limits can also be used in conjunction with bag tags, imposing a user fee. The Town of Smiths Falls currently allows residents to dispose of 2 bags for free, with additional bags and items requiring a purchased bag tag.

**Implementation:** The bag limit may be reduced to 1 per week, being implemented in conjunction with the organics program in the summer 2012. New materials will be accepted in the recycling program, significantly reducing the volume of garbage, as many of these materials are bulky. In order to successfully implement this system, we would consider recycling By-laws, banning recyclable materials in the garbage and/or higher priced user fee tags.

**Initiative: Assess Tools and Methods to Maximize Diversion**

**Overview:** Waste recycling programs fail or succeed based on their ability to overcome public barriers to participation. Additional research on the appropriate tools and methods can help how best to maximize opportunities to divert Blue Box materials from the waste stream and reduce waste going to disposal. Topics include:

- The types of waste diversion behaviours currently undertaken in each household;
- Perceived barriers to participation in waste diversion programs;
- Willingness to participate in waste recycling programs;
- How residents receive information or learn about local waste recycling programs;
- The tools residents need to increase their participation in recycling programs.

This information can be collected through telephone surveys and focus groups. Methods and tools identified through the survey can be tested for performance using focus groups or through a pilot project. A waste audit can be completed as a tool for assessment of program effectiveness.

Audits have been included within our contract with R.W. Tomlinson and can be completed upon request at the MRF.

**Implementation:** A phone and website survey was completed in order to satisfy the public consultation component of this program, incorporating recycling motivations and barriers based questions in order to satisfy all components. Additionally, a communications plan will be created, establishing a monitoring system for the new and ongoing programs in order to ensure recycling the public is continually reminded of the recycling program.

Review of this recycling strategy will be completed by our local environmental group for their input on future initiatives and recommendations on how to effectively reach residents. Review will also be completed by an Environmental Consultant, who is familiar with WDO and Stewardship Ontario requirements, for their professional input and recommendations to ensure the methods and tools noted will ensure success of the waste diversion program. Assessment of program through 3<sup>rd</sup> party waste audits – tool to assess promotion and education effectiveness and willingness of residents to partake in new initiatives.

#### Initiative: Large Item Limit

**Overview:** Large item limits restrict the number of items a resident can dispose of per collection. This encourages residents to divert more recyclable materials, in order to not exceed collection limits (one bag & 1 large item per week). Large item limits can also be used in conjunction with tags, imposing a user fee. The Town of Smiths Falls currently allows residents to dispose of 1 bag of garbage and a large item for free, with additional bags and items requiring a purchased bag tags at \$ 2.00/tag.

**Implementation:** The Large item collection may be reduced to four times throughout the year and may have a higher price tag (e.g. \$5). This program will be incorporated with the success of the Two Swap days noted in 2011 and upon analysis; this change being implemented in conjunction with regulated Large Item pick up days Summer 2013.

With the Swap days we are hoping to see a reduced volume of large item garbage, as many of these materials are bulky and hard to handle by our collection contractor. In order to successfully implement this system, we would consider increasing cost for large item recycling to pursue residents to use: Swap Days, our R.E.A.L. Re-use store as well many charitable collection call centres that pick up gently used items. The use of By-laws shall be implemented in 2013 to ensure days designated for large pick up are adhered to and that promotion is provided to ensure awareness of free days such as Swap Days are used.

#### Initiative: Public Space Recycling

**Overview:** At present we have some recycling within our Town limits relating to public spaces; At Town hall and other Town owned facilities there is recycling as initiated by members of staff. To ensure of public recycling, we would like to ensure Town employees are setting the example and doing all they can to facilitate the recycling within their offices/work space.

Also due to costs of recycling containers for public spaces there has been a lack of implementation as funds are not available to purchase receptacles due to changes within our Towns tax base.



Our focus at this time is on the tourism industry as well as an invitation to new residents to the area. We are inviting new residents to "Smiths Falls a great place to live, work and play" & "Sensational Smiths Falls"; we need to improve the appearance of our town and provide the ability for existing residents to do their part around town to keep it clean. By recycling, we have an ability to recoup costs through marketing materials collected and keep our buildings, downtown core and public spaces cleaner. Make our Town more inviting than it already is – too good to waste!!!

**Implementation:**

Due to associated implementation costs for receptacles we have proposed a phased approach to ensuring public recycling is put into place.

Phase 2 (2012) will take us through our Downtown core. Tourism designation and local walking route for the Town of Smiths Falls

Phase 3 (2014) for park areas; Lower Reach Park, connecting path along Rideau Canal, Victoria Park, Curling Club Ball diamond park and our Skateboard park.

*Contingencies*

Even the best planning can be delayed by a variety of foreseen and unforeseen circumstances. Predicting and including contingencies can help to ensure that these risks are managed for minimum delay. The table below identifies contingencies for possible planning delays.

Waste Recycling Strategy Contingencies	
Risk	Contingency
Insufficient funding	<ul style="list-style-type: none"> <li>• Explore and apply for other funding sources</li> <li>• Delay lower-priority initiatives</li> <li>• Increase proportion of municipal budget to solid waste management</li> <li>• Raise/implement user fees</li> </ul>
Lack of available staff	<ul style="list-style-type: none"> <li>• Hire summer student to help with planning/monitoring</li> <li>• Prioritize department/municipal budget to solid waste management</li> </ul>
Public opposition to planned recycling initiatives	<ul style="list-style-type: none"> <li>• Improve public communications</li> <li>• Engage community/stakeholders to discuss initiatives/recycling plan</li> </ul>

## 9. Monitoring and Reporting

The monitoring and reporting of the Town of Smiths Falls 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 System 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 approach for monitoring the Town of Smiths Falls waste recycling program is outlined in the table below.

Recycling System Monitoring		Monitoring Topic	Monitoring Tool	Frequency
Total waste generated (by type and weight)	Measuring of waste and recyclables at transfer station/disposal site (i.e. weight scale records)			Monthly
Diversion rates achieved (by type and by weight)	Formula: (Blue box materials + other diversion) ÷ Total waste generated * 100%			Quarterly
Waste disposed (by type and by weight)	Reconciliation of weight scale tickets			Monthly
Customer satisfaction	Tracking calls/complaints received to the municipal office			On-going
Program participation	<ul style="list-style-type: none"> <li>- Customer survey (e.g. telephone/website)</li> <li>- Assess participation rates</li> <li>- Waste Audit at MRF</li> </ul>			Annually Bi-annually Annually
Opportunities for improvement	Tracking calls/complaints received to the municipal office; Customer survey (e.g. telephone)			On-going
Planning activities	Describe what initiatives have been fully or partially implemented, what will be done in the future			Annually
Review of Recycling Plan	<p>A periodic review of the Recycling Plan to monitor and report on progress &amp; update plan, to ensure that the selected initiatives are being implemented, and to move forward with continuous improvement</p>			Annually/concurrent with strategic plan

## 10. Conclusion

The Town of Smiths Falls has completely redesigned its recycling program in order to meet the requirements set by the WDO, address the increasing public pressure to strengthen environmental consideration and to reassess municipal waste costs, reducing them through the diversion of materials by recycling and composting.

In order to ensure success, the Town of Smiths Falls has sent its Environmental Coordinator to various WDO funded courses supported by AMO, CIF and Toronto, in order to gain knowledge on how to effectively create, promote and manage a recycling program and related initiatives. By reviewing the fundamentals of recycling, understanding the importance of the Ministry of Environment's commitment to waste diversion (Waste Diversion Act) and incorporating both into the municipal recycling strategy, financial compensation may be provided in order to assist with effectively managing our waste.

Our recycling strategy and management was lacking and falling behind provincial standards, which has a guide diversion rate for Ontario set at 70% in 2011. The new strategy is now updated and will encompass the next 5 years of recycling and waste management. This waste strategy will be used to guide and measure our successes through monitoring and reporting activities to ensure our compliance to the Waste Diversion Act and to constituents that we are doing all we can to ensure our environment is protected and our solid waste is managed effectively.

As of January 2011, the Town of Smiths Falls will be including additional recycling materials to assist in our diversion efforts. Based on the initial success, a green bin/organics program upon council review of staff reports and recommendations may approve implementation in order to divert even more waste. Council has shown a willingness to address the overall appearance of our town through public space recycling which we have addressed through a phase approach due to associated implementation and operational costs. Efforts to form a partnership with local environmental groups will allow for smoother running and effective provincial take back programs. Monitoring tools will be used to frequently assess the state of the recycling program, in order to implement further promotion and education efforts or as by-law enhancements to ensure our success. The Town of Smiths Falls anticipates that its waste diversion rate will rise from our overall rate of 41% to 70% by the end of the 5 year strategy.

This is a living document that will be continually reviewed in order to adjust for successes and address any issues that may arise.

## Appendix A: Waste Recycling Option Scores

Suitable ? Y/N	Description of Options/Best Practices  (More information: Blue Box Program Enhancement and Best Practices Assessment Project Final Report, Volume 1)	Cost per HH	Cost per HH	Criteria (Score out of 5)							Total Criteria Score
		Implementation	Operation (IFO supplemented)	% Waste Diverted	Proven Results	Reliable Market/End Use	Economically Feasible	Accessible to Public	Ease of Implementation		
<b>Promotion and Outreach</b>											
Y	Public Education and Promotion Program	\$1.00	\$2.00	5	5	3	5	5	5	5	28
Y	Training of Key Program Staff	\$0	\$.05	5	5	5	5	0	5	5	25
	Communication Plan	\$	\$1.00	5	5	3	5	5	5	5	28
<b>Collection</b>											
Y	Optimization of Collection Operations	\$0	\$28.00	5	4	3	4	5	5	5	26
Y	Bag Limits	-By-law, no landfill its necessary	Covered in P&E	5	5	2	1	1	2	2	15
Y	Optimization of local take – Back programs	\$0	Covered in P&E	1	2	2	5	5	5	5	20
Y	Provision of Free Blue Boxes	\$0.00	\$9.00 (replacement cost – yellow)	5	5	5	5	5	5	5	30

Y	Collection Frequency	\$0	\$covered in P&E cost	1	2	4	5	5	5	5	5	22
<b>Transfer and Processing</b>												
Y	Optimization of Processing Operations	\$0	\$8.00	4	4	5	4	0	5			22
<b>Partnerships</b>												
Y	Multi-Municipal Collection and Processing of Recyclables	\$0	\$2.13	3	4	5	4	2	2			20
Y	Schools	\$0	\$1	3	5	3	2	5	3			21
	Environmental Action League	\$0	\$3.60	5	5	3	3	5	5			24
<b>Additional Research</b>												
Y	Assess tools and Methods to maximize Diversion	\$1.00	\$2.00	5	5	3	5	1	5			24
<b>Administration</b>												
Y	Following generally accepted principles for effective procurement and contract management	\$0	\$2.00	5	4	5	4	1	2			21
<b>Other Options</b>												
Y	Recycling in public town buildings phase 1	\$4.00	\$2.00	3	4	3	3	5	5			23
Y	Multi-Year implementation of Public space Ph 2 &3	\$19.00	\$2.00	3	4	5	4	2	2			20

## Scheduling/Timetable

Initiative	Steps (Monitoring) 2010	Timeline	By Who
<b>Materials List</b>	- Create a master document of all materials accepted in each stream of recycling to use in P&E and for reference	November 8, 2010	Create: Megan Approve: Vanessa, Elaine
<b>P&amp;E material</b> Based on telephone survey & best practices:	1. Plan 2. Design 3. Create	November 24, 2010	Create: Megan Approve: Vanessa, Elaine
- Calendar - Magnet - Newspaper article - Electronic versions of print on town website			
<b>Distribution of P&amp;E</b> Have P&E materials and new recycling containers distributed in time for January program start	- Distributed with new recycling bins	December 17, 2010	Elaine
<b>Separate P&amp;E Brochures targeting:</b>	- How they can get involved immediately - Stress potential \$ savings - Small Businesses: 2 bag garbage limit, unlimited recyclables at curb side - Commercial(small businesses): unlimited recyclables at curb side	December 20, 2010	Create: Megan Approve: Vanessa, Elaine
- Business's - Institutions - Apartments			
<b>Website</b>	- Update town website to include electronic versions of print material - Current rates and goals	December 27, 2010	Plan: Megan Approve: Elaine Implement: Lynda M Manage: Vanessa & Lynda M
<b>Year 1</b>			
<b>New Recycling Program Launch!</b>		January 1, 2011	Vanessa, Elaine
<b>Goal: Increased Participation 70%</b> (two bin system)	- Participation Audit	February 1, 2011	Vanessa

<b>Create Workshops &amp; Presentations</b>	<ul style="list-style-type: none"> <li>- Targeting: <ul style="list-style-type: none"> <li>- Apartments</li> <li>- Retirement homes</li> <li>- Schools</li> </ul> </li> <li>- About: <ul style="list-style-type: none"> <li>- Recycling Program</li> <li>- Backyard composting</li> <li>- Future open space &amp; Organics Program</li> </ul> </li> </ul>	February 2011 - Ongoing	Vanessa + Student
<b>To improve recycling in our community</b>	<ul style="list-style-type: none"> <li>- Provide recycling receptacles to Town owned facilities with information on what goes in</li> </ul>	May 2011	Vanessa + Elaine
<b>Increase Breadth of Recycling Program to Include:</b> <ul style="list-style-type: none"> <li>- Business's</li> <li>- Institutions</li> <li>- Apartments</li> </ul> Facilitate contracts between large local business's, institutions, apartments and contractor for recycling programs/pickup	<ul style="list-style-type: none"> <li>- Stress potential \$ savings Small Businesses(SB): 2 bag garbage limit, unlimited recyclables</li> <li>- Commercial(SB): unlimited recyclables</li> <li>- Provide contract contact for them to ask specifics to</li> </ul>	March 2011	Vanessa + Elaine
<b>P&amp;E Material</b>	<ul style="list-style-type: none"> <li>- Created and distributed by:</li> <li>- Light recycling information to remind residents of program backyard composting avail.</li> </ul>	December 2011	Vanessa
<b>Goal: Increased Capture Rate new material by 25%</b>	<ul style="list-style-type: none"> <li>- Bills of lading</li> </ul>	December 2011	Vanessa
<b>Goal: Recycling diversion rate of 41% through recycling</b>	<ul style="list-style-type: none"> <li>- Marketed materials</li> </ul>	December 2011	Vanessa
<b>Goal: Cost savings in waste management through recycling</b> <ul style="list-style-type: none"> <li>- Reduce recycling costs by 20%</li> </ul>	<ul style="list-style-type: none"> <li>- Cost savings through increased marketing of material</li> <li>- Communicate these savings in Year 2 P&amp;E material</li> </ul>	December 2011	Vanessa
<b>Year 2</b>			
<b>To maximise diversion of residential /municipal waste existing systems</b>	<ul style="list-style-type: none"> <li>- Reach diversion goals through promotion and education targeting those areas identified by monitoring that require more information</li> </ul>	May 2012	Vanessa

<b>To improve recycling in our community Phase 2</b>	- make recycling available in our downtown core by providing receptacles and information on website and on bins	July 2012	Vanessa
<b>Create a communications strategy for Green Bin Program</b>	- Updated related research - New Slogan, tagline	February 1, 2012	Vanessa + Elaine (Student?)
<b>P&amp;E Material Green Bin &amp; Recycling</b>	- Create marketing material for: A) Recycling information B) Green Bin Program a. New bag limit 1 bag/week	March 2012	Vanessa + Graphic Designer
<b>Green Bin Program Launch! (Upon Approval)</b> - New bag limit of 1 bag/week	- Distribute bins to residents - Through results of monitoring strategies determine feasibility of bag limit ( council approval before implementation)	May 2012 June 2012	Vanessa + Elaine
<b>Create Workshops &amp; Presentations</b>	Targeting: - Apartments - Retirement homes - Schools About: - Recycling Program - Future <b>Organics</b> Program with Backyard composting and curb side if approved	June 2012 - Ongoing	Vanessa + Student
<b>Year 3</b>			
<b>Large Items Restriction</b>	- Large items including furniture and household appliances require separate tags at higher fee (Increase amount taken to re-use stores instead)	January 1, 2013	Vanessa + Elaine
<b>Workshops, Presentations, Take Back Programs, Events</b>	- Research in order to select a target audience, issue and to create effective programs	January 2013	Vanessa + Elaine
<b>Goal: Recycling Participation 78%</b>	- Participation audit	Summer 2013	Summer Student
<b>Goal: Increased Capture Rate by 10% (Both Recycling – fibre &amp; plastics)</b>	- Bills of lading - More business & institution recycling – workshops	December 2013	Vanessa



<b>P&amp;E Material</b>	- Created and distributed by: - Brochures, Newspaper Ads, Calendar with updated recycling and organics information - Include bag limit information (if applicable)	December 2013	Vanessa
	<b>Year 4</b>		
<b>Public Spaces Recycling Phase 3</b>	- Arrange for pickup and transfer of materials - Advertise - Install bins - <i>Recycle on the go!</i>	Summer 2014	Vanessa
<b>Goal: Recycling Participation 75%</b>	- Participation audit	Summer 2014	Summer Student
<b>Goal: Green Bin Participation 60%</b>	- Participation audit	September 2014	Summer Student
<b>Year 5</b>			
<b>P&amp;E Material</b>	- Created and distributed by: - Brochures, Newspaper Ads, Calendar with updated recycling and organics information	December 2015	Vanessa + Student
<b>Goal: Increased Capture Rate</b> Increase capture rate of new recycling material to 80%	- Bills of lading - More business & institution on recycling/organics programs - Organic tonnages	December 2015	Vanessa
<b>Goal: Diversion Rate of 70%</b> Increase capture rate of organics to 70%	- Marketed materials and composting/leaf & yard waste	December 2015	Vanessa