

Final Report

CIF 819.6

Township of McNab/Braeside Small Program P&E Plan Implementation



Final Project Report

April 13, 2015

Township of McNab/Braeside

CIF Project number 819.6

Acknowledgement:

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Executive summary

This is the final report of a project implemented by the Township of McNab/Braeside between April 2014 and April 2015. The project goals were to improve the performance of the Blue Box recycling program, decrease contamination within the program and meet Best Practice requirements by having a communication plan in place for the program. The Continuous Improvement Fund (CIF) provided financial and technical assistance in completing the project.

On March 28, 2015 the Township created and began implementation of a communication plan for the Blue Box recycling program. During the first year of implementation, the municipality implemented the following promotional & educational (P&E) tactics:

- Mailed out calendar and recycling guide to all properties;
- Installed signage at the Township Recycling Depot; and
- Produced and placed diversion advertisements within the local newspapers.

In order to assess the impacts of P&E activities, the Township of McNab/Braeside targeted two primary objectives and completed measuring & monitoring activities comparing 2013 base year vs 2014:

1. Reduce contamination

- Review of the number of Blue Boxes left behind at the curb as a result of contamination. Boxes left behind at the curb have decreased from 16.5 BB/wk to 12.4 BB/wk.
- Review of the number and cost associated with fines received for contaminated depot bins. Fines have decreased from \$1,200 (2013) to \$500 (2014).
- Review of staff time associated with sorting of depot bins and removing contamination. Staff sorting time has decreased from 3.5hr/month to 1.9hr/month.

2. Increase diversion

- Review of the tonnage collected and reported on the Datacall. Tonnage collected through the Blue Box program has decreased from 500.50 tonnes to 467.78 tonnes. The decrease is not likely a reflection of performance as the collection contractor went through an ownership change, and the methodology used by the contractor to estimate tonnes of material also changed.

The primary objectives of the current plan aimed at reducing contamination both at the curb and depot. The Township has been largely successful in tackling this issue. Secondary, Staff aimed to increase the amount of material diverted through the Blue Box program. Due to changes in the methods used by the contractor in estimating this statistic, Staff cannot definitely evaluate success in achieving this objective. The municipality plans to complete the remaining tactics identified within the communication plan and further monitor the impacts.

For further information about this project, please contact:

Ryan Frew, P.Eng. | Director of Public Works | Township of McNab/Braeside
o: 613-623-5756 x 227 | e: rfrew@mcnabbraeside.com

1 PROJECT INFORMATION

1.1 Municipal Information

The Township of McNab/Braeside provides waste management services to 3114 households. Blue box recycling is provided through biweekly multi-stream curbside collection services.

Population:	7371
Households (single family):	3114
Blue Box Tonnage (2012 Datacall):	574 Tonnes
Municipal Grouping:	7 (Rural Collection – South)
Blue Box Program net cost (2012 Datacall):	\$135,121.49
Net Cost per Tonne:	\$235
Annual P&E Budget:	\$1,000.00

The Township also operates an attended recycling depot which is located at the townships landfill site (573 Calabogie Road). The depot is open to the public from 8:30 a.m. to 4:00 p.m. on Tuesday, Thursday and Saturdays. The Township targets the following materials: Comingled Containers (glass, aluminum, steel, plastic tubs and containers, plastic film) and Fibres (Mixed paper, boxboard, cardboard).

Collection of recyclable materials is completed by Beaumen Waste Management Systems Ltd. There is no revenue sharing agreement in place between the municipality and the collections contractor. The Township's blue box recycling program is a member of municipal group 7 (Rural Collection – South), on the Waste Diversion Ontario datacall, and operates at a net cost of \$235/tonne material collected (2012).

1.2 Project Description

The Continuous Improvement Fund provided the Township with technical assistance and a grant of \$5,000 for the development of a communication plan for promotion and education of the Blue Box program and the implementation of P&E tactics. Tactics used by municipal staff were to revitalize the recycling guide that the Township sends out to each resident, provide better signage at the recycling depot and promote the program through advertisements that focused on issues relevant to the Township.

Overall, this project was created to decrease contamination at the curbside and recycling depot, reduce staff time and fines for contamination and promote Blue Box waste diversion in our municipality.

2 IMPLEMENTATION

2.1 Goals and Objectives

Decrease contamination curbside and at recycling depot:

- 1 In 2013, the Township received fines from the recycling contractor totaling \$1,200.00 for contaminated recyclables deposited at the municipal depot, we aim to reduce annual fines for contaminated recyclables at the municipal depot by 75% (25%/year) to approximately \$300/year.
- 2 Reduce municipal staff time associated with sorting. The annual staff time dedicated to sorting materials at the depot is currently unknown. As of fall 2013, municipal staff has begun to record the time spent sorting materials. In 2014, the objective is to identify the average monthly hours of staff time spent sorting materials. The focus will then shift to decreasing staff time spent sorting by 50% by 2016. During the first 6 months(winter season) of tracking an average of 3.5 hours of staff time per month was spend sorting recyclable material at the depot.
- 3 In 2013 there was also an average of 16 stops per week (max. 34) where blue boxes were left behind at the curb due to contamination, we aim to reduce this to 10 by 2016 through the use of non compliance stickers.

Increase tonnage: Diversion of residential recyclables in 2012 is currently at 574 tonnes, we aim to increase that by 26 tonnes (1.5 %/year) by 2016.

Increase blue box diversion rate: In 2012, the blue box diversion rate was 20.85%. By 2016, the goal is to reach 25%.

2.2 Messages Used

The messages utilized over the period of this plan were:

1. **Keep'em separated** – the goal of this message is to provide a short and simple message that will help remind each resident to keep the comingled containers and the paper fibres separate on recycling day.
2. **Recycling is smart and easy** – the goal of this message is to reach all demographics within the Township as it will provide education of the benefits of recycling and also reinforce to those that are utilizing the program that they are doing something that will benefit the next generation.

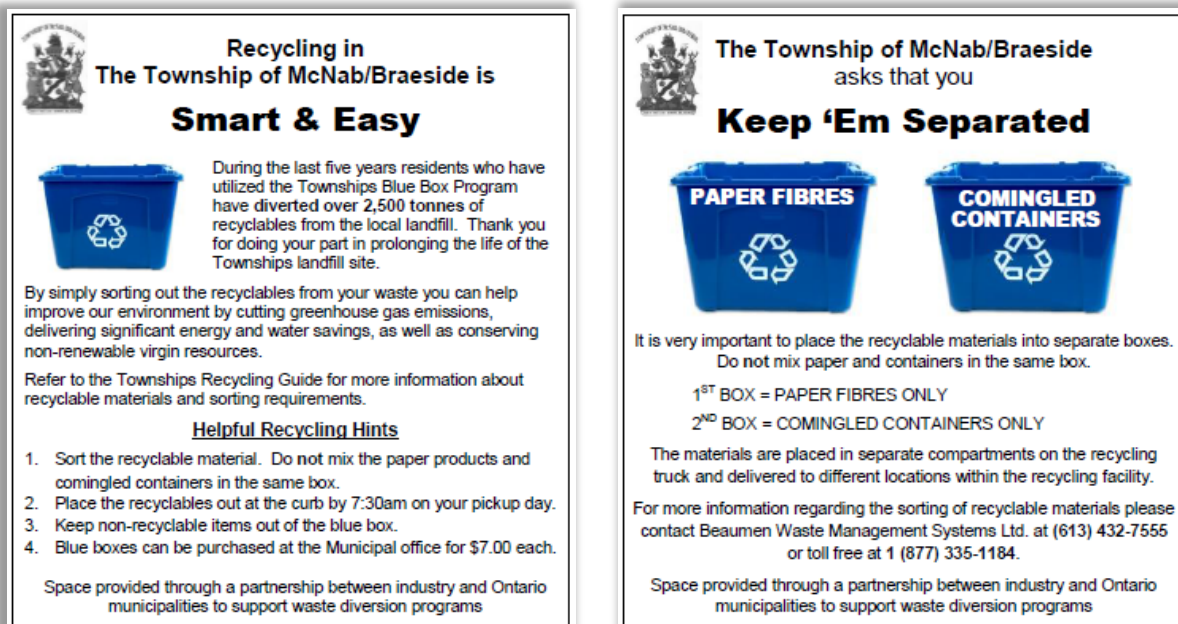


Figure 1: Promotion and Education Advertisements

2.3 Target audiences

The focus of communication efforts were for residents of McNab/Braeside as a whole.

2.4 Tactics Utilized

The tactics identified in Year 1 of the P&E plan are described below and shown in Table 1.

Recycling Calendars with an attached recycling guide were mailed out to all households within the Township. The recycling guides were revamped from previous years to include more detailed information about the acceptable material as well as coloured graphic.

New signs were produced and installed at the Townships Recycling Depot. The signs utilized graphic to provide visual cues to the residents utilizing the depot. Individual sign were made for each product type (ex. Newspaper, boxboard, glass, plastic, etc.) and grouped together to make up a larger Fibre and Comingled container sign. By having individual sign the Township is able to move around the signs easily we change the location these products are to be placed.

In kinds ads were placed in the Renfrew Mercury and Arnprior Chronicle-Guide newspapers in order to promote diversion and educate the public about proper set out requirements. Ads were placed in the newspapers on July 2nd, October 2nd and October 9th. The Renfrew Mercury has a circulation of 15,600 and the Arnprior Chronicle Guide has a circulation of 7,900. Ads were 4x6 and printed in black and white as seen in figure 1. The ads cost \$473.00 in lineage.

Table 1: P&E Implementation tactics, targets, and respective costs

Tactic	Description	Budget	Actual
Calendar & Recycling guide	Produce and mail out new calendars and recycling guides to all residents	\$1,000.00	\$750.65
Signs	Produce and install new graphic signs for the Recycling Depot	\$5,000.00	\$590.00
Diversion Ads	Produce new advertisements for the local newspaper	\$0	\$0
Task	Description	Timeline	Actual
Calendar & Recycling guide	Produce and mail out new calendars and recycling guides to all residents	Spring 2014	March 2014
Signs	Produce and install new graphic signs for the Recycling Depot	Spring 2014	August 2014
Diversion Ads	Produce new advertisements for the local newspaper; throughout 2014	12 ads	6 ads



Figure 2: Township recycling depot. New signage in background.

3 RESULTS

3.1 Measuring & Monitoring

The effectiveness of the P&E plan was evaluated based on the objectives that have been set for the Township's recycling program; as outlined in section 2.1. The results of measuring and monitoring activities of the Blue Box recycling program are shown in Table 2.

By redesigning the recycling guides and supplying them to each household we have seen a decrease in the number of non-compliant stops per week since residents are more aware of what materials are recyclable and the need to separate paper and containers.

The new signs at the recycling depot reduced the contamination fines by \$700.00 over the previous year and helped lower the amount of time staff spend sorting material at the depot. The visual images on the signs were able to better direct residents to the correct bins for the drop off of recyclable materials.

Table 2: Measuring and monitoring activities of Blue Box recycling program for McNab/Braeside

Measure	2013	2014	Goal
Diversion (Tonnes of material)	500.5	467.78*	507.8
Diversion (Datacall)	29.0%	28.0%	22.2%
Contamination (Blue Boxes left behind due to non compliance per week)	Avg. 16.5	Avg. 12.4	Avg. 14 .0
Contamination (Fines for non compliant depot bins)	\$1,200.00	\$500.00	\$900.00
Contamination (Municipal staff sorting time; hrs per month)	Avg. 3.5	Avg. 1.9	Avg. 2.9

* The recycling collection company was sold to a new owner in 2014. Change was made in how tonnage is measured.

3.2 Analysis of project

Overall, the project has been a success. The Township has been able to exceed most of the goals set out in the Promotion and Education Plan. The tactics used have resulted in a decrease in fines received for contamination and a reduction in staff sorting time. The messages that were sent out to the residents have also started to work as the number of contaminated blue boxes left behind at the curb have also been decreasing.

During this year, seasonal variations of contamination curbside and at the depot were evaluated however no substantial influence can be attributed to the seasonal populace.

What we can take away from this project is that even with a small budget, small changes like adding graphics to signs or recycling guides can have a positive impact. Since we are a small program, the

Township has limited resources and expertise available to develop new advertisements or signage therefore the development of these types of documents will take longer than expected. The CIF has developed guidelines for designing effective signage which was very helpful in implementing the tactics within our plan.

3.3 Next Steps

The Township is looking to improve on the results seen over the past year and hopes to continue to reduce the fines received for residents mixing general recyclables within the corrugated cardboard bin.

With increased education we also hope that there will continue to be less non-compliant bins at the curbside which will help reduce resident's frustration and increase participation in the program.

The Townships Promotion and Education Plan is to extend until March 2017 and then it will be reviewed, evaluated and updated for another 3-year cycle. It is anticipated that the plan will be reviewed well in advance of the March 2017 deadline in order to coincide with budget discussions for the Township.

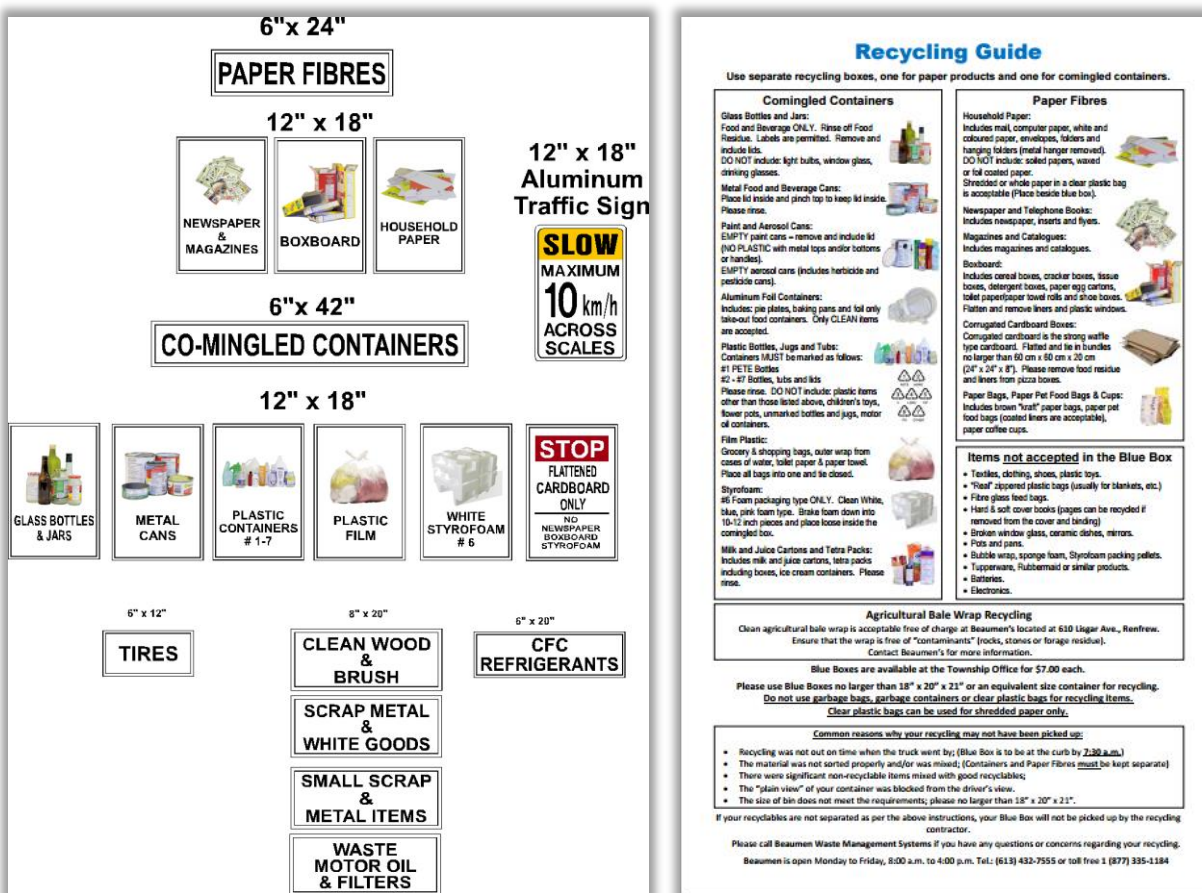


Figure 3: Modular signage developed for depot recycling areas (left) recycling guide for curbside (right)