Township of Madawaska Valley CIF # 260

Blue Box Recycling Program Best Practice Assessment Report August 2010

Prepared for:
The Continuous Improvement Fund
92 Caplan Avenue, Suite 511
Barrie, ON L4N 0Z7

Prepared by: GENIVAR Consultants LP 600 Cochrane Drive, 5th Floor Markham, Ontario L3R 5K3

Project No. MA-10-138-00-MA

Executive Summary

On behalf of the Continuous Improvement Fund (CIF), a recycling program assessment was conducted for the Township of Madawaska Valley. The assessment approach was developed by CIF and is used to systematically review program status against the best practices questions found in the WDO Municipal Datacall. Program performance is also reviewed since this too is a factor that influences WDO funding.

Observations, conclusions and potential opportunities for improvement were developed primarily as a result of a one-day interview and site visit, which was conducted on June 1, 2010. The output of the process is a high-level analysis: prior to implementing any of the potential opportunities it may be necessary to examine their appropriateness and practicality in more detail. Where initiatives call for capital investment, a cost/benefit and/or payback analysis is required, as might be a feasibility review.

A preliminary comparison to municipalities within its WDO municipal grouping was performed. Madawaska Valley collection costs are well below the average but depot and transfer costs are considerably higher than the average. A second comparison to selected Ontario municipalities was made where Madawaska Valley was shown to perform well with respect to relative gross and net cost per tonne. The performance measure E&E Factor is the best within this limited comparison although, within the larger municipal grouping, this value ranks as 36th out of 71 municipalities (WDO 2010) as a relative measure against which funding is allocated.

A review against each of the following best practices questions was performed. In the case of Madawaska Valley, a number of questions are being addressed. Best practice questions 1 and 2, for instance, are being addressed through the development of a Waste Recycling Strategy.

- 1. Blue box recycling plan as part of an integrated waste management plan
- 2. Established performance measures
- 3. Multi-municipal planning approach
- 4. Optimization of collection and processing operations
- 5. Training of staff in key competencies
- 6. Appropriately planned, designed and funded communications program
- 7. Established and enforced policies that induce waste diversion

Questions 3 through 7 represent areas of opportunity for Madawaska Valley. In general it was concluded Madawaska Valley operates an efficient and economical recycling program, and that program operators are aware of potential opportunities as well as issues of related cost. A number of recommendations are offered in the report, all of which can be considered in the spirit of prudent management already exercised by the Township.

Recommendations target both the administrative and report requirements that will help Madawaska Valley secure a maximum share of the best practice funding available, but also improve material recovery and cost efficiency aspects that are used to measure program performance. These take several forms: annual reporting, staff training, enhanced program promotion, operating adjustments, potential economies of scale, and changes to contractual or third party agreements. Specific recommendations include:

- Review the Township's existing Waste Strategy against the WDO requirements, and amend or append to it a new section that defines blue box specific objectives and targets and solidifies data collection processes
- Collect, document and analyse program data to support ongoing program evaluation
- Review and establish specific blue-box targets reported to the WDO

GENIVAR ES-1

- Generate an annual report for all best practice elements that require monitoring and reporting including recycling plan review, blue box targets and performance, effectiveness of P&E, and operational reviews
- Structure future contracts to separate transfer/haul and processing costs
- Initiate discussions with other municipalities about joint services for collection, processing, depot/transfer, marketing, and promotion and education. High depot/transfer costs and the prospect of common P&E materials are good topics of discussion
- Review collection requirements for corrugated cardboard.
- Attend recycling training that meets the WDO best practice training requirement.
- Obtain CIF assistance to boost promotion and education efforts through CIF Project #192, Small Program P&E Plans, and through CIF funding assistance
- Consider additional policy support such as bag limits or user charges at the depots

By following up with the noted recommendations it is hoped that Madawaska Valley will be in a position to attain the goals of the CIF program assessment, namely the implementation of program improvements and strategies that improve recycling program effectiveness and efficiency.

This Project has been delivered with the assistance of Waste Diversion Ontario's Continuous Improvement Fund, a fund financed by Ontario municipalities and stewards of blue box waste in Ontario. Notwithstanding this support, the views expressed are the views of the author(s), and Waste Diversion Ontario and Stewardship Ontario accept no responsibility for these views.

© 2010 Waste Diversion Ontario and Stewardship Ontario All rights reserved. No part of this publication may be reproduced, recorded or transmitted in any form or by any means, electronic, mechanical, photographic, sound, magnetic or other, without advance written permission from the owner.

GENIVAR ES-2

Table of Contents

Executive Summary Table of Contents

1	INTR	ODUCTION	1			
	1.1 1.2	Madawaska ValleyBest Practice Questions and the WDO Municipal Datacall				
2	THE PROGRAM ASSESSMENT AND BEST PRACTICES REVIEW					
3	PRE	LIMINARY REVIEW AND ANALYSIS	4			
4	PRO	GRAM ANALYSIS USING THE BEST PRACTICE QUESTION REVIEW	7			
	 4.1 Development and implementation of an up-to-date blue box recycling plan as particle Diversion System or Integrated Waste Management System 4.2 Establishing defined performance measures including diversion targets, monitoriand a continuous improvement program 					
 4.3 Multi-municipal planning approach to collection and processing of recyclables 4.4 Optimization of operations in collections and processing by following general principles (GAP) for effective procurement and contract management 						
	4.5 4.6 4.7	Training of key program staff in core competencies	4			
5	CON	CLUSIONS AND RECOMMENDATIONS1	9			
	5.1 5.2	Conclusions				
Lis	t of Ta	ables				
Table 3.1 Table 4-1 Table 4-2		WDO Funding Allocation Formula	11			
Аp	pendi	ces				
Appendix A		A Blue Box Program Plan Update on Funding for Municipal Programs [Presentation]				
Appendix B		dix B WDO Municipal Datacall Best Practice Questions				
Appendix C		C Small Rural Southern Blue Box Program Profile, from the <i>Program Enhancement ar</i> Best Practices Assessment Project Final Report	10			
Appendix D		ndix D Communications and Communications Monitoring Plan Samples				

1 Introduction

1.1 Madawaska Valley

Madawaska Valley operates a mixed collection system, with curbside service provided to 751 households in the village of Barry's Bay, and the remaining 2,234 households serviced by depots. All residents receive garbage, blue box recyclables and green bin organics collection through the system.

Blue box materials are collected in a two stream, alternate week system: Containers are collected curbside on one week, fibres and OCC are collected on the other week. Both streams are received continuously at depots. Garbage collection is provided every other week and residents are required to purchase bags at \$1.00 per bag, with no bag limit. All Municipal Datacall blue box material categories are acceptable for collection in the recycling program. The Township owns and operates the collection system, including curbside collection and the three recycling depots at the Bark Lake, Wilno and Radcliffe sites. Under a contract with the Ottawa Valley Waste Recovery Centre (OWVRC), blue box materials are hauled to the OVWRC for processing.

The Township marketed a total of 411 tonnes of blue box recyclables in 2009. Madawaska Valley is categorized as a "Rural Collection – South" municipality by the WDO, and the Township achieved an impressive 35% residential diversion rate in 2009, well above the 27% average for the municipal grouping. This performance is abetted by the fact that the Madawaska Valley recovery rate for recyclables, at 61%, exceeds the average of 53%, likely because the Township also supports an organics collection program.

1.2 Best Practice Questions and the WDO Municipal Datacall

Starting in 2010 the answers to the "best practice" questions in the Waste Diversion Ontario (WDO) Municipal Datacall will have a bearing on the amount of funding made available to individual municipal programs. Over a three year period the percentage value relative to overall funding will escalate from a starting point of 5%, to 15% and finally to 25% in 2012. Under the model being implemented by the WDO, funding will be awarded based on a three part formula, with the Best Practice questions forming the first, a performance factor (possibly the E&E Factor) forming the second, and program cost making up the final portion.

Given the increasing significance of the Best Practices portion of the funding distribution model, the Township of Madawaska Valley asked the Continuous Improvement Fund (CIF) to fund an assessment of their program against each of the Best Practice question categories. The objective is to position Madawaska Valley to maximize their performance against each question, since each will have a point value and will be tabulated to arrive at an overall score that will determine how much of the Best Practice question portion will be made available to the municipal program operator. CIF retained GENIVAR to perform the assessment.

The values for each of the best practice sections in the Datacall are as follows:

1.	Blue box recycling plan as part of an integrated waste management plan	12.5%
2.	Established performance measures	25.0%
3.	Multi-municipal planning approach	8.3%
4.	Optimization of collection and processing operations	12.5%
5.	Training of staff in key competencies	8.3%
6.	Appropriately planned, designed and funded communications program	8.3%
7.	Established and enforced policies that induce waste diversion	25.0%
	TOTAL	100.0%

More detail is provided in Appendix A, a PowerPoint presentation made at the October 15, 2009 Municipal Waste Association Fall Workshop held in Toronto. The questions as published by the WDO appear in Appendix B.

Each of the main WDO best practice questions is divided into a series of sub questions, each worth a proportionate share of the total question. More specifically, sub-questions that are in bold print count against the total. Theoretically, if a question worth 12.5% has five bolded sub questions, the answers to those sub questions would count for 2.5% each.

In practice, however, there are a number of issues with respect to the sub questions that make it difficult to advise with accuracy the exact financial impact of each sub question. Inquiries were made of the WDO and of the Municipal Support person for municipal MIPC members to try and clarify, but it is evident that the application of the questions is still a work in progress (this is the first Datacall in which the questions will actually be applied against funding).

Despite the fact that there may be a few questions for which the financial implications of the subquestions is unclear, parties associated with the best practice questions and how they are evaluated are aware of the concerns and working to develop a fair approach, It is still prudent therefore to work towards meeting the best practice questions, where appropriate, given their increasing significance within the funding allocation formula.

2 The Program Assessment and Best Practices Review

The approach used in this report was developed by CIF and is used to systematically assess program status against those best practices with which the Township is unable to comply as noted in the Township's Datacall submission. The exercise is more than a strict assessment of Madawaska Valley practices: question #6 calls for a program review, making it is necessary also to discuss program performance as well in order to assess both practices and performance, the Continuous Improvement Fund (CIF) program assessment model uses the best practice questions to examine all areas of program performance. The CIF developed a recycling program assessment to provide an objective and thorough assessment of the participating program's blue box program.

The approach is partly based on the site visit and assessment process utilized as part of the Blue Box Program Enhancement and Best Practices Assessment Project (Best Practices Project).

There are a number of goals and objectives associated with the CIF approach, including:

- Recommending, for implementation, recycling program effectiveness and efficiency improvements through examination of program components, and
- Providing municipal recycling programs with timely and objective input to aid decision making about program improvements, upgrades, contracts, tenders and any other program development issues.

Observations, conclusions and potential opportunities for improvement outlined in this report are developed primarily as a result of a one-day interview and site visit, which was conducted on June 1, 2010. The output of the process is a high-level analysis: prior to implementing any of the potential opportunities it may be necessary to examine their appropriateness and practicality in more detail. Where initiatives call for capital investment, a cost/benefit and/or payback analysis is required, as might be a feasibility review.

3 Preliminary Review and Analysis

It is important to note that the overall funding formula employed by the WDO contains two elements other than the best practice questions. In total, funding will be distributed according to a combined model: best practice questions, a performance factor (possibly the E&E factor or a modified version of same), and program cost. It is important for all program operators to assess and improve program cost and performance measures in a system where *relative* position regarding program performance may have a direct bearing on funding. This means that the broad assessment undertaken here is much more than an exercise to confirm practices; programs will be driven to examine cost and recovery in order to maximize funding eligibility.

Allocation Method 2010 2011 2012 **Datacall Best Practice Questions** 5% 15% 25% **Program Performance** 30% 40% 45% Net Cost 65% 45% 30%

Table 3.1 - WDO Funding Allocation Formula

Madawaska Valley has no control of the process or rationale used by WDO to categorize the program within a WDO municipal grouping, which in this case is referred to as the Rural Collection – South category. There are municipalities in this grouping with widely divergent characteristics in terms of population, geographic size, location, and program delivery. Reporting of data also varies depending on contract structures and operating relationships. Regardless, WDO uses municipal groupings for comparative reasons and as part of funding allocation strategies where poor performers within a municipal grouping can lose a portion of their funding.

When compared to municipalities within the WDO municipal grouping, Madawaska Valley is seen to have collection costs well below the average. The collection figure likely reflects the small geographic size of the curbside collection area and a system that uses collection vehicles that shares time between garbage, recyclables and organics collections.

Depot and transfer costs, on the other hand, are considerably higher than the average. Even when it is understood that this includes processing costs (reported as \$17 in the Municipal Datacall, which is the processing cost associated with the segregated corrugated cardboard) the figure is high and is not totally explained by either transportation or processing costs. Other factors, and quite possibly a lack of competition in the area for these services, may come into play here. According to the WDO information, blue box recovery for Madawaska Valley is about 8% higher than the average.

Table 3-2 Comparative Analysis: Madawaska Valley within its WDO Municipal Grouping

		Madawaska Valley	Madawaska Valley	Group Average*	Group Range*
	Year	2009 (reported)	2008	2008	2008
	Households	2,985	2,985	4,291	230 – 19,199
	Tonnes Reported or Calculated	447	453	582	3 – 3,017
a	Collection Cost / Tonne	\$ 111	\$ 101	\$ 224	\$ 0 - 453
Residential	Processing Cost / Tonne	\$ 17	\$0	\$ 40	\$ 0 - 381
esid	Depot-Transfer Cost / Tonne	\$ 242	\$ 257	\$ 63	\$ 0 - 631
ď	Promotion and Education Cost / Tonne	\$ 3.55	\$ 6.81	\$6	\$ 0 - 40
	Calculated Administrative and Interest on Municipal Capital / Tonne	\$ 19	\$ 18	\$ 23	\$ 2 - 263
	Gross cost / Tonne	\$ 430	\$ 383	\$ 451	\$ 72 - 5,524
	Net Cost / Tonne	\$ 411	\$ 369	\$ 451	\$ 72 - 5,524
	% Recovery	Unavailable	61	53	7 - 94
	E&E Factor **	Unavailable	6.05	7.98***	0.62 - 34.45

^{*} The WDO Municipal Grouping for Madawaska Valley is the "Rural Collection – South" grouping which included 69 Municipalities in 2008, and now has 71 (2010).

To obtain another perspective, a number of other Ontario programs were selected for the purpose of comparison. The attributes used to make the selection included mixed depot / curbside collection system, population size, number of households serviced and program tonnage.

Table 3-3 Comparative Analysis: Madawaska Valley versus selected Ontario Programs (2008)

Program Name	Calculated Blue Box Tonnes Marketed	Total Gross Costs	Gross Costs Per Tonne	Total Gross Revenue
Township of Elizabethown-Kitley	400	\$ 91,827	\$ 229	\$ 132
Municipality of West Elgin	170	\$ 113,311	\$ 668	\$ 2,467
Township of Stone Mills	564	\$ 393,339	\$ 698	\$ 46,337
Township of Madawaska Valley	416	\$ 159,532	\$383	\$ 5,794

^{**} The Efficiency and Effectiveness Factor (E&E Factor) is expressed by dividing a recycling program's efficiency (net cost per tonne) with its effectiveness (percent of materials recovered). Better performing programs have a relatively low cost per tonne in the numerator combined with a relatively high recovery rate in the denominator, resulting in a low E&E Factor. The figure of record with the WDO at the time of this report was prepared was from the previous year. While the E&E Factor is considered to be a reasonable measure, it has limitations. For instance, a poor performing program with a very low cost per tonne could possess a low E&E factor.

^{***} Calculated excluding outliers w/ E&E factors > 100

Program Name	Material Revenue Per Tonne	Other Revenue Per Tonne	Total Net Cost	Net Cost Per Tonne	E&E Factor
Township of Elizabethown-Kitley	\$ 0	\$ 0.33	\$ 91,695	\$ 229	6.70
Municipality of West Elgin	\$ 14	\$ 0.11	\$ 110,844	\$ 653	28.29
Township of Stone Mills	\$ 0	\$ 82	\$ 347,002	\$ 616	10.00
Township of Madawaska Valley	\$ 13	\$ 1.33	\$ 153,738	\$ 369	6.05

In general recycling performance is measured as cost per tonne, and the limited comparison above reveals that Madawaska Valley performs well with respect to relative gross and net cost per tonne. The performance measure E&E Factor is the best within this limited comparison, but within the larger municipal grouping this value ranks as 36th out of 71 municipalities (WDO 2010) as a relative measure against which funding is allocated. This would indicate that there is some risk to Madawaska Valley when competing for that portion of municipal funding allocated according to program performance. It should be noted, however, that in previous WDO funding allocation schemes (2007, 08 and 09) Madawaska Valley has always been treated as a better performing program. This means that, in any of the changing "cost containment" or "incentive" funding allocation approaches employed, Madawaska Valley has not been penalized or lost funding because of poor performance.

4 Program Analysis using the Best Practice Question Review

The best practices questions in final form have been posted on the WDO website and appear here in Appendix B. In the following section, a general finding is documented for all WDO headings, with additional narrative offered on those questions and specific sub-questions that either require attention by Madawaska Valley, or have been identified in the program assessment.

4.1 Development and implementation of an up-to-date blue box recycling plan as part of a Waste Diversion System or Integrated Waste Management System

- h) Does the plan require performance monitoring against Blue Box diversion targets?
- k) Was a monitoring report presented to Council/Committee/board in 2009?

As part of the Environmental Assessment for landfill expansion Madawaska Valley has a waste management strategic plan that includes some direction with respect to recycling. The plan is dated 2007 and is therefore current as required by the WDO five year plan review cycle. The plan notes that, as part of the preferred approach to waste management in the Township, it is best to maximize waste diverted via the establishment of mandatory recycling and bag limits to complement the established user-pay system, with consideration of expanding of the current curbside blue-box program.

To fully meet the WDO Waste Recycling Plan requirement, however, it may be prudent to amend the plan or develop a separate waste recycling strategy. Township representatives, in fact, are planning to complete a waste recycling strategy by the end of 2010 using the guidelines set out buy the CIF.

The existing Waste Management Strategic Plan does not address blue box specific targets. Diversion targets appear to be related to the overall provincial target of 60%, which speaks to the entire waste stream and is not blue box specific, and the types of targets specific to blue box programs include recovery rates, participation rates, contamination rates, unit costs (per hhld, per tonne) and any other element of participation or service that can and should be monitored for the betterment of the program. The WDO best practice question is blue box specific and as part of the waste recycling strategy process the Township will have the opportunity to establish distinct blue box specific targets.

It may also be helpful to review how the diversion number associated with sub-question g) (What is the Blue Box diversion target for 2009?) is reported. The Township reports to the WDO a target of 45%, yet as part of the WDO Municipal Datacall process the Township receives confirmation of their blue box diversion rate for the previous year: 61% The WDO further explains how this rate is calculated: blue box material tonnes marketed divided by blue box materials available for collection. The WDO expression "blue box diversion" is more commonly referred to as the blue box recovery or blue box capture rate.

Based on general municipal performance in Ontario, 45% is a reasonably challenging target for overall diversion and possibly, in some cases, the amount of diversion of the total waste stream attributed to blue box recycling. Blue box recovery in Ontario, however, exceeds 60% (as does recovery in Madawaska Valley) and the reporting of a 45% target should be reviewed in this context.

Representatives from Madawaska Valley have attended a CIF sponsored workshop which offers guidance with respect to the development of an appropriate plan, and as a result are aware of basic plan elements as outlined in the CIF *Guidebook for Creating a Municipal Waste Recycling Strategy*.

With respect to sub-questions h) and k), the Strategic Plan does not appear to address performance monitoring and reporting as required. There are, in fact, several instances within the best practice questions where monitoring, reporting and review are required. Madawaska Valley is encouraged to develop an annual reporting regime that includes monitoring program for all best practice elements that require monitoring and reporting: plan review, blue box targets and performance, effectiveness of P&E, and operational reviews.

4.2 Establishing defined performance measures including diversion targets, monitoring objectives and a continuous improvement program

b) Does your program collect specific program data to evaluate the effectiveness of recycling programs before and after implementation?

It is generally assumed that a municipality addressing question #1 of the WDO Datacall (above) will in the process resolve any deficiencies with respect to this question, #2. Because the strategic plan is by nature a high level strategy, it does not appear to contain the detail required in 2 b). Attention should be given to defining blue box specific objectives and targets and solidifying data collection processes. In the case of 2 b), the question is not whether the municipality has actually done an evaluation, but whether data is collected to support an evaluation if and when program implementations occur.

There are a number of different program aspect for which data can be collected and evaluated. An example of this would be the development of an enhanced Promotions and Education (P&E) program. It is helpful at the outset to inventory what sources of information would be used to determine the effectiveness of a promotions campaign. This could include invoices that track processing costs, weigh slips, participation studies or set out studies. The type of information collected should reflect the objectives of the campaign, which could target:

- participation
- material recovery (general or a specific item)
- material contamination
- how boxes are placed at the curb or what is an acceptable recycling container
- any combination of the above

The data collected should first be used to establish a baseline for the objective prior to the implementation, and then revisited over time to measure progress. In the case of Madawaska Valley, a natural starting point might be the measurement of material recovery and data sources might be processing invoices, haulage records and Datacall reporting. After initiating a program to increase recovery these sources would be reviewed and compared to baseline to determine whether there has been an increase that can be attributed to the P&E program. Processing volumes are a natural starting point, but frequency of haulage may also provide insight as might a participation study.

With respect to the latter, a curbside participation study can be done quite easily and inexpensively. Participation is a measure over time and measures the percentage of households who put their blue box (or equivalent) out for collection. In weekly collection systems a household is considered to participate if they place their blue box out *once per month*. In the case of Madawaska Valley which collects fibres and containers on alternate weeks, one full collection cycle is actually two weeks. However, residents have an opportunity to participate weekly so participation would be measured based on a four week period. For each of the four collection days a staff person would be asked to drive down a number of streets, based on a representative sample, to record which addresses have placed their blue box out for collection. This route would be exactly the same for all four collection days. After the fourth survey all homes recorded will have placed the blue box out at least once. If there were 40 homes in the sample area (about 5% of the households getting curbside collection in Madawaska Valley) and 28 put recyclables at the curb at least once in the four collection period, the Township would have a curbside blue box participation rate of 70%.

Madawaska Valley may also want to monitor recycling participation at the depot sites. This may be as simple as recording whether users bringing garbage to the site also brought separated recyclables over a fixed period of time and repeating the exercise after implementation of the communications plan.

4.3 Multi-municipal planning approach to collection and processing of recyclables

- a. Does your municipality deliver and/or provide recyclable material collection services jointly with one more other municipalities through an agreement?
- b. Does your municipality deliver and/or provide Blue Box recyclable material processing services jointly with one more other municipalities through an agreement?
- c. Does your municipality deliver and/or provide Blue Box recyclable material transfer/depot services jointly with one more other municipalities through an agreement?
- d. Does your municipality deliver and/or provide Blue Box recyclable material marketing services jointly with one more other municipalities through an agreement?
- e. Does your municipality deliver and/or provide Blue Box recyclable material public education services jointly with one more other municipalities through an agreement?
- f. If none of these services (collection, processing, depot/transfer, marketing, and promotion and education) are currently being delivered and/or provided jointly with another municipality, has your program synchronized the expiry date of its recycling contract with the recycling contracts of neighbouring municipalities?
- g. Has your municipality approached other municipalities about jointly providing recycling (collection, processing, depot/transfer, marketing, and promotion and education) services?

The WDO requirement is intended to place a dollar value on efforts by municipalities to seek opportunities to gain economies of scale by partnering with their neighbours. This approach is uncommon in some parts of the province, and in fact the notion of pooling resources or services may occasionally meet with resistance. On the other hand, some municipalities have banded together in order to develop collective systems that pool recyclables and services in an effort to obtain efficiencies. A number of the municipal partnerships have created board or authority structures to manage waste, such as the Bluewater Recycling Association, the Essex Windsor Solid Waste Authority, the Ottawa Valley Waste Recovery Centre, and Quinte Waste Solutions. Each has evolved to meet the needs of a collective group, and in some cases beyond delivery of blue box service. Some, for instance, are full service waste management entities.

Regardless, there may be local sensitivities to the approach. Some decision makers worry that consideration of co-operative tendering for waste services or recycling may usurp local authority or promote amalgamation. There are enough examples to demonstrate that municipalities can easily maintain their authority and still work collectively to enhance their recycling programs. The most obvious example is the case of the six municipalities in York Region who joined together to issue a collection tender for regionalized three stream collection. These participants maintained their autonomy throughout the process, structuring a request for proposals that allowed them to stay within the joint project if they realized a benefit and opt out if the collective service package for cost and service was not seen as an improvement. The "York Region North Six" successfully worked together to secure a garbage collection and waste diversion services contract that saved the partners, collectively, about \$900,000 annually for seven years (an average of \$150,000 each annually) while increasing the frequency and number of waste diversion programs.

The development of the "York Region North Six" was funded, in part, by the E&E Fund (predecessor of the CIF) under project #214. E&E Fund reports are available for viewing on the Recycling Knowledge Network, at http://vubiz.com/stewardship/Welcome.asp.

At the very least the local options should be explored since the WDO questions on multi-municipal collection will continue to drive home the point. At 8.3% of the total best practice questions, the overall value to Madawaska assuming the current funding average of \$47,630 (2007 through 2009) remains relatively steady would be about \$990 in 2012, when the Best Practice questions represent 25% of the WDO funding allocation. This amount is not likely to create much pressure to act purely for the sake of

meeting the WDO Best Practice questions; on the other hand, failure to at least initiate the process is in effect a failure to investigate possibilities that might improve Madawaska recycling performance in a number of other areas, and in 2012 a considerable portion of the funding allocation (45%) will be based on program performance likely measured using the E&E Factor.

Currently Madawaska Valley reports that it is not working with other municipalities. The nature of the WDO question is such that not all sub-questions can be answered positively immediately and not all are appropriate. A starting point is required, and that starting point is as basic as inviting neighbouring municipalities to discuss potential opportunities.

An inaugural meeting on the matter can focus on developing an inventory of practices and timelines. Issues for discussion could include:

- Contracting versus municipal service for recycling, including who uses municipal capital
- Collection, transfer and processing contracts, including expiration dates and opportunities to harmonize contract periods in a manner that at least allows consideration of a collective operating approach
- Program particulars: who collects what materials, how often and how much. Are programs similar enough, or could they be, to permit collective P&E approaches, such as pooling of P&E efforts through the development of common materials?
- How do service costs compare? Are there any particular cost elements, for instance depot and haulage costs, that could be brought forward for a common solution? Is there any way to explain cost variations?

General comparisons between cost and recovery will help each municipality identify operational priorities and the general information sharing may lead to program improvements even before coordinated, collective actions are taken.

The process of coordinating contracts and operations takes time, and the first and most immediate step for Madawaska and its neighbours is to document their meeting invitations or e-mails, meeting times, related resolutions or letters, and agendas such that the municipality can continue to demonstrate and prove if asked that it has approached or worked with others. Cooperative operational arrangements, such as joint procurement of services and regional transfer points, will follow over time where appropriate and workable.

4.4 Optimization of operations in collections and processing by following generally accepted principles (GAP) for effective procurement and contract management

a) Are any of your collection services municipally operated?

Have you worked with, or applied for funding through the Effectiveness and Efficiency Fund or the Continuous Improvement Fund pertaining to collection optimization projects?

Has your municipality undertaken a review of your Blue Box program in relation to the Blue Box Program Enhancement and Best Practices Assessment Project Report?

d) Do you own your own collection capital?

If so, have you worked with, or applied for funding through the Effectiveness and Efficiency Fund or the Continuous Improvement Fund pertaining to collection optimization projects?

e) Are any of your processing services provided by a contractor?

If so, was your last tender/RFP developed using a recycling tender/procurement tool such as the Stewardship Ontario Model Tender Tool?

As a result of the timing of the municipal visit for this project, observations regarding blue box set out were made but the actual collection vehicles and process were not observed. As a result there is no comment regarding collection efficiencies or practices, but according to the WDO submission these have been reviewed in the last two years.

The issue of potential expansion of the curbside collection program to additional households was discussed during the visit. The decision to expand curbside service is often a politically challenging one since it is difficult to determine exactly what the curbside service cut-off should be. More specifically, those who do not receive curbside service might ask why others do, and there may be very little to explain why a firm line was drawn where it was.

Madawaska Valley provides garbage and Blue Box collection services to 751 of 2,985 households within the Township, with the remaining households serviced by three depot sites. Curbside collection is provided in the urban areas of the Township (Barry's Bay), and the depots are provided for the low-density rural population. This arrangement is typical of many smaller rural municipalities with low population densities in Ontario, as shown in Table 4-1.

Table 4-1 Mixed Curbside/Depot Rural Collection Systems ¹

Program Name	Reported and/or Calculated Marketed Tonnes	HH Serviced by Curbside Collection	HH Serviced by Depot Collection	Kgs per HH	Total Collection Cost	Collection Cost per Curbside HH ²
Highlands East (Municipality)	347.56	260	4,292	76.35	\$ 17,248.04	\$66.34
Madawaska Valley (Township)	416.29	751	2,234	139.46	\$ 42,061.50	\$56.01
Lanark Highlands (Township)	322.70	441	3,100	91.13	\$ 27,357.86	\$62.04
Armour (Township)	258.70	494	2,255	94.11	\$ 26,800.90	\$54.25
Merrickville-Wolford (Village)	188.03	427	713	164.93	\$ 17,000.00	\$39.81
West Elgin (Municipality)	169.64	1,041	1,410	69.21	\$ 44,319.10	\$42.57

¹ Based on the 2008 WDO Municipal Datacall

We were unable to find examples of municipalities with population densities similar to that of Madawaska Valley (6.5 per km²), and which have implemented full curbside collection. A preliminary look at WDO and Statistics Canada data, shown in Table 4-2, reveals that there are no full curbside collection systems in communities with population densities less than 10 per km².

Table 4-2 Population Density and Collection System for Select Ontario Municipalities ¹

Program Name	Reported and/or Calculated Marketed Tonnes	HH Serviced by Curbside Collection	HH Serviced by Depot Collection	Collection Cost per Curbside HH ²	Kgs per HH	Pop'n Density (per km²) ³
Papineau-Cameron (Township)	39.61	467	70	\$51.35	73.76	1.9
Highlands East (Municipality)	347.56	260	4,292	\$66.34	76.35	4.4
Lanark Highlands (Township)	322.70	441	3,100	\$62.04	91.13	5.0

² Calculated as 'Total Collection Cost' divided by 'HH Serviced by Curbside Collection'

Madawaska Valley (Township)	416.29	751	2,234	\$56.01	139.46	6.5
Armour (Township)	258.70	494	2,255	\$54.25	94.11	7.6
Mulmur (Township)	313.87	1,609	0	\$54.30	195.07	11.6
Montague(Township)	215.29	1,367	0	\$62.13	157.49	13.0
North Stormont (Township)	418.38	2,638	0	\$38.17	158.60	13.1

¹ Based on the 2008 WDO Municipal Datacall

In the case of Madawaska Valley the interest in expanding curbside collection stems from the desire to recover more material. There is some guidance that may be helpful to the Township in this regard: the answer is not a simple yes or no but instead a suggestion on how expansion might be implemented if a decision is made to extend the curbside service.

Guidance is available in the Blue Box Program Enhancement and Best Practices Assessment Project Final Report (2007) for both northern and southern small rural Blue Box programs. It says:

Use of drop-off depots for recovering recyclables is a Best Practice in low density rural areas, where curbside recycling is cost prohibitive. It is more cost effective to employ the use of depots in areas where curbside collection costs exceed \$50 per household per year. This is almost always the case for rural communities generating less than 2,000 tonnes per year.

The report notes that with respect to obtaining higher participation and capture rate, curbside collection is preferred over depot systems and suggests that when it is feasible, curbside blue box collection should be offered to every eligible household. Small rural communities that elect to provide curbside collection should:

- employ measures that increase the amount of material collected per stop and maximize collection efficiency;
- for curbside programs, provide sufficient rigid collection containers free of charge; and
- schedule collection of Blue Box materials to be at least as frequent as waste collection.

The per household curbside collection costs for Madawaska Valley were \$56.01 and \$66.20 in 2008 and 2009 respectively. The best practices report suggests that collection costs should be maintained below \$50 per household. The average per household collection cost for rural Ontario municipalities in WDO's Rural Collection - North and Rural Collection - South categories reporting separate collection/processing costs is just above \$42 per household.

The best practices report identifies the number of households per km of road as a criterion in determining when curbside collection may not be feasible. Less than 10 hh/km may be too dispersed for full curbside collection services. Household per road km density data is not available for all communities, but Madawaska Valley has reported 11.06 hh/km in 2009.

This discussion, however, does not necessarily mean that Madawaska Valley should rule out the possibility of extending curbside collection. What it means is that any decision to do so should be supported by appropriate policies and P&E aimed at maximizing recovery.

There are a number of options that Madawaska Valley may consider to increase recovery while maintaining a watchful eye on related cost. An incremental approach is encouraged, in which adjustment to the program are made starting with low to medium cost measures and moving to potentially more costly operations options that impact service frequency or geographic expansion. The Township could:

² Calculated as 'Total Collection Cost' divided by 'HH Serviced by Curbside Collection'

³ Statistics Canada, 2006

- implement a promotional campaign to address recovery and review and enforce policies that support recycling
- improve signage at the recycling depots
- engage in a program "refresh" that includes the distribution of new blue boxes, either for the curbside area or across the entire municipality
- establish and promote bag limits (see policy discussion) for both curbside and/or depot users
- extend the bag tag policy to depots (see policy discussion)
- consider increasing service frequency to the existing curbside collection area while enhancing the promotion and enforcement support for recycling by depot users
- offer the existing level of curbside service (alternating weeks for fibre and containers) to select additional areas
- offer increased level of curbside service (weekly for fibres and containers) to select additional areas

While it is difficult to predict the overall impact on cost and recovery, a monitoring plan should be devised that will allow the Township to regularly check their performance in both areas. There will be additional discussion about program promotion below, however for the purposes of this section it is noted that any changes to service frequency, availability of curbside collection or depot recycling should be preceded and supported by a meaningful educational and promotional campaign, part of which may be funded by the CIF.

As noted earlier in the report, depot and transfer costs are considerably higher than the average. Even when it is understood that this includes processing costs (reported as \$17 in the Municipal Datacall, which is the processing cost associated with the segregated corrugated cardboard) the figure is high and is not totally explained by either transportation or processing costs. Opportunities to reduce associated costs related to both transfer and haul as well as processing occur when agreements are renewed or retendered, starting with an opportunity to obtain pricing which clearly separates transfer and processing costs. This allows the municipality to determine which of the two costs require attention.

Also, if the current agreement stipulates that the processor keeps all revenues for the recyclables, then the processor has taken on the risk of marketing recyclables in a volatile commodities market. In this case it is highly possible that the processing price has been established to mitigate this risk such that losses are minimized. One way to know what the risk premium might be is to ask for two prices: a price where the municipality receives the revenues (or most of the revenues) and a price where the contractor receives the revenues. The difference between the first, in which the processor is quoting purely on the price for providing a service, and the second in which the contractor is actually assuming market risk, will be what the municipality is being asked to pay to cover the risk.



Corrugated Cardboard Collection: The Township may wish to require users to bundle corrugated in order to facilitate more efficient collection

4.5 Training of key program staff in core competencies

- a) Within 2007, 2008 and 2009, have staff responsible for Blue Box recycling attended recycling-specific workshops or courses totalling 4 days or more, individually or collectively?
- b) Was the training received from a workshop/course provided by an industry association, post-secondary educational institution or recognized body which, based on successful completion of the course and/or course assessment, offers a certificate of completion or certification?
- c) Was the course/workshop primarily dedicated to blue box recycling (minimum 50% by content and/or time)?

This is a particularly onerous requirement for small municipalities, however represents a fundamental best practice within the Best Practices Project. In order to assist municipalities in obtaining the required funding, the E&E Fund supported the development and implementation of a training program that meets the requirement and which, at least until the end of 2011, is offered free of charge to recycling program operators and decision makers in Ontario municipalities.

All aspects of best practice question 5 are addressed in the training. The fundamental training is a 4 day course and the additional specialized courses in data management, promotion and education, contract management and material markets are two days each. The course has been built to an academic standard and would be suitable as part of a certification program, and includes an assessment aspect: a 2 hour exam for the 4 day course and a post-course assignment for the specialized two-day courses. The content, in this case, is 100% blue box recycling and far exceeds the 50% required in the WDO question.

The course is currently organized by the Municipal Waste Association, which is now publicizing a course offering in Ottawa, September 27 to October 1, 2010. More details are available by contacting the MWA at (519) 823-1990. Other opportunities for training include SWANA courses, and less formal approaches including the Ontario Recyclers Workshop (CIF) and MWA workshops, however the latter two workshop approaches do not qualify against all best practice training questions, most notably 5 b) which requires the completion of a course assessment.

4.6 Appropriately planned, designed, and funded promotion and education program

- a) Does your program currently have a communications plan (either a stand-alone plan or as part of a larger plan document) with identified goals and measurable objectives that is regularly updated?
- b) Does your plan include a monitoring and evaluation component (an example would be: identification of 'spikes' in recovery or overall annual tonnages coinciding with specific P&E efforts)?

It is generally acknowledged that a promotion and education (P&E) program is a necessary component of a healthy recycling system. P&E can be a very cost effective way to improve program performance by increasing participation and recovery, and decreasing contamination of recycling streams.

Research suggests that the public's perception of a recycling program's effectiveness is closely tied to the program's actual effectiveness (Gamba and Oskamp 1994 in SGS 2006). Effective P&E, along with a well-designed program, leads to a perception of increased effectiveness and better program performance.

There are four key factors to consider in developing an appropriate P&E program (Best Practices Project 2007):

Design – the main idea here is to create a strong icon or identifier, to "brand" communication
materials so residents instantly recognize the information as relevant to recycling or waste
management. Madawaska Valley does practice branding and the use of graphic icons to identify
municipal and program material.

- Funding the best practices reports that those municipalities reaching 60% recovery of available blue box material spend in the area of \$1 per household per year on promotion and education. This amount represents a floor spending level and in 2008 the Township achieved this level of spending: in 2009 reported spending dropped to about 53¢ per household.
- Deployment it is generally recommended that programs be promoted consistently and repeatedly to get and keep public attention.
- Monitoring and evaluation an ongoing record of program performance can be reviewed to determine whether a promotional approach or campaign has made a difference. Monitoring and evaluation is difficult for small programs with limited resources. However, it is important to have a way to assess the effectiveness of P&E strategies. One suggestion provided in the literature is simply to look for spikes in material recovery or reductions in contamination based on material tonnages.

Best practices in P&E program design boil down to having a well-organized communications plan. This is stated clearly in the Best Practices Project report and echoed in the Quinte reports. A review of rural recycling depot programs revealed that most "promotional work was generally done in bits and pieces by various staff members." In order to obtain the greatest effect and operate a cost effective P&E program, two elements should be in place: a communications plan outlining objectives, target audiences, key messages, tactics, timing and a monitoring mechanism; and, a designated person to oversee the communications plan.

In a practical sense it is a challenge for small programs like Madawaska Valley to dedicate the time and resources to accomplish all these things, but there are a number of options that would allow the municipality to consider upgrading its P&E efforts. Appendix D includes sample communications and communications monitoring plans that may be adapted to the Madawaska Valley situation, or might be useful if and when Madawaska reviews and possibly implements strategies to increase recovery. A well conceived and targeted P&E program may be helpful in attaining local targets, which at the very least, in the case of Madawaska Valley, be raised to a more challenging level.

Madawaska Valley can also inquire about CIF Project #192, Small Program P&E Plans, which is in place to help small municipalities develop P&E Plans as well as develop communication materials using templates, through on-line resources. In the case of Madawaska Valley, the on-line information includes illustrations of materials, but the CIF program may help the Township to synchronize the appearance of their promotional materials with other municipalities and increase program profile.

The remaining discussion in this section will focus on P&E best practices for recycling depots, including recommendations and observations made in both the Best Practices Project (2007) and Quinte (2006, 2008) reports. During the June 2, 2010, site visit the depot sites were closed to the public and observations about the interaction of site staff with the public unavailable. The following is offered to assist Madawaska Valley in evaluating management of recyclables at depots.





Depot sites where signage related to recycling could be improved. While there is no question that depot attendants are well informed, signage that makes recycling self-evident is considered a best practice

During the site visit it was possible to view the depot sites and in one case, at Bark Lake, see the attendant in action. Based on observations made at the sites it would appear that recyclables are being recovered and that the quality of the material is good. The attendant at the Bark Lake site was active and knowledgeable, consistent with the best practice of having a strong presence at the site to direct residents and users. The main element missing was good signage, another best practice. Even with a good attendant, sites can sometimes get busy and people may come in and out while staff are attending to other issues. Clear signage telling people where and what to recycle serves not only as an operating guide but also to educate.

The Phase 2 Quinte report provides several recommendations that address deployment issues in P&E for rural recycling depots. The recommendations highlight the importance of making depots accessible and easy to use for residents. Some of these recommendations were even pilot tested by Quinte Waste Solutions to determine their effectiveness.

Good signage is very important in a rural recycling depot, where residents are sorting and depositing materials themselves. Best practices for depot signage identified in Best Practices Project report include the following:

- The use of universally recognizable graphics and symbols, photos or displays of acceptable / unacceptable materials. Pilot tests conducted as part of the Quinte report showed that graphics, as opposed to text-only signage, resulted in a reduction in sorting errors made by the public.
- Clear, visible lettering and bright colours.
- Styles and fonts consistent with the rest of the municipal recycling program.
- Clear labelling of individual bins to increase ease of use and reduce contamination.
- Large, visible signs near depot entrance indicating acceptable / unacceptable materials.
- Signs prohibiting illegal dumping in appropriate locations.
- Clear directional signs, where depots aren't visible from main roads.
- Weatherproof information area at the site with take-away pamphlets.

Recycling depot attendants can also play a central role in communicating key messages to residents. Attendants, supported with training and dedicated time to interact with residents, are able to make recycling depots more accessible, improve understanding of how to use the program, and enforce illegal dumping and municipal recycling policies. The Best Practices Project and Quinte reports further recommend that printed P&E materials should be made available to the public at recycling depots, either through a weatherproof display area, or to be distributed directly by depot attendants.

Promoting municipal recycling programs and educating residents about how to use them are universal best practices. In addition to P&E practices at depot sites, depot programs should use a variety of other media to reinforce existing recycling programs and introduce changes to the recycling program. These include but are not limited to calendars, mail outs, newspaper ads, radio and television ads and outreach at special events.

The Phase I Quinte report recommends promoting the recycling depot in high traffic areas such as grocery stores and post offices. However, when this strategy was pilot tested it was found that posters place in these high traffic areas had very little effect and were not observed by most residents. This demonstrates that while posters can play a role in a P&E strategy, it is essential to have a mix of P&E materials and tactics to ensure that key messages are received by target audiences.

4.7 Established and enforced policies that induce waste diversion

a) Does your program provide Blue Boxes (or the equivalent) free of charge, or below cost?

One of the practices recognized in the best practices report is the provision of free blue boxes to residents. There is a correlation between household recycling capacity and participation in that a lack of capacity – more specifically meaning that when the household blue box or boxes are full – will result in recycling materials being placed in the garbage. The provision of free replacement blue boxes is seen to both assure that recycling capacity if available in the household and act to promote the program.

A third benefit is that the provision of containers by the municipality improves the compatibility of containers to the collection operation: functionally and ergonomically. Left to provide their own containers, well meaning residents have been known to purchase and use covered containers (slows down collection crews) or containers that are too large (too heavy when full) or too small (low to the ground, collector must stoop to lift).

- b) Does your program have any of the following policies in place?
 - Bag limits
 - Recycling incentive program for households that rewards increased recycling, set-out and participation

The policies noted above represent only those WDO noted policies that Madawaska Valley currently does not employ. The Township, in fact, has tackled the most ambitious of the policy areas by implementing a pay-as-you-throw (PAYT) program. The most obvious policy, one that the Best Practices identifies as having meaningful impact on recycling recovery and for which much of the groundwork would have been done when the PAYT policy was enacted is bag limits. Bag limits are cited in the Best Practices Project as one of several policies that limit solid waste services in a manner that results in higher recovery rates for blue box materials. The project report notes that bag limits can be correlated to increases in recovery, and based on the information in the report the following relationship is described:

Weekly bag Limit	Blue box recovery			
5	45%			
4	50%			
3	52%			
2	54%			
1	57.5%			

The critical issue for the Township may be the impact of such a policy given that the WDO already recognizes that Madawaska Valley has a 61% blue box recovery rate, however the development, promotion and implementation of a bag limit policy may still positively impact current levels and help Madawaska Valley achieve even higher recovery rates.

The Best Practices Project report provides additional guidance with respect to bag limits, noting that the suggest weekly bag limit for a program that collects recyclables on alternate weeks and has weekly garbage collection is 3. If kitchen organics are also diverted from the waste stream then the bag limit can be dropped to 2.

In general this is a policy that, with enough advance notice for residents, would be enforced with the same type of curbside and depot based enforcement practices used to uphold other waste by-laws and policies.

The adoption of an incentive policy allows great latitude since there are any number of ways to encourage recycling through recognition, or monetary awards or prizes. In some respects Madawaska Valley already employs an incentive system by adopting a user pay program for curbside collection: the disincentive to create garbage because of user pay is an incentive to recycle. Madawaska Valley, however, does not use the principal of user pay for garbage delivered to depots in the same way. The belief is that because people deliver their waste to the sites they can not be "charged" for a service they don't get.

The contention (as was stated at the site meeting) that the \$1.00 garbage bag charge represents a "charge" for service is an interesting point. In general garbage bag charges, with the exception of programs that are fully self-financed on volume or weight-based collection fees, are generally arbitrary rounded numbers (i.e. \$1, \$2, etc) and imposed to place a value on waste. The purpose is to support waste diversion, and while there is an element of cost recovery the overall driver behind such a policy is to change wasteful behaviour. From a policy perspective there is nothing preventing Madawaska Valley from considering bag limits or user charges at their depots.

In the *Municipal Solid Waste Audit Summary Report* prepared for the Township by Integrated Environmental Waste Services in June 2008, it is shown in Figure 6 that the percentage of residential waste recycled at the sites are less than that of the curbside program (Bark Lake Landfill 27%, Wilno TS 31%, Radcliffe TS 38%, residential curbside 44%). If this is still the case in 2010 and Madawaska Valley is still interested in increasing overall capture for reasonable cost, policies that apply to the depots may be worth considering.

The Township still incurs expense for the management of the waste after it is delivered to a site, is still responsible for managing and extending to the greatest degree possible its landfill asset, and finally it is also committed to escalating waste diversion targets. It may wish to consider tiered PAYT and/or bag limit approach for depot users.

In general, however, the adoption of any one of the policies noted in the question qualifies Madawaska Valley when being assessed against the question, and Madawaska Valley is currently able to confirm four of the six policy approaches mentioned. The objective for adoption of any further policies is more directly related to improving program performance through increased recovery, and not simply to meet the WDO best practice requirement.

5 Conclusions and Recommendations

5.1 Conclusions

Madawaska Valley operates an efficient and economical recycling program, with a collection system designed in-house to meet the needs of a small municipality. There is good policy support for the recycling program at the curbside, including every other week garbage collection and pay-as-you-throw bag charge of \$1.00. During the site visit for this report it appeared that program administrators were interested in improving the recovery level of the program, and while a subsequent review of program data would suggest that there is some room for improvement in this area it is also noted that the Township performs relatively well with respect to the material recovery and cost elements of recycling.

There are a number of recycling program areas to be reviewed by Madawaska Valley staff, including multi-municipal co-operation, collection and transfer optimization, depot signage, and additional policy support. There may be some opportunities to increase recovery at the depots and review curbside approaches that will enhance capture rates, which are already respectable but can be improved.

While collection costs are low, depot/transfer costs are very high. In general recycling performance is measured as cost per tonne, and Madawaska Valley performs well with respect to relative gross and net cost per tonne. The performance measure E&E Factor value ranks as 36th out of 71 municipalities (WDO 2010) within the Township's municipal grouping as a relative measure against which funding is allocated. This would indicate that there is some risk to Madawaska Valley when competing for that portion of municipal funding allocated according to program performance.

Because Madawaska is a well managed program, there are likely relatively few, if any, single actions that will, on their own, produce big jumps in recovery or reduced cost. The recommendations that follow can be considered collectively or separately and reflect a general trend to continuous improvement of the system that may be helpful in increasing the performance of the program. Other recommendations will assist the Township in meeting the WDO best practice reporting requirement.

An area of interest for the Township during the visit was the potential for expansion of the curbside collection program to additional households. The Township of Madawaska Valley, at 139 kg/hhld/yr, has a good recycling capture rate when compared to similar mixed curbside/depot municipalities, but overall WDO data shows that some municipalities approach 200 kg/hhld. It is generally noted that these programs offer complete curbside service. The decision to expand curbside service is often a politically challenging one since it is difficult to determine exactly what the curbside service cut-off should be. More specifically, those who do not receive curbside service might ask why others do, and there may be very little to explain why a firm line was drawn where it was.

The WDO and best practice data is less clear about whether there is any meaningful difference between weekly service and alternating weekly service. The general theory is that if a program offers the appropriate amount of recycling capacity in the home – in other words the number of blue boxes or carts have been matched to the collection frequency – then there should be no barriers to participation. During the waste recycling strategy process the Township may wish to evaluate the options, but we could find no data that would suggest that a well planned, well promoted alternate week program was any less effective than a weekly program.

5.2 Recommendations

Review the existing Waste Strategy against the WDO requirements, and amend or append a new section: To fully meet the WDO Waste Recycling Plan requirement it may be prudent to amend the plan or develop a separate waste recycling strategy. Attention should be given to defining blue box specific objectives and targets and solidifying data collection processes, things that do not appear in the existing Waste Strategy document.

Collect, document and analyse program data: In the case of best practice question 2 there is a requirement to collect data to support ongoing program evaluation.

Review and establish specific blue-box targets: Especially the diversion number associated with subquestion g) (What is the Blue Box diversion target for 2009?). The Township reports to the WDO a target of 45%, yet as part of the WDO Municipal Datacall process the Township receives confirmation of their blue box diversion rate for the previous year: 61%. This gives the impression that the existing target somewhat meaningless when in fact it is simply a difference between the definitions used by both parties to define targets.

Generate an annual report: Madawaska Valley is encouraged to develop an annual reporting regime that includes monitoring program for all best practice elements that require monitoring and reporting: plan review, blue box targets and performance, effectiveness of P&E, and operational reviews.

Structure future contracts to separate transfer/haul and processing costs.

Initiate discussions with other municipalities: Approach other municipalities about jointly providing recycling (collection, processing, depot/transfer, marketing, and promotion and education) services. One issue in common with neighbouring municipalities is very high depot/transfer costs. This, and the prospect of common P&E materials, are good topics of discussion.

Review collection requirements: Corrugated cardboard collection, for instance, appears to be unregulated with respect to bundling and size. Although bundling requirements can sometime be seen as discouraging participation, recycling is offered to commercial users for free and a reasonable requirement to bundle or prepare material for easier collection might be fairly well received and facilitate more efficient collection. Commercial clients might even be asked to provide input as to what is reasonable in this regard.

Take an incremental approach to increased recovery: Adjustments to increased curbside collection availability and/or frequency should be staged, and should be accompanied by efforts that will promote maximum recovery for the cost. Program changes can be made starting with low to medium cost measures and moving to potentially more costly operations options that impact service frequency or geographic expansion, only after due consideration during the waste recycling strategy process..

Attend recycling training: The WDO best practice training requirement calls for 4 days of training annually for municipal waste managers, and that training should be at least 50% blue box recycling specific. In order to assist municipalities in meeting this requirement, the E&E Fund supported the development and implementation of a training program that meets the requirement and which, at least until the end of 2011, is offered free of charge to recycling program operators and decision makers in Ontario municipalities. A recycling course will be held in Eastern Ontario in the fall: the Municipal Waste Association is now publicizing a course offering in Ottawa, September 27 to October 1, 2010. More details are available by contacting the MWA at (519) 823-1990.

Obtain CIF assistance to boost promotion and education efforts: CIF Project #192, Small Program P&E Plans, is in place to help small municipalities develop P&E Plans as well as develop communication materials using templates, through on-line resources. Madawaska Valley may choose to apply for this assistance in conjunction with neighbouring municipalities.

Consider additional policy support: From a policy perspective there is nothing preventing Madawaska Valley from considering curbside bag limits or user charges at depots.

By following up with the noted recommendations it is hoped that Madawaska Valley will be in a position to attain the goals of the CIF program assessment, namely the implementation of program improvements and strategies that improve recycling program effectiveness and efficiency.