



PO Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

> Halifax Regional Council May 6, 2003

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SUBMITTED BY:

George McLellan, Chief Administrative Officer

Brad Anguish Director Environmental Management Services

DATE: April 29, 2003

SUBJECT: Weekly Summer Green Cart Pilot Project

ORIGIN

During the 2003-04 Budget Process, staff proposed, as part of the debate on Parking Lot Items, that HRM initiate a pilot project for the weekly summer collection of organic green carts. This report follows from that recommendation.

RECOMMENDATION

It is recommended that:

- 1) Staff proceed with the implementation of a weekly summer green cart collection pilot project in selected areas of HRM (under the general terms provided in this report) and provide a complete evaluation of the project before the end of this calendar year.
- Funds in the amount of \$80,000 be withdrawn from the Service Improvement Reserve, Q310, to provide funding for this pilot project.

BACKGROUND

Staff prepared several recent reports on this subject for the Solid Waste Resources Advisory Committee and Council. These reports provided the basis for discussion by Council during the budget period.

The proposal, which was part of the Parking Lot debate at Council, referred to a Pilot Project that would test the concept of a weekly summer green cart collection project for the summer of 2003 within an area of the urban core.

DISCUSSION

The purpose of the pilot project is to provide a cost-effective method for evaluating the impact of weekly summer green cart collection on organics program participation and customer satisfaction. The results of the evaluation will be used to determine whether a recurring investment in weekly summer green cart collection throughout HRM is warranted.

To ensure requisite project probity, staff has sought consulting assistance for the design and evaluation of the pilot project. Staff would be responsible for project communications and coordination.

The organic carts would be collected weekly in three collection areas within the urban areas of the former cities of Halifax and Dartmouth. The pilot project areas have been recommended by LURA Consulting and SNC Lavalin based on information provided by HRM staff regarding data availability (e.g., Hansen records, number of households, collection day, boundaries, etc.).

Larger service areas were considered (see Alternatives Section of this report); however, larger geographical areas require more effort and cost to implement and evaluate with no higher degree of confidence in the results.

1.0 Parameters of the Study

- 1.1. Timelines: The study will be conducted for the 8-week collection period beginning Monday, July 7, 2003 and ending Friday, August 29, 2003.
- 1.2. Location: The study area comprises of four subareas, three of which will receive weekly organic collection:
 - a) The Tuesday collection area of Halifax, which is the area north of Cogswell/Quinpool and east of Windsor St., will receive weekly organic collection;

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- b) The Thursday collection area of Dartmouth (bounded by Portland Street, Celtic Drive, Mount Pleasant Avenue, Eastbrook Avenue, east side of Wyse Road to Geary Street) will receive weekly organic collection;
- c) The Thursday collection area of Halifax (bounded by Joseph Howe Drive from Bedford Basin to the Bicentennial Highway, west of the streets off Hamshaw Drive to the former Town of Bedford limit) will receive weekly organic collection; and
- d) The Wednesday collection area of Halifax (west of Windsor Street, north of Quinpool/Jubilee, east of Dutch Village Road/Joseph Howe Drive) will not receive weekly organic collection, but will be a part of the study. It will serve as a <u>control</u> <u>area</u> against which the other areas will be compared and contrasted.

2.0 Rationale for Pilot Areas

The three weekly pilot collection areas represent a typical mix of urban high density development in the downtown core, a primarily mature residential area, and a combination of established and new residential neighbourhoods. These area types are consistent with reports of green cart related nuisances and, as determined by the consultants, could theoretically derive the most benefit from more frequent collection during the summer months.

These pilot and control areas represent the most cost-effective selection that can be communicated to residents without generating widespread confusion regarding collection times.

The three weekly pilot areas included within the study, and the measurement and evaluation methodology, will provide sufficient data to support a future decision regarding weekly organics collection in the HRM during summer months.

3.0 Measurement

- 3.1. Set-out rate: The set-out rate will be measured for all participants in the weekly collection areas and the control area. The frequency of set-outs per household will be calculated.
- 3.2. Tonnage: The weight of material gathered will be measured for the weekly collection areas and the biweekly control area. A per-household tonnage figure will be calculated.
- 3.3. Customer Satisfaction: A survey will determine customer satisfaction with the weekly collection. The survey will probe to determine whether more frequent collection reduces or eliminates cart-based nuisances, increases perception of program convenience, fosters more use of the cart program, or is required due to volume of materials.

4.0 Evaluation Methodology

4.1. Set-out rate methodology: Set-outs will be recorded for households along collection routes in the pilot and control areas. The proposed routes being monitored comprise a total of approximately 10,000 households, or almost half of the total of 22,000 residential properties in the four areas.

Area	Collection Day	Study Component	Number of Households
Halifax - North End Peninsula	Tuesday	Weekly Pilot	5,500
Halifax - Mainland North	Thursday	Weekly Pilot	6,500
Dartmouth - Downtown	Thursday	Weekly Pilot	4,000
Halifax - West End Peninsula	Wednesday	Control: regular biweekly collection	6,000

A field data recorder will accompany the organics collection vehicle and note if a green cart was set-out at each individual household. This information will be logged each week to provide data for the eight weeks of the pilot program. The biweekly control area route data will be collected in the same manner, with data being collected on the regular organic collection days.

The set-out data will be ente	red in a table	as indicated:							
Collection Day:	Time:								
Weekly Pilot	ot Regular Biweekly Program								
Weather: Rain	Sunny	Windy	Overcast						

Street ⇒							Smit	h Stree	t					
House No. ⇒	12	13	14	15	16	17	18	19	20	21	22	23	24	25
July 7/30	~		V		V	V			~		V			
July 14/03		V	V	V		V	V	V	~	V		V	V	V
July 21/03	~	V	V			~		~		V	V		~	V
July 28/03	V		V	V				V				V		

Captured data will be analyzed to determine the set-out rate for each route monitored. This will provide information on the frequency of set-out in both the weekly and biweekly areas. The weekly collection data will be evaluated against the collection data for the control route to determine the frequency residents took advantage of increased organic collection.

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4.2. Tonnage: The organic collection vehicles will be weighed before unloading at the organic collection facility. The tonnage recorded will be aggregated to develop a total weight of organics collected. In the case of the weekly collection areas, an adjustment factor will be applied against the tonnage to compensate for extra weight due to the moisture present which would have evaporated had the cart not been collected as often (the carts are designed with ventilation holes which allow moisture from the organic material to dissipate to the atmosphere).

Finally, per-household tonnage figures will be calculated for each area. The figures for the areas which received weekly collection will be evaluated against the control area to determine if more organic material was collected from households with weekly collection than those with collection every other week.

- 4.3. Customer Satisfaction: A survey will be conducted immediately following the pilot collection test to determine customer satisfaction with the weekly collection frequency in the three test areas, and also in the control area. In particular, the survey will determine if householders:
 - Took advantage of the weekly collection;
 - Experienced nuisance issues with their carts during the test period;
 - Felt that weekly collection diminished the number and severity of nuisance issues;
 - Prefer weekly collection to biweekly collection during the summer months;
 - Are willing to pay more, through their taxes, for this increased collection service.
- 4.4. Cross-referencing Data: After all data is collected, it will be evaluated together to determine the overall results of the pilot. The following questions will be pursued:
 - 1. Do residents who have weekly collection set their organic carts at the curb more often than those with biweekly collection?
 - 2. Does weekly collection translate into organic tonnage capture rates which are higher, lower or the same as in areas with biweekly collection?
 - 3. Does weekly collection reduce the instances of nuisance factors with the organic carts, particularly nuisances with odours, flies and maggots?
 - 4. Are customers more satisfied with weekly collection than biweekly collection?

5. Are customers willing to pay more taxes for increased collection of organics during the summer months?

BUDGET IMPLICATIONS

The collection service costs for the three days per week pilot project would be \$35,000. To provide for evaluation (including the control area), additional communications costs, and implementation expenses, staff estimates the total project budget should be in the order of \$80,000. Funding for this pilot project is available through a withdrawal from the Service Improvement Reserve Q310, as confirmed by Staff of Financial Services

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FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy and the approved Capital budget, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation. It is recommending an increase in the amount to be withdrawn from the reserve funds, however, as noted in the budget implications section, funds are available for this withdrawal.

Based on the current business case for the Service Improvement Reserve, the SIR reserve is available for projects that demonstrate anticipated downstream benefits with a method for tracking savings and benefits to repay the amount withdrawn in specified future years.

Therefore, this withdrawal does not meet all the current business case criteria for a withdrawal from the SIR Reserve. Staff have previously identified that the current criteria for SIR does not accommodate all issues and opportunities identified and that a further review of the Reserve Business Case is required. Staff are recommending the withdrawal from SIR based on the pending reserve review and also based on the 03/04 budget deliberations whereby the Committee of the Whole had approved this project funding source in principle.

ALTERNATIVES

There are many permutations and combinations of collection areas that Council could consider for pilot and control areas in the pilot project. One alternative, which staff does not recommend, is the expansion of the pilot area to include all five collection days in the former cities of Halifax and Dartmouth at a total project cost of \$170,000. The recommended pilot and control areas in this report represent the most cost-effective selection that can be communicated to residents without generating widespread confusion regarding collection times. The recommended areas will provide sufficient data to support a future decision regarding weekly organics collection in the HRM during summer months.

May 6, 2003

ATTACHMENTS

N/A

Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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