TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON FEBRUARY 7, 2017**
FROM:	**KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR - ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER**
SUBJECT	**UPDATE AND NEXT STEPS – RESOURCE RECOVERY STRATEGY AND RESIDUAL WASTE DISPOSAL STRATEGY 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 actions **BE TAKEN** with respect to the development of London's long-term solid waste Resource Recovery Strategy and Residual Waste Disposal Strategy as part of the Environmental Assessment (EA) process (Phase One - Prepare Terms of Reference and Phase Two – Undertake EA):

a) The following Draft Guiding Principles for the development of London's long-term Resource Recovery Strategy and Residual Waste Disposal Strategy **BE ENDORSED** for feedback in the community engagement program for the development of the Terms of Reference:

- Be Socially Responsible
- Ensure Financial Sustainability
- Ensure Impacts of Residual Waste Disposal are Minimized
- Ensure Responsibility for Waste Management
- Implement more Resource Recovery Solutions
- Make the Future System Transparent
- Make Waste Reduction the First Priority
- Prioritize our Community's Health and Environment
- Support Development of Business (contractual) Partnerships
- Support Development of Community Partnerships
- Work to Mitigate Climate Change Impacts

b) The general framework for the community engagement program, as presented in this report, **BE APPROVED** including:

i. The use of the following community engagement tools and forums: public notices, project website including use of the new Engage London program, interested stakeholders contact and distribution list, open houses, meetings/presentations, City of London Advisory Committees, and using a range of information and communications tools;
ii. Contact with individuals and groups within the following broad stakeholder categories: the general public, the Government Review Team and Indigenous Communities; and,
iii. The typical flow of information/reporting structure as identified in Figure 1 in this report.

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 local First Nation Communities noting 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) 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; and

e) Civic Administration **BE DIRECTED** to report back to Civic Works Committee with an Interim Update Report and the Final Draft Terms of Reference including holding a public participation meeting to conclude Phase One activities.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

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

- Reports to the Waste Management Working Group (WMWG) are located under City Hall (Meetings – Advisory and other Committees)
- Memorandum of Understanding with the Institute for Chemicals and Fuels from Alternative Resources - University of Western Ontario (December 12, 2016 meeting of the Civic Works Committee (CWC), Item #10)
- Establishment of a Waste Management Working Group (December 5, 2016 meeting of the Strategic Priorities and Policy Committee (SPPC), Item #2)
- Update and Next Steps: London Waste to Resources Innovation Centre and Green Shields Energy (October 4, 2016 meeting of the CWC, Item #10)
- Appointment of Consulting Engineer Long Term Solid Waste Resource Recovery and Disposal Plans (May 24, 2016 meeting of the CWC, Item #10)
- Individual Environmental Assessment Long Term Solid Waste Resource Recovery & Disposal Plans (October 6, 2015 meeting of the CWC, Item #14)
- Preliminary Concept for a London Waste to Resources Innovation Centre (February 3, 2015 meeting of the CWC, Item #4)
- City of London W12A Landfill Area Plan Study Meeting on Official Plan & Zoning By-Law Amendment (February 9, 2009 meeting of the Planning Committee, Item #15)

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:

Strengthening our Community
- Healthy, safe and accessible city

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 to bring forward the following items, in draft, for community engagement plus all other required aspects of Terms of Reference (ToR) development:

- Guiding principles for the strategies
- Framework for engagement
- Key residual waste disposal parameters and rationale

CONTEXT:

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 Environment & Climate Change (MOECC). The Individual EA requires approval by the Minister of Environment & Climate Change and Cabinet.

DISCUSSION

This section is divided into three parts. Each part provides an overview on the subject matter and the outcome. Detailed information is contained in the appendix assigned to each part:

PART A Development of Draft Guiding Principles (plus Appendix A)

PART B General Framework for the Community Engagement Program (plus Appendix B)

PART C Key Parameters be used as Part of the Terms of Reference Development and Community Engagement (plus Appendix C)

PART A - Development of Draft Guiding Principles (plus Appendix A)

Overview
Ten Draft Guiding Principles for the development of London's long-term Resource Recovery Strategy and Residual Waste Disposal Strategy were reviewed by the Waste Management Working Group (WWG) at its January 19, 2017 meeting.

The Draft Guiding Principles were based on input from previous waste management community engagement events over the last ten years and ongoing input received from Municipal Council, a number of Council Advisory Committees, community and business groups, and the W12A Public Liaison Committee. Additional rationale for the Draft Guiding Principles is presented in Appendix A including a listing of each guiding principle and the various City plans, programs and policies (e.g., The London Plan, Council's Strategic Plan, etc.) that the principle supports or is consistent with.

Outcome

The review of the Draft Guiding Principles by the WMWG resulted in the addition of one new Draft Guiding Principle. The eleven Draft Guiding Principles supported by the WMWG for community engagement and feedback are presented in Table 1.

Table 1 - Draft Guiding Principles

Be Socially Responsible – Develop acceptable and fair solutions that minimize social impacts, encourage participation and maximize social benefits for residents and businesses and take into account input from residents and businesses.
Ensure Financial Sustainability – Develop financially sustainable solutions that are easy and affordable to maintain by current and future generations and also help to stimulate economic growth within our community.
Ensure Responsibility for Waste Management – Waste management is a fundamental service provided by municipal governments. London should manage residential waste and resources generated within its boundaries. London should ensure that local businesses have access to competitive resource recovery and residual waste disposal options.
Ensure Impacts of Residual Waste Disposal are Minimized – Waste disposal facilities must meet, and if possible, exceed all applicable regulatory standards. London will make all reasonable efforts to reduce and address negative effects of any future residual waste disposal facility through proper design and operation of the facility, as well as providing appropriate mitigation measures to the surrounding community.
Implement more Resource Recovery Solutions – Residual waste needs to be minimized and any waste that is generated needs to be treated as a resource, when practical. Resource recovery includes reuse, recycling, composting, anaerobic digestion and waste conversion to create energy and energy products. Resource recovery will balance environmental, social and financial needs along the road to a waste-free Ontario in the future.
Make the Future System Transparent – Future decisions on the implementation of the Resource Recovery Strategy and Residual Waste Disposal Strategy will continue to be open, accessible, based on best practices and facts, and follow the Corporation of the City of London by-laws, policies and practices to find solutions.
Make Waste Reduction the First Priority – Our first goal is to reduce the amount of material being generated by residents and businesses that requires management (e.g., encourage food waste avoidance, composting at home, local policies to encourage waste reduction, supporting producer responsibility and other provincial and federal programs).
Prioritize our Community's Health and Environment – The health of our residents and the environment is a priority in decision-making to minimize negative impacts and to maximize the benefits.
Support Development of Business (contractual) Partnerships – Working together with the private sector will ensure that roles, responsibilities and skills are assigned appropriately such that municipal resources are maximized and the best opportunities for London and potential partners are created.
Support Development of Community Partnerships – Working together with local community groups and organizations will help us reach our waste diversion goals and maximize resource recovery more effectively and efficiently.
Work to Mitigate Climate Change Impacts – To reduce the impact on climate change we will identify, assess and implement solutions that reduce greenhouse gas emissions associated with our waste management system.

Community and stakeholder input on the draft guiding principles will be sought in early spring 2017 as part of the community engagement processes for the two strategies. Various community engagement tools (traditional media, social media, Engage London, the City's website, open houses, etc.) will be used. Final approval of the guiding principles will occur by Municipal Council after receiving community and stakeholder input.

PART B - General Framework for the Community Engagement Program (plus Appendix B)

Overview
Both the Resource Recovery Strategy and Residual Waste Disposal Strategy will require significant community engagement in order to be successful. Community engagement enables stakeholders to participate in the planning process and enhances the quality of the project.

It is proposed to use the phrase ***Why Waste?*** as a common branding term across the community engagement programs for both the Resource Recovery Strategy and Residual Waste Disposal Strategy.

As noted earlier, the Residual Waste Disposal Strategy involves completion of an Individual EA which has additional specific prescribed and highly recommended community engagement requirements. The proposed community engagement for the Residual Waste Disposal Strategy goes well beyond these minimum requirements. The general framework for the proposed community engagement program is presented in Appendix B and summarized below.

Key aspects of the proposed Community Engagement Program are presented in Table 2.

Table 2 – Summary of ToR Community Engagement Program

Component	Comments
Who will be consulted?	*General Public* Key stakeholders from the general public include: • Interested residents, businesses and groups; • City of London Advisory Committees; • W12A Landfill Public Liaison Committee; and, • Waste Management Community Liaison Committee (new).
	Government Review Team • The Government Review Team consists of staff from various government ministries and agencies (federal, provincial including local Conservation Authorities and municipal including local Boards of Health) who have an interest in the proposed project.
	Indigenous Communities • The City will engage indigenous communities as early as possible in the development of this ToR to facilitate their involvement in the process in ways that meet their needs. The indigenous groups will be consulted on how they would like to be involved in the EA Process.
What Engagement Tools will be Used*?*	• public notices • project website including use of the new Engage London program • interested stakeholders contact and distribution list • open houses • meetings/presentations • City of London Advisory Committees • a range of information and communications tools

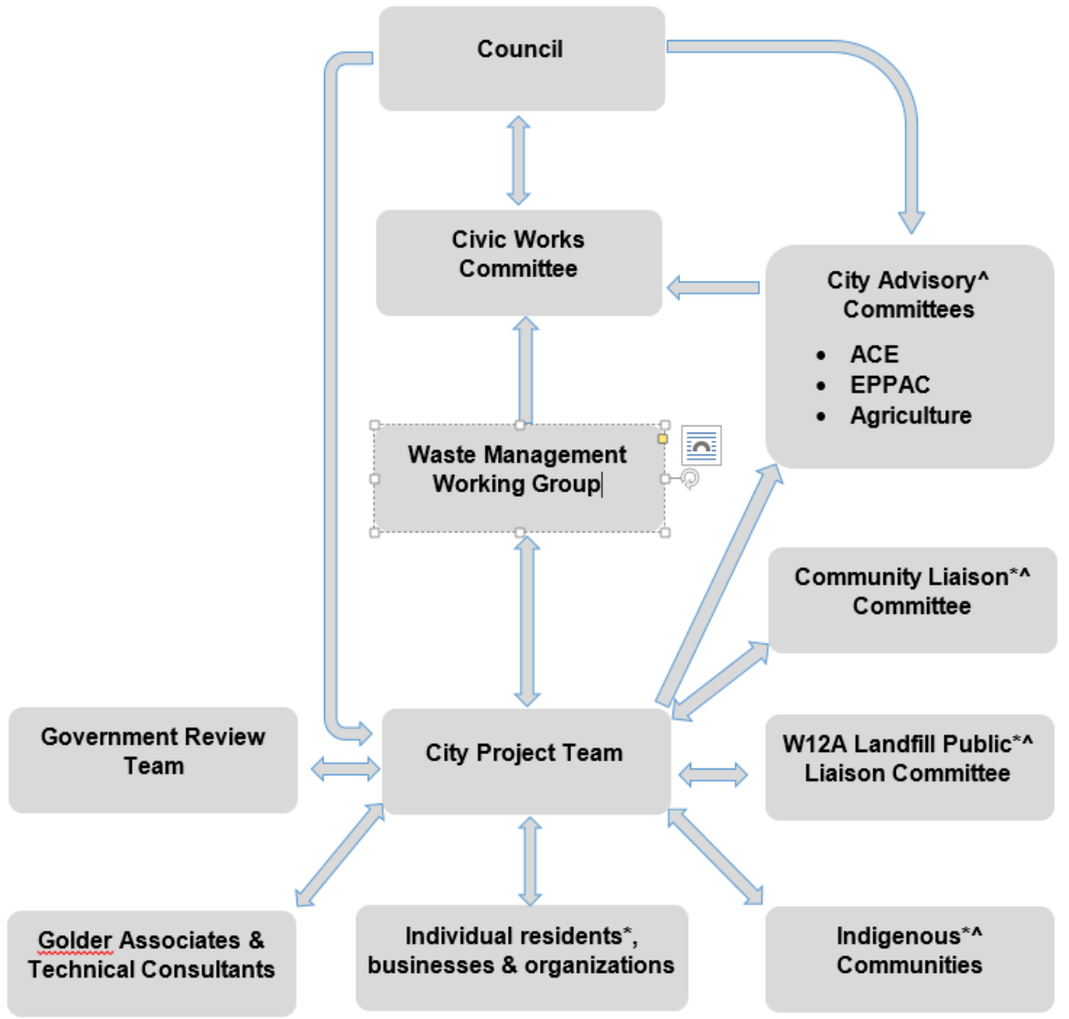
As noted in Table 2, City staff propose to establish a new liaison committee whose purpose is to make sure that the varied interests of multiple stakeholders are equally and adequately represented through a diverse membership throughout the EA process by encouraging the participation of key individuals representing specific stakeholder groups. City staff will strive to ensure that the committee is as well-balanced as possible to advise staff. The proposed composition of this new group, called the Community Liaison Committee, is presented in Table 3.

Table 3 – Proposed Composition of Waste Management CLC

Member	Selection Process
One and two members from a community group with interest in the environment	• Will approach London Environmental Network and/or Urban League to recommend participants
One or two members from community associations	• Will approach London Urban League to recommend participants
One or two members of the local business community	• Will approach London Chamber of Commerce to recommend participants
One or two waste management companies using the W12A Landfill	• Waste management companies will be invited to submit an application to participate
One or two members from W12A Landfill Public Liaison Committee	• Will approach W12A Landfill PLC to recommend participants
Two members at large	• Public will be invited to submit an application to participate

There will be numerous stakeholders involved in the development of the Residual Waste Disposal and Resource Recovery Strategies. The typical flow of information between the various stakeholders and the City approval process is presented in Figure 1.

Figure 1 – Typical Flow of Information/Reporting Structure



Outcome
The general framework of the proposed community engagement program was presented to WMWG at its January 19, 2017 meeting who supported the overall direction of the community engagement program including:

- The use of the following community engagement tools and forums: required public notices, project website including use of the new Engage London program, interested stakeholders contact and distribution list, open houses, other meetings/presentations, City of London Advisory Committees;

- Contact with individuals and groups within the following broad stakeholder categories; the general public, the Government Review Team and Indigenous Communities;

- The establishment of a Waste Management Community Liaison Committee designed to be a liaison/feedback group for City staff; and

- The typical flow of information/reporting structure as identified in Figure 1 in this report.

PART C - Key Parameters be used as Part of the Terms of Reference Development and Community Engagement (plus Appendix C)

Overview
The EA process requires the scope of work (purpose of the study or undertaking) to be clearly defined. There are four key decisions to be made when developing the purpose of the Residual Waste Disposal Strategy ('Disposal Strategy') which are discussed in Appendix C and summarized below in Table 4.

Table 4 – Key Decisions on Residual Waste Disposal Strategy Scope of Work

Issue	Summary of Assessment	
What length of time does the Disposal Strategy cover?	**Alternatives Considered**	**Comments**
	1. 20 years **2. 25 years** 3. 30 years 4. 35 years	A new disposal planning period of 30 or 35 years is not recommended as they are not consistent with the Province's recently released Draft Final Strategy for a Waste-Free Ontario or comments provided by the MOECC. New disposal capacity planning periods of 20 or 25 years have similar benefits but a period of 25 years provides greater certainty for London and delays the expense of completing the next environmental assessment for a longer period.
What annual tonnage could be disposed?	**Comments**	
	Preliminary waste quantity projections indicate that the maximum annual rate of fill of 650,000 tonnes, as currently approved for the W12A Landfill, will not have to be increased to meet the disposal needs envisioned considering the 25 year time period recommended above. It may be possible (or necessary from an approvals perspective to "avoid over-supply of landfill capacity) to reduce the annual rate of fill once final waste quantity projections have been calculated.	

continued

Table 4 – Key Decisions on Residual Waste Disposal Strategy Scope of Work

Issue	Summary of Assessment	
What service area does the Disposal Strategy include?	**Alternatives Considered**	**Comments**
	1. Existing **2. Regional** 3. Provincial	A province-wide service area is not recommended given the expected additional difficulties in the approval process and strong likelihood of public opposition. A regional service area is preferred over a service area using the existing service area of the W12A Landfill because it has most of the benefits of the existing service area plus the added benefits of being consistent with the Final Draft Strategy for Waste-Free Ontario, provides a competitive public disposal option for nearby organizations and municipalities, provides a greater financial benefit to the City and addresses a portion of the provincial shortfall in disposal capacity.
How much residual residential waste will require disposal?	**Comments**	
	Based on current waste diversion programs, participation from residents, proven processing technologies, and proven and sustainable end markets for materials, a residential waste diversion rate between 55% and 65% will likely be sustainable in the next few years.	

Outcome
The WMWG reviewed information on the scope of work for the Residual Waste Disposal Strategy at its January 19, 2017 meeting. The WMWG supported the following for community engagement and feedback:

- The study period for the Disposal Strategy will cover the timeframe 2017 to 2050 which is 25 years beyond the current approved capacity of W12A Landfill;

- The maximum annual rate of fill, which is currently approved at 650,000 tonnes, remain unchanged at this time;

- The service area include the City of London, Elgin County, Middlesex County, Huron County, Lambton County, Oxford County, Perth County and local First Nation Communities; and

- The capacity of any new residual waste disposal facilities be sized assuming the residential waste diversion rate is 60% by 2022; and taking into consideration the Provincial interim goals for total solid waste diversion (consisting of residential, IC&I and CR&D waste streams) of 30% by 2020, 50% by 2030 and 80% by 2050.

ACKNOWLEDGEMENTS

This report was prepared with assistance from Mike Losee, Division Manager, Solid Waste Management; Anne Boyd, Manager, Waste Diversion and Paul Smolkin, P. Eng., Principal, Golder Associates Ltd. (Technical consultant on the EA).

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**

y:\shared\administration\committee reports\cwc 2017 02 ea rr report.docx

List of Appendices

Appendix A Development of Draft Guiding Principles for the Resource Recovery Strategy and the Residual Waste Disposal Strategy

Appendix B General Framework for the Community Engagement Program

Appendix C Additional Details: Key Parameters to be Used as Part of the Terms of Reference Development and Community Engagement

Appendix A

Development of Draft Guiding Principles for the Resource Recovery Strategy and the Residual Waste Disposal Strategy

Over the last ten years, there have been numerous community engagements with respect to solid waste management in London including:

- 2006 to 2009 – W12A Area Plan and W12A Landfill Site Community Enhancement and Mitigative Measures Program
- 2007 – A Road Map to Maximize Waste Diversion in London
- 2013 – Road Map 2.0: The Road to Increased Resource Recovery and Zero Waste (and the Interim Waste Diversion Plan 2014 – 2015)
- 2014 – Public Feedback on Different Garbage and Recycling Collection Frequency Schedules
- 2015 to 2016 – Streamlined EA (Environmental Screening) for Waste Disposal
- 2016 – Garbage Container Limits

It is based on these previous community engagements and ongoing input received from Municipal Council, a number of Council Advisory Committees, community and business groups, and the W12A Public Liaison Committee, as well as input from the Waste Management Working Group that 11 draft guiding principles (Table 1) have been identified that reflect community values, concerns and priorities at this point in time. Also identified on Table A-1 is additional rationale for the draft guiding principles primarily from significant City of London documents and other levels of government that have also undergone community engagements prior to being approved.

Table A-1 - Draft Guiding Principles

Draft Guiding Principle	Additional Rationale
Be Socially Responsible – Develop acceptable and fair solutions that minimize social impacts, encourage participation and maximize social benefits for residents and businesses and that take into account input from residents and businesses.	• Addresses Council's Strategic Plan 2015-2019 (Strengthening our Community, Building a Sustainable City, Growing our Economy and Leading in Public Service) • Consistent with The London Plan
Ensure Financial Sustainability – Develop financially sustainable solutions that are easy and affordable to maintain by current and future generations and also help to stimulate economic growth within our community.	• Addresses Council's Strategic Plan 2015-2019 (Growing our Economy and Leading in Public Service) • Consistent with the Multi-year Budget process (2016-2019) and long-term forecasts
Ensure Impacts of Residual Waste Disposal are Minimized – Waste disposal facilities must meet, and if possible, exceed all applicable regulatory standards. London will make all reasonable efforts to reduce and address negative effects of any future residual waste disposal facility through proper design and operation of the facility, as well as providing appropriate mitigation measures to the surrounding community.	• Addresses Council's Strategic Plan 2015-2019 (Building a Sustainable City) • Consistent with The London Plan • Consistent with W12A Landfill Site Community Enhancement and Mitigative Measures Program

Table A-1 - Draft Guiding Principles

Draft Guiding Principle	Additional Rationale
Ensure Responsibility for Waste Management – Waste management is a fundamental service provided by municipal governments. London should manage residential waste and resources generated within its boundaries. London should ensure that local businesses have access to competitive resource recovery and residual waste disposal options.	• Addresses Council's Strategic Plan 2015-2019 (Strengthening our Community, Building a Sustainable City, Growing our Economy and Leading in Public Service) • Consistent with The London Plan
Implement more Resource Recovery Solutions – Residual waste needs to be minimized and any waste that is generated needs to be treated as a resource, when practical. Resource recovery includes reuse, recycling, composting, anaerobic digestion and waste conversion to create energy and energy products. Resource recovery will balance environmental, social and financial needs along the road to a waste-free Ontario at some point in the future.	• Addresses Council's Strategic Plan 2015-2019 (Building a Sustainable City and Growing our Economy) • Consistent with The London Plan • Contributes to the London Waste to Resources Innovation Centre
Make the Future System Transparent – Future decisions on the implementation of the Resource Recovery Strategy and Residual Waste Disposal Strategy will continue to be open, accessible, based on best practices and facts, and follow the Corporation of the City of London by-laws, policies and practices to find solutions.	• Addresses Council's Strategic Plan 2015-2019 (Leading in Public Service)
Make Waste Reduction the First Priority – Our first goal is to reduce the amount of material being generated by residents and businesses that requires management (e.g., encourage food waste avoidance, composting at home, local policies to encourage waste reduction, supporting producer responsibility and other provincial and federal programs).	• Addresses Council's Strategic Plan 2015-2019 (Building a Sustainable City and Growing our Economy) • Consistent with The London Plan
Prioritize our Community's Health and Environment – The health of our residents and the environment is a priority in decision-making to minimize negative impacts and to maximize the benefits.	• Addresses Council's Strategic Plan 2015-2019 (Strengthening our Community and Building a Sustainable City) • Consistent with The London Plan
Support Development of Business (contractual) Partnerships – Working together with the private sector will ensure that roles, responsibilities and skills are assigned appropriately such that municipal resources are maximized and the best opportunities for London and potential partners are created.	• Addresses Council's Strategic Plan 2015-2019 (Growing our Economy and Leading in Public Service)
Support Development of Community Partnerships – Working together with local community groups and organizations will help us reach our waste diversion goals and maximize resource recovery more effectively and efficiently.	• Addresses Council's Strategic Plan 2015-2019 (Strengthening our Community and Leading in Public Service)

Table A-1 - Draft Guiding Principles

Draft Guiding Principle	Additional Rationale
Work to Mitigate Climate Change Impacts – To reduce the impact on climate change we will identify, assess and implement solutions that reduce greenhouse gas emissions associated with our waste management system.	• Addresses Council's Strategic Plan 2015-2019 (Building a Sustainable City) • Consistent with The London Plan • Contributes to the Community Energy Action Plan (CEAP) • Addresses Ontario's Five Year Climate Change Plan (2016-2020) • Addresses actions in the Final Draft Strategy for a Waste-Free Ontario Building a Circular Economy • Addresses Pan-Canadian Framework on Clean Growth and Climate Change

The tentative schedule for approval of the guiding principles is presented in Table A-2. Community and stakeholder input on the draft guiding principles will be sought in early spring to summer 2017 as part of the community engagement processes for the two strategies. Various community engagement tools (traditional media, social media, Engage London, the City's website, open houses, etc.) will be used. Final approval of the guiding principles will occur by Municipal Council after receiving community and stakeholder input.

Table A-2 - Tentative Schedule for Approval of Guiding Principles

Step	When (in 2017)
CWC/Council approval of draft guiding principles	February
Community Engagement and Feedback	March – August
Report to WMWG	September
CWC/Council – Final Approval	September

Appendix B

General Framework for the Community Engagement Program

This Appendix provides an overview of the proposed community engagement program and is divided into four sections:

Section A Who Will be Consulted?
Section B What Engagement Tools will be Used?
Section C How will Information be Incorporated into the Process?
Section D What is the Timetable for the Community Engagement Program?

SECTION A - Who Will be Consulted?
There are generally three categories of stakeholders who want to be involved in the EA Process; the general public, the Government Review Team and Indigenous Communities.

General Public
Key stakeholders from the general public include:

- Interested residents, businesses and groups;
- City of London Advisory Committees;
- W12A Landfill Public Liaison Committee; and,
- Waste Management Community Liaison Committee (see below, to be created).

Broad-based advertising (e.g., social media, newspaper advertisements) will be used to reach interested persons, businesses and groups. In addition, notices or newsletters regarding the process will be mailed to all property owners within two kilometres of the Waste Management and Resource Recovery area which includes the W12A Landfill site. The City will engage interested persons, businesses and groups and elicit feedback through a variety of methods such as open houses, letter and email correspondence, social media, Engage London, the City's website and newspaper advertisements.

The City has three Advisory Committees that may have interest in the EA and will be contacted early in the process to determine how they would like to participate in the process. The three Advisory Committees are the Advisory Committee on the Environment, Agriculture Advisory Committee and Environmental and Ecological Planning Advisory Committee.

The W12A Landfill PLC serves as a focal point for dissemination, review and the exchange of information and monitoring results relevant to the operation of the City's landfill. The W12A Landfill PLC will be sent all public notices on the process and provided with regular updates at their meetings (every two months). The W12A Landfill PLC will also be given the opportunity to have one or two of its members be a part of the proposed Waste Management Community Liaison Committee (CLC).

It is proposed to establish a new liaison committee whose purpose is to make sure that the varied interests of multiple stakeholders are equally and adequately represented through a diverse in membership throughout the EA Process by encouraging the participation of key individuals representing specific stakeholder groups. City staff will ensure that the committee has a well-balanced membership to advise staff.

The proposed name for the committee is the Waste Management CLC. The proposed objective of the CLC is to act as an informal sounding board (panel) and to:

- provide input on the Terms of Reference and the EA studies;
- provide input on communication materials to be used in the community engagement; and,
- provide the City with assistance in reviewing issues received from the community, as appropriate.

The proposed composition of the CLC is presented in Table B-1.

Table B-1 - Proposed Composition of Waste Management CLC

Member	Selection Process
One and two members from a community group with interest in the environment	• Will approach London Environmental Network and/or Urban League to recommend participants
One or two members community associations	• Will approach London Urban League to recommend participants
One or two members of the local business community	• Will approach London Chamber of Commerce to recommend participants
One or two waste management company using the W12A Landfill	• Waste management companies will be invited to submit an application to participate
One or two members from W12A Landfill Public Liaison Committee	• Will approach W12A Landfill PLC to recommend participants
Two members at large	• Public will be invited to submit an application to participate

Government Review Team

The Government Review Team consists of staff from various government ministries and agencies (federal, provincial including local Conservation Authorities and municipal including local Boards of Health) who have an interest in the proposed project. At a minimum, members of the Government Review Team will receive all mandatory notices and be provided a copy of all draft ToR and EA reports for review and comment. Additional involvement by individual Government Review Team members will be made on a case by case basis as required.

Indigenous Communities

The City will engage Indigenous groups as early as possible in the development of this TOR to facilitate their involvement in the process in ways that meet their needs. The Indigenous groups will be consulted on how they would like to be involved in the EA Process. The City is currently developing a list of potentially affected Indigenous groups in consultation with the Ministry of Environment and Climate Change (MOECC), the Ministry of Indigenous Relations and Reconciliation, and Aboriginal Affairs and Northern Development Canada.

SECTION B What Engagement Tools will be Used?

The minimum community engagement requirements for an individual EA are listed below:

Notice of Commencement	mandatory
Notice of Submission	mandatory
Maintain a website (or webpages) with information about the proposal	highly recommended
Provide specific aboriginal consultation	highly recommended
Hold at least two events providing information and receiving input	highly recommended

The proposed community engagement program by the City goes well beyond these minimum requirements and is outlined below.

Terms of Reference Phase

The proposed community engagement activities for the Terms of Reference phase are listed in the approximate order in which they are likely to occur.

- **Notice of Commencement (NOC**) - The NOC will announce the start of the ToR phase. The NOC will be advertised in The Londoner and posted on the City's website. It will provide a brief overview of the proposed Undertaking, information

about the City, the application process for participation in the Waste Management CLC, open house #1 and how to contact the City with comments and questions. Prior to issuance of the NOC, a media release will be issued to all local newspapers and radio and TV stations and announcements will be made on the City's website and through social media.

The NOC, accompanied by a letter of introduction from the City about the undertaking, will be emailed or mailed to:

- Government Review Team members;
- Indigenous Communities;
- Businesses that utilize the W12A Landfill;
- Properties located within a 2 km radius of the Waste Management and Resource Recovery area.

- **Website** - The City's website will allow stakeholders to stay up to date on the ToR Process, get background information and documents, find out about upcoming community engagement activities and will include a number of engagement tools to solicit feedback including the new Engage London program.

- **Interested Stakeholders Contact List -** The City will maintain a contact list of anyone who has expressed an interest in being involved in the process. Anyone on the contact list will be notified of all community engagement events as well as be provided general updates on the status of the EA Process on a regular basis.

- **Advertising of Community Engagement Events –** The minimum advertising for specific community engagement events (e.g., open houses, circulation of Draft Terms of Reference, Notice of Submission) will be placement of an ad in The Londoner newspaper, information posted on the City's website and a notice mailed to:

  - Persons and groups on the Interested Stakeholders Contact List;
  - Indigenous Communities;
  - Properties located within a 2 km radius of the Waste Management and Resource Recovery area

- **Waste Management CLC Meetings** – The Waste Management CLC will meet on a regular basis to provide input to the City Project Team. The first meeting of the CLC will elect a chair and vice-chair, review the role of the CLC and review and discuss the EA Process and materials to be displayed at Open House #1. Meetings will also take place prior to the second and third open houses to review and comment on material to be used at the open houses and prior to submission of the draft ToR to the MOECC to provide comments on the draft document. Additional meetings will take place on an as needed basis. Guidelines for the general operation of the Waste Management CLC will be submitted to Civic Works Committee.

- **Open Houses –** The City will hold at least two and likely three open houses to inform the public about the EA Process, the Community Engagement Program, the overall project, alternatives being considered and to solicit input. Each open house may involve multiple days at one location and/or be held at several different locations.

- **Other Meetings/Presentations -** The City Project Team will be available to meet and/or make presentations to interested residents individually and/or to groups (depending on the preference of the residents) who want further details or who want to speak directly to staff about any concerns or input they have. Staff will tailor the meeting/presentation to the needs of each group or individual and in general each will include an explanation the EA Process, provide information, answer questions and provide opportunities for residents to deliver feedback.

- **Indigenous Communities** - In addition to the activities described above, consultation specific to individual Indigenous communities will be carried out.

- **Draft Terms of Reference –** A draft ToR will be prepared and circulated for review. This allows potential issues to be identified and considered up front. It also allows identification and feedback on major gaps and omissions that if not corrected may lead to amendments to the document once it is formally submitted.

- **Notice of Submission (NOS**) - The NOS will announce the formal submission of the completed ToR to the MOECC for approval. Stakeholders will have the opportunity to directly provide comments to the MOECC on the ToR.

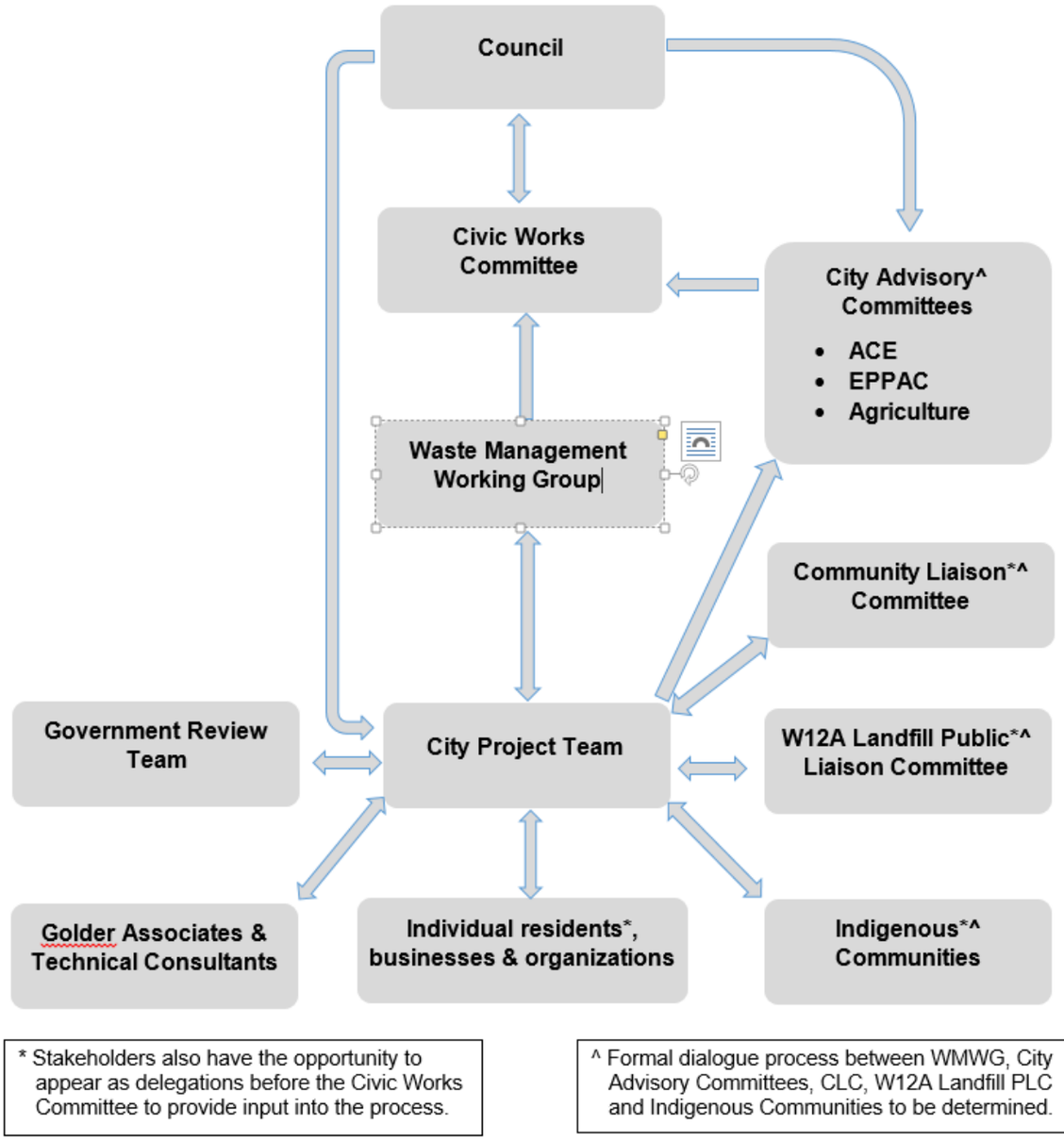
EA Phase

The Community Engagement Program for the EA phase will be developed at the end of the ToR Phase taking into account what worked and what did not during the ToR Community Engagement Program. It is expected that the Community Engagement Program for the EA phase will have many of the same features used in the ToR phase including NOC, the use of the City website, the interested stakeholders contact list, advertising of community engagement events, Waste Management CLC meetings and open houses.

SECTION C How Will Information be Incorporated into the Process?

The typical flow of information between the various groups and stakeholders identified in Part A and the City approval process is presented in Figure A-1.

Figure B-1 – Typical Flow of Information/Reporting Structure



SECTION D What is the Timetable for the Community Engagement Program?

The tentative community engagement program schedule for the development of the Residual Waste Disposal Strategy and the Resource Recovery Strategy is presented in Tables B-2 and B-3 respectively.

Table B-2 – Tentative Schedule for Residual Waste Disposal Strategy

Step		When
ToR Phase	Notice of Commencement, Website	Late February, 2017
	Open Houses, Other Engagement Activities	April to October, 2017
	Prepare Draft ToR Documents	May 2017 to Jan., 2018
	Review of Draft ToR Documents	February 2018
	Prepare Proposed ToR Documents	March to April 2018
	Committee/Council Approval	April 2018
	Submission to MOECC	May 2018
	Minister ToR Approval	September 2018
EA Phase	All EA Activities	October 2018 to December 2019
	All Community Engagement Activities	October 2018 to December 2019
	Prepare Draft and Proposed EA Documents	January to June 2020
	Submission to MOECC	July 2020

Table B-3 – Tentative Schedule for Resource Recovery Strategy

Step	When
“Why Waste? Choices, Ideas, Transition” – Community engagement and feedback	April to August 2017
Participating in Provincial Actions (Strategy for a Waste-Free Ontario: Building a Circular Economy) with a focus on Organics Action Plan and industry funding for recycling	Ongoing
Updates to WMWG/CWC/Council – General Direction	October/November 2017
General Direction – Community engagement and feedback	December 2017 to February 2018
CWC/Council – Final Approval	March 2018

Appendix C

Additional Details: Key Parameters to be Used as Part of the Terms of Reference Development and Community Engagement

The EA process requires the scope of work (purpose of the study or undertaking) to be clearly defined. There are four key decisions to be made when developing the purpose of the Residual Waste Disposal Strategy ('Disposal Strategy') which are:

1. What length of time does the Disposal Strategy cover?
2. What annual tonnage could be landfilled?
3. What service area does the Disposal Strategy include?
4. How much residual residential waste will require disposal?

1. What Length of Time does the Disposal Strategy Cover?

Overview

The W12A Landfill has approximately eight years capacity remaining based on current waste disposal rates which will provide disposal capacity until 2025. The five most recent municipal Terms of References (ToRs) (which sets out the framework for undertaking the EA) approved by the MOECC (Table 1) for landfill expansion EA's have planning periods for new residuals disposal capacity of 20 to 36 years beyond the currently approved disposal capacity.

Considering the above, new residuals disposal capacity of 20 years, 25 years, 30 years and 35 years were assessed taking into consideration:

- consistency with other EAs;
- Final Draft Strategy for a Waste-Free Ontario;
- MOECC comments;
- understanding of community considerations; and
- financial considerations.

Consistency with other EAs

Precedents set by other residual management disposal capacity projects provide a good indication of expectations by government and community reviewers. As noted above the five most recent municipal ToRs for landfill expansions approved by the MOECC are identified on Table C-1.

Table C-1 – Planning Periods of Recently Approved ToRs

Municipality	Existing Landfill Remaining Site Life (years)	New Residuals Management Disposal Planning Period (years)
City of Temiskaming Shores (2012)	7	23
Regional Municipality of Niagara (2013)	3	25
The Town of St. Marys (2014)	4	36
Municipality of Greenstone (2014)	0	20 to 30
County of Brant (2014)	10	30
Average	5	27 to 29
City of London	8	-

Final Draft Strategy for a Waste Free Ontario

The MOECC posted its Final Draft Strategy for a Waste-Free Ontario: Building the Circular Economy to the Environmental Registry on December 16, 2016 and will receive comments until January 30, 2017. Although not finalized, the proposed strategy for a Waste-Free Ontario does provide a general guideline for where the Province is likely to head with respect to future landfills. The strategy recognizes the need for more landfill space but does not want an oversupply of landfill capacity. The proposed strategy states:

> *"While Ontario strives for a waste-free future, there will still be a need for landfill space as we work towards this goal... Potential new landfills will need to be planned well to avoid over-supply of landfill capacity, and managed well to meet environmental standards and maximize the capture of greenhouse gases."*

Seeking an additional 20 to 25 years of waste disposal capacity is reasonable when considering the above. It balances the need for long-term waste disposal security against looking too far into the future given the proposed strategy for a Waste-Free Ontario. The 20 to 25 years of additional waste disposal capacity is less than the average additional disposal capacity being sought by other municipalities who recently had ToRs approved (Table 1).

It must be noted that landfilling is different when compared with other waste disposal technologies such as energy-from-waste (EFW). A landfill is built in stages (i.e., cells for waste placement) that typically last 3 to 5 years. The cost to build the cell occurs when the previous cell is nearing completion (about one year before). If there is less garbage than anticipated the construction of the next stage can be delayed. This is different than an EFW facility that must be built in its entirety and requires a minimum tonnage commitment to operate the facility. Some EFW technologies can be modular in size to help lower capital costs if available tonnage is likely to be lower.

MOECC Comments

In discussions with the MOECC it was made clear that the decision on the length of the new disposal capacity period was up to the City but the MOECC would need a compelling rationale to support additional disposal capacity of greater than 25 years given the Draft Final Strategy for a Waste-Free-Ontario: Building the Circular Economy.

Understanding of Community Considerations

Generally, a shorter disposal capacity period of time (20 years) would be considered better by the local community living near a current or proposed disposal facility noting that some/many in the local community have no desire for any additional capacity at the W12A Landfill. The community as a whole would likely prefer a longer disposal capacity period (25 to 30 years) to provide a longer term solution.

Financial Considerations

The environmental assessment process for approval of long term residuals disposal facilities is long and expensive. The length of the overall approvals process for municipalities is typically between six and eight years and costs several millions of dollars. A longer, new disposal capacity period allows the work by everyone and costs of the EA process and other required subsequent approvals to be spread over a longer period of time and delays the expense of completing the next EA.

Recommendation

Table C-2 summarizes the considerations discussed above with respect to the length of the new residuals disposal planning period.

A new disposal planning period of 30 or 35 years is not recommended as they are not consistent with the Province's recently released Draft Final Strategy for a Waste-Free Ontario or comments provided by the MOECC.

New disposal capacity planning periods of 20 or 25 years have similar benefits but a period of 25 years provides greater certainty for London and delays the expense of completing the next environmental assessment for a longer period. For these reasons, it is recommended that the new disposal capacity period of 25 years beyond the current capacity of the W12A Landfill be pursued, extending to 2050.

Table C-2 – New Disposal Planning Periods (Considerations and Length of Time)

Considerations	New Disposal Planning Periods (years)			
	20	25	30	35
Consistent with Other EAs	✓	✓	✓	✓
Consistent with Waste-Free Strategy	✓	✓	✗	✗
MOECC Comments	✓	✓	✗	✗
Understanding of Community Considerations	✓	✗	✗	✗
Financial Considerations	✗	✓	✓	✓

2. What annual tonnage could be landfilled?

The current Environmental Compliance Approval (ECA) for the W12A Landfill site limits the maximum annual disposal (referred to as the "rate of fill") to approximately 650,000 tonnes. Historical annual quantities disposed of have been a function of waste diversion programs, use of an EFW facility operated by the London Health Sciences Centre, disposal bans (e.g., construction, renovation and demolition materials) and amount of business garbage delivered to the W12A Landfill. Listed in Table C-3 is a summary of tonnage over the years.

Table C-3 - Waste Quantities Received at the W12A Landfill

Tonnes	Description of Activity
260,000	Waste received in 2016
225,000	Average annual waste received for disposal for 5 year period 2012 - 2016
260,000	Average annual waste received for disposal for 5 year period 2007 - 20011
275,000	Highest 5 year average annual waste received for disposal 1984 - 1988
310,000	1987 - the largest annual amount of waste (garbage) received
380,000	1989 - the largest annual amount of waste (garbage and clean fill) received

The average annual amount of waste received for disposal at the W12A Landfill over the last 10 years has been approximately 240,000 tonnes. The largest annual amount of waste received for disposal occurred in 1987 and was approximately 310,000 tonnes.

Preliminary waste quantity projections indicate that the maximum annual rate of fill of 650,000 tonnes will not have to be increased to meet the disposal needs envisioned considering the 25 year time period recommended above, the proposed service area (Section 3) and the future waste diversion goals (Section 4). It may be possible (or necessary from an approvals perspective to "avoid over-supply of landfill capacity) to reduce the annual rate of fill once final waste quantity projections have been calculated.

Considering the above, it is proposed not to change the maximum annual rate of fill of 650,000 tonnes per year at this time.

3. What Service Area does the Disposal Strategy Include?

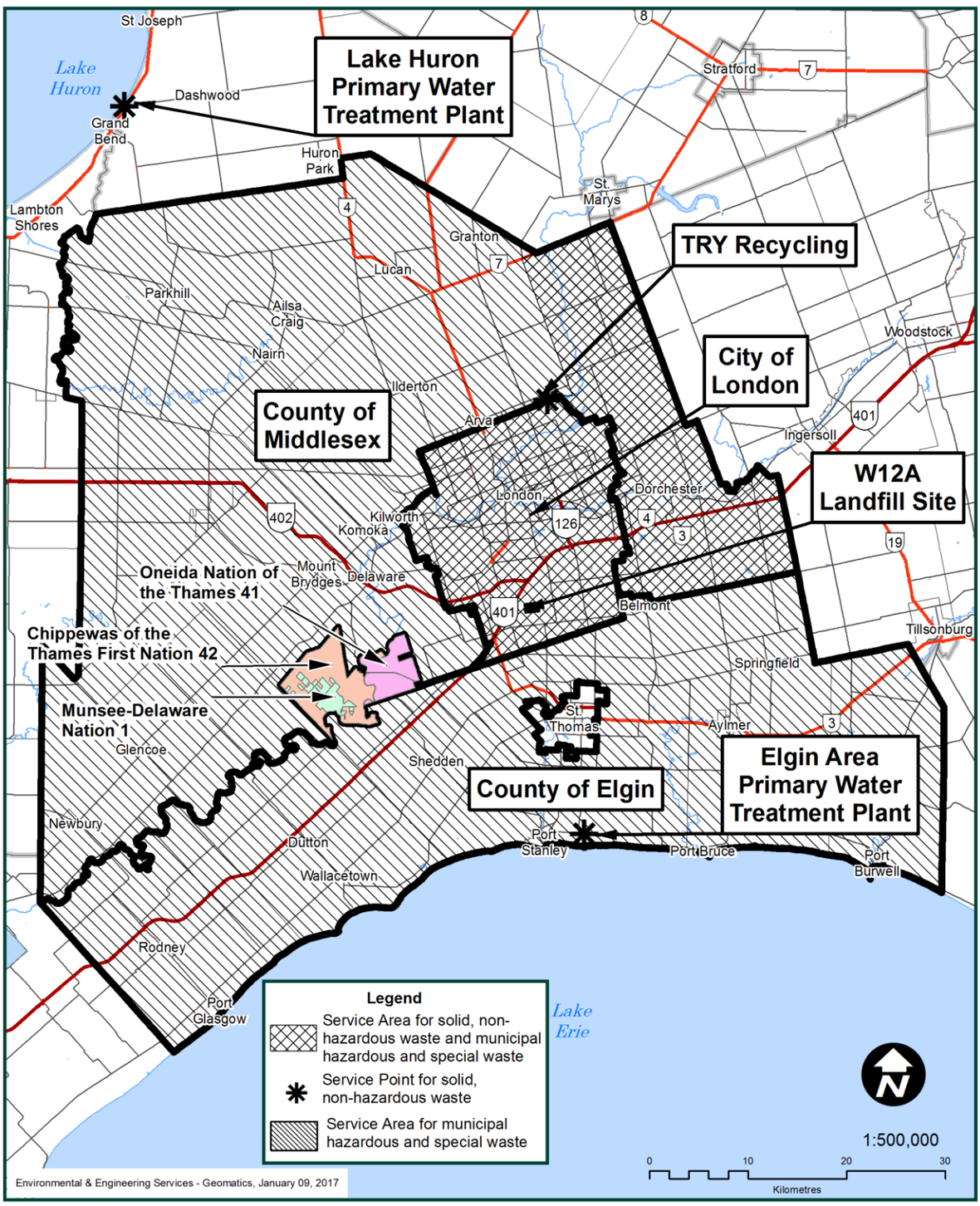
<u>Overview</u>
The approved W12A Landfill service area currently includes London, Thames Centre, Try Recycling's facilities located in Middlesex Centre (County of Middlesex), the Lake Huron Water Treatment Plant located in the Municipality of South Huron (County of Huron) and the Elgin Area Water Treatment Plant located in the Municipality of Central Elgin (County of Elgin) for disposal; and London, County of Middlesex and County of Elgin for Municipal Hazardous and Special Waste Services (MHSW) (See Map C-1, next page).

The City could limit this aspect of the EA to the existing service area of the W12A Landfill (as noted above, a combination of locations and point sources) or consider a

larger service area (regional to provincial). Factors to take into consideration when deciding on the extent of the service area include:

- consistency with current approach for providing waste management services;
- geographic location (wasteshed);
- province's recently released Final Draft Strategy for a Waste Free Ontario;
- provincial shortfall in disposal capacity;
- provision of a publically-owned disposal option for nearby municipalities, institutions & businesses;
- community support;
- local nuisance impacts;
- financial benefit;
- backup/contingency disposal capacity; and,
- ease of approvals.

Map C-1 – Current Services Areas
(Solid, Non-Hazardous Waste and Municipal Hazardous and Special Waste)



Consistent with Current Approach for Waste Management Services

Not changing the existing service area or having a regional service area is consistent with the current approach of providing waste management services to nearby municipalities when in the interest of the City. Municipalities, other government organizations, or individual businesses in Eglin, Middlesex, Huron and Oxford Counties already use one or more of the waste management services available in the City's Waste Management Resource Recovery area as shown in Table C-4. The City also provides waste management services to the Oneida First Nations community.

Table C-4 - Waste Management Services Provided to Other Jurisdictions

Waste Management Service	First Nations	Elgin	Huron	Middle-sex	Oxford
Disposal of Municipally Controlled Waste	-	-	-	Yes	-
Disposal of Point Source IC&I Waste	-	Yes	Yes	Yes	-
Processing of Municipally Controlled Recyclables	-	Yes	-	Yes	-
Processing of IC&I Recyclables	-	Yes	-	Yes	Yes
MHSW	Yes	-	-	Yes	-

It is also noted that the City's Manning Drive Material Recovery Facility (MRF) can accept recyclables from anywhere in Ontario but currently only processes recyclables from the local region (recyclables from nearby municipalities or organizations in Elgin, Middlesex and Oxford Counties).

The City also is the Administrator in the Lake Huron and Eglin Area Water Supply Systems which is a regional water supplier to municipalities in Elgin, Huron, Lambton and Middlesex Counties.

Geographic Location

A regional service area consisting of Elgin County, Middlesex County, Huron County Lambton County, Oxford County and Perth County makes a logical "wasteshed" consisting of all Counties that border Middlesex County. London represents the main regional center for all or parts of each these Counties. This proposed "wasteshed" or service area is shown on Map C-2 (next page).

The existing service area has served a very useful purpose but it has created several restrictions that impede service efficiencies by creating unnecessary boundaries and removing control from London Municipal Council to assist neighbouring municipalities and/or derive additional tipping fee revenues from their waste management assets. A province-wide service area is a more common request from private landfill operators. It is also significantly more complex when analyzing impacts and other considerations (e.g., environmental, social, financial).

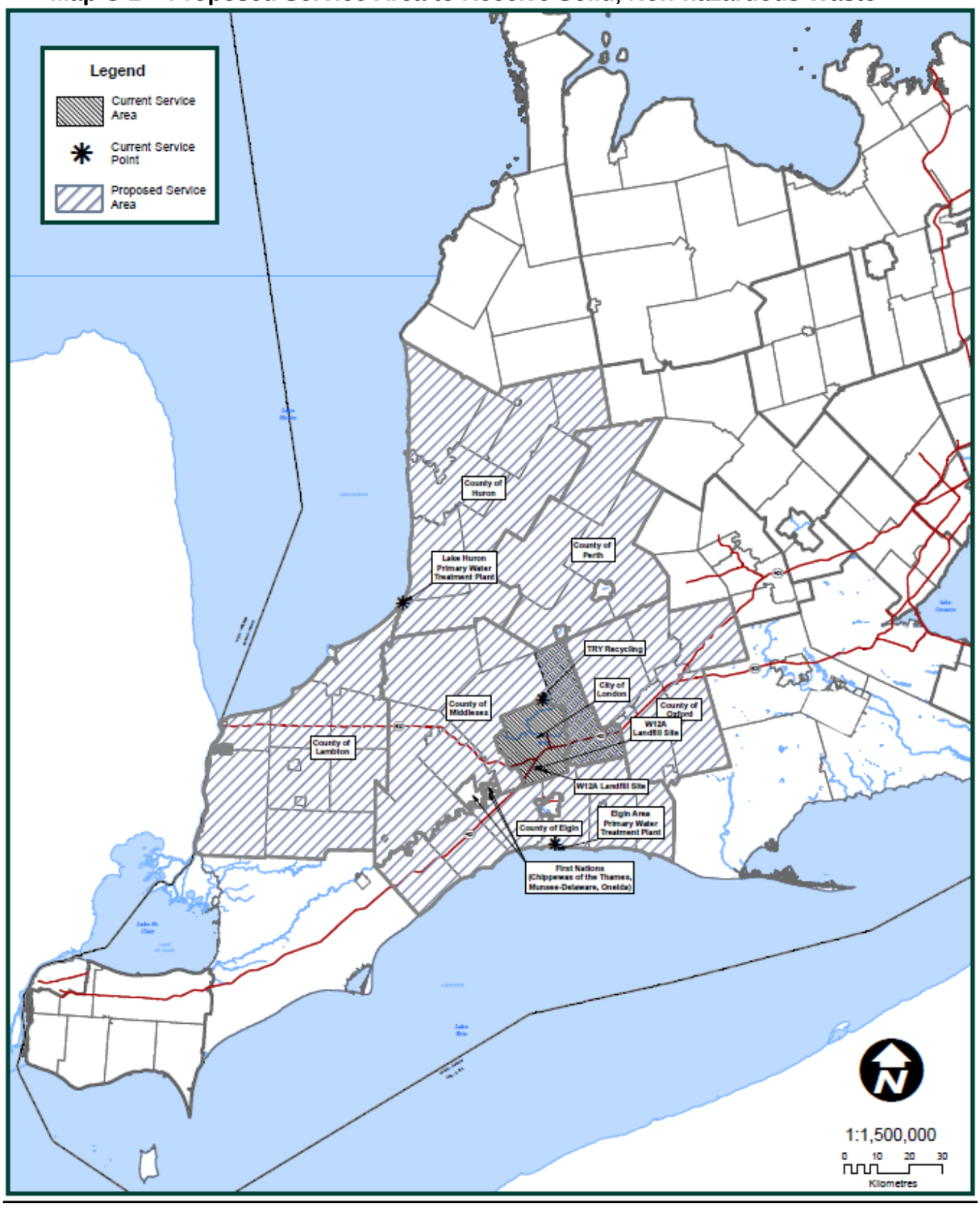
Recently Released Final Draft Strategy for a Waste-Free Ontario

As previously noted, the MOECC posted its Final Draft Strategy for a Waste-Free Ontario: Building the Circular Economy to the Environmental Registry. The strategy recognizes the need for fewer and larger landfills to reduce environmental impacts, particularly those associated with greenhouse gas impacts. This will require a more regional approach to waste disposal. The proposed strategy states:

> *"The size of landfills will also be considered to reduce the need for multiple new landfills and use landfill gas reduction facilities effectively."*

Having London provide residual waste services to a larger area (regional to provincial) is consistent with having fewer and larger facilities to reduce greenhouse gas impacts.

Map C-2 – Proposed Service Area to Receive Solid, Non-hazardous Waste



Addresses a Portion of Provincial Shortfall in Disposal Capacity

The Ontario Waste Management Association estimates that Ontario's existing landfill capacity is estimated to be between 11 years (if all waste generated in Ontario was disposed in Ontario) to 17 years (if 30% of Ontario's waste continues to be sent to the United States for disposal). Consequently, there is the potential for a significant shortfall in disposal capacity should new disposal capacity not become available in a timely fashion.

There are currently two large landfill proposals in Southwestern Ontario; a new landfill is proposed near Ingersoll (Southwestern Landfill Proposal by Walker Environmental) and expansion of the Ridge Landfill in Chatham-Kent (proposed by Progressive Waste Solutions). It is estimated there will still be a waste disposal capacity shortfall over the proposed study period even if both these landfill proposals are approved.

Having a regional to provincial service area could address a portion of the provincial disposal capacity shortfall.

Publically-owned Disposal Option for Nearby Municipalities, Institutions and Businesses
Municipalities that do not have their own landfill typically must rely on using a private landfill for disposal, of which there are a limited number in Southern Ontario. Enabling the W12A Landfill to accept waste from surrounding municipalities would provide these municipalities with a competitive public option that could potentially reduce their costs. It also has the potential to reduce greenhouse gas emissions by reducing transportation distances.

It is common for institutions and businesses to award waste collection and disposal contracts for all of their facilities irrespective of the municipalities in which they are located in. This can provide cost savings through economies of scale and/or simplify their administrative costs associated with waste management. For example, the Thames Valley District School Board which has schools in the cities of London, Woodstock and St. Thomas as well as the counties of Elgin, Middlesex and Oxford. Having a landfill site that can serve all these areas would be beneficial.

Community Support
No community engagement on choosing between the existing, a regional or a provincial service area has been undertaken. Based on previous events, it is believed:

- there would be no to some opposition to the existing service area;
- there would be significant opposition to a provincial service area regardless of the benefits based on the opposition to the purchase of the Green Lane landfill by the City of Toronto; and,
- there may or may not be opposition to a regional service area given the limited concerns with the changes made to the W12A Landfill's service area over the last few years.

Local Nuisance Impacts
One of the proposed guiding principles (separate Waste Management Working Group Report) to be used to direct the development of the long-term Resource Recovery Strategy and the Residual Waste Disposal Strategy for the City of London is:

> *Waste disposal facilities must meet, and if possible, exceed all applicable regulatory standards. London will make all reasonable efforts to reduce and address negative effects of any future residual waste disposal facility through proper design and operation of the facility, as well as providing appropriate mitigation measures to the surrounding community.*

In other words, regardless of the size of the service area (existing, regional or provincial), any waste disposal facility will need to meet all applicable regulatory standards and will be designed and operated to prevent adverse impacts to the area's water quality, air quality, noise levels, etc.

The size of the service area does have the potential to affect nuisance impacts (e.g., odours, increase traffic on the roads, etc.) in the local area.

Provide Financial Benefit to the City by Lowering Waste Disposal Costs
Waste disposal facilities typically have significant "economies of scale" due to the large portion of fixed costs (e.g., landfills have fixed costs such as scale house attendant, operations staff, groundwater monitoring, etc.) compared to the variable costs (e.g., leachate collection system, cover material, etc.). Consequently having more waste come to a waste disposal facility over a year from a regional to provincial service area will lower the cost per tonne of waste received. This results in more economical and cost effective waste disposal for the City and the customer base.

The additional revenue and financial savings can then be reinvested into new environmental initiatives at the landfill, used to lower waste management costs for the residents and/or offset the cost of additional resource recovery (i.e., tipping fee charge of approximately $45/tonne versus an incremental operating and capital replacement cost of $25/tonne for 150,000 tonnes per year will generate $3,000,000 annually to lower costs or to reinvest).

Provide Backup/Contingency Disposal Capacity

Waste management is a critical service and any prolonged disturbance or disruption of service can be detrimental to both the environment and residents and other users. There may be circumstances where the City will not be able to accommodate some or all the waste coming to the landfill for a short period of time. This could be the result of a work stoppage, fire, accidents or malfunctions at the landfill, etc. In such cases, having disposal options at other landfills as a short-term contingency measure is vital to providing effective waste management.

Ideally the City would have a contingency plan in place whereby one or more landfills would be able to take London's garbage in these circumstances and in return the City would reciprocate the contingency (backup) capacity for these landfills. Having a service area that is broader than the current service area would allow the City to create a contingency agreement with any other landfills in the selected service area.

Ease of Approvals

It is expected that proposing a provincial-wide service area for a municipally-owned waste facility will make the environmental assessment approval more difficult as it would complicate the assessment of impacts. For example, it would be difficult to determine greenhouse gas (GHG) impacts from the transportation of waste given the wide range from where waste could originate. A service area using the existing service area of the W12A Landfill or a regional Study Area would be much less complicated.

Recommendation

Table C-5 summaries the considerations discussed above with respect to the proposed service area.

Table C-5 – Service Areas and Considerations

Considerations	Service Areas		
	Existing	Regional	Provincial
Consistency with Current Approach	✓	✓	✗
Geographic Location (waste shed)	✗	✓	✗
Final Draft Strategy for a Waste-Free Ontario	✗	✓	✓
Provincial Shortfall in Disposal Capacity	✗	✓	✓
Provision of a Publically-owned Disposal Option	✗	✓	✓
Community Support	✓?	✓?	✗
Local Nuisance Impacts	✓	✗	✗
Financial Benefit	✗	✓	✓
Backup/Contingency Disposal Capacity	✗	✓	✓
Ease of Approvals	✓	✓	✗

Based on the above considerations:

- A province-wide service area is not recommended given the expected additional difficulties in the approval process and strong likelihood of public opposition.

- A regional service area is preferred over a service area using the existing service area of the W12A Landfill because it has most of the benefits of the existing service area plus the added benefits of being consistent with the Final Draft Strategy for Waste-Free Ontario, addresses a portion of the provincial shortfall in disposal capacity, provides a public disposal option for nearby organizations and municipalities and provides a greater financial benefit to the City.

It is recommended the Disposal Strategy include the City of London plus Elgin County, Middlesex County, Huron County, Lambton County, Oxford County, Perth County and local First Nation Communities in its proposed service area. The population of Elgin, Middlesex, Huron, Lambton, Perth and Oxford Counties (including separated cities) as well as local First Nations communities is approximately 525,000.

It must be noted that having available residual waste disposal capacity for municipalities outside of London does not mean that London is obligated to accept waste from these municipalities in the future. City Council will the authority to determine which, if any, municipalities or businesses outside of London are allowed to use any City residual waste disposal facilities. For example, the City's Manning Drive Material Recovery Facility (MRF) can accept recyclables from anywhere in Ontario. It is currently processes recyclables from municipalities or organizations in Elgin, Middlesex and Oxford Counties.

The amount of waste that may come from the proposed service area cannot be estimated at this time because no contact has been made with any of the approximately 50 municipalities within the proposed service area to determine their level of interest in potentially using residual waste disposal facilities in London or the quantity of waste each municipality generates. A detailed estimate will be made subject to approval of the proposed service area by Council.

The expected quantity of waste will likely be limited based on the following:

- The majority of municipalities (approximately 30 of the 50) have their own landfill. Some of the landfills have capacity beyond 2050 while some landfills are currently in the process of being expanded (e.g., St. Marys Landfill).

- Many municipalities without landfills have 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.

- The quantity of waste generated per capita is typically less in rural areas compared to urban areas. For example, the residential per capita disposal rate from households served by the Bluewater Recycling Association (BRA provides recycling and garbage collection services to a large portion of Huron, Lambton, Middlesex and Perth Counties) is only 55% of London's disposal rate (280 kg/hhld/year for BRA compared to London's rate of 510 kg/hhld/year).

A very preliminary estimate of the quantity of waste that may come to a new City-owned residual waste disposal facility at some point in the future is 100,000 to 150,000 tonnes per year if the City received waste from 40% of the service area.

Based on discussions with the MOECC, inclusion of waste from these regional municipalities in the additional waste disposal capacity to be considered in the EA will require some form of expression of interest/commitment from those municipalities.

4. How Much Residential Waste Will Need to be Disposed?

The City has progressively carried out assessments of waste diversion and developed implementation programs and a schedule for specific activities to continue to increase its rate of diversion. The current residential diversion rate is 45% with the latest assessment of diversion programs provided in *The Road to Increased Resource Recovery and Zero Waste (Road Map 2.0)*.

Programs identified in Road Map 2.0 have the potential to divert 60% of residential waste. The only significant diversion component that remains undecided is how residential organics will be managed. It is estimated that it would take between 2 and 5 years to fully implement an organics management program depending of the method and technology chosen to manage organics.

As noted earlier, the City has commenced a separate process, in parallel with the Residual Waste Disposal Strategy EA, to further examine waste diversion and overall resource recovery. 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.

A review of the ten largest municipalities/recycling boards in Ontario (excluding London) indicates that 60% residential diversion is a practical upper limit for large municipalities with a Green Bin program. Nine of the ten municipalities (i.e., Essex-Windsor does not have a Green Bin program) had Green Bin programs and their diversion rates for 2014 are presented in Table C-6. Diversion rates varied from 45% to 62% with an average diversion rate of 52%. Only two jurisdictions (Halton and York) achieved a diversion rate greater than 55%. Without a Green Bin program the practical upper limit for residential diversion for a large municipality is approximately 50%.

The Resource Productivity and Recovery Authority (formerly Waste Diversion Ontario) has not published the 2015 data for municipalities, but in general it is expected than most jurisdictions with Green Bin programs will show an incremental improvement in the amount diverted. The improvement is the result of increased efforts in public education and the introduction of bi-weekly garbage collection in a number of municipalities. It is expected the average diversion rate will increase to approximately 55%.

Some municipalities have set aggressive (aspirational) waste diversion targets higher than 60% but do not have a clear road map on how they will reach these targets.

Table C-6 – Waste Diversion in Municipalities with Green Bin Programs

Municipality	Green Bin Program	2014 Waste Diversion[a]
Ottawa	Yes	45%
Peel	Yes	45%
Hamilton	Yes	48%
Niagara	Yes	52%
Toronto	Yes	52%
Waterloo	Yes	52%
Durham	Yes	55%
Halton	Yes	56%
York	Yes	62%
Average		52%

a – From *www.rpra.ca/Library/WDO-Historical/Municipal-Information*.

Based on current waste diversion programs, participation from residents, proven processing technologies and proven and sustainable end markets for materials, a residential waste diversion range between 55% and 65% will likely be sustainable in the next few years.

For the purpose of developing the long-term Residual Waste Disposal Strategy it is proposed to assume a short term target for residential waste diversion rate of 60% by 2022. The 60% diversion rate will be increased in the future should it be determine that higher diversion rates are possible and sustainable.

The Province has published (December 2016) interim goals for total solid waste diversion (consisting of residential, IC&I and CR&D waste streams) of 30% by 2020, 50% by 2030 and 80% by 2050. Long term diversion targets will be developed taking these goals into consideration when estimating long term capacity requirements.