

**Item No. 2**  
**Halifax Regional Council**  
**February 2, 2010**

**TO:** Mayor Kelly and Members of Halifax Regional Council

**SUBMITTED BY:**



Ken Reashor, P.Eng., Acting Director, Transportation & Public Works

**DATE:** January 12, 2010

**SUBJECT:** Expanded Green Cart Service Cost Options

### **INFORMATION REPORT**

#### **ORIGIN**

At the September 15<sup>th</sup> meeting of Regional Council, the following motion was approved:

11.2.1 Councillor Mosher - Request for Report re: Weekly Green Bin Collection

“MOVED BY Councillor Mosher, seconded by Councillor Walker that Halifax Regional Council request a staff report on the cost implications of extending the weekly green bin collection as follows:

1. To commence the beginning of June and run until the end of September during the summer of 2010 and in future summers.
2. To extend weekly green bin collection service to all areas of the Halifax Regional Municipality. MOTION PUT AND PASSED.”

#### **BACKGROUND**

The current weekly green cart collection service is provided during July and August each year in the following communities: Halifax, Dartmouth, Bedford, Hammonds Plains, Sackville, Beaver Bank, Kinsac, Cole Harbour, Westphal, Eastern Passage, Cow Bay, Beechville, Lakeside, Timblelea, Herring Cove, Sambro Loop, Williamswood, Harrietsfield and Fall River area. The service as currently configured has been in place for the past five years (since summer of 2005).

## DISCUSSION

The various cost implications for expansion of the Weekly Green Cart collection program in Fiscal 2010/11, are as follows:

### **Weekly Organics Collection Estimates Fiscal 2010/11**

<b>Service Option</b>	<b>Service Areas</b>	<b>Service Period</b>	<b>Contracted Cost<sup>(1)</sup> Estimates</b>
Current Service	Halifax, Dartmouth, Bedford, Hammonds Plns, Sackville, Beaver Bank, Kinsac, Cole Hbr, Westphal, E. Passage, Cow Bay, Beechville, Lakeside, Timberlea, Herring Cove, Sambro Loop, Williamswood, Harrietsfield, Fall River area	July & August	\$356,000  (This cost is included in Proposed 2010/11 operating Budget)
Extended Service Period to <b>June through September</b> for Current Service Areas	Same as Above	June through September	\$705,000  <b>(Operating Budget increase of \$349,000)</b>
Expanded Service to <b>All HRM Areas</b> for Current Service Period of July & August	All Eight Collection Areas (all of HRM)	July & August	\$437,000  <b>(Operating Budget increase of \$81,000)<sup>(2)</sup></b>
Expanded Service to <b>All HRM Areas</b> for <b>Extended Service. Period of June through September</b>	All Eight Collection Areas (all of HRM)	June through September	\$886,000  <b>(Operating Budget increase of \$449,000)</b>

Notes:

- (1) Includes estimates for partial weeks, as applicable.
- (2) Estimated additional cost for weekly organics collection during July and August in remaining portions of Collection Area 4 - Western County only is \$28,000.

The most recent report on assessed implications and factors related to expanding weekly green cart collection services, dated March 10, 2008, and attachments, which was presented on April 1, 2008 at Regional Council, is attached for your reference.

### **BUDGET IMPLICATIONS**

Funds for the provision of weekly green cart collection services in July and August for the same communities as in previous years, is contained in the proposed 2010/11 Operating Budget.

### **FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN**

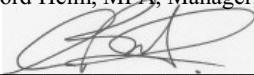
This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

### **ATTACHMENTS**

Report dated March 10, 2008, "Weekly Green Cart Service Options"

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Robert Orr, P.Eng., Collection & Processing Coordinator &  
Gord Helm, MPA, Manager, Solid Waste Resources

Report Approved by:   
Gord Helm, MPA, Manager, Solid Waste Resources, 490-6606



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Halifax, Nova Scotia  
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## Item No. 3

**Halifax Regional Council**  
**April 1, 2008**

**TO:** Mayor Kelly and Members of Halifax Regional Council

**SUBMITTED BY:**

A handwritten signature in black ink, appearing to read "Mike Labrecque".

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Mike Labrecque, P.Eng., Director, Transportation and Public Works

**DATE:** March 10, 2008

**SUBJECT:** Weekly Green Cart Service Options

### INFORMATION REPORT

#### ORIGIN

Committee of the Whole Regional Council meeting of September 25, 2007.

#### BACKGROUND

At the September 25, 2007 meeting of the Committee of the Whole Regional Council meeting, the following motion was approved:

“Moved by Councillor Walker, seconded by Councillor Adams, that the Committee of the Whole endorse weekly summer green cart collection for all of HRM and that further discussion on this matter be included as part of the budgetary process.”

With the recent award of RFP 07-391 Collection and Transportation of Source Separated Solid Waste by Regional Council on February 19, 2008, the various cost options for expansion of the weekly green cart service are now available. Staff has also obtained information from Environment Canada, NS Department of Natural Resources and residents in communities throughout HRM, which is herein provided for the information of members of Regional Council.

## **DISCUSSION**

The attached September 4, 2007, staff report (Attachment # 1) entitled “Weekly Summer Green Cart Collection - Review of Change in Service Boundaries”, was presented at the COW meeting on September 25, 2007. The report details the areas of HRM that have received the service since the summer of 2004. The report provides the financial, customer service, and current participation implications, were the service to be solely provided to areas of HRM having urban and/or suburban tax rate designation; or expanded to all of HRM for the months of July and August. The report highlights that the communities within the eight residential collection areas receiving the service do not align with the urban, suburban and rural tax rate designation.

The financial implications of expanding the weekly service to include the month of September 2008, is now available with the award of RFP 07-391. The cost of providing the service in June 2008 (in urban, suburban and/or rural HRM) is not known as the new five year residential collection contracts commences July 1, 2008. As a guideline, the cost of weekly service in June 2008 is based upon the price submitted for September 2008. The price for June 2008 may be more costly as it is the last month of the current five year contract - and staff and fleet may not be readily available as each company prepares for the July 1<sup>st</sup> start of their new contracts.

### **1. Financial Implications:**

The following details the cost of weekly green cart service during the four additional weeks in July and August for the same communities that have received the service since 2004 (i.e. the status quo), the cost of the service for all of the HRM in July and August, the cost of the service in the status quo communities for two additional weeks each in June and September, and for all of HRM in June and September.

<b>Monthly Cost of Weekly Green Cart Service</b>		
	July and August	June* and September
Status Quo	\$301,416.38	\$295,700
All of HRM	\$375,234.13	\$386,440

\*June 2008 to be negotiated - (September 2008 half of total shown)

### **2. Customer Service Implications:**

#### **a) Current Participation**

As noted on page three of the September 4, 2007 staff report, participation (i.e. carts placed at the curb at the “extra week”) ranges from 14% in rural communities to 52% in urban communities. Typically during the summer months, many residents are often away from the place of residence while on vacation and travelling.

**b) Fall 2007 CRA Survey**

In November 2007, a survey was conducted by Corporate Research Associates to measure the interest of residents for expanding the weekly service during July and August to all of HRM, for June and/or September in the same communities that have received the service the past four summers, and for all of HRM. The following summarizes the survey findings:

1. For residents who have received the service since 2004 in July and August:  
87% support weekly green cart collection in June and September;
2. For residents who have not received the service in July and August:  
66% support weekly green cart collection in July and August;
3. For residents who have not received the service in July and August:  
55% support weekly green cart collection in June and September;
4. 64% of residents are opposed to paying a small fee for the service for July and August;
5. 66% of residents are opposed to paying a small fee for the service for June and September.

**c) Data from Environment Canada**

To fully assess all aspects of the potential benefits were weekly green cart service level to be enhanced, staff reviewed the Environment Canada Monthly Data Report for 2006 and 2007. The following information is provided:

<b>Average (2006 and 2007) temperatures at the Halifax Stanfield International Airport</b>				
	<b>June</b>	<b>July</b>	<b>August</b>	<b>September</b>
Mean Max Temp	20.4	24.3	23.1	20.3
Mean Temp	15.6	19.5	18	15
Mean Min Temp	10.7	14.6	12.8	9.6

**d) Nuisance Factor - Fruit Flies, Bears and Odour**

To also assess all aspects of expanding the weekly green car service, staff looked at the “nuisance factor”, specifically if there is a correlation between the occurrence of fruit flies, the attraction of bears and odour, i.e. lessening of each, were weekly summer green cart service to be provided in rural HRM, and/or enhancing the service

level to include June and September in “status quo” areas and all of HRM. The following information is provided:

**i) Fruit Flies**

From information available on the Woodrow Wilson Biology Institute website ([http://www.woodrow.org/teacher/bi/1994/life\\_cycle.html](http://www.woodrow.org/teacher/bi/1994/life_cycle.html))

“There are four stages in the life cycle of a fruit fly: egg, larva, pupa and adult. At a typical classroom temperature (21°) drosophila melanogaster will produce new adults in two weeks... the life span of a fruit fly may be several weeks.”

Fruit fly eggs, or larva, can be found on any piece of fruit. If fruit is not washed, within a matter of hours (if near the completion of metamorphosis at the end of the third instar of the puparium) fruit flies will be experienced. The best defence to prevent fruit flies is to wash all fruit that is not refrigerated.

From Environment Canada data, the optimum/idea temperature for the production of fruit flies occurs during two months - July and August - when the mean maximum temperature at the airport exceeds 21°

**ii) Bears**

The possible correlation of the provision of weekly green cart service as a preventative measure for nuisance from bears was discussed at the June 21, 2007 meeting of the Solid Waste Resource Advisory Committee. Attachment # 2 is a memorandum dated June 18, 2007 to Bill Karsten, Chairman and Members of SWRAC entitled “Weekly Summer Green Carts and Reports of Bears”. From the information provided by NS Department of Natural Resources, 88% of reports of bear sightings between 2005 and June 2007, occurred in communities of HRM that receive weekly green cart collection in July and August.

As the information provided by the NS Department of Natural Resources last June did not include reports of bears along the eastern shore, staff recently obtained an update of reports of bears for all of 2007 (including in the eastern shore area of HRM).

The NS Department of Natural Resources has advised that bears sightings have dropped from a total of 121 in 2006, to 45 in 2007. Many reports were of the same animal sighted on various streets and subdivisions in the same community on the same or successive days. Of the 45 sightings in 2007, 6 were reported in communities not receiving weekly green cart

service in July and August. Bear sightings are most frequent in newer subdivisions in Hammonds Plains - where weekly green cart service is provided in July and August.

As staff's memo of June 21, 2007 notes, bears have an excellent sense of smell and can be attracted by a variety of scents - from barbeques, exterior cat and dog food dishes, seeds at bird feeders, and the exterior storage of refuse and organics. Another factor related to recent reports of bears is that new development has encroached on natural bear habitats. Preventive measures residents can take against attracting bears are available on the HRM website [www.halifax.ca](http://www.halifax.ca), through the Corporate Call Centre 490-4000, and in the Naturally Green newsletter.

**iii) Odours**

At the April 6, 2004 meeting, Regional Council approved Alternative # 3-weekly summer green cart collection in urban/suburban HRM (Halifax, Dartmouth, Bedford, Sackville, Cole Harbour, Beechville, Lakeside, Timberlea) at a cost of (then) of approximately \$180,000.

Odour from green carts is most commonly experienced in the urban core of HRM where residential lot size is typically the smallest, often with very little or no front yard set back. At many residential properties in the urban core, the green cart is often stored in close proximity to an entrance or window. Many homes in the urban core directly abut the sidewalk, resulting in the green cart being in direct sunshine throughout the day, which causes an increase in the temperature inside a green cart. Those benefiting the most from weekly green cart service are residents whose homes are located in the dense urban core of the HRM.

Subsequent to the April 6, 2004 meeting, Regional Council approved weekly summer green cart service in the following additional communities: Cow Bay, Eastern Passage, Herring Cove, Waverley, Fall River and Fletchers Lake. Many properties in these communities have a larger sized lot than in the urban core.

**Summary:**

The provision of weekly green cart collection is a significant expenditure - over \$300,000 for the "status quo", i.e. in the same communities in July and August 2008 that have received the service since 2004. Changes to this service delivery at additional cost could include one of the following:

1. Expanding weekly green cart service in July and August to all of HRM;
2. Expanding the service to include the months of June and/or September in the same communities that are receiving the service in July and August;



3. Expanding the service to include the months of June and/or September for all of HRM.

Based upon the participation rate in rural HRM, information from the Woodrow Wilson Biology Institute, data from Environment Canada, low public support for funding the expansion of the service to June and September and information provided by NS Department of Natural Resources, that the current service level in the same communities continue for future summers.

### **BUDGET IMPLICATIONS**

There are no budget implications. Funds for the provision of weekly green cart service in July and August in the same communities are contained in the proposed 2008/09 Operating Budget.

### **FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN**


This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

### **ATTACHMENTS**

1. September 4, 2007 staff report "Weekly Summer Green Cart Collection - Review of Change in Service Boundaries (with attached staff report of March 29, 2004 "Findings: Weekly Summer Collection Cart Pilot Project");
2. June 18, 2007 memorandum "Weekly Summer Green Carts and Reports of Bears".

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by :

  
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\_\_\_\_\_  
Jim Bauld, Manager, Solid Waste Resources (TPW) 490-6606



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**Halifax Regional Council  
September 25, 2007  
Committee of the Whole**

**TO:** Mayor Kelly and Members of Halifax Regional Council

**SUBMITTED BY:**

A handwritten signature in black ink, appearing to read "Mike Labrecque".

Mike Labrecque, Director, Transportation & Public Works

**DATE:** September 4, 2007

**SUBJECT:** Weekly Summer Green Cart Collection -  
Review of Change in Service Boundaries

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## **INFORMATION REPORT**

### **ORIGIN**

Solid Waste/Resource Advisory Committee meeting of June 8, 2006.

### **BACKGROUND**

At the June 8, 2006 meeting of SWRAC, the following motion was approved:

“Moved by Councillor Snow, seconded by Councillor Karsten, that the status quo be maintained for this summer and for the summer of 2007, in regards to weekly summer green cart collection, and staff explore options of aligning it with the urban tax rate for the 2008 year, with implementation considered for 2009.

Mr. Bauld noted that this decision may have ramifications for Councillors who do not serve on this committee, and he suggested that the matter be provided to (Regional) Council for information. The Chair concurred and advised that staff could provide the information at a Committee of the Whole session.”

## **DISCUSSION**

Weekly summer green cart collection service has been provided since the summer of 2004. The cost of the service in 2007/08 is \$230,000.

The motion by Regional Council in April 2004 to approve Alternative #3 of the March 29, 2004 staff report (attached) for weekly summer green cart service, was not specific to communities within the urban tax rate, but rather was intended to respond where residents had generally expressed the most need for the service. The communities initially receiving the service (all have urban tax rate designation) included: •Halifax •Dartmouth •Bedford •Sackville •Cole Harbour •Beechville •Lakeside •Timberlea.

Subsequently, as approved by Regional Council, other communities were added - of which some have urban and suburban tax rate designation being:

- Cow Bay - suburban •Eastern Passage - urban •Herring Cove - urban
- Waverley - suburban •Fall River - suburban and •Fletchers Lake - suburban

As detailed in Section 3 of this report, as all of the eight(8) residential collection zones are not in alignment with the urban, suburban and rural tax rate designation, additional communities have received the service (at no additional cost for the HRM) as the homes receiving the service are a continuation and/or a small section of a daily collection route, which originated in the above-mentioned communities. The communities receiving the service are:

- Kinsac - urban/suburban •Fergusons Cove - urban •Halibut Bay to Harriestfield - rural •Beaverbank - urban/rural •Lucasville/Timber Trails Trailer Park - suburban
- Windsor Junction - suburban •south section of Montague Gold Mines - suburban
- Stillwater Lake - rural •Hammonds Plains - suburban/rural

### ***1. Financial Implications***

Removal of the service from those communities with rural tax rate designation is estimated to reduce HRM's operating costs by approximately \$6,500 in 2009/10.

Removal of the service from those communities with suburban tax rate designation is estimated to reduce HRM's operating cost by approximately \$40,000 in 2009/10.

(Note: Both costs are estimates as a Request For Proposals (RFP), for residential collection services in all of HRM for five years commencing July 1/08, will be issued later this fall. Prices will be confirmed and recommendations for all eight collection zones will be brought to Regional Council for award early in the new year.)

Expanding weekly summer green cart service to all of HRM, i.e. to all rural areas, is estimated to be an additional cost of approximately \$70,000 - again, subject to the bids received in response to the RFP to be issued later this fall.

2. **Customer Service Implications**

The removal of weekly summer green cart service from communities with rural tax rate designation, that have been receiving the service, is estimated to affect 6,500 residences.

Removal of the service from communities with suburban tax rate designation is estimated to affect 11,500 residences.

As a component of the “10% Challenge” launched in September 2004, staff has monitored the participation rate of weekly summer green carts set out on three successive “extra” collection weeks. The results indicate participation ranges from 3% to 35% in rural communities, to 52% in urban areas of HRM. The results are as follows:

	Participation (on the extra week)	
Rural Tax Rate	2006	2005
Stillwater Lake	11 out of 57 homes = 19%	N/A
Glen Arbour	20 out of 57 homes = 35%	N/A
Williamswood	8 out of 57 homes = 14%	2 out of 57 homes = 3%
Suburban Tax Rate	2006	2005
Kingswood	22 out of 57 homes = 38%	N/A
Eastern Passage	20 out of 54 homes = 37%	18 out of 57 homes = 31%
Urban Tax Rate	2006	2005
Lower Sackville	N/A	30 out of 57 homes = 52%
Halifax Peninsula	N/A	29 out of 57 homes = 51%

3. **HRM Solid Waste/Resources Collection Strategy**

In September 1998, Regional Council approved the adoption of a Collection Strategy for the new Solid Waste/Resource Management System, which was subsequently executed by Regional Council in January 1999, with the approval of By-Law S-600. The Collection Strategy was the result of an extensive review to achieve cost effective and efficient collection services across the HRM. The key components of the Collection Strategy include:

- i) the collapsing of twenty-one(21) residential collection zones into eight(8);
- ii) biweekly collection of organics and refuse;
- iii) biweekly collection of recyclables in rural HRM (previously monthly collection);
- iv) a limit of ten(10) bags/cans of refuse biweekly (previously ranged from eight bags a week to twenty bags a week in former municipal units);

- v) the removal of collection services at non residential use properties; and
- vi) limiting collection services to apartment buildings up to six(6) units.

The development and adoption of the Collection Strategy, consisting of eight(8) zones or areas, was not for the purpose or intended to be in alignment with the urban, suburban or rural tax rate designation. The primary objective of the Collection Strategy was to bring efficiencies to residential collection services, which is currently servicing 125,000 residential properties weekly. Unlike the provision of sewer and water, and Metro Transit services, which generally are in alignment with urban tax rate designation, communities in four of the eight collection zones where weekly summer green cart service is provided, include the urban, suburban and rural tax rate designation, as follows:

Collection Area 3

Bedford - urban  
Hammonds Plains - suburban/rural  
Blue Mountain Estates - urban  
Lucasville/Timber Trails - suburban  
Upper Tantallon - rural  
Stillwater lake - rural  
Upper Hammonds Plains - rural

Collection Area 4

Fergusons Cove - urban  
Herring Cove - urban  
Beechville - urban  
Lakeside - urban  
Timberlea - urban  
Halibut Bay to  
Harriestfield - rural

Collection Area 5

all of Sackville - urban  
Kinsac - urban/suburban/rural  
Waverley - suburban  
Lakeview - suburban  
Windsor Junction - suburban  
Fall River - suburban  
Fletcher's Lake - suburban  
Beaverbank - urban/rural

Collection Area 6

Eastern Passage - urban  
Cole Harbour - urban  
Westphal/Lake Major - urban  
north section Montague Mines - urban  
Cow Bay - suburban  
south Montague Mines - suburban

**4. *RFP for the Collection & Transportation of Source Separated Solid Waste (including weekly summer green cart service)***

If Regional Council determines that the weekly summer green cart service is to be realigned with the urban tax rate designation, the following implications apply:

- i) a major assessment and alignment of residential collection services, i.e. week days and daily routes in collection Areas 3, 4, 5 and 6, potentially impacting 18,000 homes;
- ii) a major communications and education campaign informing residents of the changes (i.e. withdrawal of weekly green cart service);
- iii) potentially delaying the issuance of the RFP for residential collections services scheduled for October for the next five-year collection contract, and the award early in the new year; and

- iv) adding an element of risk for bidders (as staffing and equipment requirements by bidders will need to be revised from the current scope of work - which has been constant since 1998) potentially impacting the five-year bid price(s) received by the HRM.

The eight residential collection service areas, as approved by Regional Council in 1998 as part of the (then) new HRM Solid Waste Collection Strategy currently serving 125,000 residential properties every week, includes:

- Area 1 - former City of Halifax
- Area 2 - former City of Dartmouth
- Area 3 - former Town of Bedford, Hammonds Plains, Upper Tantallon and Stillwater Lake
- Area 4 -all of Western HRM, i.e Beechville, Lakeside, Timberlea, Herring Cove to Sambro, Prospect, Peggys Cove, Tantallon, and Black Point to Hubbards
- Area 5 -Sackville, Beaverbank, Lucasville, Kinsac, Fall River, Waverley, Lakeview, Windsor Junction, Wellington to Dutch Settlement and Carrolls Corner
- Area 6 -Eastern Passage, Cow Bay, Cole Harbour, Forest Hills, Westphal, Ross Road to #7 Highway
- Area 7 -Minesville, the Prestons, Porters Lake, the Lawrencetowns, the Chezzetcooks and Conrad Settlement
- Area 8 -the remainder of the Eastern Shore

At the time of amalgamation, there were twenty-one(21) residential collection contracts from the four former municipalities. For financial viability, i.e. to recover their capital and operating costs, several contractors were providing collection services in three or more areas. The creation of eight residential collection areas has benefited the HRM financially and in service delivery, as measured by customer satisfaction of 90%.

**5. *Options for Alignment of the Service with Communities with Urban Tax Rate Designation:***

The motion approved by SWRAC on June 8, 2006, requested staff to explore options of aligning weekly summer green cart service exclusive to communities having urban tax rate designation. The options consist of the following:

- i) Removal of the service from approximately 18,000 homes in communities in rural and suburban HRM that have received the service since the summer of 2004;
- ii) Including (i.e. expanding) the communities with urban tax rate designation to include the 18,000 homes located in the seventeen(17) communities listed in the four(4) Residential Collection zones, that have received the service since 2004;
- iii) Removing the service from those urban, suburban and rural communities that have received the service at no additional cost to the HRM, that are a continuation of collection day routes in communities, as detailed in the Discussion Section of this report; and/or

- iv) Continuing to provide the service in those communities that have received the service since 2004.

### **BUDGET IMPLICATIONS**

There are no budget implications for 2007/08 or subsequent years, provided the status quo (i.e. same communities as present continue to receive weekly summer green cart collection service in future summers) is maintained.

### **FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN**

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

### **ALTERNATIVES:**

As detailed in Section 5 of this report, there are several options or alternatives.

Since the provision of weekly summer green cart service commenced in 2004, there have been very few enquiries (average five/year) of residents requesting the service.

1. Based upon the participation rates, as detailed in Section 2 of this report, staff does not recommend the expansion of the service to all of HRM.
2. The creation of a separate residential collection zone for the 18,000 homes in the suburban/rural communities, which are not contiguous as they are located in four(4) Collection zones, within eight(8) Council Districts, is not recommended .
3. Deletion of the service from communities in rural and suburban areas that are receiving the service, is not recommended.
4. Expanding the coverage area of the urban tax rate designation to those communities in suburban and rural HRM that have received the service, is not recommended.
5. As the current service coverage area appears to meet the demand, primarily in the urban and suburban areas of HRM where property lots are smaller (often with very small or no front or side yards), and reflects the direction by Regional Council to include specific communities that have suburban tax rate designation, it is recommended that the status quo be maintained.

**ATTACHMENTS**

March 29, 2004 staff report entitled "Findings: Weekly Summer Collection Green Cart Pilot Project"

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/agenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.



Report Prepared by :

\_\_\_\_\_  
Jim Bauld, Manager, Solid Waste Resources 490-6606






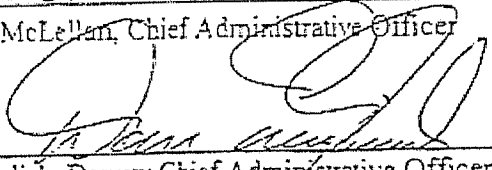
PO Box 1749  
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Halifax Regional Council  
Committee of the Whole  
April 6, 2004

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:

  
George McLellan, Chief Administrative Officer

  
Dan English, Deputy Chief Administrative Officer

DATE: March 29, 2004

SUBJECT: Findings: Weekly Summer Collection Green Cart Pilot Project

### ORIGIN

At the May 6, 2003 Regional Council meeting, the withdrawal of \$80,000 from the Service Improvement Reserve was approved for the completion of a weekly summer collection green cart pilot project. The approval of funds for the pilot project followed discussions during the 2003-04 Budget Process.

### RECOMMENDATION

It is recommended that:

Based upon the marginal benefits quantified during the eight-week, weekly summer collection green cart pilot project, that the current service level of biweekly green cart collection, continue for future summers.

## BACKGROUND

The provision of a weekly summer green cart pilot project, at approximately 15,500 homes with a biweekly control area of 6,000 homes, was conducted during an eight-week period between July and August in the urban core of HRM. The purpose of the pilot project was to provide a cost-effective method of empirically evaluating the impact of weekly summer green cart collection on the organics program participation and customer satisfaction. To ensure the evaluation was conducted without bias, LURA Consulting and SNC Lavalin were engaged for the design and evaluation of the project. The results of the pilot project assisted HRM in determining if a recurring investment in weekly summer green cart collection throughout HRM is warranted.

### 1.0 Parameters of the Study

#### 1.1 *Timelines:*

Eight weeks commencing Monday, July 7<sup>th</sup> and continuing to August 29<sup>th</sup>.

#### 1.2 *Location:*

Tuesday and Thursday, collection area in Halifax; Thursday in Dartmouth; with Wednesday, Halifax as the control area.

#### 1.3 *Rationale for the Pilot Areas:*

The three weekly pilot 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. The pilot areas included many properties with very small front and side yards where, typically, higher number of nuisance complaints are reported.

#### 1.4 *Measurement:*

##### a) *Set-out Rate:*

The frequency of green cart set-outs per household was measured.

##### b) *Tonnage:*

The weight of the organics collected in the weekly and biweekly control area was measured. Per household tonnage figure was calculated.

##### c) *Customer Satisfaction:*

A survey was conducted to determine customer satisfaction with the weekly collection, including if there was a reduction in cart-based nuisances, or if there was a perceived program convenience prompting more use of the green cart.

## DISCUSSION

To raise awareness of the eight-week weekly green cart collection service (July 7, 2003 to August 29, 2003), a special weekly green cart collection schedule was distributed to approximately 15,500 homes in the study areas. Based upon the parameters stipulated above, all the data gathered during the eight-week pilot project (by route monitors who measured the set-out of green carts at the curb, the weight of the organics in the collection vehicles from the pilot and control area, and the door to door survey conducted at 585 homes) was tabulated and evaluated by LURA and SNC Lavalin.

### Findings

#### 1. Set-Out Rate Frequency:

Participation (i.e. placement of the green cart at the curb) per week in the weekly pilot area was 53% as opposed to 68.5% in the biweekly control area. In the pilot area over a two-week period, there was 57% higher number of green carts placed at the curb for collection. It is noted that 21% of residents surveyed were away one week while 14% of residents were away two weeks of the eight-week pilot project.

#### 2. Organic Material Collected:

The amount of organics collected in the control area was 8.8 kg/household. This compares to 10.2 kg/hh in the pilot areas. Overall, the weight of organics collected was 15.9% higher in the areas which received weekly collection.

#### 3. Customer Satisfaction:

##### 3.1 *Reported Nuisances (% of people surveyed):*

<u>Type</u>	<u>Control</u>	<u>Pilot</u>
none	47.6%	55.4%
flies in cart	28.6%	23.6%
strong odours	25.7%	22.1%
fruit flies	23.8%	15.7%
maggots	15.2%	8.9%

##### 3.2 *Collection Preference (% of people surveyed):*

	<u>Control</u>	<u>Pilot</u>
Biweekly	54.3%	27.9%
Weekly	45.7%	72.1%

3.3 *Willingness to pay for increased collection frequency (% of people surveyed):*

<u>Willingness</u>	<u>Control</u>	<u>Pilot</u>
Yes	42.9%	66.4%
No	54.3%	32.1%

Summary of Findings

- a) Weekly collection does not appear to increase overall participation in the organics collection program; however, those that participated now do so more frequently with weekly collection.
- b) The set-out rate frequency is 53% for weekly collection and 68.5% for biweekly collection.
- c) Weekly green cart collection was found to increase organic tonnage collected by 15.9% when compared to biweekly collection.
- d) Reports of fruit flies and maggots were lower in the weekly pilot areas, however, there was little difference regarding odours and flies in the green cart in the biweekly control area and the weekly pilot area.
- e) Residents are generally more satisfied with weekly green cart collection than biweekly collection.
- f) More residents in the pilot area were willing to pay an additional \$3.00 per year for increased summer green cart collection.

Analysis

*Historical Performance of the Bi-Weekly Organic Green Cart Program:*

Since the rollout of the 100,000 organic green carts across HRM in 1998, the number of residents reporting nuisances has decreased. HRM received reports of more residents experiencing nuisances in the summer of 1999, than in subsequent summer months. In response, an enhanced solid waste Communication and Education campaign was developed in 2001/2002. Although fewer nuisances were reported in the pilot areas, weekly green cart collection has not totally eliminated odour and flies nuisances. As residents become familiar with the use of the green carts, the number of nuisances reported has generally lessened.

A decrease in the number of residents experiencing nuisances since the summer of 1999 is consistent with the experience in other municipalities that have implemented a similar green cart program. SWRAC report dated March 7, 2001 reported 150 complaints for the months of July and August in 2000. For July and August, 2002, summer before the pilot program,

the call center (Hansen) logged 64 complaints and 39 complaints for the same period during the pilot program, 2003.

In the fall of 2001, HRM engaged Corporate Research and Associates to conduct a survey of residents measuring the overall satisfaction of Solid Waste Resources' services and collection programs. The results of the survey were as follows:

*Satisfaction Rate:*

Refuse Collection-	84%
Recycling Collection-	90%
Organics Collection-	81%
Household Hazardous Waste-	64% (a)
Information on Refuse services-	81%
Information on Recycling services-	87%
Information on Organics services-	79%
Information on Household Hzd services-	55% (a)

*Note: (a) Since this survey, the Household Hazardous Waste program has been expanded with additional Saturdays the HHW depot is open, and residents can return left over latex and oil base paint to local Enviro Depots™.*

The results of the survey in 2001 revealed that most residents of HRM are satisfied with the organics green cart program (and other SWR services). However, staff continues to seek to improve the overall satisfaction rate.

### Cost Benefit Analysis

The benefit of weekly summer green cart collection (a higher level of service for residents) has financial implications for HRM. Staff's analysis has determined that the cost of weekly collection for the pilot project for three collection days (2 in Halifax, 1 in Dartmouth) is approximately \$246/tonne. This compares to \$80/tonnes for biweekly collection of organics during July and August, for all of HRM.

Based upon the 15.9% increase in organics collected during the eight-week pilot project, staff has calculated the additional increase of organics that would be received in Area 1 (Halifax), Area 2 (Dartmouth) and in the eight collection areas (all HRM) for a full five-day-week (Monday to Friday) service. A cost comparison of biweekly organics collection, and the cost if a five-day-week, weekly collection was provided in Areas 1 and 2 and in all of HRM is as follows:

Organic Collection - Additional Tonnes and Costs

	Area 1 (Halifax)	Area 2 (Dartmouth)	All HRM
* Additional organics, weekly collection (5 day week)	<del>182 Tonnes</del> = 140 tonnes	<del>140 Tonnes</del> = 100 tonnes	<del>707 Tonnes</del> = 535 tonnes
Existing biweekly Collection	\$76/Tonne	\$60/Tonne	\$80/Tonne
* 5 day week, weekly collection	\$102/Tonne	\$81/Tonne	\$110/Tonne
Annual costs for weekly organic collection in July and August	(areas 1&2) \$100,000		\$250,000

(\* Assumes 12.5% increase applies for each/area and is sustained.)

[1.25]

Based upon a five-day-week, weekly organics collection in July and August, the cost of collection increases by an average of 35%. As July and August are typically months when organics received at the two compost facilities is well within the 480 tonnes weekly limit, there are no contractual, operational, or financial implications with the processing of additional organics received through a weekly summer green cart collection. HRM would not realize any savings at Otter Lake or an increase in revenue at the two composting facilities, from a slight increase in organics collected with a weekly summer green cart service level.

Other Municipalities

Service Level:

In 1998, Regional Council approved the service level for solid waste/resources collection. Based upon the following analysis, Council approved the policy of only ICI properties in rural HRM receiving municipal collection services:

- fewer than 1,500 of the 11,000 industrial/commercial /Institutional (ICI) properties received municipal collection;
- many of the 1,500 ICI properties privately supplemented weekly collection with their own collection; and
- the biweekly schedule for residential properties would not meet the requirements of the ICI sector.

In 2003, Council approved the elimination of municipal collection services at all ICI properties effective July, 2005, thereby establishing a uniform standard across all of HRM.

Of approximately forty municipalities in Nova Scotia that have a green cart collection system, only Lunenburg and Mahone Bay provide weekly green cart collection for a six-week period during the summer. In Lunenburg and Mahone Bay, all properties (including restaurants, cafes and B&Bs) receive municipal collection services, including green cart collection. The policy to provide weekly summer green cart collection in Lunenburg and Mahone Bay during the short tourist season, responds mainly to reports of odours and flies

at establishments that serve food, which are clustered along the main street and/or waterfront area of high pedestrian traffic.

The ICI properties (including restaurants, cafés, bars, etc.) in HRM are source separating organics through private collection services, annually diverting in excess of 13,000 tonnes. Depending upon the volume of organics generated by the establishment and available storage, the frequency of private collection of organics is often more than once a week.

### Conclusion

Residents in the weekly organic pilot program are generally more satisfied with a higher level of service, reported fewer nuisances of flies and odours, are willing to pay for the service and the weekly service diverts more organics to the compost facilities. Presumably, the findings would apply to residents across HRM, especially the urban core where many properties have limited side and front yards. Fewer nuisances are reported from residents in rural HRM, where properties have larger set backs and side or backyards.

The question staff has assessed, and for Council to consider, is what priority the weekly summer green cart collection should be given in relation to other demands of services maintained by HRM. Assessment by staff, recognizing other financial pressures (including the disposition of recoveries from Hurricane Juan), is that the marginal benefits, with a substantial cost per tonne for the additional tonnes of organics collected, do not warrant the provision of weekly summer green cart collection.

However, a review of the Solid Waste C&E campaign has identified an opportunity to enhance the duration and number of HRM advertisements on local television, instructing residents how best to control green cart nuisances during the summer months. Commencing June 24, 2004, the summer schedule for television advertisement will be enhanced from the current six weeks to ten weeks. Funds for the additional advertisements are available from the Solid Waste Resources C&E account.

### *Enhanced Service - Funding Options:*

Should Council determine weekly summer green cart collection to be provided, the recovery of related expenses could be recovered through the general base tax rate or by the levy of an area rate for specific areas that the service is delivered.

### BUDGET IMPLICATIONS

As included in the bid price for RFP 02-097 (Collection and Transportation of Source Separated Solid Waste) the cost of weekly green cart collection during the months of July and August for all of HRM is \$250,000. The cost of weekly collection in the summer in Area 1 (Halifax) and Area 2 (Dartmouth) is \$100,000.

Funding for weekly green cart collection next summer, has not been identified in the proposed 04/05 budget. As per the policy of Regional Council, funds for enhanced weekly summer green cart collection require a corresponding reduction offset to ensure no net increase, or alternately an increase in the tax rate for those residential properties receiving the enhanced collection service.

It is staff's opinion that based upon the measured incremental benefit of a weekly summer organics collection and the increase in the cost per tonne (at \$246/tonne for limited collection, and \$110/Tonne for all 8 areas) of the additional organic material diverted, that an expenditure for weekly green cart collection in the summer of 2004 is not cost effective.

Total expenditure for the weekly summer collection green cart pilot project was \$63,568 of the \$80,000 approved from the Service Improvement Reserve.

#### FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

#### ALTERNATIVES

1. One alternative is to provide weekly summer green cart collection for all of HRM, at a cost of \$250,000 annually. Should Council proceed with weekly summer green cart collection, HRM must notify the residential contractor 60 days in advance of the commencement of the service. As the costs of this program exceed existing budget allocations, Council would need to identify a funding source through the 04/05 budget process. This is not recommended as the benefits of an enhanced service are marginal and not cost effective.
2. A second alternative is the provision of weekly summer green cart collection in the urban core of HRM where generally residential properties have smaller front and side yards. The cost of weekly summer green cart collection in Area 1 (Halifax) and Area 2 (Dartmouth) is approximately \$100,000. This is not recommended.
3. A third alternative is weekly summer green cart collection in urban/suburban HRM (Halifax, Dartmouth, Bedford, Sackville, Cole Harbour, Beechville, Lakeside, Timberlea) at a cost of approximately \$180,000 annually. This is not recommended.
4. A fourth alternative is the provision of weekly summer green cart collection in peninsula Halifax and downtown Dartmouth at a cost of approximately \$40,000. This is not recommended.

#### ATTACHMENTS



Findings : Weekly Summer Collection Green Cart Pilot Project  
Council Report

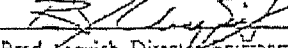
- 9 -

April 6, 2004

HRM Pilot Study of Weekly Organics Cart Collection (Results and Findings)

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.

Report Prepared by: Jim Bauld, Manager, Solid Waste/Resources 490-7176

Report Approved by:   
Brad Aneush, Director, Environmental Management Services 490-4825



PO Box 1749  
Halifax, Nova Scotia  
B3J 3A5 Canada

## MEMORANDUM

TO: Bill Karsten, Chairman and Members of SWRAC

FROM: Jim Bauld, Manager, Solid Waste Resources

CC: Brad Anguish, P.Eng. Director EMS

DATE: June 18, 2007

SUBJECT: Weekly Summer Green Carts and Reports of Bears

### I. Reports of Bears:

In recent years, reports of bears have become a common occurrence in the HRM. Reports of bears are more frequent in the spring, before their natural food source, i.e. berries, grasses and leaves, is available. Bears have a very strong sense of smell and can identify a potential food source from a significant distance, well over 1 km. The current edition of the Naturally Green (distributed to 155,000 homes in HRM in May and the spring edition in previous years) included tips for residents to prevent attracting bears. When a bear is sighted, residents are advised to take the following action:

- remove grease from BBQs;
- remove exterior dog and cat food dishes;
- remove bird feeders;
- don't place meat or fish in the backyard composter (will also attract rodents);
- keep the green cart and garbage in a shed or garage;
- as bears are primarily nocturnal, place the green cart and refuse in bags/cans out for collection on the morning of collection day;
- wash and rinse the green cart with a mild cleaning solution;
- contact the Department of Natural Resources (1-800-565-2224) who will live trap the bear and relocate it to a remote location.

Development throughout the HRM has encroached on natural bear habitat, making it more difficult to release the bear into an area where it will not again come into contact with humans.

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Attachment #1 is a list of bear sightings provided by the Department of Natural Resources (DNR) for 2005, 2006 and 2007. Of the 59 reports of bear sightings in the past three years, 52 (88%) occurred in areas of HRM where weekly summer green cart collection is provided. The Department of Natural Resources also advises that one additional area where bears have been reported is in Lake Echo. Inspection by DNR staff have confirmed that many homes in Lake Echo have one or more of the attractants, particularly BBQ's.

From the data provided by DNR, staff concludes that there is no correlation between reports of bears and the provision of weekly summer green cart collection. Weekly summer green cart collection is not a preventative measure to reduce reports of bears.

**2. Motion at June 8, 2006 SWRAC - re: Alignment of Weekly Summer Green Cart Service with Urban Tax Rate:**

Attachment # 2 is a staff report presented at the September 28, 2006 meeting of SWRAC. Page one of the report contains a motion approved at the June 8, 2006 meeting of SWRAC. The motion directs staff to assess aligning weekly summer green cart service with the urban tax rate, and provide Regional Council with the information. The staff report detailing the implications of aligning weekly summer green cart service to just those areas of HRM within the urban tax rate, will be brought to Regional Council later this summer.

  
attachments

1. 2005/06/07 DNR reports of Bears;
2. September 19, 2006 staff report entitled "Weekly Summer Green Cart Collection" (with attached staff reports of May 15, 2006 and March 29, 2004).

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(Attachment #1)

## REPORTS OF BEARS - 2005

Location	Area	Weekly Green cart
Waverley Frame Subdivision	2	Y
Capilano Drive	5	Y
Fox Point Crt, Upper Tantallon	4	N
Conrads Road, Hubbards	4	N
Waverley Road, Shubie Park Area	2	Y
Oldham	5	N
North Beaver Bark	5	Y
Highland Park, Haliburton Hills	3	Y
Oakbank Lane, Miller Lake	5	Y
McGrath's Cove Rd, McGrath's Cove	4	N
Turf Lake Road, Goffs	5	N
Lylewood rive, Middle Sackville	5	Y
Wedgewood Park, Rockingham	1	Y
Hescott Street, Elmsdale	5	Y
Westwood Blvd, Upper Tantallon	3	Y
Kingswood Subdivision	3	Y
Burnhope Drive, Montague Mines	6	Y
Rochester Dr, White Hills Subdivision	3	Y
White Hills Subdivision	3	Y
Waterstone Run, Lucasville	5	Y

- Total: 20 reports of bears
- 15 in weekly collection areas
- 5 in biweekly summer collection areas

# REPORT OF BEARS - 2006

Location	Area	Weekly
Lockview Road, Fall River	5	Y
Montague, Westphal, Waverley	2	Y
Pockwock Road, Upper Hammonds Plains	3	Y
Waverley	2	Y
Beaver Bank Villa	3	Y
Lucasville/Middle Sackville	3/5	Y
Timberlea	4	Y
Miller Lake	5	Y
Dartmouth	2	Y
Shearwater	6	Y
Aerotech Park	5	Y
Westwood Hills, Upper Tantallon	3	Y
Lake Major/Cherry Brook Area	7	Y
Ross Road, Westphal	6	Y
Lake of the Woods Subdivision, Hubley	4	Y
Portobello Hill	2	Y
Orchard Dr, Fenerty Rd, Waterstone Subdivision	5	Y
Beaverbrook Subdivision, Fall River	5	Y
Highway 118	2/3	Y
Prospect	4	N
Enfield	5	Y
Sackville/Windsor Junction/Secont Lake Area	5	Y
Timber Trails Trailer Park, Lucasville	3	Y
Holland Road, Wellington	5	Y
Frenchman's Road, Oakfield	5	Y
Grand Lake	5	Y
Cow Bay	6	Y
Goodwood	4	N
Cole Harbour	6	Y
Upper Sackville	5	Y
White Hills Subdivision	3	Y
Kingswood Subdivision	3	Y

- Total: 32 reports of Bears
- 30 in HRM with weekly summer collection
- 2 in HRM with biweekly summer collection

## REPORT OF BEARS - 2007 TO DATE

Location	Area	Weekly
White Hills Subdivision	3	Y
Humber Park, Dartmouth	6	Y
Silverside Subdivision, Waverley	2	Y
Miller Lake	5	Y
Oakvield	5	Y
Waterstone Run Subdivision	5	Y
Wilson Lake Drive, Lower Sackville	5	Y

- Total: 7 reports of Bears
- all in areas of HRM with summer weekly green cart collection

### Grand Total:

- 59 reports of Bears since January 1, 2005
- 52 reports in areas of HRM that have weekly summer green cart collection
- 7 reports in areas of HRM with biweekly summer collection

### Summary:

88% of reports of Bears in areas of HRM that have weekly summer green cart collection.