

E&E Project Evaluation Form

****Please be advised that completed evaluations are made available publicly and are posted on Stewardship Ontario's E&E Fund web site****

Project Name/Number/Priority area: Peak Season Waste Audits for Renfrew County and Seasonal Waste Audits for Renfrew County, Project 223 and 223B

Lead Sponsor/competed by/date: Ottawa Valley Waste Recovery Centre

Project Duration: August 2006 to October 2007

Total project value: \$69,960

E&E funding amount: \$66,780

Section 1 –To be completed by Project Applicant

1) What were the Project Goals and Objectives (as per the E&E Application and/or Contract)?

The Goals and objectives of the Peak Season Audits were to determine seasonal waste composition variances, establish base line audit data and to determine waste composition. It was also to measure set out frequencies, quantities and contamination by material type for specific North Eastern Communities which experience peak volumes from May to the fall season. These communities had not undertaken an audit and as such, there was no baseline data available. Once this part of the project was completed the project was expanded to include a winter and spring audit so that OVWRC would have representative data for each season and more accurate annual generation calculations. There was a need to establish baseline benchmark data for the community taking into account seasonal variances.

2) Were the goals and objectives met? (and if not why not?)

Yes

3) Summary of Project Accomplishments (i.e. what did the project do/achieve?)

The initial audits for the peak seasons periods of Summer (August) and Fall (November) of 2006 allowed OVWRC to establish a comprehensive snap shot of waste composition and generation during the peak seasonal generation periods. Building on the success of these audits additional funding was received to include winter and spring audits which now provides for a full year of seasonal data.

We now have complete information on set out frequencies, quantities and contamination by material type available both by individual season and for a complete year. The data has been compiled in a number of comprehensive reports.

This will assist in budgeting and planning staffing requirements to accommodate for seasonal variations and provide background data to determine future capital needs.

4) Summary of Project Limitations (e.g. is there anything that should have been done differently?)

Renfrew County has some municipalities that are serviced through depot collection programs. These audits have provided valuable insight and information into the curbside programs but work needs to be undertaken to address the depot programs.

OVWRC was interested in determining diversion statistics for the entire waste stream including yard waste. In keeping with Stewardship Ontario's policy it was necessary to include an additional section in the waste audit results to incorporate the yard waste tonnages. The yard waste was multiplied by 26 weeks to calculate the annual kg/hhd generation rate. The Centre would like to see a standard calculation used by all Municipalities involved in Stewardship Ontario audits and have this data available to be used as a meaningful benchmark when comparing other programs.

More work is required to evaluate the success of the LCBO Bottle Return Program. The results were inconclusive. It appears that the LCBO bottle return program is having an impact on coloured LCBO bottles, while the results for the LCBO clear bottles are uncertain. Generation rates in the fall were similar to the rates achieved in the winter and spring audits even though the LCBO bottle return program had not been launched at the time of the fall audits.

5) What do you consider to have been the key “lessons learned” from this project? Does your project/activity represent a “best practice”?

The key study findings are as follows:

- There is a significant difference in the overall waste generation rates between the peak season and non-peak seasons with a 25% difference in generation rates across each waste stream category
- Of all the waste streams, the organic stream exhibited the most significant difference between the peak and non-peak seasons with an overall difference of 42% in peak periods.
- The amount of potentially recyclable materials found in the garbage stream was almost 20% higher in the peak season which suggests that vacationers may be less aware of recycling opportunities.
- Contamination rates were similar and similar recovery rates were achieved for all materials during peak and non peak seasons with the exception of metals which achieved a 13% higher recovery rate during the non-peak seasons.

6) What specifically are municipal staff doing with the experiences and data from this project? Do you have plans to apply these lessons in your program? Please explain how.

1. Change in focus with Promotion & Education Campaign – obvious need to target vacationing visitors to the area
2. Building a staffing model as part of 2008 budget preparation to accommodate temporary and seasonal part time staff needs
3. A comparison of the organics food waste collection with a similar program (Durham Region) indicates that OVWRC achieves a higher capture rate. This appears to support the Centre's decision to use larger rolling carts and a no bag policy. Many of our local non partner municipalities are actively planning curbside organics programs (Madawaska Valley and

Bonnechere Valley Wards 1, 2 and 4). We will be bringing these results forward as a lesson learned from our program.

7) Has your municipal council been informed about the project and its results?

OVWRC is preparing a Board Report to summarize the key findings of the project. It is anticipated that the report will go forward to the November OVWRC Board Meeting and then be forwarded to the local municipal partners and the public liaison committee. The Centre will be discussing the benefits of reducing curbside garbage bag limits and implementing mandatory recycling over the coming years.

8) Do you think there are opportunities to share/replicate the successful elements of this project with other Ontario programs? If yes, how and where?

As with the other Audits undertaken by Stewardship Ontario and funded through the E&E Fund we anticipate that the data will be posted on Stewardship Ontario's website and available for other communities to use as a reference for benchmarking.

The OVWRC acts as a resource for many Municipalities in the Eastern and Northern parts of the province. Staff dedicate significant time and resources to being available to provide tours and respond to information requests on our programs. The information learned in these audits will be useful when assisting these communities with information.

9) Did this project result in either reduced costs per tonne of Blue Box waste recycled and/or increased Blue Box tonnes diverted? (Please explain)

The project was intended to provide the necessary baseline data to set a benchmark to allow for measurement of future program changes. Program cost reduction and increased diversion will become evident as we move ahead with program changes based on the analysis of the data obtained from the audits.

Section 2 –To be completed by Stewardship Ontario (and reviewed by applicant)

9) Did this project do what it set out to do? If not, what were the reasons/ barriers?

As per the original contract agreements, this project:

- Determined baseline waste composition and generation information for all four seasons in Renfrew County.
- Evaluated seasonal composition, generation, and contamination rates to confirm peak season vs. non-peak season variations
- Established behavioral information, including set-out frequencies and contamination by season as well as for a complete year.

10) What are the key learnings from this project? Are there any next steps? What is being done to share the results?

As indicated by the Project Applicant, the following key learnings were obtained from this project:

- Baseline annual household waste generation data was determined for each community, by season. Future audit results will be measured against this data.
- Confirmation that Renfrew County experiences varied waste generation, recovery rates, and disposal behaviours during its Peak Season vs. the Non-Peak Season.
- Peak Season variances include increased generation of waste, increased generation of organic materials, and increased misdirection of recyclables into the garbage stream, when compared to Non-Peak Season results.

The results of this project have enabled Renfrew County to assess success in some waste management practices, and to determine and target key areas for improvement in other areas.

Specifically:

- Target education and promotion of proper waste and recycling practices for Peak-Season visitors who may be unfamiliar with Renfrew County expectations.
- Use the seasonal variances model to more effectively manage staffing, resources, and equipment during Peak-Season and Non-Peak Season variances.
- Target less-effective programs, such as organics, in order to improve capture rates and resident participation.

It should be noted that this project was undertaken as two different components. The initial application was for a waste audit for the Peak-Season (summer and fall) only. Once the results of that audit were analyzed it was determined that a larger scope would be necessary for the data to have maximum impact and usefulness. The second application was for additional winter and spring audits (Non-Peak Season) in order to determine annual waste generation and disposal patterns, and identify seasonal variances.

Future waste audits to determine whether seasonal waste generation and disposal variances exist should ensure that an appropriate sample size of both Peak-Season and Non-Peak Season data is obtained and analyzed.

11) Was the project good value for the money (e.g. were there measureable program or system cost reduction benefits, cost effective tonnage increases, etc?)

Establishing current generation volumes, diversion rates, set-out frequencies, and other behavioral aspects of the Renfrew County waste management program has enabled the County to generate baseline data against which the success of future projects and initiatives will be measured.

In addition, the results of this project have identified key areas for immediate improvement in the effectiveness and efficiency of resource use and citizen participation.

12) Does this project represent “best practices”? If yes, explain.

This project constitutes a Best Practice in the development of an up-to-date plan for recycling, as it has enabled Renfrew County to determine generation and disposal patterns during Peak and Non-Peak Seasons, from which defined performance measures, diversion targets, and continuous improvement initiatives can be established.

In addition, the information obtained from this project will enable the strategic planning and design of a more effective promotion and education program for both annual and seasonal residents of Renfrew County.

13) Tonnage and Financial Summary

This project revealed current generation and diversion rates as follows:

- Total annual waste generation: 831kg/hh/year during Peak Seasons; 669kg/hh/year during Non-Peak Seasons.
- Diversion rates (excluding yard waste): 52% diversion during Peak Seasons; 49% diversion during Non-Peak Seasons.
- Misdirected recyclable materials: 20% higher rate of misdirection during Peak Season versus Non-Peak Season.