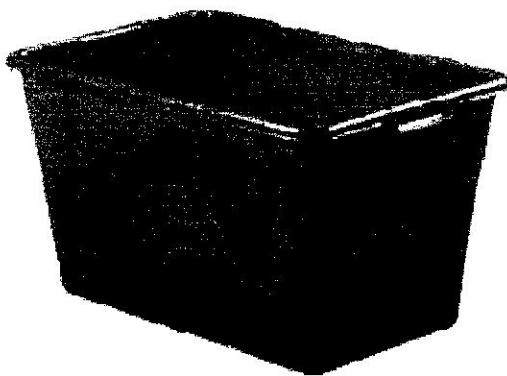


A Waste Recycling Strategy for the Township of Sables-Spanish Rivers



January 25, 2011

**Prepared with assistance from
Waste Diversion Ontario**

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1. Introduction

This Waste Recycling Strategy was initiated by the Township of Sables-Spanish Rivers to develop a plan to increase the efficiency and effectiveness of its recycling program and maximize the amount of blue box material diverted from disposal. In particular, the objective of this strategy is to increase the Township's Blue Box diversion rate from 7.8% up to 20% in the short term (2 to five years) and 25% in the long term (5 to 10 years).

The study area for this Waste Recycling Strategy is the primarily the residential sector of the Township of Sables-Spanish Rivers, although attention has also been given to the Industrial, Commercial and Institutional (ICI) sector.

This Waste Recycling Strategy was developed with support from the Continuous Investment Fund (CIF), and is based on the CIF's *Guidebook for Creating a Municipal Waste Recycling Strategy*.

This strategy recommends the following initiatives:

Priority Initiatives

Recycling Contracting

1. Include performance measures and penalties for non-performance in the tenders and contracts.
2. Consult Stewardship Ontario's Model Tender Tool when preparing the next waste collection tenders and/or obtain outside expertise in the preparation of the tender and contract.

Public Education and Promotion

3. Increase the Township's promotion and education of recycling.

Data Collection

4. Survey Township residents on their recycling attitudes, behaviours and barriers.
5. Conduct a participation set-out survey to measure how often residents set out their recyclables for collection.
6. Conduct a waste audit to measure the Township's actual garbage composition.

Storage and Shipping of Blue Box Materials to Sudbury Facility

7. Assess the feasibility of an arrangement with the City of Sudbury to accept the Township's recyclable materials including:
 - a. The feasibility of expanding the suite of blue box materials currently accepted in the Township's blue box program; and
 - b. The feasibility of storing and shipping the collected blue box materials.

Training of Key Staff

8. Waste management staff should participate in third-party training sessions where possible. Webinars and webcasts can provide opportunities for training while avoiding the need for travel.

Increasing Diversion from ICI

9. Develop an ICI Waste Diversion Program to help provide support to businesses wishing to find alternatives to waste disposal.

Future Initiatives

Disposal Bans

10. Implement a disposal ban on materials included in the Township's recycling program.

Bag Limits and User Pay

11. Reduce the number of bags allowed without a bag tag and provide an upset bag limit for the total amount of garbage bags set out for collection.

2. Overview of the Planning Process

In preparation of this Waste Recycling Strategy, a representative of the project team met with municipal staff to discuss key issues with the current recycling program and to complete the worksheets from CIF's *Guidebook for Creating a Municipal Waste Recycling Strategy*. The 2009 Waste Diversion Ontario datacall for Sables-Spanish Rivers was used to assess the recycling system, including current costs, diversion rate and future needs. This information was also compared against published WDO datacall information for other municipalities within the Township's municipal grouping.

3. Public Consultation Process

Once completed, the Waste Recycling Strategy will be posted on the Township's website and hard copies made available for public comment.

4. 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.

There are a variety of issues facing the Township's Blue Box program that this WRS will help to address. Some of the issues facing the Township are common among many northern Ontario municipalities, such as:

- Considerable distance from recyclable processors and markets; and
- Low economy of scale for managing recyclables, due to small and distributed population, and therefore small tonnages of material collected over a wide area.

Additionally, levels of funding received for blue box recycling in Ontario is based in part on the adoption of a waste recycling plan, the incorporation of other WDO-approved recycling best practices, and the amount of recyclable material marketed. This WRS will help to improve program effectiveness and efficiencies and maximize the amount of eligible funding available.

5. Goals and Objectives

This Waste Recycling Strategy has identified a number of goals and objectives for the Township of Sables-Spanish Rivers. These are presented below.

Table 1: Waste Recycling Goals and Objectives	
Goals	Objectives
Increase the amount of recyclables diverted from disposal.	Short term (2 to 5 years): Raise blue box diversion rate to 20% (2008 average for "Rural Collection – North" WDO municipal grouping) Long Term (5 to 10 years): 25% (realizing a 70% capture rate of Blue Box materials)
Maximize capture rates of blue box materials through existing and future programs	Raise the current capture rate of 22% up to 50% in the short term (2 to 5 years), and up to 70% in the long term (5 to 10 years)
Reduce operation costs through system efficiencies	Reduce the cost to manage blue box recyclables by 5-10%.
Expand the lifespan of the Township's landfill	Reduce the amount of material that requires disposal.

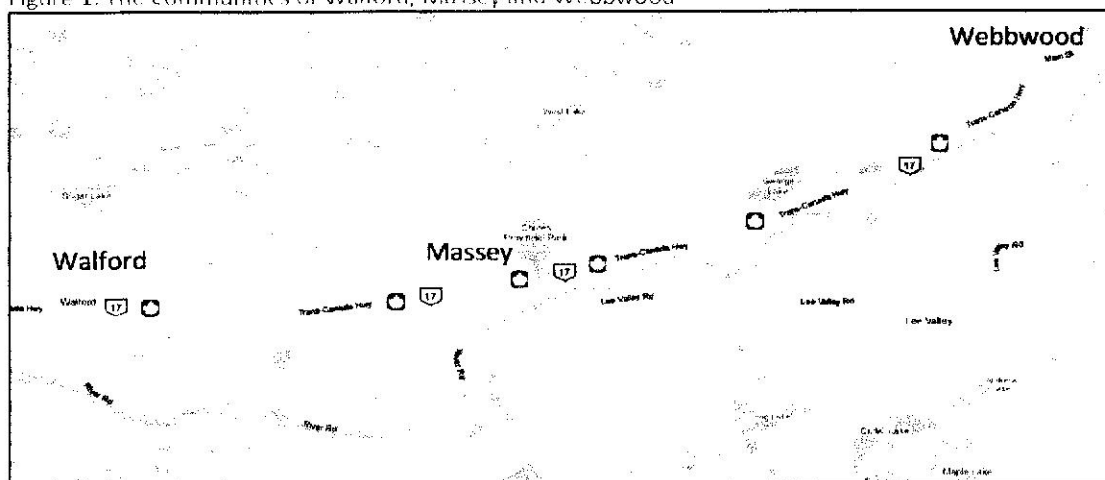
6. Current Solid Waste Trends, Practices and System and Future Needs

Community Characteristics

According to the 2006 Canadian Census, the Township of Sables-Spanish Rivers has a population of 3,237, with 1,295 total households/dwellings. Of these, 1,130 are single-family households and 165 are multi-family households. The population has remained stable since 1981.

The Township was restructured in 1998 and is comprised of the following communities: the Township of Spanish River, The Towns of Massey and Webbwood, and the previously unincorporated geographic townships of Tennyson, Gough, Shakespeare and McKinnon. The majority of the population is settled in the three urban areas of Massey, Webbwood and Walford.

Figure 1: The Communities of Walford, Massey and Webbwood



Source: 2010 Google Maps

Current Waste Generation and Diversion

The Township generated approximately 1,548 tonnes¹ of residential solid waste in 2009. Of this, 121 tonnes, or 7.8 percent, was diverted through the municipal blue box program. Currently, the most common material recycled is fibres (e.g., fine paper, newsprint, old corrugated cardboard, etc), while the least is glass. The table below summarizes the current waste generation and blue box diversion rates.

Table 2: Residential Solid Waste Generated and Diverted through Blue Box		
Blue Box Material	Tonnes Recycled	Percent of Total Waste
Fibres (ONP, OMG, OCC, OBB and fine papers)	48	3.1%
Metals (aluminum, steel, mixed metal)	26	1.7%
Plastics (containers, film, tubs and lids)	35	2.2%
Glass	12	0.8%
Total Blue Box material currently diverted	121	7.8%

As Table 3 indicates, the Township's blue box diversion rate is below average for its WDO municipal grouping (based on the 2008 average rate).

¹ The Township measures the amount of garbage it collects according to volume. This amount is then converted to tonnes. According to the Township's 2009 WDO datacall, the 2,361 cubic yards of waste was collected, or an estimated 1,392 tonnes. The remaining material identified in the Township's waste stream includes 16.22 tonnes of residential deposit/return materials (e.g., beer and liquor bottles) and Blue Box residual.

Table 3: Average Blue Box Diversion Rate	
Sables-Spanish Rivers (2009)	7.8%
Municipal Grouping: Rural Collection-North (2008)	20.3%

Potential Waste Diversion

Currently, the Township has no waste audit data available for its residential waste. To estimate the Township's waste composition, waste audit data from West Nipissing was used as a proxy, as its community characteristics were felt to be similar to that of Sables-Spanish Rivers.

Based on a target capture rate of 70%, approximately 412 tonnes of blue box recyclable material are available for diversion in the Township. Of this amount, approximately 121 tonnes are being diverted, while 291 tonnes remain in the waste stream and are being disposed. This includes Blue Box materials that are currently not collected in the Township's program, but are considered eligible Blue Box materials and are commonly collected in other parts of Ontario, particularly throughout southern and central Ontario. Diverting the blue box material remaining in the Township's waste stream could raise its Blue Box diversion rate from 7.8% up to 25%. Estimates of blue box material available for diversion are listed in Table 4 below, while Table 5 lists the blue box materials that are collected in the Township. As seen in Table 4, there appears to be a considerable amount of paper remaining in the municipal waste stream not diverted for recycling.

It should be noted that the Township would have to expand the types of Blue Box materials currently collected in its Blue Box program to achieve a diversion rate of 25%. Based on the current types of materials accepted in their program, the maximum Blue Box diversion rate that the Township could achieve is approximately 20%, assuming a capture rate 70%². The majority of this increase would be from paper, while little to no increase in plastics would be expected. This would raise the Township's Blue Box diversion rate to the average for their municipal grouping.

² The Township is currently capturing 22% of all eligible Blue Box material estimated to be in Township's waste stream. When considering just the Blue Box materials included in the Township's own program, an estimated 27% of those materials are being captured.

Table 4: Current and Potential Diversion (based on 70% Capture Rate of Eligible Blue Box Materials in Residential Waste Stream)				
Material	Estimated Total Available in Waste Stream for Diversion (tonnes/year)	Currently Recycled (tonnes/year)	Potential Increase (tonnes/year)	Potential Increase (%)
Papers	249	48	201	13.0%
Metals	32	26	7	0.4%
Plastics	87	35	52	3.4%
Glass	22	12	10	0.6%
Total	390	121	269	17.4%

Table 5: Blue Box Materials Accepted in the Township's Recycling Program			
Accepted Blue Box Materials		Blue Box Materials Not Accepted	
<i>Fibres</i>	<i>Metals</i>	<i>Fibres</i>	<i>Plastics</i>
<ul style="list-style-type: none"> • Newsprint • Other Printed Paper • Magazines/Catalogues • Phone books • Corrugated Cardboard • Box Board 	<ul style="list-style-type: none"> • Aluminum Cans • Other Aluminum Packaging & Foil <i>Glass</i> <ul style="list-style-type: none"> • Clear Glass • Coloured Glass <i>Plastics</i> <ul style="list-style-type: none"> • PET Bottles (#1) • HDPE Containers (#2) 	<ul style="list-style-type: none"> • Gable top cartons • Tetra Pack Cartons • Metals • Steel Cans • Empty Aerosol Cans • Empty Paint Cans 	<ul style="list-style-type: none"> • Other Bottles and Containers (#3, #5, #7) • LDPE/HDPE Film ((#2, #4) • Polystyrene Foam (#6) • Polystyrene Crystal (#6) • Tubs and Lids (#2, #4, #5) • Thermoform PET (#1), Clamshells & Other Clear Plastic Containers

Existing Programs and Services

Through a contractor, the Township provides curbside collection to residents for garbage and recyclables. The Township has a partial user fee system in place. Residents are allowed to set out two bags of garbage with no bag tag affixed, while additional bags require a \$2.00 bag tag. Bag tags can be purchased at the Township Office and the public libraries in Massey and Webbwood.

Residents receive collection of recyclables every second week, with collection occurring on the north of Highway 17 one week, and the south side the next. Recyclables are generally collected commingled, although residents are asked to flatten and bundle corrugated cardboard and put shredded paper in a clear plastic bag. During collection, the recyclable materials are sorted by the collection contractor into the collection vehicle.

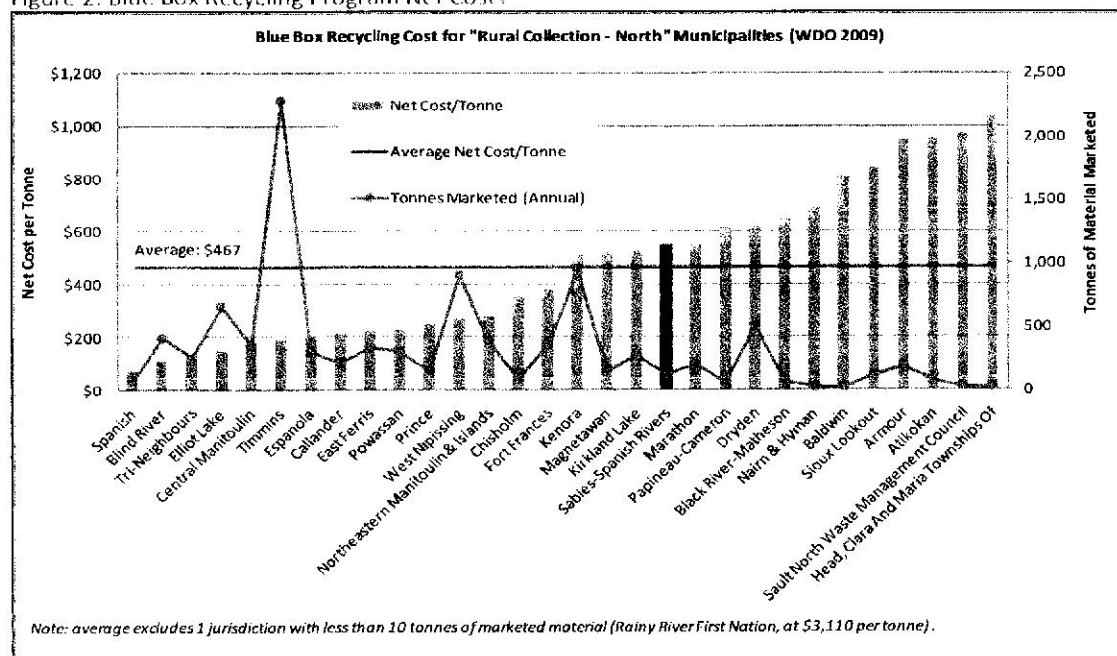
Commercial pick-up is also provided to businesses in the Township. Commercial properties are able to set out eight bags of garbage, after which they require a bag tag.

Program Cost

In 2009, the total net annual recycling cost for the Township was \$66,280³. This amounts to \$550 per tonne, or \$20 per capita. As Table 6 and Figure 2 below indicate, the net annual recycling costs for the Township are above average compared to other municipalities in its WDO municipal grouping.

Table 6: Net Recycling Cost (per tonne per year)	
Sables-Spanish Rivers	\$550
Municipal Grouping: Rural Collection – North	\$467 ⁴

Figure 2: Blue Box Recycling Program Net Costs



³ As reported by WDO for the 2009 datacall.

⁴ The average net cost for this grouping excludes the jurisdiction of Rainy River First Nation, whose net cost per tonne of \$3,110 is an outlier to the remaining dataset.

Anticipated Future Waste Management Needs

The Township's population has been stable for nearly the past 30 years, and no significant growth is expected over the next 10 years⁵. Accordingly, solid waste generation rates in the Township are not expected to significantly change over the next 5 to 10 year planning period.

7. Recommendations

Recommendations for improvements to the recycling program are described below under five categories. A summary of how the categories were scored is provided in Appendix A.

Priority Initiatives

Recycling Contracting

A carefully written recycling tender and contract is crucial for ensuring municipalities receive best value for money and are protected against poor or non-performance, particularly with respect to collection. A tender should clearly describe what is required, and the contract should describe penalties for non-performance. Examples of topics that should be covered in the tendering/contracting process include:

- Role of contractor in the enforcement of proper material set out (e.g., when to refuse loads, use of corrective communication materials, etc);
- Data collection tools (e.g., forms, GPS tracking, etc);
- Field communication protocols for collection; and
- Penalties for non-performance (e.g., improper operation, inappropriate behaviour by contractor staff, missed collection, etc).

The Township's recycling contract expires in May 2011. It should consider updating its tendering process and contract document to ensure it obtains best value for service.

To prepare for the tender process, the Township should review Stewardship Ontario's Model Tender Tool, which was designed to assist municipalities with the design and implementation of solid waste tenders. The tool is located on Stewardship Ontario's Recyclers' Knowledge Network⁶, and topics include:

⁵ The Township's 2003 Official Plan provides for a population of 3,400 to 3,800 during the planning period of 2001 to 2021, excluding the seasonal population.

⁶ Available at <http://vubiz.com/stewardship/Welcome.asp>. Log in Recyclers' Knowledge Network with e-mail address and select "Model Tender" under the "What's Here" drop down menu on the left side of the page.

- Pre-tender considerations and consultation;
- Level of service considerations;
- Compiling background information;
- Tender preparation;
- Evaluation process;
- Release, opening, evaluation and award of tender; and
- Post award discussions.

To further ensure that the Township obtains best value for its solid waste collection contract, it should consider obtaining outside expertise in their preparation.

The Township's current contract stipulates collection of recyclables every two weeks. Shifting from bi-weekly collection to every week collection of recyclables could increase the collection and diversion of recyclables from disposal. To assess the cost of weekly collection, the Township should request pricing for both weekly collection and bi-weekly collection of recyclables.

Recommendations

1. Include performance measures and penalties for non-performance in the tenders and contracts.
2. Consult Stewardship Ontario's Model Tender Tool when preparing the next waste collection tenders and/or obtain outside expertise in the preparation of the tender and contract.
3. Include collection options for both weekly collection and bi-weekly collection in the next waste collection tender.

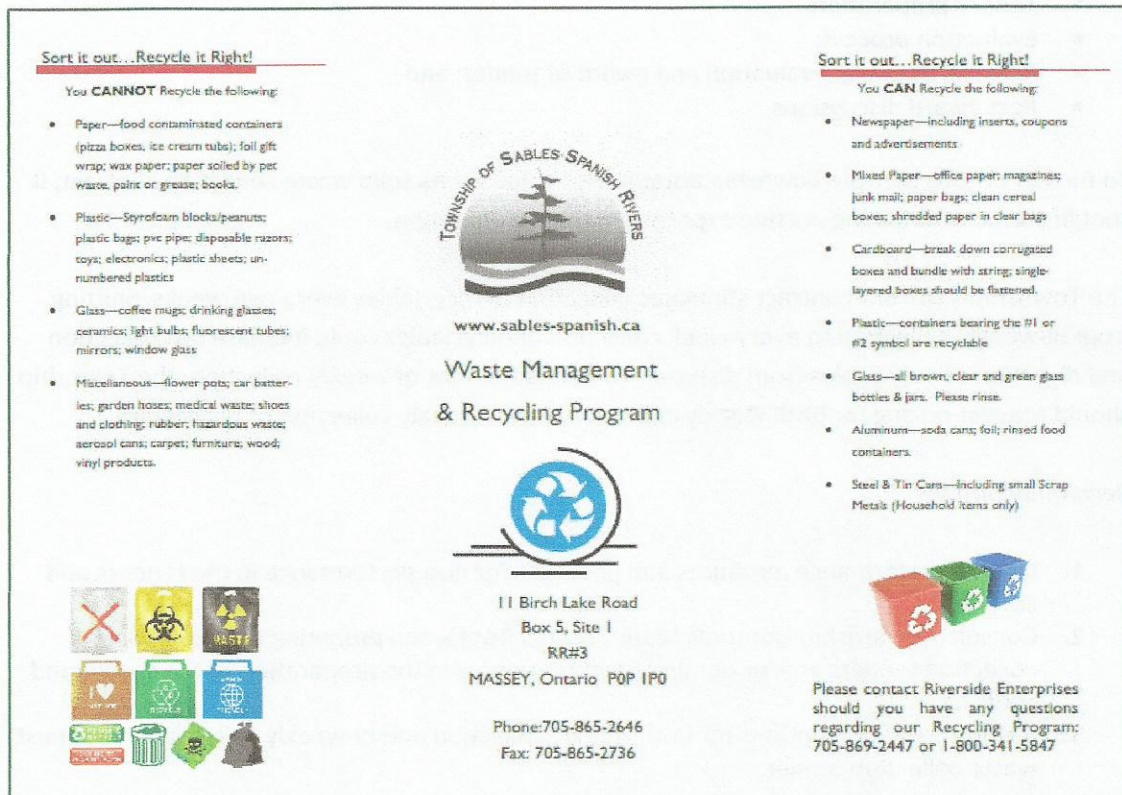
Public Education and Promotion

The Township currently produces a flyer annually that describes what residents can and cannot recycle and how the material should be prepared. The flyer (see figure 3) is also available on the City's website.

The Continuous Improvement Fund (CIF) has identified promotion and education as a fundamental best practice for the blue box program and a priority project area. The promotion and education best practice requires that programs have an up to date communications plan with:

- Identified goals;
- Measurable objectives; and
- A program to monitor and evaluate the promotion and education efforts.

Figure 3: One side of Township of Sables-Spanish Rivers Waste Management Brochure



The capture rate of the Township's current blue box recycling program is less than 30%, far below the 70% target capture rate as recommended by CIF. Improvements to the Township's promotion and education program can help to increase the capture rate by encouraging more frequent and correct participation. A number of recommended promotion and education options include:

- A Community-Based Social Marketing Campaign (an initiative that identifies and overcomes barriers to participation in waste diversion programs by assisting people to adopt a desired behaviour and lead to a sustainable practice);
- Updated print materials (e.g., a colour brochure describing how residents should recycle and why, a 'reminder' fridge postcard or magnet, etc), door to door canvassing (a staff member or student goes door to door distributing a recycling brochure and answering questions about recycling), among other initiatives;
- Static and/or staffed recycling kiosks in public areas (e.g., the Massey Fair, the Legion Hall, Chutes Provincial Park, Massey Arena, Walford Community Centre, the public library, a Beer Store location, at events); or

- Other elements as described in Stewardship Ontario's report *Identifying Best Practices in Municipal Blue Box Promotion and Education* or on their Recyclers' Knowledge Network.

In addition to recycling, the promotion and education can also address waste prevention (e.g., precycling⁷) and reuse.

As this would not be a full-time task, a student resource and its cost could be shared in other parts of the waste management program or other public works activities.

The Continuous Improvement Fund provides support in the form of materials and funding for municipal recycling promotion and education programs. CIF's "One Stop P&E Shop for Small Programs" is hosted at www.wdo.ca/cif/promotion_education.html. Through this website, the Township will be able to develop a communications plan and access template materials. Examples of past CIF funded projects can be found at www.wdo.ca/cif/projects.html#cne and include projects such as depot signage, recycling brochures, stickers, websites, among other things.

Recommendations

4. Increase the Township's promotion and education of recycling.

Data Collection

When making adjustments and improvements to recycling programs, it is important do so utilizing the best available information. The analysis of the Township's current capture and diversion rates suggests that participation in the Township's recycling program is low, as the current capture rate of blue box materials collected in the Township's programs is less than 30%. There are a number of possible reasons for this low participation rate, for example:

- Some households may not be participating at all;
- Most households may be participation in the program, but may be limiting how much recyclable materials they are setting out for collection; or
- Some of the recyclable material may be used in another fashion⁸, among other reasons.

⁷ Precycling is the practice of reducing waste through careful purchases, where only what is needed is bought, and products with less packaging is preferred over those with more packaging. This includes buying in bulk, using your own reusable container when purchasing items, avoiding junk mail, subscribing to electronic billing or notices instead of paper ones, among other things. For more information, visit Environment Canada's website at www.ec.gc.ca/education/default.asp?lang=en&nav=2444333A1-1, or search "precycling" in your favourite Internet search engine.

Options for obtaining information on current recycling behaviours and barriers include:

- Surveying residents on their attitudes toward recycling and waste diversion, current recycling practices in their home, what barriers to recycling they face, and possible solutions for addressing those barriers. The residents could be surveyed by telephone, through a door-to-door questionnaire, or via questionnaire kiosks in public places (e.g., grocery stores, events, etc). Examples of possible barriers and solutions are listed in Table 7.
- Set-out survey to measure the frequency residents set out their blue box for collection. The set-out survey would quantify how often residents set out their materials for recycling and could also provide information on what kinds of material people are recycling and how much (e.g., how many bundles of cardboard are set out, how full the bins are, etc).

Table 7: Examples of and Solutions to Possible Barriers to Recycling

<p>Lack of Information/Confusion about the Program</p> <p>Residents may not be fully aware of how their recycling program works. For example, they may not be aware of all of the materials that may be accepted, or how they should be prepared. Confusion they feel about the recycling program may discourage them from participation.</p> <p>Possible solutions: improved communications materials/program (e.g., an Informative brochure that is visually pleasing, a community-based social marketing campaign, promotion of recycling in the community, etc)</p>
<p>Lack of Storage Space in Blue Box</p> <p>Some residents may experience that there is not enough room in their blue box to store their materials for the full two week period and place their overflow recyclables in their garbage.</p> <p>Possible solutions: Educate residents about alternatives solutions to employ if your blue box is full. Provide residents with a second and or larger blue box (The CIF will fund 50% of the cost for large blue boxes).</p>
<p>Apathy/Forgetfulness</p> <p>Some residents may put their recyclables in the garbage rather than recycle them because they do not care, lack the motivation to recycle or simply forget.</p> <p>Possible solutions: Recycling prompts (e.g., fridge magnets, stickers for garbage cans), education</p>

⁸ The analysis indicates that there is a significant amount of fibres (e.g., newsprint, cardboard, etc) that is not being recycled. Fibres are valuable recyclable material and can be worth between \$70 – 160 per tonne in the marketplace, depending on the fibers type of fibre. One possible explanation is that it is being burned for fuel.

about the benefits of recycling/impacts of not recycling, special promotions or contests, constant messaging/promotion, education in the schools.

Better information on what waste is being disposed compared to recycling should also be considered. Currently, no waste audit information exists for the Township, and as a result WDO waste audit data for West Nipissing (another municipality categorized by WDO as Rural Collection – North) was used as a proxy. However, there may be other factors that cause some differences between West Nipissing's waste composition and the Township of Sables-Spanish Rivers (e.g., if fibres are being burned by residents). A comprehensive waste audit is recommended for the Township, which would include both recyclables and garbage.

Recommendations

5. Survey Township residents on their recycling attitudes, behaviours and barriers.
6. Conduct a participation set-out survey to measure how often residents set out their recyclables for collection.
7. Conduct a waste audit to measure the Township's actual garbage composition.

Storage and Shipping of Blue Box Materials to Sudbury Facility

The Township of Sables-Spanish Rivers is approximately 95 km from the City of Sudbury⁹, whose material recycling facility (MRF) is able to handle a wide range of blue box materials, including many that the Township currently does not collect. The Township should investigate the feasibility of sending its blue box materials to Sudbury for processing, which would allow it to expand the suite of blue box materials currently accepted in the Township's program. The City of Sudbury processing facility accepts commingled blue box materials, which would mean the residents of Sables-Spanish Rivers could continue setting out their blue box materials without source-separating.

The Township should also assess the feasibility of storing the collected blue box materials and transport it to Sudbury when it is economical to do so. For example recyclable material could be stored in roll off containers or an open top transport trailer. Once full, the roll off containers or transport trailer can be delivered to Sudbury's MRF. This approach would allow for comingled collection of recycling material that would reduce collection costs and use of the Sudbury MRF which may reduce processing cost.

⁹ Based on distance between Massey and Sudbury.

Recommendations

8. Assess the feasibility of an arrangement with the City of Sudbury to accept the Township's recyclable materials. If feasible, then assess:
 - c. The feasibility of expanding the suite of blue box materials currently accepted in the Township's blue box program; and
 - d. The feasibility of storing and shipping the collected blue box materials.

Training of Key Staff

Training of key waste management staff (including front line staff) is important to ensure that the municipal recycling program is run effectively and knowledgeably and that adequate customer service is provided. It is also considered a best practice by CIF and WDO (e.g., see Best Practice question #5a-d on page 15 of the Township's WDO datacall sheet). While training opportunities in Northern Ontario may occur less frequently, other options may include:

- Continuous Improvement Fund Ontario Recycler Workshops (includes webcast option)
- Development of in-house training session for front line staff (including customer service representatives)
- Other recycling webcasts (e.g., Institute for Local Government, www.ca-ilg.org)

Recommendations

9. Waste management staff should participate in third-party training sessions where possible. Webinars and webcasts can provide opportunities for training while avoiding the need for travel.

Increasing Diversion from ICI

The Township currently provides some collection services to its Industrial, Commercial and Institutional (ICI) sector. Currently, the amount of material collected specifically from this sector is not available for this report.

In addition to providing collection services to businesses, the Township could also offer support to businesses in the form of education programming and various incentives and disincentives for reducing waste. For example, such a program could include (but is not limited to):

- Educational materials advising businesses on how to reduce their waste, develop a waste reduction plan or conduct a waste audit. This could include web-links to existing resources, such as the resources provided on the websites for the Recycling

Council of Ontario (www.rco.on.ca/businesses) or Waste Reduction week in Canada (www.wrwcanada.com, under the resources tab).;

- Recognition for or case studies on business leaders who are finding ways to reduce their waste;
- Promotion of retailer take-back programs; and
- Discussions with local businesses about their most significant wastes and opportunities for reducing or recycling.

Recommendations

10. Develop an ICI Waste Diversion Program to help provide support to businesses wishing to find alternatives to waste disposal.

Future Initiatives

Disposal Bans

A disposal ban can be a useful tool to help keep recyclable material from being disposed in landfill. The Township of Sables-Spanish Rivers currently has the infrastructure in place to collect and process banned recyclables. Depending on the level of enforcement, additional staff resources could be required to enforce the ban. For the ban to be effective, promotion of the ban would need to be included in the promotion and education program in advance of the ban taking effect.

Many other municipalities in Ontario have implemented disposal bans for a variety of materials, including blue box materials, hazardous household waste, tires, yard waste, white goods, etc. Bans of recyclable materials have also taken place in many municipalities in Ontario and other parts of Canada & North America.

Recommendation

11. Implement a disposal ban on materials included in the Township's recycling program.

Bag Limits and User Pay

Township residents currently are able to set out two bags of garbage without a bag tag, while extra bags require a \$2.00 bag tag. The *Blue Box Program Enhancement and Best Practices Report* (KPMG, 2007) identifies the reduction of bag limits as a factor leading to increased waste diversion when other waste diversion opportunities are present. The KPMG report describes three types of bag limit scenarios:

- **Strict bag limit** – once the bag limit is reached, there are no other options for setting out additional bags of garbage. Waste collection staff leaves excess bags at roadside.
- **Partial bag limit** – also known as a partial user pay system, residents can purchase bag tags for excess bags of waste (this reflects the Township's current approach to bag tags).
- **Hybrid** – a maximum is applied to the number of bags of garbage residents can set out, with a portion of them requiring a bag tags.

Currently, the Township's waste diversion options for residents do not include the full suite of blue box materials accepted in central and southern Ontario communities, nor does it include a household organics diversion program. Therefore, any bag limit reduction would need to be marginal (e.g., reduce current limit from 2 to 1) to ensure residents have enough disposal/recycling capacity to deal with their household waste. As a graduated approach to reduce waste and capture more recyclables, the Town could require bag tags on all bags of garbage after a period of time. Additionally, the Township could institute an upset limit of how many bags of garbage residents can set out for collection (including both with and without bag tags).

It is recommended that this approach be implemented as a future initiative, once the other strategy options have been implemented and their progress evaluated.

Recommendation

12. Reduce the number of bags allowed without a bag tag and provide an upset bag limit for the total amount of garbage bags set out for collection.

8. Implementation

Table 8 below presents the recommended timeline for implementation of the preferred initiatives.

Table 8: Implementation Timeline for Recommendations				
Recommendation	2011	2012	2013	2014 +
<i>Priority Initiatives</i>				
Improvements to Recycling Contracting				
Public Education and Promotion Program				
Data collection				
Storage and Shipping of Blue Box Materials to Sudbury Facility				
Training of Key Staff				
Increasing Diversion from ICI				
<i>Future Initiatives</i>				
Disposal Bans				
Bag Limit and User Pay				

9. 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.

Table 9: Waste Recycling strategy Contingencies	
Risk	Contingency
Insufficient funding	Raise/implement user fees
	Explore and apply for other funding sources
	Delay lower-priority initiatives
	Increase proportion of municipal budget to solid waste management
Public opposition to planned recycling initiatives	Improve public communications
	Engage community/stakeholders to discuss initiatives/recycling plan
Lack of available staff	Prioritize department/municipal goals and initiatives
	Hire summer student to help with planning (may be available funding)

10. Monitoring and Reporting

The monitoring of and reporting on a municipality's recycling program is considered a Blue Box program fundamental best practice and is 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 Township's waste recycling program is outlined in the table below.

Table 10: Recycling System Monitoring		
Topic	Tool	Frequency
Total waste generated (by type and by weight)	Measuring of recyclables	Each load
Diversion rates achieved	Formula: (Blue box materials + other diversion) ÷ Total waste generated x 100%	Monthly
Program participation	Customer survey (e.g., telephone); monitoring set-out rates	Every 1 to 3 years
Customer satisfaction	Customer survey (e.g., telephone); tracking calls/complaints received to the municipal office	Every 1 to 3 years
Opportunities for improvement	Customer survey (e.g., telephone); tracking calls/complaints received to the municipal office	On-going
Planning activities	Describe what initiatives have been fully or partially implemented, what will be done in the future	Annually
Review of Recycling Strategy	A periodic review of the Recycling Strategy to monitor and report on progress, to ensure that the selected initiatives are being implemented, and to move forward with continuous improvement	Every 3 to 5 years

Appendix A: Waste Recycling Option Scores

Description of Options/Best Practices	Criteria (Score out of 5)					Total Criteria Score
	% Waste Diverted	Proven Results	Economically Feasible	Public Acceptance	Ease of Implementation	
Recycling Contracting	3	5	5	5	4	22
Public Education and Promotion Program	5	5	3	5	3	21
Storage and Shipping of Blue Box Materials to Sudbury Facility	3	5	4	5	4	21
Data collection	3	5	4	3	4	19
Training of Key Staff	3	5	4	3	4	19
Disposal Bans	4	5	3	3	3	18
Bag Limit and User Pay	4	5	4	2	3	18
Increasing Diversion from ICI	3	4	4	4	3	18