

Township of Southwold Two-Stream Harmonization CIF Project Number 1039

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Prepared for: Resource Productivity and Recovery Authority
Continuous Improvement Fund



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Table of Contents

| 1 | Introduction | | | | |
|-------|------------------------------|--|--|--|--|
| | 1.1 | Backgroundpage 3 | | | |
| | 1.2 | Community Profilepage 4 | | | |
| | 1.3 | Waste Management System page 5 | | | |
| 2 | Appro | pach | | | |
| | 2.1 | Set Up and Implementationpage 6 | | | |
| | 2.2 | Monitoring and Measuringpage 9 | | | |
| | 2.3 | Program Challengespage 9 | | | |
| 3 | Project Results and Analysis | | | | |
| | 3.1 | Project Resultspage 10 | | | |
| | 3.2 | Analysis of Resultspage 10 | | | |
| | 3.3 | Lessons Learnedpage 10 | | | |
| 4 | Project | Budgetpage 11 | | | |
| 5 | Conclus | ion page 11 | | | |
| | | | | | |
| List | of Ta | bles | | | |
| Table | 1: Num | ber of Households in Township of Southwoldpage 5 | | | |
| Table | 2: Wast | e management System Overview for Township of Southwoldpage 6 | | | |
| Table | 3: Recy | cling Collection 2016 vs 2017 for Township of Southwold page 9 | | | |
| Table | 4: Budg | et and CIF Share of Projectpage 11 | | | |

1. Introduction

The Township of Southwold expanded the curbside collection program for residents in 2017. Prior to the improvement, the Township had a very limited collection stream for curbside recycling. The program expansion was the direct result of entering into a Garbage and Recyclable Collection Agreement with a service provider and a Recyclable Material Processing and Marketing Agreement with the City of London.

The goal of introducing a two-stream collection system was to increase diversion rates, reduce costs and increase participation by residents in the recycling program.

1.1 Background

The Township of Southwold's curbside recycling program, prior to this project, provided one box to each household and included very limited plastics classifications including HDPE, aluminum, and fibres. Residents placed limited materials in the bin and were instructed to place bundled fibres beside the recycling bin.

In March 2017, the Township of Southwold made expansion improvements to the existing recycling program and entered into an agreement with the City of London Recycling Centre to accept our recycling materials resulting in the implementation of a two-stream blue box program. In May 2017, with support funding from the Continuous Improvement Fund, a second, larger recycling bin was delivered to each household in the Township of Southwold to encourage participation in the newly expanded two-stream collection system.

The goal of the roll out was to increase diversion rates while educating residents, making the sorting and preparation for collection easier, especially given the expanded recycling classifications, including tubs, lids, mixed, bulky rigid, gable top and tetra pak, film, and aerosol cans. Residents were encouraged to use the new box for one-stream of materials and their existing box for the other stream of materials. The additional larger container was to more than double the storage capacity for recyclables, thereby providing more sufficient space for the expanded stream of curbside collection materials.

The launch of the program saw delivery of new boxes, hot stamped with the Township logo, with information promoting the change in the program presented in bio-degradable bags.







1.2 Community Profile

The predominantly rural community of the Township of Southwold has a strong agricultural base and is located in the central part of Elgin County. Incorporated in 1852, the Township includes the hamlets of Fingal, Iona, Iona Station, Paynes Mills, Shedden and Talbotville. The municipality offers beautiful countryside and a wonderful blend of active farms, historic villages and tourism.

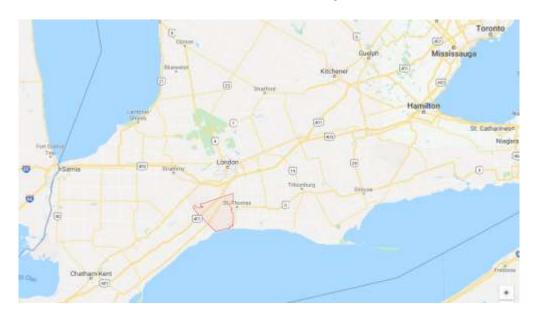


Table 1: Number of Households in Township of Southwold

| Municipality | Population | Single Family Households | Multi Family Households | Total Households |
|---|------------|-----------------------------|----------------------------|------------------|
| Lynhurst & Ferndale settlement areas | | 209 | 0 | 209 |
| All other areas | | 1,541 | 0 | 1,541 |
| Total | 4,421 | 1,750 | 0 | 1,750 |

1.3 Waste Management System

The waste management system is summarized in the table format shown below.

Table 2: Waste Management System Overview for Township of Southwold

| Single Family Service | Service Description (curbside/Depot weekly/bi-weekly single/two/multi stream) | Collection Provider | Processing Provider |
|--|---|-------------------------------------|---|
| Lynhurst & Ferndale settlement-Garbage | Curbside/weekly | Waste Connections of Canada Inc. | Disposal and processing at Green Lane Landfillowned and operated by the City of Toronto |
| Lynhurst & Ferndale settlement-Recycling | Curbside/weekly (same day as garbage)/two-stream | Waste Connections of Canada Inc. | City of London – Material Recovery Facility |
| All other areas of Southwold-Garbage | (alternating week with | | Disposal and processing at Green Lane Landfillowned and operated by the City of Toronto |
| All other areas of Southwold-Recycling | Curbside/bi-weekly alternating week with garbage)/two-stream | Waste Connections of Canada Inc. | City of London – Material Recovery Facility |

2. Approach

2.1 Set Up and Implementation

The Township of Southwold ordered blue boxes through the CIF's Cooperative Container Procurement Program (https://thecif.ca/ordering-containers/) from Peninsula Plastics and delivered one blue box to every household in the Township. Included in the blue box were education and marketing materials provided by the City of London and Township collection calendars, all packaged in a biodegradable "Southwold Recycles" bag. Two blue boxes were made available for distribution to new households. Blue boxes were made available to local businesses.

Blue Boxes were distributed to residents throughout the month of May, 2017. In addition to the blue boxes, which to notify residents of the upcoming program change, the following means of communication were utilized in launching 2-stream collection:

- Pamphlets (as presented on page 6) were distributed with blue boxes, additional copies have been made available at the front counter of the municipal office.
- Numerous Facebook posts beginning in March 2017 and continuing into June 2017
- Updates to website content March 2017
- Announcement of the new program in our Southwold In Motion Spring 2017 Newsletter, April 2017, excerpts as presented on page 7





SOUTHWOLD'S NEW RECYCLING PROGRAM

Effective March 1st, 2017, the Township of Southwold has made IMPROVEMENTS to our Recycling Program. We have entered into a contract with the City of London Recycling Centre to accept our recycling materials on our behalf.

We will be implementing a two stream blue box program. One blue box will contain paper products and the other one will contain all other recyclable materials. The Township will provide every household with an additional blue box as soon as they are available. There will no change in the pickup schedule or collection contractor.

Top 5 Recycling Tips

- No StyrofoamTM StyrofoamTM is not accepted in your recycling program. It is garbage.
- Carton & cups are containers Paper coffee cups, fountain drink cups, milk/juice cartons and boxes belong in the Containers Bin. Remove plastic lids from cups first, and place both in with Containers.
- Flatten all boxes Flatten all types of boxes and bundle or place in BlueBox. Unflatten boxes will be left at the curb.
- No plastic bags. Please, no plastic bags in the Blue Box. At the recycling centre, they get wound in machines and result in costly maintenance. Please reduce or recycle them at a retail bin.
- Recycle as much as you can! The average household only recycles 70% of what they can. Make a difference –recycle 100%



REDUCE, REUSE, RECYCLE

2.2 Monitoring and Measurement Methodology

The increase in the tonnage of material deposited in the blue box program is being monitored annually.

Table 3: Recycling Collection 2016 vs 2017 (8-month period) for *Township of Southwold*

| Collection Month | 2016 Tonnes of Collected Recyclables, | 2017 Tonnes of Collected Recyclables, |
|------------------|---------------------------------------|---------------------------------------|
| | adjusted for residual waste | adjusted for residual waste |
| May | 19.39 | 21.78 |
| June | 23.15 | 24.49 |
| July | 19.60 | 16.46 |
| August | 17.03 | 18.95 |
| September | 18.59 | 16.80 |
| October | 17.40 | 21.19 |
| November | 22.92 | 25.16 |
| December | 20.94 | 17.85 |
| Total | 159.02 | 162.68 |

The two-stream blue bin program was not implemented until May 2017. The results indicate an increase in the recycled tonnage for the 8-month period over the same period in 2016. This is encouraging as there was a risk that program participation or set-out compliance would suffer in the short term as residents adopted the new two stream system.

Feedback from the City's MRF staff regarding the quality of blue box recycling has been very positive. The Township has not been notified of any issues regarding contamination of the recycling stream with unsolicited materials. This is good news for the Township as it appears our recycling program is performing similarly to the other small municipalities in the area in terms of low contamination levels.

The Township has not been notified by the collection contractor in regards to any issues at the curbside. This indicates residents have adopted proper set-outs of the two stream program.

2.3 Program Challenges

It is difficult to calculate any cost savings as, prior to the signing of an agreement with the City of London, the Township of Southwold contracted all services including garbage pickup, garbage disposal, blue box pick up and blue box material sorting and sales. In March 2017 we entered into a contract with the City of London and are now paying to have the material sorted and will share in the revenue generated by the sales. Previously, our supplier/contractor collected, sorted and sold all blue box material and retained all of the funds generated from the sales.

The Township was without a contract for a number of years and felt it was prudent to enter into agreements that enabled us to expand the program in an effort to increase diversion rates, reduce costs and increase participation by residents in the recycling program.

3. Project Results and Analysis

3.1 Project Results

The results of the implementation of the expansion of blue box service to a two-stream harmonization improved diversion of recyclables 3.66 tonnes over 2016 totals. This is great news staff had been cautioned a decrease in diversion, through resident participation, may occur with a programming change. Pleasantly, this was not the case.

Key Findings:

- Costs to implement the program were relatively inexpensive at \$ 8.43/household.
- Funding and implementation of the program, made possible through the Resource Productivity and Recovery Authority's Continuous Improvement Fund resulted in an increase in diversion over the prior 8-month period.
- Continued education through clear communication is required to ensure an understanding of the need for waste diversion activities by all members of the Township of Southwold community.

3.2 Analysis of Results

The diversion results, as presented, compare 8 months of data from 2017 to 2016, indicating a modest increase in the tonnes of blue box materials collected from residences in the municipality. The City of London has informed municipal staff that the quality of material arriving at the tip floor is of "good quality" meaning there is low levels of contamination.

The Township has historically contracted out all recycling collection, sorting and sales activities under one agreement. The Township was not provided with a breakdown of components under the prior contract and, as a result, are unable to determine the net cost savings from the blue box program, if any.

Residents "liked" our Facebook posts and, those residents who commented on Facebook or were in contact with the office, were happy with the improvement to the program. No complaints were received.

3.3 Lessons Learned

Due to the timing of the signing of new agreements, the two-stream harmonization program was rolled out quickly. There was a risk immediate participation in the program could have been delayed for residents who did not read the educational material provided or utilize the second blue box immediately. That being said, there was no evidence program participation suffered or that there was a lack of understanding surrounding the new two stream program. In reality, there were no concerns noted by the collection company (in terms of compliant set-outs) or the City of London MRF staff. The feedback received from the public was almost exclusively positive.

For future rollouts of programming changes, efforts will be made to ensure the public are informed well in advance of the effective date of the change.

4. Project Budget

The project budget for the launch of the two stream program is detailed in Table 4 below. Budgeted costs are compared to actual. In general, the project was completed on budget at the anticipated costs.

Table 4: Budget verses Actual with CIF Share of Funding

| Costs of Program | CIF Share (max. | Budget | CIF Share | Actual |
|-----------------------------|------------------|-------------|---------------|-------------|
| | 34% of estimated | | (34% of | |
| | costs) | | actual costs) | |
| | | | | |
| Recycling bins | | \$11,626.08 | \$3,952.87 | \$11,626.08 |
| Promotional material | | 804.39 | 273.50 | 804.40 |
| Educational material | | 266.00 | 167.74 | 493.33 |
| Delivery and roll out costs | | 4,863.38 | 618.10 | 1,817.94 |
| | | | | |
| Total | \$5,780.00 | \$17,559.85 | \$5,012.21 | \$14,741.75 |

The Township received funding support from the CIF for the purchase of a second blue box, in transitioning from a single stream program where residences had previously been provided with a box. Additionally, funds to distribute the boxes to residences and promote the programming change were included in the project budget.

Distribution of the boxes were completed by municipal staff at a cost of approximately \$1,800; almost \$1 per household. During distribution, staff also placed copies of promotional material in the boxes to educate residents on the upcoming change. Incorporating both these activities reduced costs of a mail-out to distribute the information.

5. Conclusion

The transition to a two-stream harmonization system for blue box collection resulted in an increase in diversion from May 2017 to December 2017. Actual costs of the programming expansion were lower than anticipated. To increase diversion further, the Township of Southwold is committed to continuing to monitor diversion and educating residents and businesses of the need to participate in waste diversion activities.

Partnering with the City of London, through the Recyclable Material Processing and Marketing Agreement, has provided the Township of Southwold with valuable data, resources and support. Township staff look forward to continuing this successful relationship into the future.

The Township is grateful for the financial and technical support provided by the CIF in completing the launch of our new two-stream program.