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Green Action Centre Comments to the Standing Policy Committee on Infrastructure Renewal and Public Works on The Winnipeg Public Service's Garbage and Recycling Master Plan Recommendations

October 3, 2011

SUMMARY OF RECOMMENDATIONS

Green Action Centre recommends approval of the Public Service Garbage and Recycling Master Plan with the following amendments.

- 1. Indicate that 50% diversion by 2020 is an interim target, which should be exceeded in future years.
- 2. Insure the continued development of local recycling opportunities such as additional blue box materials (e.g. metals) and smaller scale collection depots and bins in neighbourhoods, shopping centres and retail outlets.
- 3. Insure that waste reduction and re-use initiatives are targeted in the plan, in promotion and education for the plan, and in seeking regulatory and program support from senior governments.
- 4. Insure that a full-scale organics facility can handle the full range of residential, commercial and city organic waste and can yield useful products, such as compost and bio-gas (which might power collection vehicles, as Toronto is doing). Begin a source separated organics trial in 2013.
- 5. Add small and medium cart sizes to the large and extra-large included in the Public Service plan and charge a graduated fee based on cart size (e.g. \$3.00, \$4.00, \$5.00 and \$6.00 / month). Confirm whether or not the proposed charges include proportional shares of landfilling costs in addition to collection and hauling costs.
- 6. Direct city staff to prepare specific proposals for waste diversion from multi-family dwellings, including a regulation requiring landlords to enable tenant recycling, within the next 6 months for action by City Council. Multi-family dwellings should meet the same requirements to recycle as single family households.
- 7. Petition and pressure the Province to establish a level playing field of regulation and incentives in the Capital Region or the Province to promote the diversion of IC&I and C&D wastes.
- 8. Create a continuing citizens' advisory or working group to assist in the completion of the CIWMP and its implementation and conduct other public consultation as needed.



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Green Action Centre welcomes the Winnipeg Public Service recommendation that Council approve a Comprehensive Integrated Waste Management Strategy for implementation starting in 2012, but with a recognition that the current proposal falls short of comprehensiveness and that several improvements are needed for the plan to realize its potential.

1. The Status Quo Isn't Acceptable and High Diversion Rates Can Be Achieved

Winnipeg has among the lowest residential waste diversion rates of larger Canadian cities.

-	Winnipeg	16%
-	Regina	16%
-	Saskatoon	23%
-	Hamilton	49%
-	Metro Vancouver	55%
-	Halifax	57%
-	Edmonton	60%
_	Toronto	67%

- The other cities listed above all have adopted Comprehensive Integrated Waste Management Plans (CIWMPs) to achieve the levels of waste diversion. For example, Hamilton adopted a CIWMP in 2001 and saw its diversion rate increase from 17% to 49% by 2009.
- Winnipeg's goal to exceed 50% diversion by 2020 should be regarded as an interim target if the full potential of its CIWMP is to be realized.

2. The Proposed Menu of Waste Diversion Activities and Costs are Reasonable and Achieve Significant Reductions in Waste Going to Landfill and in GHG emissions.

- To reach a 35 to 37 per cent diversion rate, the Winnipeg Public Service recommends that an
 integrated system of garbage and recycling carts, leaf and yard waste and Community Resource
 Recovery Centres (CRRCs) be implemented together, as they are interdependent elements (see,
 page 11 of the Administrative Report). Green Action Centre supports this mix and the proposed
 start date of 2012.
- At the same time, Green Action Centre is concerned that the CRRCs will be largely car- and truck-dependent facilities and believes that there is a need for continuous improvement in more local recycling opportunities, including such measures as an increase in the range of recyclables captured in the curbside program (e.g. scrap metal, which would add value) and the expansion of smaller scale collection depots and bins in neighbourhoods or shopping centres (such as the Canadian Diabetes collection bins and steward recycling programs at retail outlets). We

- understand that the Public Service intends to partner with various stewards. Locally accessible collection should be a prominent criterion in those discussions.
- The consultant (Stantec) costed out the components of the city plan and provided a breakdown
 of the unit costs and benefits of the options in the near- and longer-term. Appendix 1 presents
 Green Action Centre's summary of these costs, on a unit basis, along with reductions in
 Greenhouse Gas emissions.
 - o In the near-term, the average cost per tonne of material diverted is \$83 and rises slightly to \$119 per tonne in the longer term.
 - o The diversion rate increases to 35% in the near term and to 55% in the longer-term.
- Due to the higher diversion rates, greenhouse gas emissions are reduced by 250,000 tonnes per year of CO² equivalent, in the near-term, and by 432,000 tonnes of CO² equivalent per year in the longer-term.
- However, the Winnipeg Public Service report does <u>not</u> contain recommendations regarding the promotion of waste reduction and re-use, which was a component of the Stantec proposal. Under the heading of *Reduction and Re-use*, the Stantec report (pages 41 to 49) included the promotion of backyard and community composting, re-use initiatives with community partners, establishment of a per capita residential waste reduction target, grasscycling, community based social marketing and the promotion of waste minimization legislation and programs at the federal and provincial levels.
- Green Action Centre strongly recommends that these measures be included in the City's CIWMP.

3. In order to achieve high rates of diversion, it is essential that a curbside organics collection system be instituted across the city.

- In the near-term, the Winnipeg Public Service recommends that a source separated organics (kitchen organics) trial be conducted for residential households in 2014; and that, based on the results, recommendations for a full-scale program be brought forward to City Council (see recommendation #12).
- Green Action Centre strongly endorses this proposal for several reasons. First, without a
 curbside organics collection system in place, the City will not achieve its 50 per cent waste
 diversion target. On its own, a fully developed organics collection and composting program will
 remove close to 100,000 tonnes from the landfill, raising the diversion rate by 28 percentage
 points. Second, organics are the biggest source of GHG emissions at the landfill and reducing
 the level of those emissions requires the composting of organics. Third, having both an organic
 and non-organic collection system will enable the City to move to a bi-weekly system of garbage
 collection, resulting in significant savings.
- Green Action Centre recommends that the source separated organics trial begin in 2013 to allow sufficient time for learning and adjustment.
- In addition, Green Action Centre recommends that, in considering the development of a full-scale program of organics collection and processing, the City look to building a facility that will handle a broad range of organics from residential, commercial and city sources and that can

produce bio-gas as a product which then can be used to power the fleet of vehicles collecting the waste and waste diversion streams of materials. Toronto is building such a system.

4. The Method of Financing the CIWMP should provide incentives for people to reduce the amount of garbage they put out.

- The Winnipeg Public Service report recommends that City Council approve a user fee charge of \$4.17 per single-family dwelling (SFD) unit per month, billed quarterly (\$12.50) on the water bill to cover the cost of garbage collection (see, recommendation #21). This would be used to cover the cost of collecting garbage via the recommended 240-litre automated cart collection system for all SFDs in the City (see, recommendation #1). As the Stantec report indicates, this flat rate fee of \$50 per year per single family dwelling (SFD) will cover the average per dwelling cost of \$40 for garbage collection and add a \$10 per household fee for a reserve fund to pay for capital costs of expansion of the diversion programs. The \$40 per household fee raises the \$7.6 million it costs the city to collect garbage from Single Family Dwellings.
- It is not clear whether the \$40 per household annual fee includes the full cost of garbage disposal or just the pick-up and hauling. The Public Service should be asked to clarify whether other revenues still subsidize the \$43/tonne tipping fee, including the \$10/tonne WRARS levy, which represents the cost of landfilling garbage.
- The advantage of a fee for garbage collection is that it ends a portion of the cross-subsidization of the costs of garbage disposal from all taxpayers including the IC&I and farming sectors, which separately have to pay for their own garbage collection services. The disadvantage is that it ignores the ability to pay which is somewhat but very imperfectly captured by the property tax.
- On balance, Green Action Centre endorses a fee-approach to covering some of the costs of garbage disposal, but only if it takes the form of a graduated fee schedule that is based on the size of the cart selected by the household for garbage. Toronto has a system of automated carts that features four different cart sizes small, medium, large (Winnipeg's proposed cart size) and extra-large. For those using the small size, the household gets a credit of \$2.84 per year while those using the other sized carts are charged, \$48, \$145 and \$204 per year, respectively. This is the approach Green Action Centre recommends, as (a) it provides a financial incentive for households to reduce the amount of garbage they produce, and (b) better reflects the actual collection and disposal costs imposed on the system in proportion to the volume of garbage produced and collected.
- Note that Toronto's carts and fees reflect biweekly garbage collection, in contrast to the planned weekly collection in Winnipeg in the early years. In other words, under the proposed Public Service plan, Winnipeggers are provided double the weekly capacity that Torontonians are provided with the large-sized carts. This directly undermines the objective of achieving high diversion rates. If yard waste, recyclables and bulky objects are collected, a household that composts its kitchen wastes and conscientiously diverts other materials should ordinarily have only a small volume of residuals left to collect as garbage. The 2009 residential waste composition study conducted by StewardEdge demonstrates that the largest portion of household discards is divertible (Appendix 2). Unfortunately the public review open houses and surveys failed to present the Toronto graduated system as an option, although we raised it on

the public consultation blog. A recent letter in the Winnipeg Free Press well expresses the great excess in capacity that the large carts provide and unfairness of subsidizing those who fail to divert more (Appendix 3). How will we ever get to the considerable savings of biweekly garbage collection if our cart deployment encourages the continuation of high levels of household waste?

Hence Green Action Centre recommends Winnipeg households be offered the four cart sizes
that Toronto residents are offered (i.e. adding the two smaller sizes to the two larger sizes
contained in the Public Service report) and adjusting the proposed fee structure approximately
as follows.

small (75 litres = 1 bag) - \$3.00/month or \$36/year
 medium (120 litres = 1 ½ bags) - \$4.00/month or \$48/year
 large (240 litres = 3 bags) - \$5.00/month or \$60/year
 extra-large (360 litres = 4 ½ bags) - \$6.00/month or \$72/year

These suggested fees are notional and intended to generate the same cost recovery as the Public Service plan. The merits of having a round monthly fee or a zero charge for the smallest cart can also be discussed.

- The Public Service recommendation to use only large and extra-large sized garbage carts may be driven in part by the desire to maintain consistency throughout the city with the deployment of carts in the northwest quadrant last year. But that decision was made before a deep review of waste and diversion was commissioned and it should not override the implementation of an optimal plan. Northwest residents should be allowed to trade in too-large carts for more appropriate sizes. In fact surveying them now after a year's experience to ascertain what their choices might be could be one basis for estimating city-wide choices a year from now. Consultation with Toronto's waste department on the distribution of choices between the four container sizes would be another basis.
- The Winnipeg Public Service report is silent about how garbage collection costs would be recouped from multiple family dwellings. Yet, the Stantec report (see, Table 4.13 on page 166) recommends that the remaining \$3.4 million in garbage collection costs be raised from the multiple family dwellings (MFD) via an increase to the aggregate levy on those properties. Thus, it proposes a flat fee for SFDs and an increase in the tax levy on MFDs. This creates an uneven manner of raising revenues but may be the only practical way of raising the revenues from the MFD households.
- Green Action Centre supports the Stantec proposal for covering the costs of garbage collection from the MFD households and recommends that City Council implement that approach.

5. More needs to be done to encourage waste diversion from multi-family dwellings

- The Stantec final report (see, page 21) shows that the waste diversion rate for multi-family dwellings is only 14 per cent, compared to 16 per cent for single family dwellings. It also shows that multi-family dwellings contribute 15 per cent of all of the residential waste going to the landfill.
- Yet, the Winnipeg Public Service Recommendations contain no concrete provisions for diverting waste materials from multi-family dwellings. Recommendation #17 calls for discussions with

- the multifamily residential sector be ongoing for future program improvements including, but not limited to, improved recycling and possible future source separated organics.
- Green Action Centre urges the City Council to direct City staff to prepare specific proposals for
 waste diversion from multi-family dwellings, including a regulation requiring landlords to enable
 tenant recycling, within the next 6 months for action by City Council. Multi-family dwellings
 should meet the same requirements to recycle as single family households.

6. Much more needs to be done to address the amount of waste generated and landfilled by the Institutional, Commercial &Industrial (IC&I) and Construction &Demolition (C&D) sectors

- The Winnipeg Public Service report contains only two recommendations regarding the
 treatment of the waste generated by the IC&I and C&D sectors. Number 27 recommends that
 small commercial establishments be eligible for the same waste diversion services as the SFD
 sector and be charged the same amount. Number 29 recommends that discussions with IC&I
 and C&D sectors be ongoing for future program improvements.
- These recommendations are totally inadequate to address the magnitude of the waste generated by these two sectors. The Stantec report indicates that the residential sector currently generates 341,000 tonnes of waste per year of which 15 per cent is diverted. By comparison, the IC&I sector generates 348,000 tonnes and the C&D sector generates a further 124,000 tonnes for a total of 472,000 tonnes. Of that total amount, the City handles only 19 per cent, with less than 1 per cent of it being diverted from the landfill.
- The Stantec report (see pages 109 to 128) offers a number of good suggestions for how the City could encourage these two sectors to divert more materials. It suggests that in the near-term, these measures could result in a 31% diversion rate for the IC&I sector and a 24% diversion rate for the C&D sector.
- Green Action Centre recommends that the City implement these proposals.
- Yet, to achieve higher diversion rates will require the involvement of the Provincial government. On page 109, the report states, ". . . in order to maximize IC&I and C&D diversion, the Province should regulate this activity. Regulations could include requirements for generators to develop and implement diversion plans." On page 123, the report recommends that the City implement a mandatory diversion by-law for IC&I and C&D generators and a landfill ban on certain materials.
- Yet, these bans will be effective only if instituted province-wide because of the presence of the other two landfill sites close to Winnipeg.
- Thus, Green Action Centre strongly recommends that the City petition and pressure the provincial government to get involved in creating a level playing field at least in the Capital Region and preferably province-wide. In addition, Green Action Centre recommends that the cost of landfilling for these two sectors be increased to give them the financial incentive to ship their materials to Material Recovery Facilities. This can be done by the province raising the current WRARs levy from \$10/tonne to at least the cost of taking materials to the MRFs.

- 7. Because the current Public Service plan is incomplete, it is important to maintain citizens' input to assist in fleshing out the rest of the plan and addressing issues of implementation.
 - Toronto used volunteer working groups of citizens with some background or expertise e.g. see http://www.toronto.ca/garbage/rwwg/members.htm
 - Seattle maintains a continuing citizen's solid waste advisory committee e.g. see http://www.seattle.gov/util/About_SPU/Management/CitizenAdvisoryCommitees/index.htm.
 - Various open houses, forums and surveys can provide additional opportunities for communication and response, as needed.

Appendix 1

Costs and Benefits of the Proposed CIWMP as Contained in the Stantec Final Report

CURRENT RESIDENTIAL WASTE MANAGEMENT SYSTEM (2009)

Total Tonnes Generated: 341,542 Total Tonnes Diverted: 53,800

Diversion Rate: 15.7%

Total Annual Cost of Waste Diversion Programs: Gross=\$9.750 M; Net=\$3.676 M

Net Cost Per Tonne Diverted: \$63.33

CONCEPTUAL NEAR-TERM SYSTEM

Component	Total Average Annual Additional Cost ¹ (\$000'S)	Total Additional Tonnes Diverted ² (000'S) (Per cent Diverted)	Annual Cost per Tonne Diverted	Change in GHG's Emitted (Tonnes of CO ² Equivalent) ³ (000's)
Admin. & Operational Support	\$415.0			
Reduction & Reuse	\$689.0	7.0 (2%)	\$98	
Resource Recovery	\$933.3	17.0 (5%)	\$55	
Recycling	\$689.0	30.0 (9%)	\$23	
Organics	\$4,012.9	21.0 (6%)	\$191	
Collection	(\$517.2)			
TOTAL	\$6,222.1	75.0 (21%)	\$83	-250.0

Note: The annual average as calculated from Table 4.6 of the Stantec final report.

CONCEPTUAL MID TO LONGER-TERM SYSTEM

Component	Total Average Annual Additional Cost ¹ (\$000's)	Total Additional Tonnes Diverted ² (000's) (Per cent Diverted)	Annual Cost per Tonne Diverted	Change in GHG's Emitted (Tonnes of CO ² Equivalent) ³ (000's)
Admin. & Operational Support	\$270.0			
Reduction & Reuse	\$697.6	12.0 (3%)	\$58	
Resource Recovery	\$2,687.2	43.0 (12%)	\$62	
Recycling	(\$47.4)	40.0 (11%)	(\$1.2)	
Organics	\$20,051.0	97.0 (28%)	\$206	
Collection	(\$1,271.6)			
TOTAL	\$22,800.0	192.0 (55%)	\$119	-432.0

Note: ¹ The annual average as calculated from Table 4.7 of the Stantec final report.

² See Table 2.28 for the tonnes diverted.

³ See Table 3.1 for the GHG estimates.

² See Table 2.38 for the tonnes diverted.

³ See Table 3.3 for the GHG estimates.

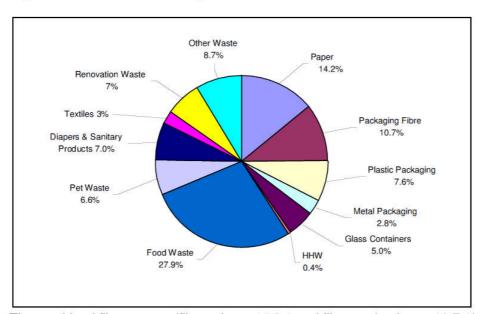
NOTE THAT THE WASTE COMPOSITION ANALYSIS DIAGRAMMED BELOW EXCLUDES YARD WASTE, WHICH INCREASES THE DIVERTIBLE PORTION OF HOUSEHOLD DISCARDS WELL BEYOND 50%.

3.0 Waste Composition Analysis

3.1. Overall Waste Composition

A graphical breakdown of the main categories of material included in the study is found in Figure 1.7

Figure 1 - Overall Waste Composition



The combined fibre stream (fibre print at 14.2% and fibre packaging at 10.7%) and the food waste stream (27.9%) comprise over 50% of the waste stream by weight.

StewardEdge Inc 15 October 2009

⁷ The Print Fibre and Packaging Fibre categories include all fibre materials and not just those that are eligible for MPSC funding.

Appendix 3

Winnipeg Free Press

LETTERS TO THE EDITOR

Posted: 09/28/2011 1:00 AM

One thing that is overlooked by the city is that some households have very little garbage. The wheeled auto bins that we have seen around the city are far too big.

We would take about three weeks to fill one in winter and about twice that in summer. We compost and recycle.

It is grossly unfair that we, with so little garbage, should have to pay the same as those who fill one every time. If they can organize extra charges for extra disposal then they should be able to reduce charges for less.

I understand the carts have chips to identify the client household. Surely these could be used to charge payment for each time it is emptied. This would be much more equitable and I'm sure the technology is available.

GORDON LOVATT Winnipeg