

ADOPTED by Council at its meeting held December 21, 2015 [B44-2015]

/AC

Windsor, Ontario December 21, 2015

REPORT NO. 319 of the
ENVIRONMENT, TRANSPORTATION & PUBLIC SAFETY
STANDING COMMITTEE
of its meeting held November 18, 2015

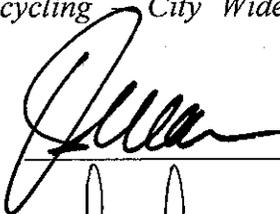
Present:
Councillor Fred Francis
Councillor Chris Holt
Councillor Bill Marra (Chair)
Councillor Hilary Payne
Councillor Paul Borrelli

That the following recommendations of the Environment, Transportation and Public Safety Standing Committee **BE APPROVED:**

Moved by Councillor Francis, seconded by Councillor Borrelli,
That the report of the City Engineer dated October 30, 2015 entitled—CQ62-2011—Mandatory Recycling—City Wide **BE RECEIVED** for information.
Carried.

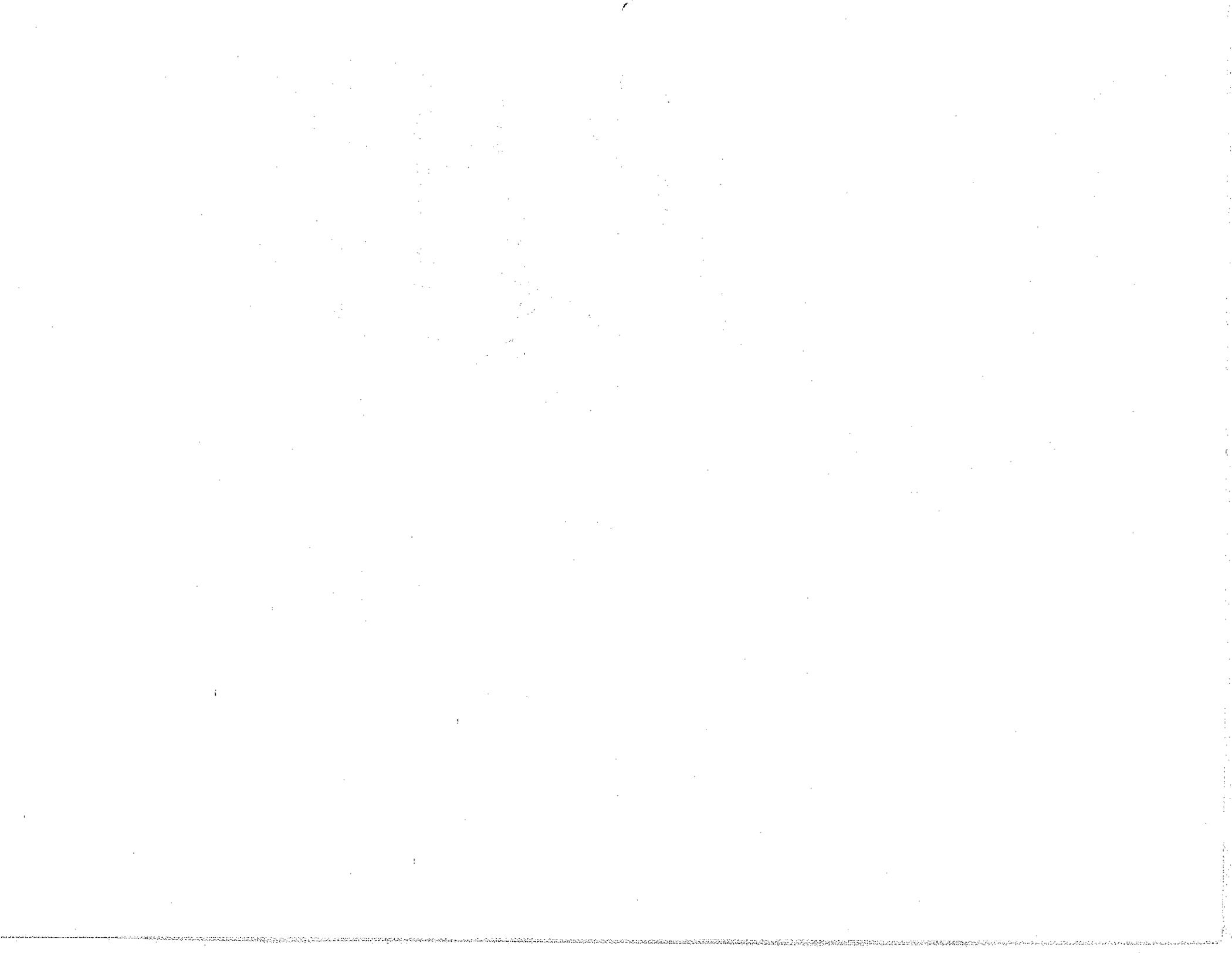
S 28/2015 EI2015

Clerk's Note: The report of the Manager of Environmental Services dated October 30, 2015 entitled "CQ62-2011 - Mandatory Recycling - City Wide" is attached as background information.


CHAIRPERSON

SUPERVISOR OF COUNCIL SERVICES

NOTIFICATION:	
NAME	CONTACT INFORMATION





Public Works - Operations

MISSION STATEMENT

"Our City is built on relationships – between citizens and their government, businesses and public institutions, city and region – all interconnected, mutually supportive, and focused on the brightest future we can create together"

REPORT #: S 28/2015	Report Date: 10/30/2015 (PW#5054)
Author's Contact: Anne-Marie Albidone Manager of Environmental Services 519-974-2277 ext. 3123 aalbidone@citywindsor.ca	Date to Council: November 18, 2015
	Clerk's File #: EI2015

To: Mayor and Members of City Council

Subject: CQ62-2011 – Mandatory Recycling - City Wide

RECOMMENDATION:

To Council FOR INFORMATION.

EXECUTIVE SUMMARY:

N/A

BACKGROUND:

On October 3, 2011, CQ 62-2011 was registered which:

"Asks that Administration review By-law 2-2006 and any other Solid Waste/Recycling By-laws and Policies for the purpose of updating the by-law to make recycling mandatory for residential, commercial and multi-residential property owners and occupants."

This report is provided to Council in response to CQ62-2011.

It should be noted that some Industrial, Commercial & Institutional properties are already required to have some level of source separation programs under Ontario Regulation 103/94 of the *Environmental Protection Act*. They are:

- Retail Shopping Establishments (>10,000m²);
- Retail Shopping Complexes (>10,000m²);

- Large Construction Projects (>2,000m²);
- Large Demolition Projects (>2,000m²);
- Office Buildings (>10,000m²);
- Multi-Unit Residential Buildings (>6 Units);
- Restaurants (>\$3,000,000/year sales for all restaurants in Ontario under the same owner);
- Hotels and Motels (>75 Units);
- Hospitals (A, B, or F classified);
- Educational Institutions (Enrollment >350 Persons); and
- Large Manufacturing Establishments (>16,000 hours in any month over the last 2 calendar years).

The source separation programs required under Ontario Regulation 103/94 must include:

- The provision of facilities for the collection, handling and storage of source separated wastes adequate for the quantities of anticipated wastes.
- Measures to ensure that the source separated waste that are collected are removed.
- The provision of information to users and potential users of the program.
- Describing the performance of the program.
- Encouraging effective source separation of waste and full use of the program.
- Reasonable efforts to ensure that full use is made of the program and that the separated waste is reused or recycled.
- A source separation program required under this regulation must provide for all the categories of waste set out in the part of the Schedule applicable to the person required to implement the program except for categories of waste that cannot be reasonably anticipated.

The enforcement of this regulation falls to the MOE. The Essex Windsor Solid Waste Authority has and continues to reach out to Industrial, Commercial and Institutional properties to assist them in meeting their requirements.

DISCUSSION:

By-law Review

Administration has reviewed the Waste Collection By-law 2-2006 with respect to making recycling mandatory for residential, commercial and multi-residential property owners and occupants.

Mandatory recycling can be implemented and enforced through a by-law that:

- a. Bans recyclable and other materials from disposal in the landfill; or
- b. Prohibits recyclable materials from being placed in the garbage; or
- c. Both.

In all three options actual enforcement of recycling activities is problematic in that the detection of recyclable materials in the waste stream is not obvious at the curb for the following main reasons:

- The City does not require the use of clear garbage bags when setting out waste for collection. In fact, the City recently amended By-law 2-2006 to require waste to be set out in hard-sided containers. This new regulation was created to discourage the proliferation of urban rodents and other animals (i.e. skunks, raccoons, opossums, rats etc.) by eliminating a major food source. Doing so also reduces messy litter from torn garbage bags. Without using clear bags (and not dark bags or hard-sided containers) it will not be possible to determine on waste collection day if a resident has placed recycling material in the waste stream. Short of ripping (dark) bag(s) open at the curb, waste collectors will not otherwise know if a resident or business is recycling. Even if a curbside inspection were to be performed and some recyclable material is found in the garbage, it may have been placed there innocently (i.e. resident didn't know the material was recyclable) or accidentally (placed in the wrong receptacle by a young family member, for example). Furthermore, it is unlikely that the waste collection company contracted to collect garbage would be willing to conduct inspections as this would put the collector at risk of injury from hidden hazards within the waste. Even if they were to agree to such a service, it would have to be negotiated and the additional cost could be significant.
- As the City currently has different waste and recycling collection days for residents, a waste collector will not see the resident's or businesses' recycling effort which is placed out on a different collection day. Collection days could be altered to mirror those of waste collection; however this would only be advisable at the development of the next waste and recycling collection tenders. Doing so now would solicit an increase in fees from the current service provider. Furthermore, residents (or businesses) are not compelled to put out waste or recycling out for every collection cycle so if a recycle box is absent one collection period it may appear the next time. (i.e. resident is/was away and didn't generate material or box wasn't full enough to warrant putting it out for collection). A missing recycle box doesn't necessarily mean that all recyclable material went into the waste stream.

The issue of enforcement requires a pragmatic solution, one that will achieve the desired results while not being seen as heavy handed or intrusive by residents. One

approach could be that active enforcement should be reserved for residents who blatantly and willfully make no attempt to recycle. i.e. repeated and obvious recyclable material out for garbage collection. Even with only enforcing the blatant examples of not recycling, the level of enforcement and associated penalty will have to be considered. Will a warning or multiple warnings be given? (A warning might involve leaving educational material affixed to their garbage can or recycling box). If the blatant disregard for recycling continues, will a ticket be issued by By-law Enforcement or will waste collection services be withheld for a period of time? Each of these alternatives will require staff and/or contractor resources to track and enforce recycling activity. Finally, if the By-law does not get enforced on all (i.e. only on the blatant) how is a resident to know if they are at risk of penalty? It does not seem reasonable to have a By-law and only apply that By-law to a subjective interpretation of "blatant".

Administration is in favour of encouraging recycling for all residential, commercial and multi-residential property owners through education, example and service delivery modification. The importance of each recommended supporting components are discussed further below.

Education Initiatives – Focused on the 3R's (Reduce, Re-use, Re-cycle)

Residents are sometimes unsure what materials are recyclable. Education is also helpful in promoting the benefits of recycling and encouraging specific behaviour. Additional benefits of an educational promotion program include:

- Greater participation levels and community involvement;
- Higher diversion rates; and
- Less contamination in recovered materials, potentially leading to higher revenues when the recyclable commodities are sold.

Administration has had great success in improving the recycling rate through education efforts. For example, recently Environmental Services conducted a waste audit at Adventure Bay. The result of the waste audit indicated that the facility was only recycling about 10%. Management at the facility was approached with the results and they were very eager to improve them. Environmental Services made a number of suggestions to improve their diversion rate (which had very little cost implications). A subsequent spot audit found that 51% of recycling material is now being diverted.

Similarly, through the use of social media and other forms of communication, residents and businesses in Windsor could be reminded and/or enlightened with respect to recycling requirements. Such communication could also promote the benefits of pre-cycling. Pre-cycling focuses on the first two of the "3Rs": reduce and reuse. Pre-cycling stops waste before it is created, whereas recycling (the third "R") takes waste

that is created and turns it into something else. Examples of pre-cycling include using re-usable grocery bags and re-usable drinking bottles.

Leading by example

Recently Council approved a Corporate recycling initiative comprising of consistent messaging and convenient access to recycling containers in all city facilities. It is expected that this action will increase diversion in Corporate facilities. Council is reminded that the programming approved does not include any enforcement.

Service Delivery Modifications

One of the best ways to improve recycling efforts is to make recycling as easy and as convenient as possible. Education will help with sorting of the material but one of the other key problems is the storage of recyclable materials for a two week-period. Many homeowners who are passionate recyclers find it a challenge to store two weeks of recycling in their bins provided by the City. Many residents do not have storage space for additional bins. Once their designated bins are full, some homeowners may discard recyclables in their weekly trash. This was partially evidenced by the increased diversion achieved when the EWSWA introduced larger blue bins. More recycling was captured in the blue box partly because of the increased capacity of the bin. It is not possible to further increase the size of the bins for health and safety reasons. The City offers free drop-off of all recyclables, electronics, scrap metal and residential household chemical waste items at the Public Drop Off Depot, which helps with excess recycling. However, this is not always a convenient option.

Administration intends to investigate the waste and recycling collection frequencies in the next waste and recycling tenders. Specifically, the EWSWA Board of Directors has given direction to receive information from bidders on weekly recycling collection and bi-weekly waste collection.

Recycling collection has been bi-weekly in Windsor since its inception in 1988. There are two main reasons the collection rate was set at bi-weekly:

- 1) Fear that there wouldn't be enough recycling materials to warrant weekly collection. Certainly, that is no longer the case as many households fill their recycling containers sooner than the current bi-weekly collection; and
- 2) Garbage collection is performed weekly. Ontario Regulation 101/94 of the *Environmental Protection Act*, s. 7(5) requires that "*The frequency of the collection of source separated blue box waste required under clause (2) (a) must be at least half the frequency at which municipal waste is collected directly from the sources of the waste*"; therefore, recycling collection has to be done at least bi-weekly.

Many municipalities in Ontario already offer weekly recycling collection, such as Waterloo, Ottawa, Niagara, Hamilton, Halton and Durham.

Each of the service delivery modifications noted above are estimated by EWSWA to be at least as effective as making mandatory recycling in terms of increasing diversion. EWSWA estimates that weekly collection of recyclables would increase diversion by 2% - 3% or 3,100 to 4,600 tonnes (county wide).¹

EWSWA's 2011 Solid Waste Management Master Plan

In 2011, EWSWA recommended that the Essex-Windsor municipalities and EWSWA collectively discuss the feasibility of introducing mandatory recycling in Essex-Windsor and suggested that such discussion should include:

- Whether mandatory recycling is introduced in a new or existing municipal by-law;
- The purpose of mandatory recycling in Essex-Windsor and how it would be used (e.g., as an educational tool, degree of enforcement, etc);
- What constitutes "recycling" (e.g., a certain number of blue box set-outs during a period of time, blue box materials prohibited from being placed in the garbage, etc);
- The level of enforcement (e.g., passive or active enforcement, use of fines or refusal of garbage collection service, etc);
- Examples of how mandatory recycling has been implemented in other municipalities, including wording used in other by-laws or policies; and
- The need for it to be consistent across all Essex-Windsor municipalities.

EWSWA estimated that mandatory recycling would result in 3,100 tonnes or more (county-wide) being diverted **if used in conjunction with clear bags**. Since By-law 2-2006 requires garbage to be in hard sided containers, using clear bags (within the pails) would likely not achieve the same effect.

As an alternative to mandatory recycling, Administration is supportive of a collaborative regional approach to increase recycling and would fully participate, at Council's direction, to a collective discussion with EWSWA and our neighbouring municipalities.

Administration recommends that should Council wish to make recycling mandatory for all property owners and occupants in the City of Windsor that it be done in conjunction with educational, enforcement and complimentary service delivery components.

¹ "Solid Waste Management Master Plan Review and Update", EWSWA, February 2012 pg. 69.

RISK ANALYSIS:

Several risks have been identified with mandatory recycling. They include:

Alienating Public through Aggressive Enforcement of By-law

A moderate risk associated with mandatory recycling will be alienating residents by imposing fines or other penalties on them for improperly placing recyclable material in the waste stream. This risk can be mitigated by only enforcing the most egregious situations and otherwise using education to improve their recycling efforts. However, as noted previously in this report, only enforcing a bylaw on some and not all, would lead to inconsistencies and challenges.

Illegal dumping of Material Not Collected

Where waste has not been collected because it obviously contains significant amounts of recyclable materials, more material (otherwise collected) may now be illegally dumped by frustrated residents and/or businesses. This risk would be mitigated over time as residents become more accustomed to the new by-law requirements.

Shortening Landfill's Lifespan

A moderate risk of **not** making recycling mandatory (and enforcing the requirement) is the shortening of the landfill's lifespan unnecessarily by filling it with otherwise recyclable material. The landfill is an important regional asset for which it is financially desirable to extend its useful life as long as possible. This risk could be mitigated by either making recycling mandatory through a by-law or through education, enforcement and service delivery enhancements/modifications.

Impact of mandatory recycling on Regional landfill passed on to City of Windsor

Another important consideration with implementing mandatory recycling is the impact that it will have on the Essex-Windsor Solid Waste Authority's Operational Plan and Budget. The Essex-Windsor Regional Landfill is funded through tipping fees, sale of recyclable materials and direct charges to municipalities.

The revenue earned by EWSWA from tipping fees assessed to businesses has been in decline over the past few years as local waste is leaving the region due to lower landfill tipping fees in Michigan and at some privately owned Ontario landfills.

The sale of recyclable materials is subject to supply and demand in the marketplace as well as fluctuating commodity prices. Revenue over the last number of years has been stagnant and at times, even decreased.

EWSWA has a 10 year Forecast Model which acts as a planning tool and provides insight as to future municipal requirements as well as the status of the Rate Stabilization Reserve. Even with making use of the Reserve over the 10 year period to moderate increases required to be assessed to Windsor and the seven County of Essex municipalities for the operation of the landfill, the forecast model already shows annual increases of 4.5% - 5% annually in order to eliminate the annual operational deficits.

Increasing recycling through any program, although the right thing to do environmentally, will have a significant financial impact on the municipality through its obligation to fund the operation of the region's landfill. Increased sales of recyclable material will not off-set operational increases. As residents and businesses may reduce the amount of waste they place into the waste stream under a mandatory recycling by-law, this risk cannot be truly mitigated. However, this risk mitigates future significant financial risks of procuring a new waste processing facility by delaying such procurement and extending the current low cost facility.

Challenges in enforcement

Proving that an individual has violated a mandatory recycling requirement in a by-law will be extremely difficult. In order to issue a ticket, a By-law Enforcement Officer must have reasonable and probable grounds to believe that a particular individual committed the offence. If the By-law Enforcement Officer does not observe the offence directly, a statement will have to be obtained from the third party garbage collector that recyclable material was found in the garbage of a particular property. The charged party will have the option to dispute the charge by requesting a trial in the Provincial Offences Court. To obtain a conviction the prosecutor will have to prove that an offence was committed by the charged individual on the criminal standard of proof beyond a reasonable doubt. The By-law Enforcement Officer and third party garbage collector will be required to be witnesses at the trial. Often the employee turnover rate at third party contractors is high. If the third party garbage collector has left the employment of the contractor and cannot be located to be summoned for trial, the charge will have to be withdrawn by the prosecutor.

Conducting a prosecution is a very lengthy and labour intensive process. Even if a conviction can be obtained the fine amount is likely to be low. Ticket cannot be issued until short form wording and set fine amounts are submitted to and approved by the Regional Senior Justice.

A mitigating strategy would be for enforcement to be done at the time of collection (i.e. not collect garbage containing recyclable materials), however, as indicated previously there is a significant risk that illegal dumping will increase.

FINANCIAL MATTERS:

Should Council wish to pursue mandatory recycling, Administration recommends that, in order to be effective, it be in done in concert with education, enforcement and service modifications. Direction with respect to the levels of service of education, enforcement and any service modifications is required. Once the levels of service are known, a more detailed cost/benefit analysis of improving the City's diversion rate versus the cost of the various initiatives will have to be performed. Cost estimates contained in EWSWA's February 2012 "Solid Waste Management Master Plan Review and Update" are provided below for several of the items discussed throughout this report along with their estimated diversion increase are provided below²:

Category	Recommendation	Estimated Operating and Capital Cost	Estimated Diversion Increase (%)	Estimated Diversion Increase
Service Delivery	Weekly Collection of Recyclables	to be determined through tender process	2% to 3%	3,100 to 4,600 tonnes (county wide)
Service Delivery	Mandatory Recycling	to be determined with level of enforcement required and level of 311 Service Requests.	2%	3,100 tonnes (county wide) in conjunction with the use of clear bags (whereas the City requires hard-sided containers).

Enforcement of mandatory recycling, if done by By-law Enforcement, will not only be difficult but will add to the list of enforcement activities already conducted by By-law Enforcement Officers thus increasing workload and lowering overall response times. This will lead to the requirement for more resources in this area. Furthermore, the non-collection of contaminated waste will lead to an increase in 311 calls, thereby increasing the current standard response time of 2 business days. There is a risk that some calls may not be closed out before the next collection, leaving the resident no containers to

² Solid Waste Management Master Plan Review and Update", EWSWA, February 2012 pg. 69.

place their additional waste in. More resources could be required to maintain a more reasonable response time.

Should Council wish to implement mandatory recycling, the following is a high level estimate of associated costs:

Advertizing/education: \$50,000 yearly;

Additional By-Law Enforcement Officer: \$68,148 for wages including fringe; \$10,451 for a vehicle and 2,330 for additional required equipment.

Additional Environmental Supervision (at the onset of the new by-law requirement): \$30,250 one-time funding;

Additional seasonal vehicle (required for the additional supervision): \$4,400 one-time funding.

Total high level estimated additional funding required: \$130,929 to the Operating Budget, plus \$34,650 one-time funding.

CONSULTATIONS:

Ann Kalinowski, Manager of By-law Enforcement

Legal Department

CONCLUSION:

Language to make recycling mandatory for all residential, commercial and multi-residential property owners and occupants can be incorporated into By-law 2-2006, a new mandatory recycling by-law or a material ban by-law. However, a By-law alone will not achieve the desired result or improve the City's diversion rate and will be challenging to enforce. Similar diversion rates could be achieved through increased education and service delivery modification. In order to ensure consistent messaging and to be most effective, each municipality in the Windsor-Essex region should be encouraged to implement similar waste diversion strategies to one another.

Therefore, Administration recommends that a combination of education and service delivery modifications be further explored with ESWWA prior to considering any new By-law(s).

APPENDICES:

