



**THE REGIONAL MUNICIPALITY OF NIAGARA
WASTE MANAGEMENT PLANNING
STEERING COMMITTEE
FINAL AGENDA**

WMPSC 2-2021

Monday, April 19, 2021

9:00 a.m.

Meeting will be held by electronic participation only

Due to efforts to contain the spread of COVID-19 and to protect all individuals, there is no public access to Niagara Region Headquarters. If you are interested in viewing this meeting or would like to speak to an item listed on the agenda please contact the Office of the Regional Clerk at clerk@niagararegion.ca at least 24 hours in advance of the meeting.

	Pages
1. <u>CALL TO ORDER</u>	
2. <u>DISCLOSURES OF PECUNIARY INTEREST</u>	
3. <u>PRESENTATIONS</u>	
3.1. <u>Overview of the Waste Management Long Term Strategic Plan</u> Catherine Habermebl, Director, Waste Management Services	3 - 12
3.2. <u>Overview of Waste Management Capital Projects</u> Peter Kryger, Project Manager, Waste Management Services	13 - 23
4. <u>DELEGATIONS</u>	
5. <u>ITEMS FOR CONSIDERATION</u>	
5.1. <u>WMPSC-C 12-2021</u> Updated Waste Management Planning Steering Committee's Terms of Reference	24 - 49

6. CONSENT ITEMS FOR INFORMATION

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| 6.1. | <u>WMPSC-C 15-2021</u> | 50 - 53 |
| | Recycled Glass Sand Used for Stormwater Management | |
| 6.2. | <u>WMPSC-C 17-2021</u> | 54 - 77 |
| | 2019 Waste Management Benchmarking Report | |
| 6.3. | <u>WMPSC-C 18-2021</u> | 78 - 84 |
| | 2021 Illegal Dumping Campaign | |
| 6.4. | <u>WMPSC-C 20-2021</u> | 85 - 89 |
| | Update on Contractor Performance Following the Commencement of the Curbside Collection, Haulage of Garbage, Recycling and Organics Contracts | |
| 6.5. | <u>WMPSC-C 19-2021</u> | 90 - 95 |
| | Councillor Information Request | |
| 6.6. | <u>WMPSC 1-2021</u> | 96 - 101 |
| | Waste Management Planning Steering Committee Minutes
February 22, 2021 | |

7. OTHER BUSINESS

8. NEXT MEETING

The next meeting will be held on Monday, June 28, 2021 at 9:00 a.m.

9. ADJOURNMENT

If you require any accommodations for a disability in order to attend or participate in meetings or events, please contact the Accessibility Advisor at 905-980-6000 ext. 3252 (office), 289-929-8376 (cellphone) or accessibility@niagararegion.ca (email).

Overview of the Waste Management Long Term Strategic Plan

Waste Management Planning Steering Committee

April 19, 2021

Catherine Habermebl, Director of Waste Management

Waste Management Services Long Term Strategic Plan

Waste Management Planning Steering Committee

April 19, 2021

Long Term Strategic Plan Development

Waste Management is releasing a RFP for the development of a Long Term Waste Management Strategic Plan (WMSP) that will:

- establish a planning framework and strategic direction for waste management in Niagara Region over the next 25 years
- include a detailed implementation plan with timelines for targets, strategies, and actions and recommendations on infrastructure and funding
- include recommendations for sustainable, diverse, long-term waste management practices and systems that are consistent with Niagara Region's corporate vision and strategies.

Key Deliverables:

Assessment of Current System – ‘Where We Are’

- Baseline Analysis and Report
 - Analysis of Niagara Region’s current waste management system including programs, services, processes, financing methodology and program performance
 - Report containing life cycle analysis of baseline system, risk analysis and identification of constraints, opportunities and gaps
- Review of Federal, Provincial and Comparable Municipalities’ Policies and Programs
- Best Practices Report
 - Assessment of initiatives, policies, benchmarks and practices in other jurisdictions that would be feasible and align with Niagara Region’s strategic direction

Key Deliverables: Development of Direction and System Options– ‘Where We Want to Go’

- Visions, Goals and Guiding Principles
 - With stakeholder input, develop a vision, goals and guiding principles for the Waste Management System that will balance environment, economic and social factors
- Projections
 - Establish baseline financial and tonnage projections for 25 years beginning 2022. Then develop a second version of the projection to reflect the recommended system including a forecast for implementation and operational costs



Key Deliverables: Development of Direction and System Options– ‘Where We Want to Go’

- Opportunities for Innovative Program Delivery including Alternative Technologies
 - Analysis and recommendations for innovative program delivery
 - Recommendation of proven and new/emerging technologies that increase diversion and/or energy recovery in an environmentally sound manner, while emphasizing options that are economical, energy efficient, acceptable to stakeholders, and allow for highest and best use of materials
 - Expansion upon and update of Niagara Region’s previously completed Alternative Technology technical memos
 - Cost/benefit analysis of each of the technologies including financial, social and environmental impacts, specifically analyzing the factors affecting alternative disposal technologies

Key Deliverables: Preferred System – ‘How We Are Going to Get There’

- Waste Management Strategic Plan recommendations
 - Include preferred options, resources and facilities required, evaluation and life cycle analysis, key strategies, actions and measures for each option, cost and funding strategy, roles and responsibilities and implementation risks
- Provide an Implementation Plan with Detailed Timelines
- Develop a Strategy for Adapting to Legislative Changes and Implementation Risks
- Establish 3Rs Targets to be Achieved over 25 Year Timeframe

Stakeholder Consultation

- The WMSP will not be developed in isolation. Stakeholders that will be consulted and informed throughout the process include:
 - Waste Management Planning Steering Committee (WMPSC), Public Works Committee (PWC), Niagara Region and Local Area Municipal Councils/Staff
 - Regional departments including Planning and Development Services and Corporate Services
 - Residents
 - Business groups
 - Waste Management service providers (collectors, processors)



Project Milestones





Questions?

Overview of Waste Management Capital Projects

Waste Management Planning Steering Committee

April 19, 2021

Peter Kryger, Project Manager, Waste Management Services

Overview of Waste Management Capital Projects

Waste Management Planning Steering Committee

April 19, 2021

SCADA Design and Implementation

ISSUE

- Leachate Collection Systems (LCS) – Mountain Road, Bridge Street, Line 5, Elm St, Glenridge Quarry - previously run using floats
- Manual monitoring required by contractors/operations staff, highly sensitive to environmental factors, limited data accuracy

PURPOSE

- SCADA provides programmable logic controller (PLC) connected to Region SCADA network. Allows for remote monitoring, control of pump stations / pumping wells and alarms if operating out of normal settings

SOLUTION / OUTCOME

- SCADA provides remote access, greater insight and increases environmental reporting efficiency due to precise record keeping capabilities.
- WM Staff partnered with WWW SCADA Team - implemented WIN911
 - Mobile app which allows staff to check SCADA alarms from cell phone – long term plan to roll this version of WIN911 to WWW as well.

TIMELINE – Just completed

BUDGET - \$800K

Humberstone Infrastructure Upgrades

ISSUE

- Environmental Assessment (EA) completed to expand landfill capacity to 4.6 million m³ requires infrastructure per Environmental Compliance Approval (ECA)

PURPOSE

- Meet ECA requirements, infrastructure upgrades for vertical expansion began in 2019.

SOLUTION

- Phase 1 of Infrastructure Upgrades were completed in May 2020 including:
 - Phase II of LGCCS
 - SCADA system for LCS pumping system
 - Storm Water Management Pond # 3 connected to LCS to align with other three ponds
- Phase 2 of Infrastructure Upgrades began 2020 and will be fully complete mid 2021. Key upgrades completed under Phase 2:
 - Secondary LCS
 - Stormwater Pond Expansion – Ponds 1-4
 - Ditch Lining to reduced storm water infiltration into LCS

TIMELINE – Completion in 2021

BUDGET - \$10.5M to date (incl. EA, Design and Construction)

Drop Off Depot Upgrades

ISSUE

- Initiated to address operational concerns at our Waste and Recycling Drop-Off Depots – Humberstone, Niagara Road-12, Bridge Street.

PURPOSE

- Upgrades aim at increasing functionality – reduced lineups, queuing off-site, increasing customer service, extending useful life of drop-off depots.

SOLUTIONS

Bridge Street:

- Asphalt by-pass lane for leaf and yard waste
- New Scale and scale house
- New concrete dump-pad / Restoration of Drop-Off Depot wall

Humberstone:

- Granular by-pass roadway with token-arm
- Re-grading south of container station for to mitigate dust generation and improve operations

Niagara Road-12:

- New concrete dump-pad / Restoration of Drop-Off Depot wall
- New By-pass road to new dump-pad

TIMELINE – Design 2021, Construction 2022 subject to MECP approval

BUDGET – \$2.8M

Glenridge Passive Gas Venting System (PGVS)

ISSUES

- Elevated levels of methane gas were found in gas probes east of PGVS, indicating bypassing of PGVS
- Higher gas concentrations have been identified in two gas probes along southern property boundary leading to concerns of migration.

PURPOSE

- Review pathways of gas migration and design infrastructure to remain compliant with MECP requirements

SOLUTION

- Complete investigation to determine pathway of gas to facilitate design and install PGVSs or alternate infrastructure to reduce/eliminate gas concentrations

TIMELINE – Design 2021, Approvals 2022, Construction 2023

BUDGET - \$780K (incl. Phase 1 & 2 - East Side, Phase 1 - South Side)

Glenridge Leachate Collection System (LCS) Improvements

ISSUE

- LCS currently functioning poorly in south-eastern portion of site proven by elevated leachate levels, seeps

PURPOSE

- LCS improvements to improve capture effectiveness, reduce elevated leachate levels, and ensure compliance

SOLUTION

- Re-design drainage on top of landfill to promote run-off
- Design and install of pump within MH8A and associated piping/forcemain to direct leachate to MH7A.
- Review potential to combine flows from two pipes leaving site and if feasible design how flow can be redirected to groundwater collection trench

TIMELINE – Design 2021, Approvals 2022, Construction 2023

BUDGET - \$2M

Mountain Road LCS Improvements

ISSUE

- LCS capture is limited - gravity portion of the system is crushed.
- Pumping containment wells (PW) – large amounts of groundwater being captured and discharged to sanitary sewer limiting downstream capacity for leachate
- PW4 accounts for 45% average total discharge from site

PURPOSE

- Decrease flow to the sanitary sewer by on-site treatment of groundwater from PW4
- After on-site treatment resolved, attempt to improve LCS capture.

SOLUTION

- Completion of Municipal Class EA. Determine best treatment method for groundwater from PW4 and LCS upgrades
- Design new on-site treatment for PW4 and LCS upgrades on west side of site
- Construct approved upgrades

TIMELINE — Design 2021, Approvals 2022, Construction 2023

BUDGET - \$1.5M, subject to increase as design advances

Quarry Road Landfill Leachate Treatment Upgrades

ISSUE

- The current leachate treatment system (wetland) is not functioning as designed to reduce the leachate impact on an adjacent stream down to acceptable levels.

PURPOSE

- Upgrade the leachate treatment system to reduce leachate impact on the stream to meet or exceed Provincial regulatory standards.

SOLUTION

- Completed Municipal Class Environmental Assessment to investigate alternatives.
- Preferred solution is to process leachate impacted water with ozone to oxidize contaminants into solid particles, and remove particles through a filter system prior to discharging treated water to stream.

TIMELINE - Design 2021, Approvals 2022, Construction 2023

BUDGET - \$650K, subject to increase as design advances

Capital Budget – 2022

- WM capital budget is fully funded from the Waste Management capital reserve fund
- Capital Budget request for 2022 will take into account reserve funding / work load within division amongst other variables
- Capital projects across Corporation are run through Corporate Asset Management Resource Allocation Model (CAMRA)
- As long as reserve funds exist for WM capital projects, they will be self funded / prioritized within WM

THANK YOU

QUESTIONS?

Subject: Updated Waste Management Planning Steering Committee's Terms of Reference

Report to: Waste Management Planning Steering Committee

Report date: Monday, April 19, 2021

Recommendations

1. That the updated Waste Management Planning Steering Committee (WMPSC) Terms of Reference, attached as Appendix B to Report WMPSC-C 12-2021, **BE APPROVED.**

Key Facts

- As part of WMPSC-C 14-2021 - Appointment of Citizen Members to the Waste Management Planning Steering Committee, WMPSC approved an update to the WMPSC Terms of Reference (ToR) be completed by Niagara Region's Clerk's Department, in consultation with Waste Management staff.
- The purpose of this report is to obtain WMPSC's approval on the updated WMPSC Terms of Reference.

Financial Considerations

There are no financial implications associated with the approval of this report.

Analysis

Existing WMPSC Terms of Reference

The original WMPSC Terms of Reference was approved in February 2002. Since this date, there have been a few minor amendments made to those terms, which included:

1. WMPSC to provide input and recommendations on a wider range of long-term waste management and planning initiatives (PWA 157-2005, September 13, 2005)
2. Regional Councillor representation on the WMPSC was increased from five (5) members to seven (7) members (CL 16-2014 (Minute Item 16.15) Regional Council, December 18, 2014)
3. Regional Councillor representation on the WMPSC was further increased from seven (7) members to eight (8) members (CL 20-2018 (Minute Item 17.14), Regional Council, December 13, 2018)

4. Regional Councillor representation on the WMPSC was further increased from eight (8) members to nine (9) members (CL-C 25-2019 (Minute Item 11.2.5), Regional Council, March 28, 2019)

Appendix A includes the existing WMPSC Terms of Reference, including the above amendments.

Updated WMPSC Terms of Reference

The updated WMPSC Terms of Reference will reflect any required changes made to Niagara Region's Procedural By-law.

As part of WMPSC-C 14-2021 - Appointment of Citizen Members to the Waste Management Planning Steering Committee, the following recommendations were approved by WMPSC, at their February 22, 2021 meeting, in relation to amending the existing WMPSC Terms of Reference:

1. That the Waste Management Advisory Committee (WMAC) **BE DISCONTINUED**, effective immediately;
2. For the remainder of this term of Regional Council, the past WMAC Chair and delegate **CONTINUE** as members of the WMPSC;
3. For future terms of Regional Council, a formal application process for selecting two (2) citizen members to sit on the WMPSC, **BE USED**;
4. That the existing WMPSC's Terms of Reference **BE AMENDED** to include the following composition:
 - Maximum of 12 individuals, including: the Regional Chair, up to nine (9) Regional Councillors and two (2) citizen members.
5. That a complete update to the existing WMPSC's Terms of Reference **BE COMPLETED** by Niagara Region's Clerk's Department, in consultation with Waste Management staff.

As a result, updates to the existing WMPSC Terms of Reference are required to remove any references to the WMAC, and replace it with two (2) citizen members.

Appendix B provides the updated WMPSC Terms of Reference.

Alternatives Reviewed

A review of the Terms of Reference clauses for Niagara Region's comparator municipalities, which have a parallel Waste Management Advisory/Steering Committee that includes both Council and public members, was completed, in order to determine whether any additional amendments were required. Appendix C includes the results of this municipal comparison's Terms of Reference clauses. Niagara Region's WMPSC Terms of Reference generally align with the content of those from the comparator municipalities.

Relationship to Council Strategic Priorities

Niagara Region's recommendation to update the WMPSC Terms of Reference supports Council's strategic priority of Sustainable and Engaging Government by promoting an organizational culture that values continuous improvement, collaboration, and innovation.

Other Pertinent Reports

- WMPSC-C 14-2021 – Appointment of Citizen Members to the Waste Management Planning Steering Committee, February 22, 2021
- WMPSC-C 35-2019 – Status of the Waste Management Advisory Committee
- PWA 157-2005 – Proposed Amendment to the Waste Management Planning Steering Committee Terms of Reference, September 13, 2005

Prepared by:

Brad Whitelaw, BA, CIM, CPM, P.Mgr.
Program Manager, Waste Policy &
Planning
Waste Management Services

Recommended by:

Bruce Zvaniga, P. Eng.
Commissioner of Public Works (Interim)
Public Works

Submitted by:

Ron Tripp, P.Eng.
Acting Chief Administrative Officer

This report was prepared in consultation with Ann-Marie Norio, Regional Clerk, and reviewed by Dan Ane, Manager, Program Financial Support, Corporate Services, and Lydia Torbicki, Manager, Waste Policy & Planning, Waste Management Services Division.

Appendices

- Appendix A Waste Management Planning Steering Committee's Existing Terms of Reference
- Appendix B Waste Management Planning Steering Committee's Updated Terms of Reference
- Appendix C Review of Terms of Reference Clauses/Content for Comparator Municipalities, which have a Parallel Waste Management Advisory/Steering Committee that includes both Council and Public Members

Appendix A - Waste Management Planning Steering Committee's Existing Terms of Reference

1. Purpose

The purpose of the Waste Management Planning Steering Committee (Steering Committee) will be to provide direction to the completion of the waste management planning process. This process will result in the selection and implementation of a long-term waste disposal strategy.

2. Responsibilities

The primary roles and responsibilities of the Waste Management Planning Steering Committee are to:

- a) Make recommendations to Regional Council on the selection, siting, development and implementation of alternative waste management technologies, long-term waste disposal site(s) and significant waste diversion facilities and programs;
- b) Promote public interest and involvement in the implementation of new waste management programs and to evaluate and consider recommendations received from the public.

3. Reporting

- a) Figure 1 identifies the relationship and reporting structure of the Waste Management Planning Steering Committee and other committees that have a role in providing input into the implementation of the Region's Long-term Waste Management System. The Waste Management Advisory Committee (WMAC), being an advisory committee that acts as the conduit for public input to the planning process, will report to the Waste Management Planning Steering Committee.
- b) The recommendation(s) of the long-term Waste Management Planning Study would be reported through the Steering Committee to Public Works and Utilities Committee and then to Council for approval.

4. Applicability of Procedural By-law

- a) As an advisory committee of Council, the Waste Management Steering Committee shall be governed by the sections of the Region's Procedural By-law relating to advisory committees.

5. Composition

- a) The Waste Management Steering Committee shall be a sub-committee of the Public Works and Utilities Committee.
- b) The Waste Management Steering Committee will be comprised of a maximum of 12 individuals, including: the Regional Chair, nine Regional Councillors and two representatives from the Waste Management Advisory Committee. The representatives of the WMAC will not have a vote on legal or financial matters.
- c) Additional Officers and/or employees of the Niagara Region's Waste Management Services Division shall serve on the Committee in a resource capacity.

6. Meetings

- a) The Waste Management Planning Steering Committee shall meet generally, on a Monthly basis prior to the second Public Works Committee meeting of each month, or at the call of the Chair.
- b) Meetings generally will be open to the public and will only be closed to the public when dealing with matters as set out under the Region's Procedural By-law relating to advisory committees.
- c) Opportunities will be provided for formal public input through reports from the WMAC and general public input via the inclusion of public deputations as an item on the agenda for each meeting. Those members of the public who wish to make a deputation would be required to contact the Region at least 24 hours in advance to do so.

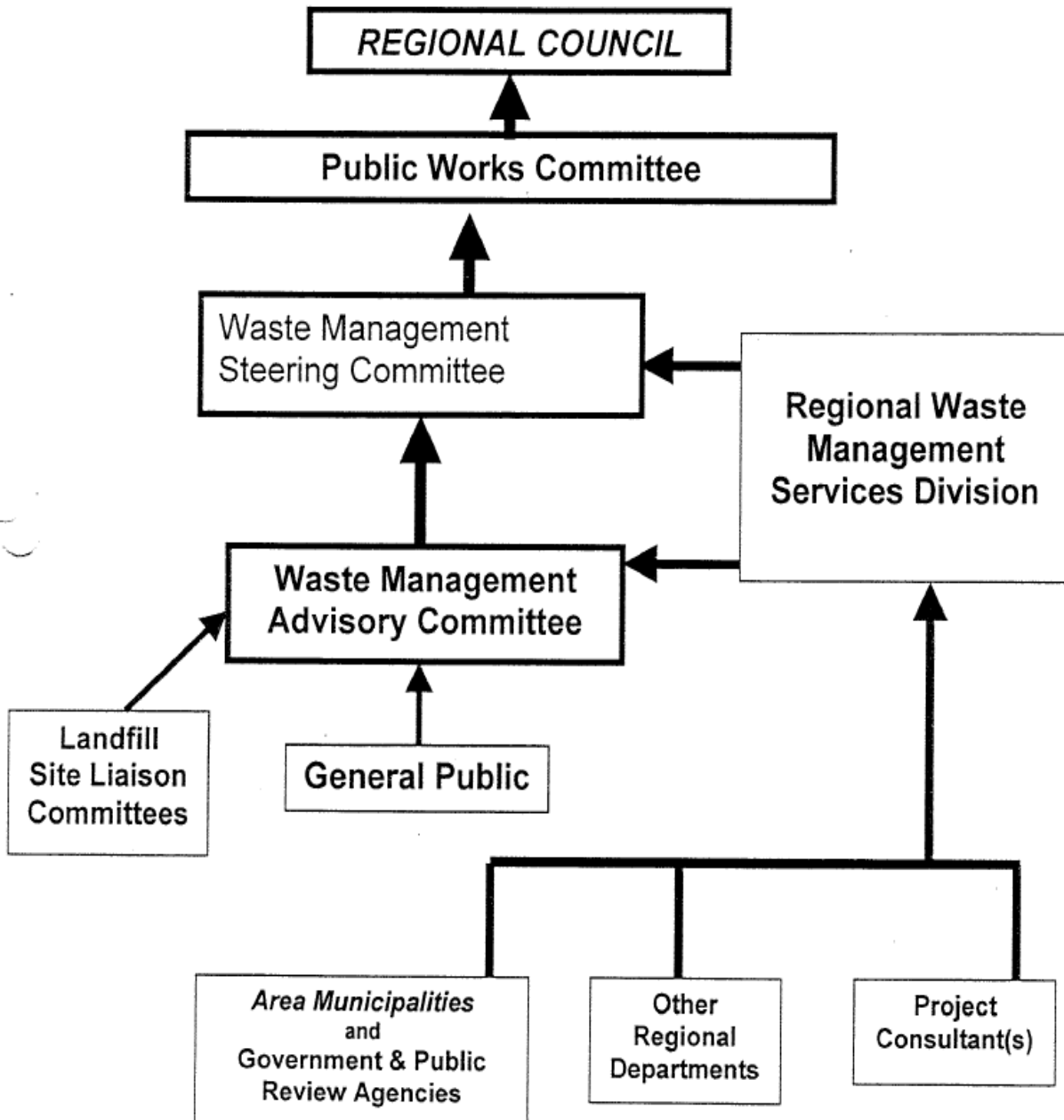
7. Meeting Agenda and Minutes

- a) Meeting agendas will be prepared and distributed to Committee members, the media and other interested participants, at least five (5) working days prior to the Waste Management Planning Steering Committee meetings.
- b) The staff of the Clerk's office will be responsible for the preparation of the agenda and minutes.

- c) Any member of the general public can request to be included on a mailing list for distribution of notices for Waste Management Planning Steering Committee meetings.
- d) The minutes and recommendations of all meetings of the Waste Management Planning Steering Committee shall be provided to the Public Works Committee at least five (5) working days prior to the meeting. Oral reports by the Chair on significant matters not yet minuted may be provided to the Public Works Committee at its next meeting. The Steering Committee minutes will be circulated for information to the Waste Management Advisory Committee and the active Landfill Site Liaison Committees.

Figure 1

**Organizational Structure for the Long-term
Waste Management Planning Study**



WASTE MANAGEMENT PLANNING STEERING COMMITTEE (WMPSC) TERMS OF REFERENCE

Appendix to Report WMPSC-C 12-2021

Recommended for Approval by the Public Works Committee on <date>

Ratified by Regional Council on <date>

Consolidated Version as of <date>

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1. PREAMBLE

The Waste Management Planning Steering Committee was established as a sub-committee of the Public Works Committee in 2002.

2. GOALS/PURPOSE

The goals/purpose of the Committee are to:

- Provide direction to Waste Management staff on recommendations related to the Waste Management Long Term Strategic Plan and other waste management strategic initiatives;
- Make recommendations to Public Works Committee on the selection, siting, development and implementation of alternative waste management technologies, long-term waste disposal site(s) and significant waste diversion facilities and programs;
- Promote public interest and involvement in the implementation of new waste management programs and to evaluate and consider recommendations received from the public.

3. REPORTING STRUCTURE

The WMPSC will report to Regional Council through the Public Works Committee. There shall be no compensation payable to the members of the Committee.

4. MEMBERSHIP

4.1 Composition

Membership for the WMPSC shall not exceed a maximum of 12 members.

Membership for the WMPSC shall include:

- Regional Chair
- Up to nine (9) Regional Councillors
- Up to two (2) citizen members

Citizen members recommended for appointment to the Committee will need to possess relevant waste management experience to be considered.

All attempts will be made to stay within the guideline composition; however, if the applications received or the qualifications of applicants do not fully address the guideline composition criteria, the most capable and qualified applicants will be recommended for appointment to fulfill the membership composition.

4.2 Term

- The term of membership shall be four years, concurrent with Regional Council's elected term of office, and the membership shall be approved by Council in accordance with membership requirements in the Terms of Reference.

4.3 Privacy

- The meetings of the WMPSC are public. Members should be aware that their names will be in the public realm and a list of membership may be posted on the Region's website and provided when requested. Member information, other than name or municipality, will be kept confidential in accordance with the *Municipal Freedom of Information and Protection of Privacy Act*.

5. ROLES & RESPONSIBILITIES

5.1 Chair & Vice Chair

- A Chair and Vice Chair will be elected from Committee members, on an annual basis, at the first meeting of the new year to preside over meetings and Committee business. The Chair and Vice Chair of the Committee shall be a Regional Councillor.
- It is the role of the Chair to preside over Committee meetings so that its business can be carried out efficiently and effectively, and to act as a liaison between the Committee, the Public Works Committee, and Regional Council.
- It is the role of the Vice Chair to preside over Committee meetings in the absence of the Chair and to perform any other duties delegated by the Chair or as assigned by the Committee through a majority vote.

5.2 Committee Members

All WMPSC members, including the Chair and Vice Chair, have the responsibility to help achieve the WMPSC's Goals/Purposes. Committee members are also responsible for:

- Reviewing meeting materials in advance of the meetings and arrive prepared to provide a broad perspective on the issues under consideration;
- Working diligently to complete assigned activities;
- Participating on working groups, as appropriate;
- Agreeing to describe, process and resolve issues in a professional and respectful manner;

- Providing input to help identify future projects or strategic priorities for future years' work;
- Communicating activities of the Committee to groups represented or those who may have an interest and offer information back to the Committee.

The two citizen members will be required to sign a confidentiality agreement.

6. RESOURCES

The Waste Management Division is the designated lead department providing resource support for the WMPSC; however, the Committee also has access to the technical expertise of staff from other Regional departments as may be required. It is recognized that staff time and the level of participation will be dependent on other departmental priorities as determined by senior management and/or Regional Council. As required, additional resources may be sought. Additional resourcing may be required for projects with senior levels of government.

The Committee shall receive administrative support from the Office of the Regional Clerk for meeting and agenda management.

7. MEETINGS

A meeting schedule following a bi-monthly cycle shall be set for the WMPSC. The schedule will be circulated to the members for approval each year. Should a time sensitive matter arise, the WMPSC may meet at the call of the Chair.

The WMPSC meetings will be held at Regional Headquarters, or by electronic participation, at a time as determined by the members. All meetings will be open to the public.

Meetings shall be governed by the Region's Procedural By-law, being a by-law to govern the calling, place and proceedings of the meetings of Council and its Committees, as may be amended from time-to-time.

If necessary, a schedule setting the due dates for materials to be included on the agenda will be circulated to each member pending adoption of a meeting schedule or the scheduling of a meeting date.

A committee member who is unable to attend a meeting, shall forward his/her regrets to the Office of the Regional Clerk as soon as possible. Should the Office of the Regional Clerk not have confirmation of quorum 24 hours prior to the meeting, the meeting shall be cancelled.

8. ABSENTEEISM

Members who miss three unauthorized consecutive meetings shall be deemed to have resigned from the Committee and will be notified of this in writing by the Committee Chair.

9. AMENDMENTS TO THE TERMS OF REFERENCE

The Terms of Reference should be reviewed and refined at a minimum of every four years to ensure that they remain current and meaningful.

Proposals to amend the Terms of Reference shall require the approval of a majority of the members present. Proposed amendments to the Terms of Reference shall be submitted to Regional Council for approval through the Public Works Committee and shall take effect only upon the approval of Council.

Appendix C - Review of Terms of Reference Clauses/Content for Comparator Municipalities, which have a Parallel Waste Management Advisory/Steering Committee that includes both Council and Public Members

Niagara Region WMPSC Existing Terms of Reference Clause (if applicable)	Niagara Region Waste Management Planning Steering Committee (WMPSC) (includes existing ToR wording)	Halton Solid Waste Management Advisory Committee	Hamilton Waste Management Advisory Committee	Ottawa Environmental Stewardship Advisory Committee
1.0 Purpose	<ul style="list-style-type: none"> Provide direction to the completion of the waste management planning process. This process will result in the selection and implementation of a long-term waste disposal strategy. 	<ul style="list-style-type: none"> Provide advice through Regional Staff to Regional Council with respect to the minimization of waste going to the landfill site through such activities as reduction, reuse and recycling (3Rs) of solid waste generated in Halton, as required by Condition 1 of the Conditions of Approval (under the Environmental Assessment Act); 	<ul style="list-style-type: none"> Assist City of Hamilton with the implementation of the 2020 Solid Waste Management Master Plan and to discuss / make recommendations on other solid waste management initiatives. 	<ul style="list-style-type: none"> Advise Ottawa City Council on policy, programs and service delivery in the area of environmental stewardship.

Niagara Region WMPSC Existing Terms of Reference Clause (if applicable)	Niagara Region Waste Management Planning Steering Committee (WMPSC) (includes existing ToR wording)	Halton Solid Waste Management Advisory Committee	Hamilton Waste Management Advisory Committee	Ottawa Environmental Stewardship Advisory Committee
		<ul style="list-style-type: none"> • Provide advice with respect to off-site impacts due to operations at the Halton Waste Management Site and the monitoring of waste haulage practices in the Region, as required by Conditions 5 and 6 of the Conditions of Approval (under the Environmental Assessment Act). 		
2.0 Responsibilities	<p>The primary roles and responsibilities of the WMPSC are to:</p> <p>a) Make recommendations to Regional Council on the selection, siting, development and implementation of</p>	<ul style="list-style-type: none"> • Provide advice on activities and programs that should be implemented to promote the reduction, reuse and recycling of solid waste, together with plans and 	<ul style="list-style-type: none"> • Give overall guidance and direction during the implementation and maintenance of the City's long-term Solid Waste 	<ul style="list-style-type: none"> • Provides advice to Council on issues pertaining to: • Policy, programs and service delivery

Niagara Region WMPSC Existing Terms of Reference Clause (if applicable)	Niagara Region Waste Management Planning Steering Committee (WMPSC) (includes existing ToR wording)	Halton Solid Waste Management Advisory Committee	Hamilton Waste Management Advisory Committee	Ottawa Environmental Stewardship Advisory Committee
	<p>alternative waste management technologies, long-term waste disposal site(s) and significant waste diversion facilities and programs;</p> <p>b) Promote public interest and involvement in the implementation of new waste management programs and to evaluate and consider recommendations received from the public.</p>	<p>programs for the disposal of waste remaining after such 3Rs initiatives;</p> <ul style="list-style-type: none"> • Examine issues and new ideas which may affect the abilities of the Region and Local Municipalities to reach their 3Rs objectives and to advise Staff on such matters; • Monitor the success of 3R programs, once established, in reaching the reduction, recycling and reuse of solid waste goals approved by Regional Council; • Advise and assist Staff with ideas for the avoidance and/or 	<p>Management Master Plan,</p> <ul style="list-style-type: none"> • Give overall guidance and direction during the preparation and implementation of other solid waste management initiatives 	<p>in the area of environmental services, forests, greenspaces, parks, cycling and pedestrian issues.</p> <ul style="list-style-type: none"> • Available as a resource to staff, providing input on matters being pursued to achieve Council's strategic priorities. • Responsible for ensuring that its business aligns with, and

Niagara Region WMPSC Existing Terms of Reference Clause (if applicable)	Niagara Region Waste Management Planning Steering Committee (WMPSC) (includes existing ToR wording)	Halton Solid Waste Management Advisory Committee	Hamilton Waste Management Advisory Committee	Ottawa Environmental Stewardship Advisory Committee
		<p>minimization of off-site impacts from Halton's Waste Management Site;</p> <ul style="list-style-type: none"> • Monitor waste haulage practices with a view to improving general traffic safety; • Support Staff in the creation of an update on activities at the end of term and submit them through Staff to Regional Council. 		<p>serves to complement, City Council's strategic priorities.</p>
3.0 Reporting	a) Figure 1 identifies the relationship and reporting structure of the WMPSC and other committees that have a role in providing input into the implementation of the Region's Long-	<ul style="list-style-type: none"> • Reports to Regional Council through Staff in the Public Works Department. 	<ul style="list-style-type: none"> • Advises Council through Public Works Committee of the progress and to receive feedback, advice and direction, as appropriate. 	<ul style="list-style-type: none"> • Reports through Standing Committee on Environmental Protection, Water and Waste

Niagara Region WMPSC Existing Terms of Reference Clause (if applicable)	Niagara Region Waste Management Planning Steering Committee (WMPSC) (includes existing ToR wording)	Halton Solid Waste Management Advisory Committee	Hamilton Waste Management Advisory Committee	Ottawa Environmental Stewardship Advisory Committee
	<p>term Waste Management System. The Waste Management Advisory Committee (WMAC), being an advisory committee that acts as the conduit for public input to the planning process, will report to the WMPSC.</p> <p>b) Recommendation(s) of the long-term Waste Management Planning Study would be reported through the Steering Committee to Public Works and Utilities Committee and then to Council for approval.</p>			<p>Management to City Council;</p> <ul style="list-style-type: none"> • May also report to another Standing Committee, where appropriate, depending on issue.

Niagara Region WMPSC Existing Terms of Reference Clause (if applicable)	Niagara Region Waste Management Planning Steering Committee (WMPSC) (includes existing ToR wording)	Halton Solid Waste Management Advisory Committee	Hamilton Waste Management Advisory Committee	Ottawa Environmental Stewardship Advisory Committee
4.0 Applicability of Procedural By-law	a) As an advisory committee of Council, the WMPSC shall be governed by the sections of the Region's Procedural By-law relating to advisory committees.	<ul style="list-style-type: none"> • The Committee shall, at all times, follow the procedures and practices set out in the Regional Procedural By-Law. 	<ul style="list-style-type: none"> • Members are responsible for complying with the Procedural By-law and the Advisory Committee Handbook 	<ul style="list-style-type: none"> • Nothing included in ToR.
5.0 Composition	a) Sub-committee of the Public Works and Utilities Committee. b) WMPSC comprised of a maximum of 12 individuals, including: Regional Chair, nine (9) Regional Councillors and two (2) citizen members. The two (2) citizen members will not have a vote on legal or financial matters, and	<ul style="list-style-type: none"> • The Committee includes: <ul style="list-style-type: none"> ◦ 4 Councillors, one from each Local Municipality, either Regional or Local ◦ 8 citizens-at-large (preferably, at least 4 of whom live near the Halton Waste Management Site) 	<ul style="list-style-type: none"> • Comprised of up to five (5) members, as follows: <ul style="list-style-type: none"> ◦ Up to three members of City Council; and ◦ Two citizen members. 	<ul style="list-style-type: none"> • Maximum membership between 9 and 11. • As much as practicable, membership should reflect City's diverse population. • Shall also include one (1) Member of

Niagara Region WMPSC Existing Terms of Reference Clause (if applicable)	Niagara Region Waste Management Planning Steering Committee (WMPSC) (includes existing ToR wording)	Halton Solid Waste Management Advisory Committee	Hamilton Waste Management Advisory Committee	Ottawa Environmental Stewardship Advisory Committee
	<p>will not be present during closed sessions, or receive confidential information.</p> <p>c) Additional Officers and/or employees of the Niagara Region's Waste Management Services Division shall serve on the WMPSC in a resource capacity.</p>	<ul style="list-style-type: none"> ○ 1 member from the Halton Agricultural Advisory Committee ○ 1 member from Conservation Halton ○ 1 member of Regional staff who performs the Environmental Inspector duties (advisory, non-voting) 		<p>Council in a liaison capacity.</p>
6.0 Meetings	<p>a) Monthly basis prior to the second Public Works Committee meeting of each month, or at the call of the Chair.</p> <p>b) Meetings generally open to public and only closed when dealing</p>	<ul style="list-style-type: none"> ● Minimum of two (2) times per year and at any other time, at the call of the Committee Chair 	<ul style="list-style-type: none"> ● Bi-monthly, or at the call of the Chair. 	<ul style="list-style-type: none"> ● Nothing included in ToR.

Niagara Region WMPSC Existing Terms of Reference Clause (if applicable)	Niagara Region Waste Management Planning Steering Committee (WMPSC) (includes existing ToR wording)	Halton Solid Waste Management Advisory Committee	Hamilton Waste Management Advisory Committee	Ottawa Environmental Stewardship Advisory Committee
	<p>with matters under Region's Procedural By-law relating to advisory committees.</p> <p>c) Opportunities will be provided for formal public input through reports from the WMAC and general public input via inclusion of public deputations as item on agenda for each meeting. Public required to contact Region 24 hours in advance to do so.</p>			
7.0 Meeting Agenda and Minutes	a) Meeting agendas will be prepared and distributed to WMPSC members, media and other interested participants at least 5	• Clerk's staff will prepare minutes and agendas and provide general administrative coordination for meetings.	• Nothing included in ToR.	• Nothing included in ToR.

Niagara Region WMPSC Existing Terms of Reference Clause (if applicable)	Niagara Region Waste Management Planning Steering Committee (WMPSC) (includes existing ToR wording)	Halton Solid Waste Management Advisory Committee	Hamilton Waste Management Advisory Committee	Ottawa Environmental Stewardship Advisory Committee
	<p>working days prior to WMPSC meetings.</p> <p>b) Clerk's staff will prepare agenda and minutes</p> <p>c) Any member of general public can request to be included on mailing list for WMPSC meetings.</p> <p>d) Minutes and recommendations of WMPSC provided to Public Works Committee (PWC) 5 working days prior to meeting. Oral reports by Chair on significant matters not yet minuted may be provided to PWC, at next meeting.</p>	<ul style="list-style-type: none"> • Clerk's staff will co-ordinate and retain Committee records including agendas, minutes, any subcommittee reports (if applicable and as required), annual reports and aims and objectives. 		
Absenteeism (new section)	<p>a) Nothing included in existing ToR.</p>	<ul style="list-style-type: none"> • Vacancies on the Committee for positions that are not Agency 	<ul style="list-style-type: none"> • If member is absent for three (3) meetings in a 	<ul style="list-style-type: none"> • Nothing included in ToR.

Niagara Region WMPSC Existing Terms of Reference Clause (if applicable)	Niagara Region Waste Management Planning Steering Committee (WMPSC) (includes existing ToR wording)	Halton Solid Waste Management Advisory Committee	Hamilton Waste Management Advisory Committee	Ottawa Environmental Stewardship Advisory Committee
		<p>Appointments or Members of Regional Council shall be advertised to the public at the beginning of the Committee term and mid-term as needed.</p> <ul style="list-style-type: none"> • If a Committee Member is unable to complete the term, a new Committee Member may be appointed by Regional Council. • All Committee Members that are to be appointed by Regional Council shall be selected by the Interview Committee in accordance with the Regional Procedural By-Law. 	<p>calendar year, without approval from WMAC, the member may be subject to replacement.</p>	

Niagara Region WMPSC Existing Terms of Reference Clause (if applicable)	Niagara Region Waste Management Planning Steering Committee (WMPSC) (includes existing ToR wording)	Halton Solid Waste Management Advisory Committee	Hamilton Waste Management Advisory Committee	Ottawa Environmental Stewardship Advisory Committee
Selection of Committee Chair and Vice-Chair (new section)	<ul style="list-style-type: none"> • Nothing included in existing ToR. 	<ul style="list-style-type: none"> • Elected by Committee for the full term, following the procedures set out in the Regional Procedural By-law. • If Chair resigns at any point during term, a new Chair will be elected by the Committee. • Vice-Chair shall only assume the authority and perform all the duties of Chair until such election takes place. 	<ul style="list-style-type: none"> • Nothing included in ToR. 	<ul style="list-style-type: none"> • Nothing included in ToR.
Term of Office (new section)	<ul style="list-style-type: none"> • Nothing included in existing ToR. 	<ul style="list-style-type: none"> • Coincides with the term of Regional Council, unless otherwise provided by resolution of Regional Council, or until successors are appointed. 	<ul style="list-style-type: none"> • Coincides with term of Council or until such time as successors are appointed by Council. 	<ul style="list-style-type: none"> • Nothing included in ToR.

Niagara Region WMPSC Existing Terms of Reference Clause (if applicable)	Niagara Region Waste Management Planning Steering Committee (WMPSC) (includes existing ToR wording)	Halton Solid Waste Management Advisory Committee	Hamilton Waste Management Advisory Committee	Ottawa Environmental Stewardship Advisory Committee
		<ul style="list-style-type: none"> • At the end of a term, members must reapply to be considered for a subsequent term. • May serve for no more than two consecutive terms. 		

MEMORANDUM

WMPSC-C 15-2021

Subject: Recycled Glass Sand Used for Stormwater Management

Date: Monday, April 19, 2021

To: Waste Management Planning Steering Committee

From: Lucy McGovern, Collection and Diversion Program Manager

Over several years, municipalities across Ontario have been challenged with processing and marketing curbside-collected glass. To meet this challenge, Niagara Recycling embarked on processing curbside collected glass and marketing it into the sandblasting industry. Eco Glass, a fine-sand like product is produced at the Region's Recycling Centre.

Niagara Region and Niagara Recycling continually explore ways to expand markets for the Eco Glass product. In 2018/2019, Niagara Region and Niagara Recycling investigated an innovative idea to use recycled glass in bioretention stormwater systems. Alternative uses for recycled glass were being investigated to create a secondary market for recycled glass and provide a substitute source of the sand component in engineered bio-soil.

Bioretention uses natural features to manage stormwater

Bioretention is a stormwater infiltration practice that treats runoff from paved areas by using the natural properties of soil and vegetation to remove contaminants. Other names commonly used for these types of practices includes rain gardens, bioswales, dry swales, stormwater planters and biofilters.

The ultimate goal of stormwater management is to maintain the health of streams, lakes and aquatic life as well as provide opportunities for human uses of water by mitigating the effects of urban development. To achieve this goal, stormwater management strives to maintain the natural hydrologic cycle, prevent an increased risk of flooding, reduce undesirable stream erosion, and protect water quality.

Tipping fees impact net costs of recycled glass sand

An economic analysis was completed to determine the net cost of producing the recycled glass sand. Three main variables impacted the financial outcomes: tip fees applied for the glass feedstock received; residual waste disposal costs; and the sales price for the glass sand. The cost of processing was constant in all analyzed scenarios. The resulting revenue varied between a net loss of \$40 per tonne, to a positive result of \$10 per tonne. This wide variation of cost is impacted primarily on the tipping fees applied for the glass received. It also illustrates the need to be exceptionally diligent in controlling costs during the manufacturing process of the glass sand.

Current demand for bioremediation media, such as recycled glass sand, is estimated to be as high as nearly 8,000 tonnes per year (based on past demand in the GTA during the construction season between April and December). The potential for the use of recycled glass sand in place of concrete sand is significant, however, concrete sand is inexpensive in comparison. Another factor impacting the economics of this option is the incoming quality of the mixed broken glass. Typical Ontario Material Recovery Facility (MRF) glass contamination rates are up to 20 per cent. If MRFs can reduce the contamination rate by 10 per cent by installing better glass clean-up systems, this could bring the product yield up from the current 60 per cent, to 70 per cent. The residue rate would fall from 40 per cent, to 30 per cent, thereby improving the economic result.

Bioretention systems as an alternative glass market?

Bioretention system installations in Ontario are growing, but implementation is not regulated and therefore use and construction are based on best practice guidance put forward by stakeholders associated with stormwater control. New markets for materials such as recycled glass sand need to be developed and this study has helped to demonstrate innovation in its infancy.

Final Project Findings

1. The cost of production of glass sand is currently more than that of concrete sand:

Currently, the cost of concrete sand used in a bioretention facility is less than the cost of the production of recycled glass sand. This would be of concern to an owner or developer of a project since the least costly components are generally used. For recycled glass sand to gain a foothold in the market, the cost differential must be narrowed. Two of the most significant factors to examine are a reduction in the contamination prior to processing and the tipping fee at the processing plant.

2. Glass fines must be removed:

Glass fines consist of glass that is smaller than 80 mesh (80 mesh screen has 80 openings in one square inch of screen). At the outset of the project, it was anticipated that the glass fines would be usable. As the project developed, however, this was not found to be the case due to the need for the sand to be consistent with the CSA Group standard W200-18, which specifies the need to use particle sizing in the glass sand that meets the requirements of concrete sand. This effectively excludes the glass fines, leaving it to be destined for the landfill unless another useful diversion opportunity is discovered. Niagara Region's contracted operator, Niagara Recycling, is researching alternate uses for this material.

3. Contamination levels affect cost of production:

The amount of contamination found within the feedstock glass needs to be reduced before the best economic picture for the production cost can be achieved. If contamination can be reduced to 5 or 10 per cent, then the economics improve.

4. Green procurement policies encourage a circular economy:

Recommendations moving forward for other municipalities interested in developing a market for the use of recycled glass sand include the development of green procurement policies and amendments to municipal purchasing by-laws to contribute to a sustainable environment and encourage a circular economy. Where feasible and without significantly affecting the intended use or quality of products or services, municipalities can endeavor to include specifications which contain the maximum level of post-consumer recyclable content.

The provincial government is moving forward with the creation of guidelines for better control of urban stormwater runoff. Municipalities can promote this by enacting changes in their standard specifications for works that occur under their control. Niagara Region's Procurement staff, with support from the Keen on Green Committee, are investigating ways to include requirements for green procurement considerations in Regional procurement policies and procedures that can support sustainable choices, while balancing limitations on project budgets.

Costs/Funding

The overall project cost, inclusive of in-kind services was \$92,043. The Resource Productivity and Recovery Authority, along with Stewardship Ontario provided a grant to Niagara Region of \$52,833. This grant covered all project costs incurred by Niagara Region, LGC Professional Consulting Services and Grobark (part of Walker Environmental Services). Niagara Region, Niagara Recycling, LGC Professional Consulting Services, Grobark, and the Toronto Region Conservation Authority also offered in-kind goods and services totalling an estimated \$39,210.

If the net cost of producing the glass sand for engineered bio-soil was favourable, Niagara Region would be able to accept glass from other municipalities for processing. Despite the economics of the project, Niagara Region and Niagara Recycling continue to produce Eco Glass and continue to look for additional alternative glass markets. Currently, Eco Glass is sold in 50 lbs bags and super sacs for \$155 per tonne and \$120 per tonne respectively, however prices may vary slightly based on the volumes purchased.

Respectfully submitted and signed by

Lucy McGovern
Collection and Diversion Program Manager
Waste Management Services Division
Public Works Department

MEMORANDUM

WMPSC-C 17-2021

Subject: 2019 Waste Management Benchmarking Report

Date: Monday, April 19, 2021

To: Waste Management Planning Steering Committee

From: Brad Whitelaw, Program Manager, Waste Policy & Planning

The purpose of this memorandum is to submit the annual 2019 waste management benchmarking review, which evaluates performance against the Blue Box program goals, objectives and targets established in WMPSC-C 1-2017, Niagara Region's 2016-2021 Blue Box Program Plan. This memorandum was delayed due to the length of time required by [Resource Productivity & Recovery Authority \(RPRA\)](https://rprra.ca/) (<https://rprra.ca/>) to verify the 2019 Blue Box Datacall results and post them to their website.

Overview

The 2019 benchmarking report is comprised of three (3) key areas for performance measurement. For each measurement parameter, Niagara's target, the current value, and how it compares to the target and/or other municipal comparators, are described in Appendix A. The parameters reflect industry standard measurements for program or system performance, cost effectiveness and efficiencies. The performance and benchmarking results are summarized below.

1. Resource Productivity & Recovery Authority Residential Waste Diversion Rate

Niagara achieved the interim waste diversion goal of 56% by 2016, and is now working towards achieving the 65% target. Niagara's 2019 diversion rate decreased slightly to 55% from the previous few years, but was still above the provincial average of approximately 50%. It was also higher than the average of the municipal comparator group (i.e. municipalities with a population greater than 250,000), which was approximately 52%. This measurement parameter and associated target will be revised once the new provincial diversion rate methodology is established.

2. Blue Box Recycling Plan Performance Measures and Targets

The Blue Box Recycling Plan goals, which align with Council's current target of 56% diversion by 2016 and 65% diversion by 2020, are to increase the diversion of residential Blue/Grey Box materials from disposal and extend the life of existing landfills. The performance results in support of program goals and associated objectives, which are measured by RPRA, include some of the following observations. Appendix A contains the full results.

- Niagara has achieved the 2019 RPRA related targets and is performing better than the comparator group and provincial average. The RPRA measures consist of:

RPRA Measure	Niagara Region	Comparator Group Average	Provincial Average
2019 Blue Box Residue Rate	7.8%	n/a	12.6%
2019 Net Cost per Tonne Marketed	\$291/tonne	\$392/tonne	\$450/tonne

- Niagara exceeded the 2019 Blue Box participation rate target, based on the results of the 2019 'Recycling Matters' curbside visual survey.
- The 2019 Blue Box set-out rate was not measured, as part of the 2019 'Recycling Matters' curbside visual survey. However, it is anticipated that the 2019 Blue Box set-out rate remained the same as the 2016 Blue Box set-out rate (1.5/hhld/week) as no program change had occurred between 2016 and 2019.

Curbside Waste Audit/Visual Survey Measure	Niagara Target	Niagara Actual
2019 Blue Box Participation Rate	82%	90%
2019 Blue Box Set-Out Rate	2.0/hhld/week	1.5/hhld/week (estimated)

3. Municipal Benchmarking Network Canada (MBNC) Performance Measures

The subset of MBNC parameters that are related to cost effectiveness are used in this benchmarking review. Niagara was lower in cost than the 2019 MBNC comparator group average, in all areas:

MBNC Performance Measure	Niagara Region	MBNC Comparator Group Average
2019 Operating Cost for Garbage Collection per Tonne - All Property Classes	\$98/tonne	\$127/tonne
2019 Operating Cost for Solid Waste Disposal per Tonne - All Property Classes	\$91/tonne	\$99/tonne
2019 Operating Cost for Solid Waste Diversion per Tonne - All Property Classes	\$164/tonne	\$217/tonne
2019 Solid Waste Average Operating Cost per Tonne - All Property Classes	\$160/tonne	\$185/tonne

Conclusions

Improvements to waste management programs and program performance have occurred over the last several years. Niagara has met the established targets or is performing better than its comparator group and/or provincial averages. Niagara has met the majority of the short-term targets established for 2019, and is trending toward meeting its longer term targets. The implementation of Niagara's policy change (i.e. EOW garbage collection) in Q4 of 2020 will have a positive impact on Niagara's waste diversion rate in future years.

These annual reviews are intended to ensure continuous improvement and that every effort is being made to ensure the waste management system is operated efficiently and cost-effectively.

Respectfully submitted and signed by

Brad Whitelaw, BA, CIM, CPM, P.Mgr., CAPM
Program Manager, Waste Policy & Planning
Waste Management Services Division
Public Works Department

Appendices

Appendix A 2019 Waste Management Benchmarking and Performance Monitoring
Report

2019 Waste Management Benchmarking and Performance Monitoring Report

Overview

The 2019 Waste Management Benchmarking Report is comprised of three (3) key areas for performance measurement:

1. Resource Productivity & Recovery Authority (RPRA) Residential Waste Diversion Rate
2. Blue Box Recycling Plan Performance Measures and Targets
3. Municipal Benchmarking Network Canada (MBNC) Performance Measures

For each area/parameter, Niagara's target, the current value and how it compares to the target and other municipal comparators (where available) are described. The parameters reflect industry standard measurements for program or system performance, cost effectiveness and efficiencies.

Benchmarking and Performance Results

1. RPRA Residential Waste Diversion Rate

Niagara's Target:	56% by 2016, increasing to 65% by 2020
2019 Value:	55%
Variance to Target:	Target not achieved
Benchmarking Result:	Niagara is above the provincial and comparator group averages of 50% and 52%, respectively.

The RPRA residential waste diversion rate is calculated based on tonnes diverted in the following main categories:

- Recyclables material stream, which consists of marketed Blue Box material, electronics, scrap metal, construction/demolition material, asphalt shingles and other miscellaneous categories;
- Green Bin organics and leaf, yard and branch material; and
- Other material, which is primarily comprised of a RPRA calculated tonnage credit for grasscycling/grass ban, deposit-return, tires and backyard composting.

In 2019, Niagara generated 198,840 tonnes of residential solid waste, which was an increase of approximately 0.2% compared to 2018. However, as illustrated in Table 1, using the RPRA methodology, which allocated additional multi-residential disposal tonnages to Niagara, the 2019 and 2018 adjusted tonnages were higher at 201,678 and 198,921 tonnes, respectively.

Table 1 - Residential Material Diverted as a Percentage of Total Solid Waste Generated in 2019 vs. 2018

Residential Waste Stream	2019 Tonnes	2019 Percent of Total Waste	2018 Tonnes	2018 Percent of Total Waste
Total Generated	201,678	100%	198,921	100%
Waste Disposed ⁽¹⁾	90,963	45%	87,786	44%
Material Diverted	110,715	55%	111,135	56%

Notes:

1. Waste Disposed tonnes were adjusted by RPRA, using their revised tonnage methodology, which allocated additional multi-residential disposal tonnages.

For comparison, Tables 2A and 2B provide the RPRA residential generation rate per capita for Niagara's comparator municipal groups which are the Large Urban and Urban Regional groups. The Large Urban group is defined by RPRA as municipalities with a population greater than 250,000 and a population density greater than four (4) residents per hectare. The Urban Regional group is defined by RPRA as municipalities with a population greater than 250,000 and a population density less than four (4) residents per hectare.

The majority of municipalities have seen increases at least once in 2013, 2014, and 2017. However, most municipalities saw a decrease in 2015, 2016 and 2018. In 2019, over half of these municipalities decreased slightly from their 2018 level.

Table 2A - RPRA Residential Generation Rate Per Capita – Large Urban Municipal Group

Municipality	2019 Kg/Cap.	2018 Kg/Cap.	2017 Kg/Cap.	2016 Kg/Cap.	2015 Kg/Cap.	2014 Kg/Cap.	2013 Kg/Cap.
Halton Region	357	364	372	375	389	413	406
Hamilton	401	394	415	397	405	419	411
London	388	383	409	399	407	405	401
Peel Region	361	362	360	361	362	368	366
Toronto	281	285	283	280	296	310	317
York Region	316	318	314	316	326	336	328
Large Urban Average	326	328	330	327	337	349	348

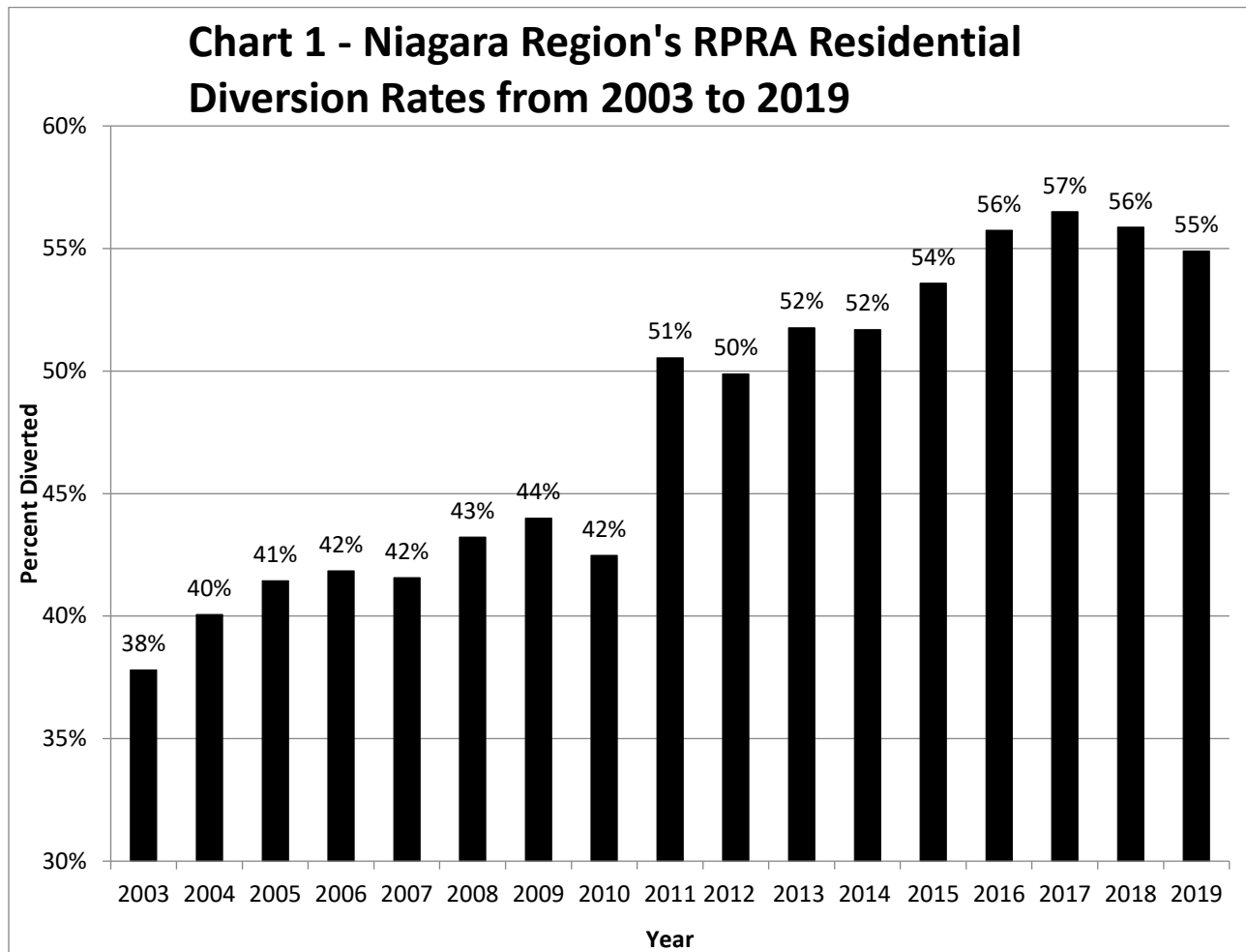
Table 2B - RPRA Residential Generation Rate Per Capita – Urban Regional Municipal Group

Municipality	2019 Kg/Cap.	2018 Kg/Cap.	2017 Kg/Cap.	2016 Kg/Cap.	2015 Kg/Cap.	2014 Kg/Cap.	2013 Kg/Cap.
Durham Region	373	383	376	377	380	385	378
Essex-Windsor	408	406	404	391	399	395	399
Niagara Region	421	421	439	427	435	442	437
Ottawa	354	355	362	352	362	367	372
Simcoe	473	457	476	473	475	465	461
Waterloo Region	331	327	329	330	347	346	354
Urban Regional Average	380	380	385	379	387	389	390

The overall trend in Chart 1 shows an improvement in Niagara's RPRA residential waste diversion performance between 2003 and 2019. Niagara's 2019 diversion rate of 55% increased by 13% compared to 2010, primarily due to the new collection service levels that were launched on February 28, 2011, as part of this collection contract.

The services and associated policies that increased diversion, through enhanced programs and behavioural change incentives, included:

- Collection of both Blue and Grey Box material every week;
- Multi-residential recycling program;
- Green Bin organics program expansion to Wainfleet and West Lincoln and to multi-residential buildings up to six units across the Region;
- Reduction in garbage limits for households - one (1) garbage container (bag/can) limit per residential unit (to a maximum of twelve containers);
- Increase in the cost of the garbage tags from \$1.00/tag to \$2.00/tag to reflect full cost recovery;
- Initiation of a partial construction and demolition (C&D) depot diversion program; and
- Addition of plastic containers and rigid plastic packaging with the numbers 3 and 7 and non-numbered to the Blue Box Program (all plastic containers and rigid packaging are now accepted).

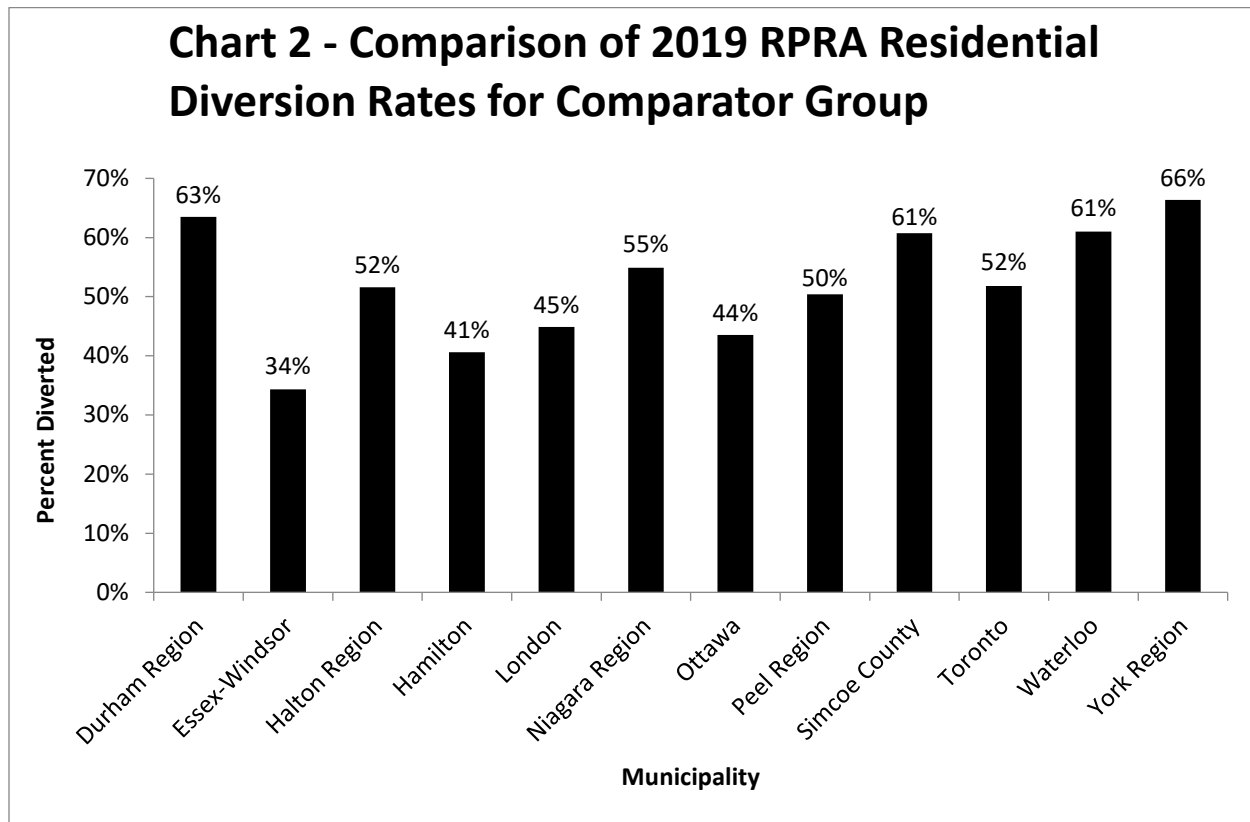


The 2019 diversion initiative that was implemented included the following:

- Mattress recycling program at the Region's landfill drop-off depots.

Notwithstanding the implementation of the above-noted initiative, there was a slight decrease in the diversion rate in 2019 compared to 2018. One of the primary factors contributing to a reduction in the diversion rate of 1% (actual reduction was 0.9% but due to rounding is shown as 1% change) was an increase in the Blue Box residue rate, which was due in large part to a lack of an end market for low-value mixed plastic.

Chart 2 below illustrates the 2019 RPRA residential waste diversion rates for Niagara and its eleven municipal comparators, which have a population greater than 250,000.



York, Durham and Waterloo have some of the highest diversion rates, which are generally attributable to every-other-week garbage collection. Simcoe County's diversion rate was also reported to be one of the highest at 61%, with a weekly one container garbage limit parallel to Niagara's program in 2019, and a very strong C&D depot recycling program.

Niagara is above the 2019 provincial average of approximately 50% diversion and higher than the average of the municipal comparator group, which is approximately 52%. In terms of ranking, Niagara is the 5th highest rate in the comparator group.

For comparison, Table 3 provides the residential diversion percentage by diverted material stream for the six (6) top performing municipal comparators, including Niagara, based on the 2019 RPRA data.

Table 3 - RPRA Residential Diversion Percentage by Material Stream in 2019 for the Top Seven Performers in Niagara Region's Comparator Group

Municipality	Deposit Return	Reuse	On-Property¹	Blue Box	Other²	Organics	MHSW	2019 Diversion Rate
York Region	1.74%	0.00%	4.37%	14.09%	12.12%	33.70%	0.32%	66.34%
Durham Region	1.48%	2.84%	5.33%	16.26%	15.63%	21.42%	0.51%	63.48%
Waterloo Region	1.66%	0.00%	6.69%	17.07%	3.34%	31.93%	0.29%	60.99%
Simcoe County	1.15%	0.14%	3.45%	16.39%	17.04%	22.01%	0.53%	60.71%
Niagara Region	1.31%	0.69%	5.32%	17.31%	6.75%	23.01%	0.51%	54.90%
Toronto	1.96%	0.00%	4.33%	12.64%	3.58%	29.05%	0.24%	51.80%
Halton Region	1.55%	0.00%	4.65%	13.52%	4.43%	27.13%	0.33%	51.61%

Comparator Group Average 51.96%

RPRA Ontario Average 49.71%

Notes:

1. On property includes backyard composting and grass-cycling
2. Other includes recyclables such as Waste Electrical and Electronic Equipment (WEEE), tires, and construction and demolition (C&D) materials

In Table 3, the organic material stream shows a wide range of diversion percentages (lowest being 21.42% in Durham to the highest at 33.70% in York), with the majority of the municipalities being above Niagara's rate of 23.01%. York, Halton, Toronto and Waterloo's higher organics diversion rate may be attributable to providing every-other-week garbage collection.

Another significant observation from Table 3 is that Simcoe County and Durham Region have an exceptionally strong C&D depot diversion program (included in Other

Recyclables) of 17.04% and 15.63%, which are anomalies compared to the other top performers.

The experience in the top performing municipalities, supplemented by the results of historical waste audit data for Niagara's low density residential sector, demonstrate good potential for future diversion growth in Niagara's organics program and/or potential for food waste reduction through the Ontario Food Collaborative.

Future increases in Niagara's residential diversion rate are expected to trend towards meeting the target of 65%, with the implementation of the service level changes, which will begin October 2020. However the 65% diversion target will likely not be realized until a full year of every-other-week garbage collection has been in place.

Planned 2020-21 diversion initiatives include:

- Increase in the cost of the garbage tags from \$2.00/tag to \$2.50/tag to reflect full cost recovery (February 2020);
- Implementation of every-other-week garbage collection, and a four (4) bulky item limit per collection, as part of the new waste collection contract (October 2020);
- Implementation of a communication strategy and public education campaign for the new waste collection contract (summer 2020);
- Implementation of waste management web/mobile application for collection day look up, collection day reminders, notifications, and item search tool (October 2020);
- Continuation of the multi-residential textile and WEEE diversion programs (2020-21);
- Continued participation in the Ontario Food Collaborative and implementation of a Niagara Region specific food waste reduction strategy (2020-21).

Provincial policy changes (i.e. extended producer responsibility and organics diversion strategy), will also instigate more substantial diversion rate increases, particularly in the organics program area.

Niagara Region is reviewing other methods to measure its waste diversion, which may be applied in future years. Metrics, such as the reduction of waste on a per capita basis, are being reviewed. Reduction (e.g. reducing avoidable food waste and reuse efforts) is difficult to measure using the traditional RPRA diversion rate calculation.

2. Blue Box Recycling Plan Performance Measures and Targets

The Blue Box Program's specific goals, which align with Council's objective of 65% diversion from disposal, are to increase the diversion of residential Blue/Grey Box materials from disposal and extend the life of existing landfills.

Key Blue Box Program objectives, which are related to the targets and benchmarking exercise, include the following:

- Optimizing collection and processing, in order to improve Niagara's performance factor (ratio of the program's net cost per tonne and its recycling rate) relative to other municipalities, which increases the program funding amount,
- Continuous improvement, including monitoring and reporting of Blue Box diversion successes against recycling targets;
- Facilitating the achievement of the various Blue Box Program performance measurement targets;
- Increasing program participation and recovery of Blue Box materials, while lowering residue rates; and
- Increasing level of customer (Regional service user) satisfaction.

The following section discusses Niagara's progress in achieving these goals and objectives. Niagara's 2019 program results are compared to:

- Targets set in the 2016-2021 Niagara Region Blue Box Recycling Plan; and
- Eleven comparator municipalities that have a population greater than 250,000 for the RPRA parameters and the RPRA provincial average.

The performance measures were defined in previous RPRA best practice requirements. The measures are based on outputs from the annual RPRA datacall process and data collected from curbside waste composition studies/audits, which are completed intermittently when introducing program changes.

Baseline Blue Box Program data from 2015 and 2016 curbside waste audits, and in some cases historical trends, were used as a general basis for developing targets for the performance measures. Targets have also been established considering approved program changes, targeted communications and processing facility improvements. Other municipal data were also used as a reference for developing targets for some measures.

RPRA Performance Measures

The RPRA utilizes a standard methodology (Generally Accepted Principles or GAP analysis) for municipal waste management reporting and residential waste diversion

calculations. The performance measures, which are an output of the RPRA datacall process, are described below with associated Niagara targets. Data from eleven comparator municipalities that have a population greater than 250,000 are referenced for comparison and benchmarking purposes.

2.1. Blue Box Residue Rate

Niagara's Target:	4.2% in 2015, decreasing to 4.0% by 2019
2019 Value:	7.8% (based on residential tonnes disposed)
Variance to Target:	Target not achieved
Benchmarking Result:	Niagara is well below the Province-wide multi-stream (two or more streams) residue rate of 12.6% for 2019. The average single stream residue rate is higher at 29.6% for 2019.

Blue Box residue rate is defined as the percentage of collected Blue Box material that is rejected during processing. Residue typically includes non-recyclable material such as take-out coffee cups and other contaminants. The residue is then disposed resulting in less revenue, as the material cannot be sold to recycling end markets.

Niagara Region achieved a residential Blue Box residue rate of 1.8% in 2011 and 2012, and 1.7% in 2013 and 2014. The 2015-19 residue rates increased from 4.5% to 7.8%. Niagara Region experienced challenges with marketing curbside collected plastic film (e.g. stuffed grocery bags) due to challenges with contamination, market surpluses, lack of demand from the domestic end market and lower cost of virgin material. The volume of bagged recyclables entering Niagara Region's MRF has been increasing over time. Bagged material creates challenges and can result in higher residue rates as it takes away from time spent removing contaminants from the line.

2.2 Net Cost per Tonne Marketed

Niagara's Target:	\$313/tonne in 2018, and remaining below the average of the comparator group for each year.
2019 Value:	\$291/tonne
Variance to Target:	Target achieved

Niagara's Target:	\$313/tonne in 2018, and remaining below the average of the comparator group for each year.
Benchmarking Result:	Niagara had the third lowest net program cost in 2019 (\$291/tonne)

A key performance indicator for the Blue Box Program is the net program cost per tonne marketed, as calculated by RPRA. This parameter includes the net cost for Niagara's Recycling Centre (i.e. processing), collection contract and program support (e.g. staff, promotion and education, etc.). The net cost reflects the revenue from the sale of recyclables.

As part of the Region's 2016-2021 Blue Box Recycling Plan, this target was re-evaluated and updated in 2018, considering more recent market conditions (i.e. lower revenues from the sale of recyclables, China's Green Fence restrictions).

As shown in Tables 4A to 4C (i.e. Large Urban and Urban Regional Municipalities), Niagara's net residential Blue Box cost per tonne marketed was approximately \$291 in 2019, which was a 31% increase compared to 2018. The main reason for the increase in 2019 was due to the decrease in revenue from the sale of recyclables. However, Niagara had the third lowest net program cost in 2019 and the fourth lowest net program cost in 2018 (\$222/tonne). Niagara was well below the 2019 comparator group average of \$392/tonne and the 2019 Province-wide average of \$450/tonne.

Niagara has a cost effective program in comparison to other jurisdictions.

Table 4A - RPRA Net Program Cost Per Tonne Marketed in 2019 vs. 2018 – Large Urban Municipalities

Municipality	2019 Blue Box Tonnes Marketed	2019 Total Net Cost	2019 Net Cost Per Tonne Marketed ³	2018 Net Cost Per Tonne Marketed ³
Halton Region	28,377	\$9,535,728	\$336.03	\$237.17
Hamilton	33,149	\$12,821,715	\$386.79	\$350.95
London	21,707	\$8,783,177	\$404.63	\$321.28

Municipality	2019 Blue Box Tonnes Marketed	2019 Total Net Cost	2019 Net Cost Per Tonne Marketed ³	2018 Net Cost Per Tonne Marketed ³
Peel Region	74,042	\$37,625,248	\$508.16	\$367.50
Toronto	99,785	\$62,185,833	\$623.20	\$641.96
York Region	53,555	\$25,148,969	\$469.59	\$371.99
Large Urban Total:	310,614	\$156,100,671	N/A	N/A

Table 4B - RPRA Net Program Cost Per Tonne Marketed in 2019 vs. 2018 – Urban Regional Municipalities

Municipality	2019 Blue Box Tonnes Marketed	2019 Total Net Cost	2019 Net Cost Per Tonne Marketed ³	2018 Net Cost Per Tonne Marketed ³
Durham Region	41,207	\$15,992,444	\$388.10	\$341.75
Essex-Windsor	19,941	\$6,655,049	\$333.73	\$213.79
Niagara Region	34,912	\$10,159,441	\$291.00	\$221.50
Ottawa	55,232	\$13,263,337	\$240.14	\$204.55
Simcoe	25,690	\$12,942,449	\$503.80	\$287.46
Waterloo Region	34,960	\$7,448,395	\$213.05	\$199.90
Urban Regional Total:	211,942	\$66,461,116	N/A	N/A

Table 4C - Average Net Cost Per Tonne Marketed in 2019 vs. 2018 – Comparator Groups

Comparator Group Simple and Weighted Averages for Net Cost Per Tonne Marketed in 2019 vs. 2018	2019	2018
Large Urban Simple Average ⁽¹⁾	\$454.74	\$381.81
Large Urban Weighted Average ⁽²⁾	\$502.56	\$426.07
Urban Regional Simple Average ⁽¹⁾	\$328.30	\$244.83
Urban Regional Weighted Average ⁽²⁾	\$313.58	\$243.88
Comparator Group Simple Average ⁽¹⁾	\$391.52	\$313.32
Comparator Group Weighted Average ⁽²⁾	\$425.91	\$354.22
Ontario Grand Total Weighted Average ⁽²⁾	\$449.59	\$373.52

Notes:

1. Simple average of per tonne values.
2. Weighted averages are group total costs or revenues divided by total group tonnage.
3. Niagara's program includes a wide range of materials which, in some cases, is greater than those collected by other municipalities and will increase the net cost per tonne marketed.

Waste Composition Studies and Visual Audit – Program Monitoring Parameters

Waste composition studies and curbside visual audits are typically completed to measure performance changes as a result of introducing a program change or when industry stewardship funding becomes available for these activities.

A waste composition study is defined as a formal, structured process used to quantify the amount and type of waste, recyclables and organics being generated and diverted. A waste composition study, which included 170 low-density residential (LDR) household set-outs, was conducted across all twelve local area municipalities in the fall and winter of 2010, and in the spring and summer of 2011, after the start of the new collection contract and service levels. A follow-up, four (4) season waste composition study was completed in 2015/2016. Both studies received CIF funding.

Visual curbside audits, which have been completed since 2007, provide data regarding participation rates. As part of an earlier “It Takes Three Campaign” properties were randomly audited by Waste Management interns to determine if recyclables that had been set out at the curb were being properly sorted and prepared for pick up. Door-to-door visits to each audited home have occurred in 2012 and 2013 to promote the ‘Blue Box Ins and Outs’ campaign. The “Gold Star Recycler” program was carried out in conjunction with the audits in order to provide a visible and tangible reward, a form of thanks and public recognition for residents’ waste diversion efforts. Curbside visual audits were not completed in 2015 and 2016, due to a reallocation of intern resources.

In 2017 and 2018, curbside visual audits of Blue and Grey Recycling Boxes were completed at approximately 1,000 LDR households. Those audit results meeting 'perfect' or 'near-perfect' criteria were given an "I'm a Gold Star Recycler" recycling box and an informative door hanger to encourage and reward their proper set-out practices.

In 2019, curbside visual audits of Blue and Grey Recycling Boxes were completed at 1,250 LDR households, as part of the ‘Recycling Matters’ campaign. The audits looked for contaminated and improperly prepared recycling materials. Promotional and educational materials were distributed to homes based on the visual results of the recycling observed at the curb. Residents who obtained a “Good” audit result were provided with a door hanger thanking them for successful participation. Residents who obtained a “Poor” audit result were provided with a door hanger on proper sorting and preparation practices. If a resident had “poor” audit results in each of the three consecutive weeks, a warning letter was issued by Niagara Region’s By-law Enforcement staff, and the address was monitored for compliance in subsequent weeks. Unacceptable materials and highly contaminated recycling boxes observed during the curbside audits were tagged as uncollectable.

Key performance measures, which are based on the curbside visual audits and waste composition studies, are identified below.

2.3 Blue Box Participation Rates

Target:	82% from 2016 to 2021
2019 Value:	90%
Variance to Target:	Target achieved

The Blue Box participation rate is defined as the percentage of LDR households on a curbside collection route which set out recyclables at least once in a consecutive two (2) week period.

As illustrated in Table 5, the trend has been towards an improved Blue Box participation rate, which is attributable to the introduction of new services in 2011, the targeted social marketing and education campaigns and program maturity.

Based on the 2015/16 Region curbside waste audit and the 2017 visual audit results, the Blue Box participation rate decreased, compared to the participation rates measured as part of previous visual audits completed, as part of the 'Blue Box Ins and Outs' campaign.

However, the 2019 Blue Box participation rate improved from 2018. Minor audit variations may be attributable to the season and the number of households not setting out any material due to being away.

Table 5 - Blue Box Participation Rates

Curbside Waste Audits and Visual Audits	Average Participation Rate
2006 - Stewardship Ontario Waste Audits	57%
2004/07 – Niagara Region Curbside Waste Audits	60%
2010 – Niagara Region Curbside Waste Audits	71%
2010 - 'It Takes Three' Visual Audits	70%
2011 – Niagara Region Curbside Waste Audits	74%
2011 - 'It Takes Three' Visual Audits	73%
2012 - 'Blue Box Ins & Outs' Visual Audits	83%
2013 - 'Blue Box Ins & Outs' Visual Audits	88%
2014 – 'Blue Box Ins & Outs' Visual Audits	85%
2015/16 – Niagara Region Curbside Waste Audits	82%
2017 – 'Blue Box Ins & Outs' Visual Audits	62%

Curbside Waste Audits and Visual Audits	Average Participation Rate
2018 – ‘Blue Box Ins & Outs’ Visual Audits	72%
2019 – ‘Recycling Matters’ Visual Audits	90%

2.4 Blue Box Set-Out Rates

Target:	2.0 boxes (or containers) set out per hhld per week from 2016 to 2021
2019 Value	Estimated 1.5 boxes (or containers) were set out per hhld per week
Variance to Target:	Target not achieved

Although this parameter was not measured in 2019, it is anticipated that the 2019 Blue Box set-out rate remained the same as the 2016 rate as no significant program changes have occurred over the last few years.

The Blue Box set-out rate is defined as the average number of Blue/Grey Boxes or other recycling containers placed at the curb for pick-up, on a per household basis, per week. The average number of full container equivalents, in addition to the actual number of containers set-out, are included in Table 6 for the waste audits conducted between 2004 and 2016.

The average Blue Box set-out rate was at its lowest in the 2010 audits, at one (1) container per household, per week, and appears to be an anomaly compared to the other audit periods. The 2011 to 2016 set-out rates did improve compared to 2010, but are still generally in line with the 2006/2007 data. The larger Blue/Grey Box capacity may explain why there is little improvement in this parameter overall.

Table 6 - Blue Box Set-Out Rates

Audit Period	No. of Boxes (or other Containers) Per Household Per Week	No. of Equivalent Full Boxes (or other Containers) Per Household Per Week
Fall 2004	1.3	Not measured

Audit Period	No. of Boxes (or other Containers) Per Household Per Week	No. of Equivalent Full Boxes (or other Containers) Per Household Per Week
Summer 2005	1.2	Not measured
Spring 2006	1.4	1.3
Summer 2006	1.5	1.5
Fall 2006	1.5	1.5
Winter 2007	1.5	1.4
Fall 2007	1.6	1.3
Fall and Winter 2010	1.0	1.0
Spring and Summer 2011	1.6	1.4
Summer 2012	1.6	Not measured
Summer 2013	1.6	Not measured
Summer 2014	1.5	Not measured
Summer 2015	1.5	1.4
Fall 2015	1.3	1.1
Winter 2016	1.4	1.2
Spring 2016	1.5	1.3

Monitoring Plan

Niagara Region's 2016-2021 Blue Box Recycling Plan was completed in 2016, as part of WMPSC-C 1-2017.

Blue Box Recycling Plan Summary

Based on the recommendations outlined in the KPMG Blue Box Program Enhancement and Best Practices Assessment Project Report, positive diversion results in other jurisdictions and stakeholder input, improvements to the Regional Blue Box Program have been implemented and other drivers to increase participation/capture rates, as part of the 2016-2021 Blue Box Recycling Plan. Every effort is being made to ensure the program is performing well (i.e. operated efficiently and in a cost-effective manner).

3.0 MBNC Performance Measures

A subset of MBNC parameters, which are related to cost effectiveness, are used in this benchmarking review. In 2019, Niagara had the lowest cost per tonne of the majority of its eight (8) comparator municipalities for the following parameters:

- Garbage Collection Cost per Tonne;
- Garbage Disposal Cost per Tonne;
- Diversion Cost (Collection and Processing) Cost per Tonne; and
- Solid Waste Average Operating Cost per Tonne

On an annual basis, Niagara's Garbage Collection, Disposal and Diversion Cost per Tonne parameters are typically lower than the MBNC average, which demonstrates the programs are cost effective.

Table 7 contains the results for Niagara Region's eight (8) comparator municipalities that participated in MBNC and are included in the RPRA comparator group (not all the RPRA municipal comparators participate in MBNC). There is a considerable amount of variation between the results of these municipalities, which may be related to differences in their waste management programs (i.e. bi-weekly vs. weekly garbage, no Green Bin program, single vs. dual stream recycling).

Table 7 - MBNC 2019 Performance Measures (for All Property Classes)

Municipality	2019 Garbage Collection Cost per Tonne	2019 Disposal Cost per Tonne	2019 Diversion Cost (Collection & Processing) Cost per Tonne	2019 Average Operating Cost per Tonne
Durham Region ⁽¹⁾	\$161.35	\$172.75	\$264.66	N/A

Municipality	2019 Garbage Collection Cost per Tonne	2019 Disposal Cost per Tonne	2019 Diversion Cost (Collection & Processing) Cost per Tonne	2019 Average Operating Cost per Tonne
Halton Region	\$153.37	\$40.15	\$224.85	\$205.27
Hamilton	\$137.41	\$83.24	\$252.83	\$204.93
London	\$102.42	\$25.33	\$148.09	\$75.66
Niagara Region	\$97.66	\$91.13	\$163.63	\$159.50
Toronto	\$98.96	\$93.95	\$415.47	\$262.03
Waterloo Region	\$168.94	\$122.73	\$173.12	\$186.43
Windsor	\$98.06	\$121.18	\$166.70	\$198.15
York Region ⁽²⁾	N/A	\$142.16	\$144.28	N/A
MBNC Average ⁽³⁾	\$127.27	\$99.18	\$217.07	\$184.57

Notes:

1. Durham Region does not report Average Operating Cost per Tonne, as they do not have complete responsibility for all collection throughout the entire Region
2. York Region does not report local municipal garbage collection information
3. MBNC average applies to Niagara Region and its eight (8) comparator municipalities

Conclusion

Continued improvements to Niagara's waste management programs and program performance have occurred over the last several years. Niagara has met the majority of the established targets and is generally performing better than its comparator group and/or Provincial averages. Niagara's 2016-2021 Blue Box Recycling Plan outlines potential changes to further improve performance in waste management program areas.

The implementation of Niagara's policy change (i.e. EOW garbage collection) in Q4 of 2020 will have a positive impact on Niagara's waste diversion rate in future years.

Benchmarking and performance reports will be completed annually, in order to compare changes in performance over time, results against targets and results against other municipal comparators. Every effort is being made to ensure Niagara's waste management system is operated efficiently and cost-effectively.

MEMORANDUM

WMPSC-C 18-2021

Subject: 2021 Illegal Dumping Campaign

Date: Monday, April 19, 2021

To: Waste Management Planning Steering Committee

From: Amanda Mosca, Engagement & Education Coordinator

This memorandum is intended to provide an overview to members of the Waste Management Planning Steering Committee regarding the upcoming illegal dumping campaign to address the issue of illegal dumping in Niagara region. The campaign will focus on encouraging residents to “See it. Report it. Stop it.”

Objectives

The main objectives of this campaign are to:

- Reduce illegal dumping activity in Niagara region
- Inform residents that putting household waste in public litter bins is a form of illegal dumping
- Increase the number of illegal dumping reports from residents and associated warnings or convictions issued as a result of these reports

The Illegal Dumping campaign will kick off following Earth Week on Wednesday, April 28 and run until Monday, July 26. Due to COVID-19, the campaign will be entirely virtual, with no in-person outreach taking place.

Overview

With the recent switch to every-other-week garbage collection, there have been concerns about an increase in illegal dumping activity. Typically, illegal dumping temporarily increases after waste collection policy changes are implemented; however, illegal dumping will usually decrease to normal levels after a few months. Roadside illegal dumps do not appear to be increasing following the transition to every-other-week collection; but, local area municipalities are reporting an increase in the incidents of illegal dumping at public space litter bins and parks. These increases may be due to a

number of factors including a decrease in the frequency of collection for some municipal litter bins. Regional staff investigate reported illegal dumps in order to identify a generator and potentially issue a charge, if evidence is found. The key to successful by-law enforcement depends on timely reporting, so that the issue may be addressed promptly to discourage further dumping.

Additionally, residents who witness illegal dumps occurring can assist in the investigation and prosecution of offenders. The campaign will encourage residents to report any illegally dumped material in order to have the issue addressed in a timely manner and allow for staff to investigate and potentially identify generator information.

The campaign will also aim to prevent and deter residents from placing household waste in a public litter bin, which is an act of illegal dumping, by promoting recycling and Green Bin programs as diversion alternatives for disposing of materials. Through proactive monitoring Niagara Region staff have observed residents frequently use public space litter bins for household waste. Many residents are not aware that the act of placing household waste in a public litter bin is illegal. Additionally, much of the material that is found to be illegally dumped in litter bins could have been diverted by using the Region's curbside recycling and organic programs.

Key Messages

Through the campaign, information and resources will focus on the following key messages:

1. See it. Report it. Stop it: Disposing of waste in non-designated areas is a crime, and residents have tools to report incidents of illegal dumping.
2. Box It. Bin It. Sort It. Participate in recycling and Green Bin programs to divert materials away from the garbage stream (and out of public litter bins).
3. Proper disposal methods of construction and demolition waste.
4. It costs us all: Illegal dumping has harmful impacts on land, water, and wildlife.

This messaging will target residents, contractors (for construction and demolition generated waste), and citizens who witness illegal dumping activity.

Methods

The 2021 Illegal Dumping campaign will utilize the following platforms to raise awareness and share resources.

Item	Where	Date Range
Circulate communications to Illegal Dumping Working group.	Request that the municipal partners repost our social media posts or share their own encouraging residents to report illegal dumping.	April 28 – July 26
Radio	Welland, Niagara Falls, St. Catharines	April 28 – July 26. Four week campaigns on different radio stations within this time period.
Social media – videos and content	Facebook and Twitter	One post per week from April 28 to July 26
Webpage updates (graphics and information)	Report Illegal Dumping Niagara Region (www.niagararegion.ca/waste/contact/dumping)	Ongoing
Advertising on public litter and recycling bins	Niagara Falls, Thorold and St. Catharines	May - July
Outdoor ads - Billboards	Niagara Falls and St. Catharines	Four (4) week campaigns rotating through different locations.

Budget

Staff have budgeted approximately \$20,000 for this campaign.

Metrics

The metrics used to determine success of the campaign will be:

- Number of illegal dumping reports submitted by residents
- Visits to online reporting tool
- Visits to Waste app reporting tool

- Number of rewards and convictions issued

Measurement

- Increase in illegal dumping reports submitted during and after campaign vs. last year
- Increase in traffic to online reporting tool (and app tool) vs. pre-campaign
- Increase in rewards and convictions issued before and after campaign vs. last year

Baseline

- Illegal dumping reports by residents during April 28 – July 26 2020: 168
- Number of rewards issued April 28 – July 26 2020: 0
- Number of convictions issued April 28 – July 26 2020: 0
- Traffic to illegal dumping webpage during April 28 – July 26, 2020
 - 731 page views
 - 636 unique page views
 - Average time on page 1:11 min

Promotion and Education Material

- The slogan See it. Report it. Stop it. will be featured on promotional and educational material used as part of this campaign. Appendix A provides some examples of the promotional and educational material.

Respectfully submitted and signed by

Amanda Mosca
Engagement & Education Coordinator
Waste Management Services Division
Public Works Department

Appendices

Appendix A Illegal Dumping Campaign Sample Graphics

Illegal Dumping Campaign Sample Graphics

Illegal Dumping Graphic



Illegal Dumping Rack Card

The See it. Stop it. Report it. Slogan shown in the illegal dumping rack card promotional and educational piece will be featured in the illegal dumping advertisements.



ILLEGAL DUMPING
SEE IT. REPORT IT. STOP IT.

CRIME STOPPERS **Niagara Region**

REPORT ILLEGAL DUMPING

Niagara Region and local area municipalities are working together to tackle the issue of illegal dumping. You can help be part of the solution by reporting a location where materials have been dumped or if you have witnessed someone illegally dumping.

MAKE A REPORT

- Call Crime Stoppers Niagara 1-800-222-TIPS
- Report online at niagararegion.ca/waste
- Call the Waste Info-Line 1-800-594-5542

PROVIDE DETAILS WHEN REPORTING

Provide as many details as possible when reporting, including:

• Location	• Licence plate
• Time	• Description of people
• Materials dumped	• Pictures or video footage
• Car make/colour	

For incidents of illegal dumping reported on Regional or Municipal roads or properties, a **reward of \$200** will be awarded if the report leads to a conviction. **A reward of \$50** will also be awarded if the illegal dumping results in an act of compliance (i.e. the person who was reported illegal dumping returns to the site and removes the dumped materials.)

Social Media Posts

The Region will leverage social media accounts and paid social media advertisements to communicate the campaign's key messages to residents. Social media posts will use real examples of illegal dumping in Niagara to highlight the issue and encourage residents to See it. Stop it. Report it.

Example Social Media Post



Construction and demolition projects can produce a lot of waste materials. Did you know that disposing of these items in non-designated areas such as public roads, ditches, public property, rural areas, vacant lots and in public litter receptacles is illegal? If you see something suspicious, report it! You could be entitled to a reward.

MEMORANDUM

WMPSC-C 20-2021

Subject: Update on Contractor Performance Following the Commencement of the Curbside Collection, Haulage of Garbage, Recycling and Organics Contracts

Date: Monday, April 19, 2021

To: Waste Management Planning Steering Committee

From: Kate Ashbridge, Waste Management Supervisor; Jennifer Wilson, Waste Management Supervisor

The purpose of this memorandum is to provide an update on the progress of the waste collection contracts with GFL Environmental Inc. and Miller Waste Systems Inc. that were commenced on October 19, 2021.

Contract Implementation Process

The contract implementation process began in January 2020, with monthly meetings between Regional staff and the incoming contractors, GFL Environmental Inc. and Miller Waste Systems Inc. As part of the implementation process, the enhanced services which are selected by the local area municipalities were confirmed.

The status of equipment orders and deliveries were reviewed and the contractors provided regular updates as they advanced through the process of securing a local yard and hiring staff. As the implementation period progressed, both contractors reported delays in the delivery of collection vehicles, due to the pandemic. GFL and Miller developed contingency plans in response to the equipment delays and provided alternative vehicles on an interim basis. Within the first week of the contract commencement, GFL's last collection vehicle arrived at the Niagara Yard. Miller experienced longer delays with the last two (2) collection vehicles arriving mid March 2021. Despite experiencing equipment delivery delays, both contractors provided adequate resources to fulfil the contract requirements.

Curbside Collection, Haulage of Garbage, Recycling and Organics Contracts Operations Update

Since October 19, 2020, Miller Waste Systems (MWS) met the Region's expectations of 100% same day collection for all curbside waste streams. During the same time period

GFL completed collection of all curbside waste stream on all but one occasion. The one-day delay was directly related to the winter snowstorm event that occurred on February 16, 2021. GFL notified regional staff of service disruptions in the morning of February 16, and staff communicated these delays to residents in the effected areas through the Region's website, social media and the Niagara Waste app. Approximately 919 properties, primarily in rural areas, were impacted by the weather related delay. Collection in this area was completed the following morning.

Fall Leaf and Yard Waste Collection

Shortly after the collection contracts commenced Niagara Region entered the fall leaf and yard waste season. During four (4) weeks in the fall and four (4) weeks in the spring, leaf and yard waste in urban area is collected separately from the Green Bin material. The separate yard waste collection required the contractors to provide additional staffing and equipment resources to complete daily collection. Both collection contractors successfully navigated the first leaf and yard waste season, with no collection delays or service disruptions to residents. As part of their plan, GFL and Miller brought in additional collection vehicles and staff to ensure they could collect yard waste materials daily.

Waste Info Line

The Waste Info Line receives calls from Niagara residents regarding waste management related issues. After determining the details of the residents' concern, the Waste Info Line staff will dispatch the issue to either Regional staff for the investigation of a by-law related issue or to the collection contractor for issues such as missed collection, incomplete collection and other contractor related concerns. The volume of contractor related calls peaked at the start of the contracts, which is typically when new service levels and contractors are introduced. As collection staff became familiar with routes and customers became familiar with the new service levels, incoming calls decreased.

The number of calls related to contractor issues has consistently decreased over the past five (5) months. In the first two weeks of the new collection contracts, a total of 1,434 contractor related issues were received by the Waste Info Line. From March 8 to March 21, 2021 a total of 195 contractor related issues were received over the two week period. Additionally, since the start of the collection contracts, 29 residents have contacted the Waste Info Line to express their appreciation and gratitude for the

services they are currently receiving. A detailed break down of incoming calls related to contractor issues is presented in Appendix A.

Contractor Performance

As the collection contracts progress through the first year, staff are monitoring contractor performance through daily review of completion times, GPS checks and contractor issues reported to the Waste Info Line. Additionally, waste management staff provide on-road monitoring of collection contractors, reviewing quality of work, such as container placement following collection. Pre and post collection audits enable staff to ensure the collection contractors are collecting the appropriate number of garbage containers and following the Region's contract requirements to tag non-compliant material.

The collection contractors are required to document non-compliance set outs on daily run sheets, which allows staff to follow up with residents regarding by-law and non-compliance issues. Staff are working with the collection contractors to decrease the number of properties with non-compliant set-outs. Waste management staff and the District Manager and Operations Manager for GFL and Miller have transitioned from meeting weekly in the lead up to the collection contract to quarterly scheduled contract performance meetings.

Early Impacts of Every-Other-Week Collection

October 19, 2020 marked the start of the new collection contracts and the Region's new service levels for residential, multi-residential, mixed-use and industrial, commercial and institutional properties located outside of the designated business area. The transition to every-other-week garbage collection was initiated in order to address the Region's stagnant diversion rate. The early data appears to show that the change in the frequency of garbage collection has had a positive impact. When comparing November 2019 to February 2020 tonnages to November 2020 to February 2021, incoming tonnes of garbage has decreased 15.1%, recycling has increased 12.5% and Green Bin (excluding leaf and yard waste) has increased 27.3%. In May, Staff will provide a more detailed report to the Public Works Committee regarding the impacts of every-other-week garbage collection.

Respectfully submitted and signed by

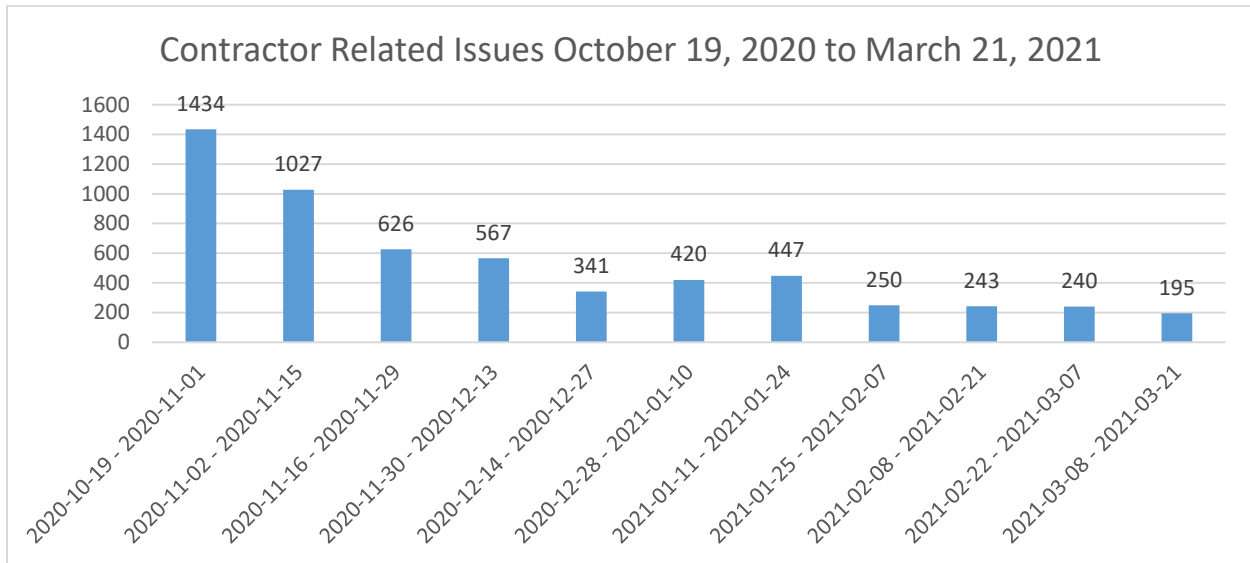
Kate Ashbridge
Waste Management Supervisor

Jennifer Wilson
Waste Management Supervisor

Appendices

Appendix A Summary of Incoming Calls Related to Contractor Issue

Summary of Incoming Calls Related to Contractor Issue



Breakdown by Collection Contractor:

GFL – 1393 total contractor issues in the period October 19, 2020 to March 21, 2021 (1.8% of total Low Density Residential dwellings in Area 1)

Miller Waste System – 4397 total contractor issues in the period October 19, 2020 to March 21, 2021 (1.8% of total Low Density Residential dwellings in Area 2)

MEMORANDUM

WMPSC-C 19-2021

Subject: Councillor Information Request

Date: Monday, April 19, 2021

To: Waste Management Planning Steering Committee

From: Catherine Habermebl, Director of Waste Management

This memorandum is intended to provide Committee members with an update on the outstanding Councillor Requests from previous meetings.

Waste Management Planning Steering Committee

Meeting Date: February 22, 2021

Minute Item #8:

Councillor Ugulini requested staff undertake further communication plans to reinforce contact information to report incidents of illegal dumping.

Follow-up Action: Communication plans for illegal dumping reporting contact information has been included in WMPSC-C 18-2021 as part of the April 19, 2021 WMPSC meeting package.

Status: Complete

Meeting Date: August 26, 2019

Minute Item #3.1:

That staff BE DIRECTED to meet with Nespresso Canada to consider implementing the Nespresso “Green Bag” pod recycling program in Niagara Region and report back with options in January 2020.

Follow-up Action: Information was submitted to Waste Management Planning Steering Committee for the January 27, 2020 meeting, which was cancelled due to a lack of quorum. Due to the pandemic, the redeployment of staff and implementation of the new collection contracts, this work was paused. This work is being reinitiated and staff will report back with an update when available.

Status: In progress

Meeting Date: May 30, 2016

Minute Item #6.6:

Provide information outlining options for the Material Recovery Facility pending legislative changes. (WMPSC-C 25-2016) Councillor Petrowski.

Follow-up Action: An evaluation of opportunities with regard to the Material Recovery Facility (MRF) is in progress as part of Phase 4 of the MRF Opportunity Review. Direction for the next major steps in the evaluation were contained in Confidential Report PW 17-2020. The project consultant is in the process of developing the terms of reference for the Negotiated Request for Proposal, with a targeted release in Q2 2021.

Status: In progress

Public Works Committee

Meeting Date: January 12, 2021

Minute Item #4.1

Consider conducting a survey for resident satisfaction on the new campaign. Councillor Nicholson.

Consider focused campaigns for illegal dumping hot spots. Councillor Foster

Provide information respecting sites frequently used for illegal dumping throughout the region. Councillor Foster.

Connect with staff at the City of Niagara Falls and the City of St. Catharines respecting Regional support for illegal dumping incidents in their respective municipality. Councillors Diodati and Sendzik.

Follow-up Action: Responses to the requests under Minute Item #4.1 have been included in WMPSC-C 18-2021 as part of the April 19, 2021 WMPSC meeting package.

Status: Complete

Minute Item #7

Provide information to the Waste Management Planning Steering Committee respecting the Waste Management Strategy RFP (PWC-C 2-2021). Councillor Zalepa.

Follow-up Action: Further to memorandums PWC-C 23-2020 and CL-C 73-2020 which provide information on the Waste Management Long Term Strategic Plan, the

finalization of the RFP has been delayed due to staff resources and workload. It is anticipated that the RFP will be released in Q2 2021.

Status: Complete

Minute Item #8.5

Councillor Insinna requested information respecting the investigation of illegal dumping incidents, including staff time and outcomes. Bruce Zvaniga, Interim Commissioner, Public Works, advised that staff would provide a report at a future Public Works Committee meeting.

Follow-up Action: WMPSC-C 10-2021 which was provided to WMPSC at the February 22, 2021 meeting and WMPSC-C 18-2021 as part of the April 19, 2021 WMPSC meeting package. Both of these information memorandums will be provided to Councillors through the Weekly Correspondence.

Status: In progress

Meeting Date: March 10, 2020

Minute Item #3.2: MOTION

That the engagement of an outside independent waste management consultant **BE APPROVED** To:

- Review the current practices related to garbage collection and recycling/recycling materials recovery facility; and
- To make recommendations on how the system can be made more cost effective and efficient for the taxpayer.

Follow-up Action: Work was initiated in 2020, however due to the implementation of the new collection contracts, the pandemic and related redeployment of staff, this project was paused. This work is anticipated to be completed in the spring of 2021.

Status: In progress

That staff **BE DIRECTED** to take the results of the review and work with the newly awarded companies and the operators of the material recovery facility to implement the suggestions over the term of the contract subject to Regional Council approval.

Follow-up Action: The review is in progress and the resulting recommendations will be submitted to Public Works Committee for approval.

Status: In progress

Provide information respecting the cost of an independent waste management consultant. Councillor Chiocchio.

Follow-up Action: Due to the implementation of the new collection contracts, the pandemic and related redeployment of staff, this project was paused. This work is being reinitiated and staff will report back with this information when available.

Status: In progress

Budget Review Committee of the Whole

No outstanding waste management related items at this time.

Committee of the Whole

No outstanding waste management related items at this time.

Council

No outstanding waste management related items at this time.

COMPLETED ITEMS

Waste Management Planning Steering Committee

Meeting Date: October 28, 2019

Minute Item #3.1:

Provide information respecting the tonnage of plastic garbage bags being collected by Niagara Region each year, and ways to mitigate usage. Councillor Gibson.

Provide information respecting the definitions of diapers and incontinence products and what differentiates the two waste categories. Councillor Diodati.

Minute Item #5.1:

Provide information respecting amending the Waste Management Planning Steering Committee Terms of Reference to include citizen members. Councillor Witteveen.

Minute Item #7.1:

Councillor Ugulini requested information respecting enforcement of illegal dumping mitigation measures in consideration of the move to every-other-week waste collection.

Minute Item #7.2:

Councillor Ugulini requested information respecting the implementation of mandatory closed top waste collection containers across the Region.

Meeting Date: Feb 25, 2019

Minute Item #8.1: MOTION

That staff **PROVIDE** options that could be included in the negotiated request for proposal (RFP) and terms of reference for the Material Recycling Facility Phase 4 Opportunity Review to allow for the Waste Management Planning Steering Committee to provide comments prior to the RFP being released to market.

Public Works Committee

Meeting Date: October 13, 2020

Minute Item #3.1

Provide information respecting the Niagara Region Waste App's ability to track real-time collection vehicle movement in the future. Councillor Diodati.

Meeting Date: September 8, 2020

Minute Item #3.1

Provide information respecting the staff costs(s) associated with the Waste info-Line. Councillor Gale.

Minute Item #5.3

Provide information respecting the cost of Niagara Recycling's scale operations. Councillor Gale.

Provide information respecting the annual value of the Niagara Recycling contract. Councillor Gale.

Provide a copy of the most recent financial audit/report on Niagara Recycling. Councillor Gale.

Meeting Date: May 12, 2020

Minute Item #5.1

Provide information respecting whether or not the contract with Walker Environmental Group is an exclusive contract. Councillor Nicholson.

Minute Item #6.2:

Ensure information is provided to residents registered for weekly diaper collection respecting alternative diaper solutions (i.e. cloth diapers) with a roster of providers. Councillor Sendzik.

Meeting Date: March 10, 2020

Minute Item #3.2: MOTION

That a plan to deal with illegal dumping that could arise as a result of bi-weekly pick-up **BE DEVELOPED** and **IMPLEMENTED**.

That a plan to deal with public health problems that could arise as a result of moving to bi-weekly pick-up **BE DEVELOPED** and **IMPLEMENTED**.

Meeting Date: Feb 11, 2020

Minute Item #7.1

Councillor Disero requested staff provide a report respecting weekly diaper collection for families regardless of the number of children. R. Tripp, Commissioner, Public Works/Acting Chief Administrative Officer, advised staff would provide a report at the Public Works Committee meeting being held on April 7, 2020.

Meeting Date: November 5, 2019

Minute Item #3.1

Provide information respecting the number of waste containers distributed to residents from May 2018 to November 2019. Councillor Insinna.

Respectfully submitted and signed by

Catherine Habermebl
Director of Waste Management Services

**THE REGIONAL MUNICIPALITY OF NIAGARA
WASTE MANAGEMENT PLANNING STEERING COMMITTEE
MINUTES**

**WMPSC 1-2021
Monday, February 22, 2021
Video Conference
Regional Headquarters, Campbell West
1815 Sir Isaac Brock Way, Thorold, ON**

Committee Members Present via Video Conference: Bradley (Regional Chair), Butters, Diodati, Edgar, Fertich, Gibson, Ugulini (Committee Chair), Witteveen (Committee Vice-Chair)

Absent/Regrets: Bellows, Rigby

Staff Present via Video Conference: D. Ane, Program Manager, Financial Support, K. Ashbridge, Supervisor, Waste Management, M. Evely, Legislative Coordinator, C. Habermehl, Director, Waste Management Services, B. Hutchings, Program Financial Analyst, L. McGovern, Program Manager, Waste Management Services, S. McPetrie, Waste Management Services Advisor, A. Mosca, Waste Management Engagement and Education Coordinator, A.-M. Norio, Regional Clerk, E. Prpic, Associate Director, Disposal Operations & Engineering, S. Tait, Program Manager, Waste Management Services, L. Torbicki, Manager, Waste and Policy Planning, B. Whitelaw, Program Manager, Policy and Planning, J. Wilson, Supervisor, Waste Management, B. Zvaniga, Interim Commissioner, Public Works

1. CALL TO ORDER

Mark Evely, Legislative Coordinator, called the meeting to order at 9:04 a.m.

2. DISCLOSURES OF PECUNIARY INTEREST

There were no disclosures of pecuniary interest.

3. SELECTION OF COMMITTEE CHAIR AND VICE-CHAIR

3.1 Call for Nominations for Committee Chair

Mark Evely, Legislative Coordinator, called for nominations for the position of Chair of the Waste Management Planning Steering Committee for a two-year term (2021-2022).

Moved by Councillor Edgar
Seconded by Councillor Butters

That Councillor Ugulini **BE NOMINATED** as Chair of the Waste Management Planning Steering Committee for a two-year term (2021-2022).

3.2 Motion to Close Nominations for Committee Chair

Mark Evelyn, Legislative Coordinator, called a second and third time for nominations for the position of Chair of the Waste Management Planning Steering Committee. There being no further nominations it was:

Moved by Councillor Butters
Seconded by Councillor Fertich

That nominations for the position of Chair of the Waste Management Planning Steering Committee for a two-year term (2021-2022), **BE CLOSED**.

Carried

3.3 Voting for the Position of Committee Chair

There being only one nominee for the position of Committee Chair, Mark Evelyn, Legislative Coordinator, announced that Councillor Ugulini would be the Chair of the Waste Management Planning Steering Committee for a two-year term (2021-2022).

3.4 Call for Nominations for Committee Vice-Chair

Mark Evelyn, Legislative Coordinator, called for nominations for the position of Vice-Chair of the Waste Management Planning Steering Committee for a two-year term (2021-2022).

Moved by Councillor Ugulini
Seconded by Councillor Fertich

That Councillor Witteveen **BE NOMINATED** as Vice-Chair of the Waste Management Planning Steering Committee for a two-year term (2021-2022).

3.5 Motion to Close Nominations for Committee Vice-Chair

Mark Evelyn, Legislative Coordinator, called a second and third time for nominations for the position of Vice-Chair of the Waste Management Planning Steering Committee.

There being no further nominations it was:

Moved by Councillor Butters

Seconded by Councillor Edgar

That nominations for the position of Vice-Chair of the Waste Management Planning Steering Committee for a two-year term (2021-2022), **BE CLOSED.**

Carried

3.6 Voting for the Position of Committee Vice-Chair

There being only one nominee for the position of Committee Vice-Chair, Mark Evelyn, Legislative Coordinator, announced that Councillor Witteveen would be Vice-Chair of the Waste Management Planning Steering Committee for a two-year term (2021-2022).

At this point in the meeting, Councillor Ugolini assumed the Chair.

4. **PRESENTATIONS**

4.1 Overview of 2021 Divisional Initiatives

Catherine Habermehl, Director, Waste Management Services, provided information respecting Overview of 2021 Divisional Initiatives. Topics of the presentation included:

- Highlights of Completed Work in 2020
- Provincial Legislation
 - Blue Box Program
 - Food & Organic Waste
 - Additional Transition Timelines
 - *COVID-19 Economic Recovery Act* (Bill 197)
 - On-site and Excess Soil Management Regulation, O. Reg. 406/19
- Strategic Projects - 2021
- Outreach Campaigns
- Capital Projects

5. **DELEGATIONS**

There were no delegations.

6. ITEMS FOR CONSIDERATION

6.1 WMPSC-C 14-2021

Appointment of Citizen Members to the Waste Management Planning Steering Committee

Moved by Councillor Diodati

Seconded by Councillor Gibson

That Report WMPSC-C 14-2021, dated February 22, 2021, respecting Appointment of Citizen Members to the Waste Management Planning Steering Committee, **BE RECEIVED** and the following recommendations **BE APPROVED**:

1. That the Waste Management Advisory Committee (WMAC) **BE DISCONTINUED**, effective immediately;
2. For the remainder of this term of Regional Council, the past WMAC Chair and delegate **CONTINUE** as members of the Waste Management Planning Steering Committee (WMPSC);
3. For future terms of Regional Council, a formal application process for selecting two (2) citizen members to sit on the WMPSC, **BE USED**;
4. That the existing WMPSC's Terms of Reference **BE AMENDED** to include the following composition:
 - Maximum of 12 individuals, including: the Regional Chair, up to nine (9) Regional Councillors and two (2) citizen members; and
5. That a complete update to the existing WMPSC's Terms of Reference **BE COMPLETED** by Niagara Region's Clerk's Department, in consultation with Waste Management staff.

Carried

6.2 WMPSC-C 16-2021

2021 Waste Management Planning Steering Committee Meeting Dates

Moved by Councillor Butters

Seconded by Councillor Edgar

That Correspondence Item WMPSC-C 16-2021, being a memorandum from A.-M. Norio, Regional Clerk, dated February 22, 2021, respecting 2021 Waste Management Planning Steering Committee Meeting Dates, **BE RECEIVED** and the following recommendation **BE APPROVED**:

1. That the Waste Management Planning Steering Committee meetings
BE HELD on Mondays at 9:00 a.m. on the following dates in 2021:

April 19, June 28, August 30, October 18, December 13.

Carried

7. CONSENT ITEMS FOR INFORMATION

Moved by Councillor Butters

Seconded by Councillor Fertich

That the following items **BE RECEIVED** for information:

WMPSC-C 1-2021

Councillor Information Request

WMPSC-C 2-2021

Alternative Waste Management Technologies Update

WMPSC-C 3-2021

Update on Blue Box Funding for 2021

WMPSC-C 4-2021

Discontinuation of the Broken Container Exchange Program

WMPSC-C 5-2021

Humberstone Landfill Site Public Liaison Committee Meeting Minutes - April 3, 2019

WMPSC-C 6-2021

Humberstone Landfill Site Public Liaison Committee Meeting Minutes - November 25, 2020

WMPSC-C 7-2021

Mandatory Closed-Top Garbage Containers

WMPSC-C 8-2021

Information on Plastic Garbage Bags

WMPSC-C 9-2021

Waste Management Tipping Fees

WMPSC-C 10-2021

2020 Illegal Dumping Summary and 2021 Mitigation Measure

WMPSC-C 11-2021

Anti-Litter Initiatives - Blue Box Lid

WMPSC-C 13-2021

Recycling Centre and Market Update

Carried

8. OTHER BUSINESS

8.1 Waste Management Service Delivery

Committee members thanked Waste Management staff for their efforts associated with the implementation of the new waste collection contract.

8.2 Illegal Dumping

Councillor Ugulini requested staff undertake further communication plans to reinforce contact information to report incidents of illegal dumping.

9. NEXT MEETING

The next meeting will be held on Monday, April 19, 2021, at 9:00 a.m.

10. ADJOURNMENT

There being no further business, the meeting adjourned at 10:00 a.m.

Councillor Ugulini
Committee Chair

Mark Evely
Legislative Coordinator

Ann-Marie Norio
Regional Clerk