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2003 – 2006 ACCOMPLISHMENTS

The Solid Waste Management Committee recommends the adoption of the recommendations contained in the following report, June 1, 2006, from the Commissioner of Transportation and Works:

1. RECOMMENDATION

It is recommended that this report be received for information.

2. PURPOSE

This report summarizes events in the field of waste management over the past four years and the activities and successes of the Waste Management Committee during that period.

3. BACKGROUND

In December of 2002, the Keele Valley landfill closed after many years of controversy. Having previously decided not to permit construction of another landfill within the Region, York, like Toronto and Peel was forced to start exporting its waste. At the time, the Region was generating over 276,000 tonnes of waste and diverting less than 24% of the total from landfill. Other Greater Toronto Area (GTA) municipalities had, by comparison, made considerable more progress, achieving levels consistent with the Provincial average of 27% diversion. Moreover, the Region's waste management infrastructure was limited to a small waste transfer station in the northern part of the Region and several small household hazardous waste (HHW) drop-off points. Other than a commitment to moving towards a three-stream waste management system, the Region also had no overall waste management strategy.

4. ANALYSIS AND OPTIONS

Since the closure of the Keele Valley landfill the Region's waste management system has undergone significant change. Committee and Council have supported a variety of new initiatives that are expected to position the Region as a leader in the field of waste management in the coming years.

4.1 2003-2006 Waste Management Activities

The following sections summarize the activities and successes of Committee and Council over the past three years related to waste management. A more detailed chronological summary can be found in *Attachment 1*.

4.1.1 Affirmation of Regional Waste Management Responsibilities

Immediately following closure of the Keele Valley landfill Committee and Council reaffirmed the Region's responsibilities under the Municipal Act by assuming the costs associated with waste disposal. This change resulted in the elimination of over $14 million/year from local municipal taxes levies. Council also authorized hiring staff to begin the process of improving Regional waste management programs and services. Addition of these staff resources has permitted the Region to dramatically increase its diversion rate, expand delivery of waste diversion services to local residents and develop numerous award winning promotional and educational campaigns.

4.1.2 Development of Waste Management Infrastructure

In the summer of 2005 the Region commissioned the $39 million Garfield Wright Waste Management Centre (WMC) and Vaughan HHW depots. The new WMC became the first major piece of waste management infrastructure owned by the Region and enabled local municipalities to switch to a commingled blue box program potentially reducing collection costs by over 20%. Earlier in 2004 Regional Council authorized establishment of a reserve fund for capital replacement associated with operation of the Garfield Wright WMC using 25% of funds received by the Region from the WDO in 2004 and 50% thereafter.

Commitments were also made in 2005 by the Region to build Community Environmental Centres (CEC) in Richmond Hill and Vaughan to divert reusable and recyclable materials that can not be readily collected curbside. These facilities are currently in the zoning and site planning stages of development. Expressions of interest have also sought from the Township of King, and Towns of Aurora and Whitchurch-Stouffville regarding the potential to build a third CEC in one of their jurisdictions.

In September, 2004 Regional Council also authorized staff to begin exploration of the feasibility of constructing a Regional organics waste composting facility. Successful construction of such a facility would be the next step for the Region towards becoming self-reliant in the management of its waste.

4.1.3 Expansion of the Regional Blue Box Program

In February 2002, Council approved expansion of the blue box program to include: paint and aerosol cans, aseptic and gable top containers and aluminium foil. In June of 2004 Council approved a further expansion to include 3-7 rigid plastic household containers. These additions to the program, in conjunction with the launch of an award winning promotional campaign in the summer of 2005 and improvements to local municipal collection service resulted in an increase in blue box diversion of almost 14% or 5,000 tonnes/yr compared with the same period for the previous year.

In the fall of 2005 Regional Council authorized acceptance of blue box materials at the Garfield Wright WMC from the local school boards. This new partnership allowed the local school boards to switch to a co-mingled blue box program and ensured children within the Region experience a consistent recycling program at home and at school.

A six month pilot project was also undertaken in the fall of 2005 in partnership with King Township to, amongst other things, explore the feasibility of future blue box additions such as plastic film. This pilot resulted in an increase of 7% diversion of blue box recyclables.

4.1.4 Regional Organics Diversion Efforts

In 2004 the Region contributed over $50,000 to a joint initiative with local municipalities to subsidize distribution of backyard composters to local residents. Almost 3,500 composters were given out with 1,244 distributed in Vaughan alone. In that same year, an award winning program was established to manage Asian Long-Horned Beetle infested yard waste generated in the City of Vaughan.

In 2005 the Region established a long-term contract with Miller Waste Systems for the management of its leaf and yard waste including provision of a public drop-off location at 20% below previous costs. Receipt of leaf and yard waste in plastic bags was also successfully banned in 2005 with less than 1% of residents objecting to the change and a savings to the Region of over $230,000/yr.

A long term contract to manage 30,000 tonnes of “source separate organics” (SSO) or food waste was established with Orgaworld B.V. Short term SSO processing contracts were also initially established with Halton Recycling Ltd and currently with GSI Environnement to provide local municipalities with sufficient contingency capacity to allow them to start their collection programs with confidence.

Technical and financial support was provided to the Town of Markham in 2004 to facilitate the roll out of SSO collection as a Regional pilot. A pilot project was also initiated in partnership with the Township of King in late 2005 to evaluate the value of a local yard waste public drop-off.

4.1.5 Expansion of the Region’s Household Hazardous Waste Program

In the summer of 2005 the Region commissioned a new Household Hazardous Waste (HHW) facility in the City of Vaughan. In May of 2006 the Region’s HHW program was expanded to include fluorescent tubes. That same month the Region rolled out a multi-media campaign to promote the proper disposal of HHW and location of the Region’s new HHW facilities.

4.1.6 Delivery of Reuse Events With Goodwill Industries

Between Jan 2004 and October 2005 the Region developed a working partnership with Goodwill Industries to increase local diversion of textiles and reusable goods. To date, the Region has established 7 annual collection events throughout the Region diverting almost 15,000 kgs of reusable goods to date. Most recently it provided support to Goodwill in establishing a curbside collection program. Several of the local municipalities have also followed the Region's example by partnering with Goodwill to establish local drop-off locations.

4.1.7 Promotion of Litter Prevention Through Local Schools

In 2004 the Region completed a joint study, with the Regions of Peel and Durham and City of Toronto, of litter levels throughout the GTA. The Region developed a 5 year litter prevention strategy in response to the outcome. The strategy was recognized that year with an award of merit by the Recycling Council of Ontario. While subsequently cancelled during the development of the 2005 budget, the Region continues to organize annual litter pick up's by local schools. In 2005, over 9,500 students and teachers participated picking up over 4,300 kgs of garbage from local street-sides, parks and school yards.

4.1.8 Award Winning Promotion and Education (P&E) Initiatives

In the past two years Regional staff has upgraded the Region's waste management print and web site materials and developed a range of P&E materials in support of, and in cooperation with, local municipalities. The Region also launched three award winning campaigns to encourage litter prevention, support the new blue box program and improve yard waste diversion. Blue box and yard waste diversion levels have both increased 17% and 8% respectively in part as a result of these efforts.

4.1.9 Development of a Long Term Waste Disposal Option

In April of 2005 York Region entered into a joint environmental assessment (EA) with Durham Region to establish a plan for the long term management of both jurisdictions' residual waste. In May of 2006 Council received the EA consultant's report evaluating technological alternatives to managing the Region's residual waste. Thermal treatment of mixed solid waste with energy recovery and material recovery from the ash/char was recommended.

4.1.10 Development of a Joint Municipal Waste Diversion Strategy

Development of a waste diversion strategy in partnership with the local municipalities was also approved by Regional Council in January of 2006. This strategy was intended to compliment the EA process by exploring means to maximize waste diversion so that the total amount of residual waste to be managed under the EA could be accurately assessed. In May of 2006 Council approved, in principle, the draft strategy developed by local municipal and Regional staff subject to the results of public consultation planned for the following month with a goal to increase waste diversion to at least 65% through:

- The following seven priority initiatives:
  - Source Separated Organics
  - Optimized Blue Box
  - Community Environmental Centres

  - Bag Limits/Financial Incentive
  - Enhanced Promotion and Education and Public Outreach
  - Diversion of Textiles
  - Infrastructure Development

- The following four future initiatives for consideration:
  - Bi-weekly Yard Waste Collection
  - Mandatory Recycling By-law
  - Advocacy
  - Small Quantity ICI Waste Generators

Further consideration of diverting construction and demolition waste was not supported by the local municipalities as it was felt that this material was not a significant part of the waste they collect at curbside.

Technical and financial support was also committed in the fall of 2005 to the City of Vaughan's "Greening Vaughan" waste management plan.

4.1.11 Dongara Pelletization Proposal

In December 2005 Regional Council awarded a contract to Dongara Developments Inc to manage 100,000 tonnes per year of residual waste for a period of 20 years. The proposal would see residual waste processed to remove any remaining recyclables and then converted to a coal replacement through pelletization.

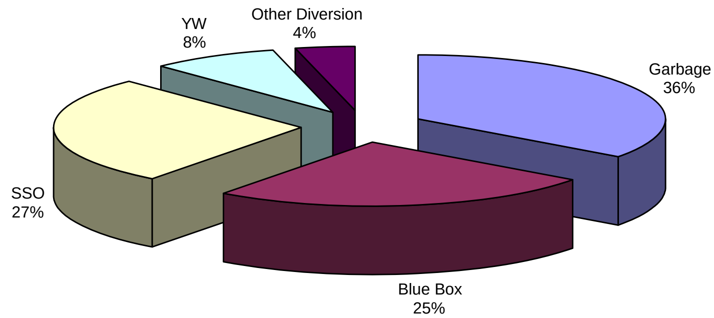
4.2 Looking to The Future

Since 2003 the Region's population had grown at an average rate of almost 3%. By 2021 the population is expected to reach almost 1,200,000 and will generate an estimated 450,000 tonnes of waste.

Expansion of the blue box program combined with implementation of SSO collection by the local municipalities and the various options recommended as part of the proposed Waste Diversion Strategy, discussed under Section 4.1.9, is expected to increase the Region's diversion rate to at least 64% (*see Diagram 1*). Development of CEC's throughout the Region and implementation of options such as improved yard waste recovery, if pursued, are expected to further increase this level.

Diagram 1

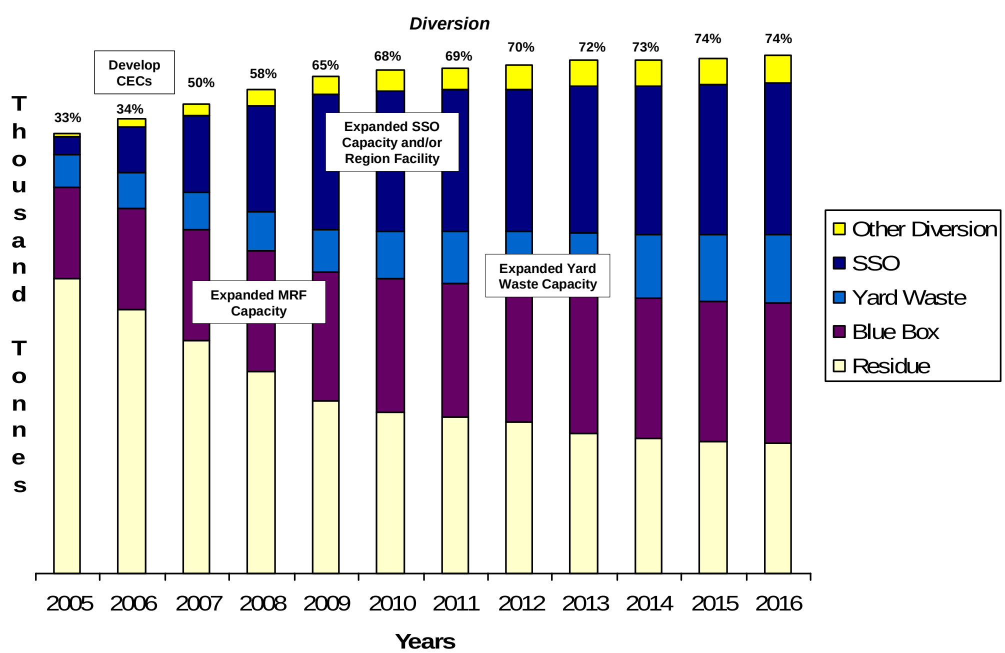
Projected Regional Diversion Rate by 2008



Combined with successful implementation of the Dongara proposal these options are expected to be sufficient to eliminate the Region's dependence on exporting waste to Michigan. Ongoing development of additional Regional waste management infrastructure will, however, be required to permit timely implementation of the various options as proposed (*see Diagram 2*). This additional infrastructure is also expected to improve the cost competitiveness of the Region's waste management system over time.

Diagram 2

Projected Regional Infrastructure Requirements



4.3 Relationship to Vision 2026

The activities and initiatives planned by Solid Waste Management Committee and approved by Council are consistent with several of the stated goals of the Region's Vision 2026 plan including:

Goal 2 – Enhanced Environment, Heritage and Culture
Goal 7 – Infrastructure for a Growing Region

5. FINANCIAL IMPLICATIONS

Tables 1 and 2 below provide an overview of the change in budget between 2003 and 2006. As can be seen, net operating costs increased by over 30% largely as a result of lower revenues and increased processing costs associated with single-stream blue box recyclables and source separated organics. Capital expenditures have been driven primarily by the development of the Garfield Wright Waste Management Centre.

Table 1
Operating Cost from KPI Comparison

Operating Cost (KPI)	2003	%	2004	%	2005	%	2006	%
Disposal Cost ('000s)	15,612		15,932		15,043		16,185	
Disposal Tonnes	224,542	76%	228,698	76%	212,867	69%	213,000	66%
Disposal Cost / Tonne	$ 70		$ 70		$ 71		$ 76	
Diversion Cost ('000s)	5,588		5,867		9,876		13,738	
Diversion Tonnes	69,481	24%	73,988	24%	97,124	31%	111,041	34%
Diversion Cost / Tonne	$ 80		$ 79		$ 102		$ 124	
('000s) Total Operating Cost	**$21,200**		**$21,799**		**$24,919**		**$29,922**	
Total Tonnes (MPMP)	**294,023**	**100%**	**302,686**	**100%**	**309,991**	**100%**	**324,041**	**100%**
Revenue ('000s)								
Sale of Material	4,289		5,681		5,659		5,246	
Other Revenue	1,112		1,422		1,392		1,029	
Total Revenue	**5,401**		**7,103**		**7,050**		**6,275**	
Net Operating Cost	**$16,911**		**$16,118**		**$19,260**		**$24,676**	

Note: ALHB all cost transferred to Roads Dept., not including WDO funding

Table 2
Capital Reserve Expenditures

('000's)

Capital Cost	2003	%	2004	%	2005	%	2006	%
Waste Transfer Stn Georgina					149	2%	151	2%
Residual Waste Management - EA					307	4%	713	9%
Garfield Wright Site Development	266	4%	4,118	19%	96	1%	504	6%
New Waste Management Initiatives	182	3%	139	1%	74	1%	1,480	18%
HHW Depot - Vaughan	88	1%	616	3%	786	10%	-	0%
Garfield Wright Facility	6,140	90%	16,624	77%	6,266	81%	1,075	13%
Public Drop-off	178	3%	15	0%	19	0%	4,394	53%
OMBI	2	0%	4	0%		0%		0%
Total Capital Cost (Reserve)	**6,856**	**100%**	**21,515**	**100%**	**7,697**	**100%**	**8,317**	**100%**

6. LOCAL MUNICIPAL IMPACT

Regional staff has to-date and will continue to work closely with local municipal staff to ensure the effective and efficient roll-out of the waste management initiatives and programs at both levels.

7. CONCLUSION

In the past three years Committee and Council has taken decisive steps to address the Region's reliance on exporting waste to Michigan. Major program and infrastructure commitments have been successfully implemented and plans are under way for further expansion including development of an overall strategy to improve diversion and residual waste management.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is attached to this report.)