TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON OCTOBER 24, 2017
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR - ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER
SUBJECT:	RESIDUAL WASTE DISPOSAL STRATEGY SCOPE OF WORK AS PART OF THE ENVIRONMENTAL ASSESSMENT PROCESS

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, with the support of the Waste Management Working Group, the following parameters that define the scope of work for the Residual Waste Disposal Strategy (including the proposed expansion to the W12A Landfill) as part of the Environmental Assessment process **BE APPROVED**:

- a) The study period for the Residual Waste Disposal Strategy will be 25 years beyond the current approved capacity of the W12A Landfill of 2025, ending in 2050;
- b) The maximum annual amount of waste that will be allowed to be landfilled be reduced from the currently approved amount of 650,000 tonnes per year to 500,000 tonnes per year;
- c) The service area include the City of London, Elgin County, Huron County, Lambton County, Middlesex County, Perth County and local First Nation Communities noting City of London Council will have the authority to determine which, if any, municipalities or businesses outside of London are allowed to use any City residual waste disposal facility or facilities in the future; and
- d) The W12A Landfill expansion be sized assuming the residential waste diversion rate is 60% by 2022 noting this does not prevent increasing London's residential waste diversion rate above 60% between 2022 and 2050.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

Relevant reports that can be found at www.london.ca under City Hall (Meetings) include:

- Update and Next Steps Resource Recovery Strategy and Residual Waste Disposal Strategy as part of the Environmental Assessment Process (February 7, 2017 meeting of the Civic Works Committee (CWC), Item #10)
- Individual Environmental Assessment Long Term Solid Waste Resource Recovery & Disposal Plans (October 6, 2015 meeting of the CWC, Item #14)

Relevant reports that can be found at www.london.ca under City Hall (Meetings – Advisory and other Committees) include:

- Decision Report #5: Residual Waste Disposal Strategy Scope of Work as Part of the Environmental Assessment Process (September 28, 2017 meeting of the Waste Management Working Group (WMWG), Item #5)
- Progress Report #2: Partial Responses to Regional Service Area for Waste Management Facilities (March 30 to June 2, 2017) (June 27, 2017 meeting of the WMWG, Item #7)
- Decision Report #2: Residual Waste Disposal Strategy Scope of Work as part of the Environmental Assessment Process (January 19, 2017 meeting of the WMWG, Item #6)

COUNCIL'S 2015-2019 STRATEGIC PLAN

Municipal Council has recognized the importance of solid waste management in its 2015-2019 - Strategic Plan for the City of London (2015 – 2019 Strategic Plan) as follows:

Building a Sustainable City

- Strong and healthy environment
- Robust infrastructure

Growing our Economy

- Local, regional, and global innovation
- Strategic, collaborative partnerships

Leading in Public Service

- Proactive Financial Management
- Innovative & supportive organizational practices
- Collaborative, engaged leadership
- Excellent service delivery

BACKGROUND

PURPOSE:

This purpose of this report is to seek approval from Committee and Council for key parameters that define the scope of work for the Residual Waste Disposal Strategy (including the proposed expansion to the W12A Landfill) as part of the Environmental Assessment (EA) process.

CONTEXT:

Background

In October 2015 Municipal Council directed staff to proceed with the development of a long-term Resource Recovery Strategy and a Residual Waste Disposal Strategy for the City of London.

The Resource Recovery Strategy involves the development of a plan to maximize waste reduction, reuse, recycling, resource recovery, energy recovery and/or waste conversion in an economically viable and environmentally responsible manner. Resource Recovery strategies (i.e., often known as waste diversion strategies) are developed and approved at the local government level and do not require Provincial government approval. However, these strategies do serve as input into Provincial government decision-making as related to approval of the Residual Waste Disposal component.

The Residual Waste Disposal Strategy involves the development of a long-term plan to manage residual waste (waste after resource recovery) and involves completion of an Individual Environmental Assessment (EA) as prescribed by the Ministry of the Environment & Climate Change (MOECC). The Individual EA requires approval by the Minister of Environment & Climate Change and Cabinet.

Waste Management Working Group and Civic Works Committee

The four key parameters identified in this report were presented and discussed at the Waste Management Working Group (WMWG) meeting on January 19, 2017 followed by submission to the Civic Works Committee (CWC) on February 7, 2017.

Council Direction

The Terms of Reference (ToR - work plan) for the EA process includes direction on key project parameters. Information on the advantages and disadvantages of different options for the four key project parameters listed below were presented to CWC on February 7, 2017. After consideration of these options by CWC, Council approved the following for community engagement:

c) in addition to all the requirements of the Terms of Reference process, the following proposed parameters BE ENDORSED and included in the community engagement program for feedback:

- i) the study period for the strategy be 25 years beyond the current approved capacity of the W12A Landfill of 2025, ending in approximately 2050;
- ii) the maximum amount of waste that can be landfilled each year, as per the current provincial Environmental Compliance Approval, remain unchanged at 650,000 tonnes at this time;
- iii) the service area include the City of London, Elgin County, Middlesex County, Huron County, Lambton County, Oxford County, Perth County, and the local First Nation Communities; it being noted that the City Council will have the authority to determine which, if any, municipalities, communities or businesses outside of London are allowed to use any future waste disposal facility or facilities or future resource recovery facility or facilities and under what conditions; and,
- iv) the capacity of any new residual waste disposal facility be sized assuming the residential waste diversion rate is 60% by 2022; and take into consideration the Provincial interim goals for total solid waste diversion of 30% by 2020, 50% by 2030 and 80% by 2050;
- d) the Civic Administration BE DIRECTED to canvass municipalities responsible for waste management within the proposed service area to determine interest in using any future waste disposal or future resource recovery facility;

DISCUSSION

Community Engagement Program

The Community Engagement Program was used to solicit feedback on the four key project parameters outlined above. The Community Engagement Program included a Notice of Commencement, project website, open houses, establishment of a Community Liaison Committee, presentations to community groups and city advisory committees, engagement with local Indigenous communities, and displays at various festivals and community events.

One of the goals of the Community Engagement Program was to make sure that residents and other stakeholders in the vicinity of the W12A Landfill were informed about the Residual Waste Disposal Strategy and the possible expansion of the W12A Landfill. To achieve this goal, personalized mailings were made to property owners as well as residential tenants within two kilometres of the landfill (about 270) on two occasions. The first mailing was to notify stakeholders about the commencement of the project and the second mailing was to inform stakeholders about the first series of open houses.

In addition, staff provide updates to the W12A Landfill Public Liaison Committee on the status of Residual Waste Disposal Strategy and Resource Recovery Strategy at each of their meetings. The W12A Landfill Public Liaison Committee also has a member that sits on the Waste Management Community Liaison Committee.

The following summarizes the ongoing Community Engagement Program between April and September 2017:

- Activity on the project Websites
 - Disposal; > 1,000 unique visitors (> 1,500 visits)
 - Resource Recovery; > 500 unique visitors (> 750 visits)
 - Feedback from > 350 unique visitors
- Numerous print and social media to promote projects
- 4 Open Houses & Virtual Open House
- Booth at 10 community events/festivals
- Presentations to 5 advisory/liaison committees
- Two Waste Management Community Liaison Committee meetings

Feedback on the four key project parameters was predominately received on the project website and at open houses. Over 300 residents provided feedback to questions on the project website for the direction the four key project parameters should take. Over 200 also left general comments which are summarized in Table 1 below by listing all comments that were mentioned five or more times.

Table 1 – Summary of Written Comments to complete

Comment				
Support for organics (Green Bin) program				
Suggests for program changes to encourage program participation ^a				
Suggestions for improvements to Blue Box Program ^b				
Focus on business and multi-residential diversion				
Support for energy-from-waste (EFW)				
Support 60% diversion (or higher)				
All other comments (no comment more than 2%)				
Total	100			

Notes: a) Suggestions included lower container limit to 1 or 2 containers, clear garbage bags, mandatory recycling bylaw, etc.

b) Suggestions included adding film plastic (e.g., plastic bags); expanded foam polystyrene to Blue Box, etc.

Feedback Received and Recommended Project Direction

A summary of the Community Engagement Program feedback on the four key project parameters is provided in Table 2. Table 2 also includes the recommended project direction for the four parameters based on the feedback as well as other relevant information.

Table 2 Summary of Community Feedback Received on Proposed Four Key Project Parameters and Recommended Project Direction

Project Direction Endorsed by Council for Community Engagement	Feedback Received	Other Information and Recommended Project Direction
The study period for the strategy be 25 years beyond the current approved capacity of the W12A Landfill of 2025, ending in approximately 2050.	 Feedback mainly received on website. Majority of feedback (approximately 60%) supported 25 year planning period. Some feedback supported longer planning period while others wanted a shorter period 	No change to 25 year planning period recommended.
The maximum amount of waste that can be landfilled each year, as per the current provincial Environmental Compliance Approval (ECA), remain unchanged at 650,000 tonnes at this time.	 Feedback mainly received on website. Majority of feedback (approximately 70%) supported placing limits on waste landfilled each year. Some feedback supported not having limits while others were undecided. 	 Waste quantity projections indicate maximum amount to be received will be no more than 500,000 tonnes per year (including waste from an expanded service area – Appendix A). Recommend the maximum amount of waste that will be allowed to be landfilled be reduced from the currently approved 650,000 tonnes per year to 500,000 tonnes per year.

Table 2 Summary of Community Feedback Received on Proposed Four Key Project Parameters and Recommended Project Direction

Project Direction Feedback Received Other Information and **Endorsed by Council for Recommended Project Direction Community Engagement** The service area include Feedback mainly • Letter outlining potential initiatives the City of London, Elgin received on website mailed to area municipalities in County, Middlesex and at open houses. spring (Appendix B). County, Huron County, Approximately one Responses from most Lambton County, Oxford third of feedback municipalities (Appendix C) County, Perth County, and indicate a desire to be included in supported expanding the local First Nation the service area, one waste disposal service area but Communities; it being third did not support many municipalities do not expect noted that the City Council expanding the service to use the landfill. Municipalities will have the authority to area and one third also want to participate in determine which, if any, was undecided. Resource Recovery discussions. municipalities, Majority of comments Response from Oxford County communities or received on this topic indicates they do not want to be businesses outside of included in Waste Disposal service generally expressed London are allowed to use support for a regional area but do wish to participate in any future waste disposal service area subject Resource Recovery discussions. facility or facilities or future to limits on the Landfill expansion will be sized to resource recovery facility amount being or facilities and under accommodate an average of accepted and/or strict approximately 26,000 tonnes per what conditions. rules and controls on year of residential waste and accepting waste from 26,000 tonnes of business waste other areas to prevent from the expanded service area. municipalities with Recommend the service area limited waste include the City of London, diversion programs Elgin County, Huron County, from using the landfill **Lambton County, Middlesex** and to prevent County, Perth County and local London from being **First Nation Communities** seen as a "dumping (Figure 1) noting City of London ground". Council will have the authority to determine which, if any, municipalities or businesses outside of London are allowed to use the W12A Landfill. The capacity of any new Feedback received 60% diversion rate is the practical residual waste disposal predominately on limit in Ontario at this time; only facility be sized assuming website and at open three large urban municipalities the residential waste have diversion rates about 55% houses. diversion rate is 60% by (Guelph, Halton Region and York Majority of feedback 2022; and take into Region which includes Markham) (approximately 70%) consideration the based on 2015 data (most recent supported 60% Provincial interim goals for provincial data available). diversion by 2022. total solid waste diversion It may be possible to achieve Some feedback of 30% by 2020, 50% by higher diversion rates in the supported higher 2030 and 80% by 2050. future. diversion goals, some supported no goals Recommend the W12A Landfill while others were expansion be sized assuming undecided. the residential waste diversion rate is 60% by 2022 noting this Many comments does not prevent increasing included support for a

Green Bin program

comments were anti-

although some

Green Bin.

London's residential waste

diversion rate above 60%

between 2022 and 2050.

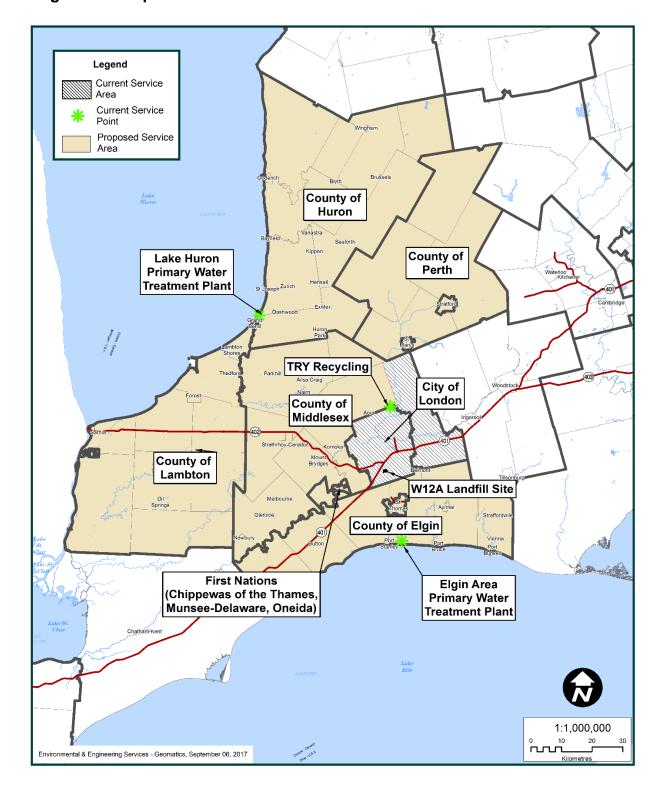


Figure 1 – Proposed Service Area for W12A Landfill as Part of the EA Process

City Advisory/Liaison Committees

As previously discussed, the Community Engagement Program included presentations to City of London advisory committees. Agricultural Advisory Committee (AAC) and Waste Management Community Liaison Committee (WMCLC) supported a 25 year planning period, placing limits on the amount of waste accepted and reaching 60% diversion by 2022. Both advisory committees gave qualified support to allowing neighbouring municipalities to use the W12A Landfill. Both committees only wanted to allow municipalities that were doing a reasonable job of waste diversion.

No written feedback was received from Advisory Committee on the Environment (ACE), Environmental and Ecological Planning Advisory Committee (EEPAC) or the W12A Landfill Public Liaison Committee (PLC).

Waste Management Working Group (WMWG)

The feedback received and recommended project direction was reviewed by the WMWG at its September 28 meeting. The WMWG supports the recommended project direction.

ACKNOWLEDGEMENTS

This report was prepared with assistance from Mike Losee, Division Manager, Solid Waste Management and Jane Kittmer, Solid Waste Planning Coordinator.

PREPARED BY:	
WESLEY ABBOTT, P. ENG. PROJECT MANAGER SOLID WASTE MANAGEMENT	
PREPARED AND SUBMITTED BY:	RECOMMENDED BY:
JAY STANFORD, M.A., M.P.A. DIRECTOR, ENVIRONMENT, FLEET & SOLID WASTE	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER

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Appendix A: Preliminary Estimates of Maximum Annual (Residual) Waste for W12A Landfill Design as Part of the Environmental Assessment Process

Appendix B: Typical Letter to Neighbouring Municipalities

Appendix C : Feedback from Neighbouring Municipalities Regarding Residual Waste Disposal Service Area

Appendix A

Preliminary Estimates of Maximum Annual (Residual) Waste for W12A Landfill Design as Part of the Environmental Assessment Process

Component	Amount (tonnes)	Comment
Existing Service Area	377,000	Projected maximum annual waste quantity (in 2049) based on anticipated population growth, 60% residential waste diversion and 50% business waste diversion. Waste streams in the existing service areas include residential, institutional, commercial, industrial and City operations (e.g., street sweepings, ash, wastewater treatment plant grit, etc.).
Regional Service Area	53,000	Projected average annual waste quantity from expanded regional service. Includes residential and business waste. Assumes additional waste from population growth offset by increasing waste diversion.
Contingency (15%)	70,000	 Contingency to account for: higher population growth than anticipated not achieving diversion targets events creating additional garbage (e.g., extreme weather events) more waste from regional service area that anticipated
Total	500,000	

Appendix B Typical Letter to Neighbouring Municipalities

April 21, 2017

Name Title Address Address Address Address



Dear Name:

Overview

The City of London has initiated two major waste management projects:

- 1. An Environmental Assessment (EA) as part of a long-term Residual Waste Disposal Strategy. This involves the completion of an Individual Environmental Assessment (EA) as prescribed by the Ministry of Environment & Climate Change (MOECC).
- 2. A long term resource recovery strategy that includes a focus on new, emerging and next generation energy recovery and/or waste conversion technologies that typically benefit from having a larger service area to attract materials for processing (i.e., beyond existing recycling and waste diversion programs). This project is designed to address the new Strategy for a Waste-Free Ontario: Building a Circular Economy (February 2017) report from the MOECC.

London Municipal Council has directed City staff to determine interest in regional opportunities for both these projects that would benefit taxpayers and create opportunities in southwestern Ontario:

the Civic Administration BE DIRECTED to canvass municipalities responsible for waste management within the proposed service area to determine interest in using any future waste disposal or future resource recovery facility;

In this regard, we are contacting municipalities with waste disposal and/or resource recovery responsibilities within a regional area to determine interest to be included in a regional service area. The proposed regional service area would include Elgin County, Middlesex County, Huron County, Lambton County, Oxford County, Perth County, and local First Nation Communities (see Figure 1, next page).

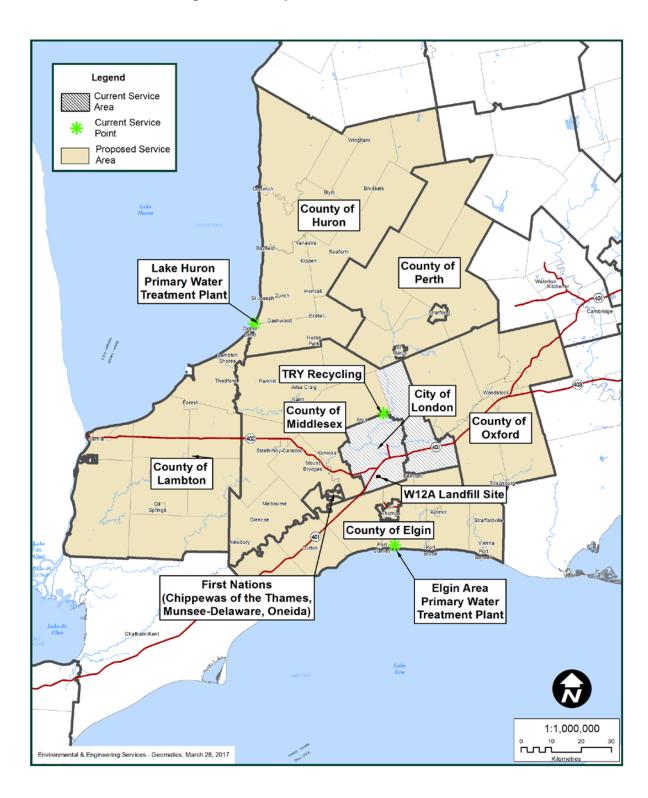


Figure 1 – Proposed Service Area

It is recognized that many municipalities within the proposed regional service area have their own landfills or existing long-term contracts with private landfills and/or are closer to private landfills and subsequently will have limited need in using residual waste disposal facilities in London. In these cases, being included in the service area would still provide a valuable contingency location in the event of an emergency; ensure that competitive alternatives are available in the marketplace; and benefit from potential economies of scale.

The purpose of this letter is to determine the level of interest of your municipality in having access to a new or expanded waste disposal facility that would be developed by the City of London and/or being included in a resource recovery strategy for new, emerging and next generation energy recovery and/or waste conversion technologies.

1. Need for Access to Future Residual Waste Disposal

Can you please provide a response and let me know if your municipality:

- 1. has no interest in being included in the service area of any new waste disposal facility; or,
- 2. would like to be included in the service area of any new waste disposal facility but are unlikely to use the facility; or,
- 3. would like to be included in the service area of any new waste disposal facility and may consider using the facility depending on the cost.

2. Need for Access to Future Resource Recovery Facilities

With respect to a long term resource recovery strategy that focuses on new, emerging and next generation energy recovery and/or waste conversion technologies, your municipality:

- 1. have no interest in being included in these discussions about future resource recovery facilities; or,
- 2. would like to be included in these discussions but are unlikely to use the facilities; or,
- 3. would like to be included in these discussions and may consider using the facilities depending on the cost.

Date for your Response

A response on behalf of your Municipal Council for both these projects by May 30, 2017 would be ideal. However, if that timeframe is not sufficient, a preliminary comment from your municipality by May 30, 2017 with a final Council Resolution no later than June 30, 2017 would be appropriate.

Background

The City of London owns and operates the W12A Landfill Site. This landfill accepts waste from London, the Municipality of Thames Centre, Try Recycling Operations Facility in the Municipality of Middlesex Centre, Lake Huron Water Treatment Plant in the Municipality of Bluewater and the Elgin Water Treatment Plan in the Municipality of Central Elgin. Based on current waste quantities being received, the W12A Landfill has between eight to ten years of capacity remaining.

Located at the W12A Landfill site is the Household Special Waste (HSW) Depot. The service area for HSW depot includes the residents and small quantity generators in London, the County of Middlesex and the County of Elgin.

Approvals, design and construction of new long term resource recovery and disposal capacity will take several years so the City has begun work on a Resource Recovery Strategy and Residual Waste Disposal Strategy to determine the most appropriate long term resource recovery and disposal methods. More details on how these strategies will be developed can be found at *getinvolved.London.ca/WhyWasteDisposal*.

City of London work to date, a review of other regional waste management projects in Ontario and discussions with officials at the MOECC, highlight that a regional service area and/or collaborating in a broader regional area has many advantages such as:

- being consistent with the Strategy for a Waste-Free Ontario;
- providing a competitive public disposal option and other resource recovery options for nearby organizations and municipalities; and,
- addressing a portion of the provincial shortfall in disposal capacity.

Further details on the rationale for the City of London to consider a regional service area for any new waste management facilities can be found at getinvolved.London.ca/WhyWasteDisposal.

If you have any questions, please do not hesitate to contact me (<u>istanfor@london.ca</u>, 519.661.2500 ext. 5411) or Wesley Abbott, Project Manager (<u>wabbott@london.ca</u>; 519.661.2500 ext. 1812).

Regards,

Jay Stanford, M.A., M.P.A. Director - Environment, Fleet and Solid Waste

cc: Martin Hayward, Acting City Manager & Managing Director, Corporate Services and City Treasurer, Chief Financial Officer
Kelly Scherr, P.Eng., Managing Director, Environmental & Engineering Services and City Engineer
Trish Edmond, Golder Associates

Appendix C Feedback from Neighbouring Municipalities Regarding Residual Waste Disposal Service Area

County			Local Municipality			
	Role in Waste Disposal	Response	Municipality	Response	Hhlds ^c	
		Interested/ may use	Town of Aylmer	interested/ may use	2,989	
			Municipality of Bayham	interested/ may use	2,655	
Elgin			Municipality of Central Elgin	interested/ may use	5,700	
□	Not directly responsible		Municipality of Dutton/ Dunwich	interested/ may use	1,807	
			Municipality of West Elgin	interested/ may use	2,972	
			Township of Malahide	interested/ may use	3,145	
			Township of Southwold	no response	1,715	
	Separated Municipality ^a		City of St. Thomas	interested/ may use	16,791	
	Responsible for waste management planning and Household Special Waste management .	Letter received for information; No specific response at this time	Municipality of Adelaide Metcalfe	directed to BRA ^b , BRA supports initiatives	1,045	
			Municipality of Lucan Biddulph ^a	directed to BRA ^b , BRA supports initiatives	1,837	
			Municipality of Middlesex Centre	interested/ may use	6,139	
Middlesex			Municipality of North Middlesex	no response, part of BRA ^b , BRA supports initiatives	2,399	
			Municipality of Southwest Middlesex	interested/ may use	2,629	
			Municipality of Strathroy- Caradoc	directed to BRA ^b ; BRA supports initiatives	8,455	
			Municipality of Thames Centre	interested/ may use (currently use in winter months)	4,884	
			Village of Newbury	no response	207	

Notes a) Located within County but not part of County government.

- b) BRA (Blue Recycling Association) is a non-for-profit corporation that provides recycling and/or garbage collection services to member municipalities. BRA supports regional approach and encourages members to participate directly with London or through the BRA.
- c) From Resource Recovery Productivity and Recovery Authority website (http://www.rpra.ca/Library/WDO-Historical/Municipal-Information/Residential-GAP-Diversion-Rates). Most recent data available is for 2015.

County		Local Municipality			
County	Role in Waste Disposal	Response	Municipality	Response	Hhlds ^c
		Interested/ may use	Township of Ashfield- Colborne-Wawanosh	no response	3,117
			Municipality of Bluewater	interested/ may use	4,532
			Municipality of Central Huron	interested/ may use	3,823
			Town of Goderich	interested/ may use	3,676
Huron	Responsible for waste management planning		Township of Howick	no response (County responsible for planning)	1,441
			Municipality of Huron East	interested/ may use	3,825
			Municipality of Morris- Turnberry	interested/ may use	1,258
			Township of North Huron	no response (County responsible for planning)	2,296
			Township of South Huron	no response (County responsible for planning)	4,644
Perth	Not directly responsible	No Response	Municipality of North Perth ^a	interested/ may use	5,340
			Township of Perth East	interested/ may use	4,080
			Township of Perth South	interested/ may use	1,431
			Municipality of West Perth	interested/ may use	3,500
	Separated Municipality ^a		City of Stratford	interested/ unlikely to use	14,042
	Separated Municipality ^a		Town of St. Marys	interested/ unlikely to use	3,094

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- b) BRA (Blue Recycling Association) is a non-for-profit corporation that provides recycling and/or garbage collection services to member municipalities. BRA supports regional approach and encourages members to participate directly with London or through the BRA
- c) From Resource Recovery Productivity and Recovery Authority website (http://www.rpra.ca/Library/WDO-Historical/Municipal-Information/Residential-GAP-Diversion-Rates). Most recent data available is for 2015.

County		Local Municipality			
County	Role in Waste Disposal	Response	Municipality	Response	Hhlds ^c
		Interested/ unlikely to use	Municipality of Brooke- Alvinston ^a	no response (County responsible)	994
			Township of Dawn- Euphemia	directed to County	843
Lambton	Responsible for solid waste disposal		Township of Enniskillen	no response (County responsible)	1,093
			Municipality of Lambton Shores	no response (County responsible)	7,008
			Village of Oil Springs	no response (County responsible)	285
			Town of Petrolia	no response (County responsible)	2,357
			Town of Plympton- Wyoming	no response (County responsible)	3,524
			Village of Point Edward	no response (County responsible)	995
			City of Sarnia	no response (County responsible)	34,785
			Township of St. Clair	interested/ unlikely to use	6,003
			Township of Warwick	no response (County responsible)	1,432
Oxford	Responsible for solid waste management	Not interested	City of Woodstock	no response	17,530
			County of Oxford (includes Woodstock)	County policy not to export waste	45,858
Total					230,645

Notes a) Located within County but not part of County government.

- b) BRA (Blue Recycling Association) is a non-for-profit corporation that provides recycling and/or garbage collection services to member municipalities. BRA supports regional approach and encourages members to participate directly with London or through the BRA.
- c) From Resource Recovery Productivity and Recovery Authority website (http://www.rpra.ca/Library/WDO-Historical/Municipal-Information/Residential-GAP-Diversion-Rates). Most recent data available is for 2015.