



**Committee Meeting of Council
AGENDA**

**Tuesday, August 10, 2021, 6:30 p.m.
Electronic Participation via Zoom**

Infrastructure and Operations Committee

Chair: Councillor Chris Mayne

Vice Chair: Councillor Mark King

Item(s) to be Addressed:

IO 2021-03

Waste Diversion Strategy

General Government Committee

Chair: Councillor Tanya Vrebosch

Vice-Chair: Councillor Bill Vrebosch

Item(s) to be Addressed:

No Items to be Addressed.

Community Services Committee

Chair: Councillor Johanne Brousseau

Vice-Chair: Councillor Scott Robertson

Item(s) to be Addressed:

No Items to be Addressed.

IO-2021-03

Draft Recommendation:

- "That 1) City Council adopt the City of North Bay's Waste Diversion Strategy attached to Report to Council IO 2021-09 dated June 30, 2021 by Karin Pratte;
- 2) City Council direct staff to make all necessary preparations, as outlined in Report to Council IO 2021-09 dated June 30, 2021 by Karin Pratte to reduce the number of receptacles of waste at the curb beginning January 1, 2022; and
- 3) a copy of the City of North Bay's Waste Diversion Strategy be forwarded to the Ministry of Environment, Conservation and Parks."

City of North Bay Report to Council

Report No: IO 2021-09

Date: June 30, 2021

Originator: Karin Pratte, P.Eng.

Business Unit
Infrastructure & Operations

Department:
Public Works & Services

Subject: Waste Diversion Strategy

Closed Session: yes ☐ no ☒

Recommendation

1. That City Council refers RTC IO 2021-09 to committee.
-

Background

History

North Bay's Blue Box Program was launched in 1991. When first established, the City only collected five different materials as mandated by the Province. Since this time, the program collects most of the packaging material found on grocery store shelves.

In 1999, the City implemented bans on the collection and disposal of corrugated cardboard. The City has expanded the materials collected and extended the program to schools and multi-residential dwellings. A weekly corrugated cardboard collection service was provided in the Downtown Improvement Area in 1998.

Listed below are some of the more prominent waste diversion programs implemented in the City of North Bay:

- Blue Box Program
- Corrugated Cardboard Ban
- Electronic Drop-off Depot

- Electronic Equipment Ban
- Grass Collection Ban
- Household Hazardous Waste Facility
- Large Brush and Wood Waste Recycling Area
- Leaf and Yard Waste Drop-off Depot
- Mattress Recycling Program
- Paint Exchange Facility
- Scrap Metal Drop-off Areas
- Tire Recycling Program
- Textile Ban

Waste Diversion Strategy

The City of North Bay's Environmental Services department prepares the City of North Bay's Waste Diversion Plan on an annual basis and a copy is forwarded to the Ministry of the Environment Conservation and Parks as required by the Environmental Assessment Conditions of Approval for the Merrick Landfill Site. The annual Waste Diversion Plan includes data and statistics in regards to diverted materials.

Staff have developed the attached Waste Diversion Strategy ("Strategy") which provides a high level overview of waste diversion for the City of North Bay over the next 5 years. The Strategy seeks to identify and implement programs to expand participation in recycling/waste reduction initiatives and increase waste diversion from the City of North Bay Merrick Landfill site.

The Strategy has 5 central and constant goals:

1. Increase program participation by those eligible to receive the service
2. Expand the scope of eligibility to more users.
3. Decrease contaminants (non-recyclables) in the recycling stream.
4. Provide diversion solutions for more types of waste products; and
5. Reduce the amount of material entering the local waste stream

The Strategy details current and new initiatives to meet these goals along with timelines for implementation, and monitoring protocols for measuring the City's progress on waste diversion. Over the coming years the vision for waste diversion in the City of North Bay involves the implementation of a robust and conscientious system that encourages the participation of environmental interest partners, private industry, government, and local residents.

The Strategy is a living document, which provides a wide-range of programs identified by staff and residents to date which warrant further examination. The programs identified will be fully investigated on the timelines noted and presented to Council in the form of Service Level Changes or Reports to Council for consideration.

User Pay Garbage Collection – Reduction in allowable bags at the curb

The first new program being proposed is the reduction in allowable bags at the curb for residential and ICI customers. This service level change was presented to Council in the fall of 2020 as part of the 2021 budget deliberations, Council was supportive of the initiative as presented and summarized below however, noted that a Waste Diversion Strategy must accompany the service level change prior to implementation. Environmental services has completed a Strategy which details goals and objectives for Waste Diversion in the City of North Bay over the next 5 years and is now prepared to implement the service level change with a start date of **January 1 2022**. Environmental services has also updated the service level financial presented in the fall of 2020 with any new and relevant information.

Service Level Change Details:

Currently residential users are allowed 3 free waste receptacles (bags) per week while ICI customers are allowed 12 free waste receptacles per week. Each receptacle has a weight limit of 35lbs and volume limit of 33 gallons. Therefore residents have the option to discard just over 100 lbs/100gallons of waste per week.

Council also approved a user pay system for garbage collection in 2019 which included receptacle/bag tags sold at \$1/tag and allowed residents to put out up to 4 additional tagged waste receptacles to the curb per week. The number of free receptacles, which is 3, never changed and therefore there have been a very minimal number of tags sold (427 YTD). This however allowed for waste receptacle tags to be out in the community and begin the communication strategy to the public. Since tags were made available just over a year ago there have been no complaints or issues with the waste receptacle tags from the Contractor or residential users.

Two Free Bags for Residential Users & 10 Free Bags for ICI Users

The current contract for garbage collection with Miller Waste has the provision for a partial User Pay Collection Program. Contractor costs to the City would not change however additional revenue would be realized through the already existing bag tag system. This service change would see the reduction from 3 free waste receptacles to 2 free waste receptacles per week. The increased annual cost to a household would be dependent on the number waste receptacles put out each week. Currently households put out approximately 1.5 receptacles per week. This means that most households would not require purchasing additional tags. There are, however, residents who will choose to put out more than 2 receptacles out of convenience. Therefore, a conservative estimate assumed half the households will put out 3 receptacles (1 tagged) quarterly. The increased annual cost to an ICI customer would also depend on how many receptacles they put out per week. Currently ICI customers are putting out an average of 9 per week. As a conservative estimate we have assumed half the ICI customers will put out an additional 2 receptacles (tagged) quarterly.

Communication Strategy

Communication is critical to the success of any waste diversion initiative. It is essential that clear, concise messaging is provided to users which details what the change in service is, how they can participate and why the City has moved forward with the change. If Council supports this service level change, communication will begin in September 2021 in order to provide sufficient lead-time notification for residents and businesses.

Service information such as the number of allowable bags at the curb; availability of bag tags and what can be reused and recycled will be reinforced with key messaging aimed at increasing public education, awareness and understanding that the change will help to increase waste diversion and preserve landfill capacity; save valuable natural resources and protect the environment. Key messages will also incorporate notable facts and figures (i.e. most North Bay households already place two or fewer bags at the curb per week) to help inform citizens that the change is based on research and best practices.

Communications will target all residents and businesses with curbside garbage and recycling collection, utilizing various tools including the City's website, social media, recycling app, brochures/handouts, press releases/public service announcements, as well as traditional and digital media advertising.

Promotion and education in the lead up will be important to ensure residents and businesses are well informed about the change and how they will be affected. This will begin with high-level notifications of the coming change through press releases /public service announcements, the City's website and social media channels. Additionally, staff will look at how collection crews may be able to assist in distributing notifications/reminders and will explore opportunities to partner with community groups, resident and business associations, schools and other stakeholders.

Communications will involve ongoing notifications, including frequently-asked-questions and answers, as well as information about existing programs and how citizens can reduce the volume of garbage for collection and stay within the new bag limits. Updates on accomplishments and key insights, including recognition of residents and business that have embraced the change will also be incorporated into the communication strategy.

Financial/Legal Implications

This service level reduction to less allowable bags at the curb also included the cost of a receptacle (bag) tag to go from the current cost of \$1/bag to \$2/bag. The cost of recycling and garbage collection has gone up in the past year due to a renewal of the existing contract with Miller Waste. Also, the cost of \$2/tag is more in line with other Northern

communities which do have partial User Pay systems including Sudbury, Thunder Bay, Sault. Ste. Marie.

If half of the residential households put out one additional bag 4 times per year the additional revenue would be \$75,284. There are an estimated 1,000 ICI customers that are currently entitled to put out 12 bags per week for garbage pickup. Their new free bag allotment would be 10 bags per week. If half the ICI customers put out 12 bags 4 times per year the additional revenue would be \$16,000. Therefore, total increased revenue of \$91,284.

This is a small revenue stream however the largest change is that this will encourage customers to recycle. The City of North Bay has completed garbage audits in the past and residential waste arriving at the landfill contains 30-40% recyclable items which are unnecessarily filling our landfill. The Merrick Landfill Site is a multi-million dollar City asset and space in the landfill is extremely valuable.

Each extra bag will need to be tagged and the cost of each tag is approximately \$0.07 therefore \$3,200 of costs associated with the purchase of tags has been included.

Typically when a full user pay system is put in place the amount of recyclables goes up by approx. 20-30%. As this is a partial user pay system a cost estimate for increase in recyclables of 10% was estimated and would increase costs annually by \$48,000. It is expected that the annual volume of garbage will be decreased which will increase the life expectancy of the landfill.

Therefore estimated costs for 2022 are \$51,200 while annual revenue is estimated at \$91,284 for an annual total cost savings of \$40,084. These values are only estimates and true costs will be based on actual bag tag sales and actual recycling weights received. During the 2021 budget deliberations Council approved the service level change to increase the cost per tag as well as reduce the number of free bags. The 2021 Environmental Services budget was established with a net savings of \$18,142. The approval of this Waste Diversion Strategy as well as the enclosed communication strategy will allow the program to come into full force for January 2022 therefore, the 2021 budget savings will not be realized.

Its also important to take into consideration that from 2023 to 2026 the Province of Ontario will roll out its new producer pay program for blue box recycling. This system will involve a transition away from the current system in which producers of recyclable materials share recycling costs with municipalities. The new system will see the province take complete control of blue box recycling with producers being responsible for the entirety of the cost of the program. The City of North Bay has been notified by the Province that we will be transitioning to the producer responsibility program in 2025.

This program shift will make producers fully responsible for all costs associated with blue box collection and marketing which will reduce the financial burden of recycling on Municipalities. It is important to note that MECF has developed a minimum service level within the regulation and if the City would like a service level that exceeds the minimum requirements in regulation this would be funded through municipal tax dollars.

Corporate Strategic Plan

- | | |
|---|--|
| <input checked="" type="checkbox"/> Natural North and Near | <input type="checkbox"/> Economic Prosperity |
| <input type="checkbox"/> Affordable Balanced Growth | <input type="checkbox"/> Spirited Safe Community |
| <input checked="" type="checkbox"/> Responsible and Responsive Government | |

Specific Objectives

Provide smart, cost effective services and programs to residents and businesses.

Protect, promote and enhance the environment in all aspects of the city's operations and plans

Options/Analysis

1. That City Council refers RTC IO 2021-09 to committee.
 2. Do not refer RTC IO 2021-09 to committee.
-

Recommended Option

1. That City Council refers RTC IO 2021-09 to committee.
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Respectfully submitted,

Name: Karin Pratte, P.Eng.
Title: Senior Facilities & Environment Engineer

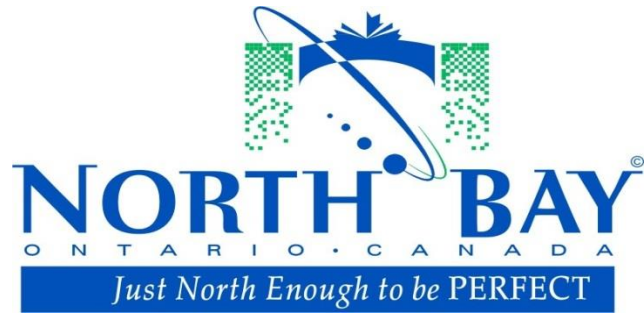
We concur with the above noted recommendation.

Name: Domenic Schiavone
Title: Director of Public Works

Name: Margaret Karpenko
Title: Chief Administrative Officer

Name: David Euler, P.Eng., PMP
Title: Chief Administrative Officer

Personnel designated for continuance: Senior Facilities & Environment Engineer



The City of North Bay Waste Diversion Strategy

July 2021

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Executive Summary

The Waste Diversion Strategy aims to map the strategies used to expand and enhance participation in local recycling and waste reduction initiatives and ultimately to divert more waste from the City of North Bay landfill.

The City has implemented bans on the collection and landfill disposal of corrugated cardboard, electronics, appliances, tires, grass clippings, household hazardous waste, textiles and mattresses in an attempt to divert as much waste as possible from the Landfill.

Over the coming years, the vision for waste diversion in the City of North Bay involves the implementation of a robust and conscientious system that encourages the participation of environmental interest partners, private industry, government, and local residents.

Staff will communicate the effectiveness of the Waste Diversion Strategy to Council annually through a Waste Diversion Report which will focus on summarized annual waste data with comparisons to goals set out in this strategy.

Introduction

Background

The City of North Bay releases a Waste Diversion Report annually for review by City Council as a requirement of the Merrick Landfill Environmental Compliance Approval. In previous years this plan has included annual data from the Blue Box Program, the Household Hazardous Waste Depot and the Merrick Landfill in addition to information regarding the various programs currently in place to facilitate waste diversion.

This Waste Diversion Strategy is a deviation from the typical report and will offer information on the existing programs and will provide details on future waste diversion projects and programs that are being considered by staff in an ongoing effort to work toward a more sustainable waste management platform for the City of North Bay.

Merrick Landfill Site

The Merrick Landfill Site operates under the MECP Provisional Certificate of Approval number A530116 which provides for the disposal of domestic, commercial and non-hazardous solid industrial wastes within a 16.4-hectare area of a 360-hectare site. The Site is approved to accept wastes from the residents and businesses within the City of North Bay, the Municipality of Callendar and the unorganized Townships of Blythe, Merrick, Stewart, Lyman, Notman, Gladman, and Hammell.

From July 1994, (when the landfill site opened) to the end of 2020, approximately 1,220,960 tonnes of waste material has been received at the Site. This corresponds to an average of approximately 46,054 tonnes per year over the last 26.5 years. The latest site life calculations based on current waste volumes indicate that there is enough space remaining in the landfill for approximately 16.9 years. While this may appear to be a long period of time, approvals for the construction of new landfill sites typically take between 10 to 15 years, and potentially tens of millions of dollars when you include closure costs of the current landfill site.



The Merrick landfill does offer diversion programs for waste on site. Currently mattresses, Freon containing appliance, tires, leaf and yard waste, wood, concrete and scrap metal are all directly diverted from landfilling and are either processed on site for reuse (leaf and yard waste) or are transported to independent facilities for processing (mattresses). While leaf and yard waste, tires and scrap metal are free of charge at the landfill site, there is a processing fee associated with

the acceptance of appliances and mattress at the Merrick landfill. These user pay fees have been designed to offset the cost of the mattress and appliance recycling programs.

The City has also implemented diversion programs focused on reuse of materials including goods exchange day and ban on collection and disposal of textiles. Re-use of items helps protect the environment in two ways: it cuts down on garbage that would otherwise end up in the City's landfill, and re-using items saves energy and the environmental impact of producing new items.

In order to extend the life of the Merrick Landfill site, waste diversion strategies are critical and with the introduction of each new program, we can be assured that valuable landfill space is being used only for materials that have no other option.

Household Hazardous Waste Depot

The City of North Bay provides a Household Hazardous Waste Depot ("HHWD") to residents of the City of North Bay and surrounding participating municipalities since it opened its doors in 1998. Residents can take hazardous products that they accumulate in their home to the depot free of charge all year long.

The HHWD is also the site of the free leaf and yard waste drop off, where residents and businesses can drop off leaf and yard waste (there is a fee for businesses), the free electronics drop off area as well as a scrap metal drop off.

The HHWD has collected and shipped out thousands of tonnes of hazardous waste over its 22 years in operation and with every shipment of hazardous waste that leaves the facility and is responsibly disposed of; we can be assured that these chemicals are being kept out of our landfill and subsequently out of our local ecosystem.

A new producer responsibility regulation for hazardous and special products will be implemented as part of the Resource Recovery and Circular Economy Act. This regulation will make producers of hazardous and special products responsible for collecting, managing and/or promoting the recycling or proper disposal of these products. This includes paints, pesticides, solvents, oil filters, oil containers, antifreeze, pressurized containers, mercury containing devices and fertilizers. Producers will have time to enter into agreements with service providers prior to most obligations under the regulation taking effect October 1, 2021. The new regulation will have little impact on the operation of the depot other than the City will be required to sign new agreements for disposal of some hazardous and special products received at the depot.

Curbside Waste Collection Program

Within the City of North Bay, curbside waste collection occurs on a weekly basis. Waste collection services are contracted through Miller Waste Systems at a cost of approximately \$1,160,000 per year.

All waste collected through curbside pick-up is transported directly to the Merrick Landfill for disposal. All residential and multi-residential homes, business and institutions have access to the waste collection program. Residents are permitted to place up to three 35lb waste containers at

the curb for collection each week while commercial and institutional (ICI) users can receive weekly pick-up of 12 bags or twice-weekly pick up of 6 bags.

Curbside Blue Box Program

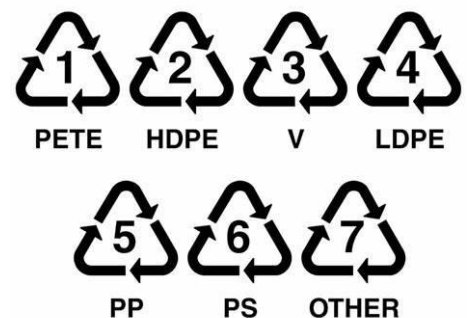
North Bay's curbside Blue Box program complies with Ontario Regulation 101/04, which mandates the type of Blue Box collection system implemented as well as the types of materials required to be collected. Recyclables are collected on a bi-weekly basis from 17,161 single residential property households and 5,456 multi-residential properties and in addition, all elementary and secondary schools are permitted to place up to 15 blue boxes at the curbside on a bi-weekly basis.

At present, commercial businesses are responsible for arranging their own recycling collection and are not included in the curbside collection program with the exception of corrugated cardboard, which is collected from all businesses in the Downtown Improvement Area once a week.

The City currently offers the ICI sector a 6 day per week drop-off depot for recyclables at its Recycling Centre. This service is heavily used by the ICI sector to divert corrugated cardboard, which has been banned from the landfill for a number of years.

The City of North Bay currently collects a broad range of materials, exceeding current provincial regulations and including:

- Aluminum cans
- All plastic food and beverage containers (1-7)
- Aluminum foil, pie plates, and trays
- Aseptic containers (Tetra Pak)
- Aerosol cans (empty)
- Boxboard (cereal boxes)
- Clear and coloured glass
- Corrugated cardboard
- Empty paint and stain cans
- High density polyethylene – small mouth containers (HDPE #2)
- Magazines, catalogues, and telephone books
- Mixed household paper
- Newsprint, including coloured flyers and inserts
- Polycoat containers
- Polyethylene terephthalate – small mouth containers (PETE #1)
- Plastic tubs and lids
- Steel beverage and food cans



The current curbside recycling program diverts substantial amounts of recyclable from the Merrick Landfill site each year. Each of these waste types is a marketable commodity and is reused in some fashion, reducing the need for raw inputs to make future consumer products.

From 2023 to 2026 the Province of Ontario will roll out its new producer pay program for blue box recycling. This system will involve a transition away from the current system in which producers of recyclable materials share recycling costs with municipalities. The new system will see the province take complete control of blue box recycling with producers being responsible for the entirety of the cost of the program. The new provincial program will standardize what materials residents can put into their blue bins with similar materials collected through the new program to what is currently collected through the City's current Blue Box. The City of North Bay has been notified by the Province that we will be transitioning to the producer responsibility program in 2025.

This program shift will make producers fully responsible for costs associated with blue box collection and marketing which will reduce the financial burden of recycling on Municipalities

The blue box regulations require that producers of paper, packaging, packaging-like products and single-use items to:

- Maintain or improve existing blue box services, including participating in a common curbside blue box collection system across Ontario
- Expand blue box services to additional sources, such as multi-unit residential buildings, schools, some public spaces, and specified retirement and long-term care homes
- Collect a consistent set of materials in blue boxes across the province
- Meet management requirements for blue box materials, such as diversion targets
- Implement a promotion and education program to increase awareness about collection, reuse, recycling and recovery of materials

The blue box regulation will not:

- Require producers to provide blue box services in industrial, commercial, and institutional (ICI) sectors
- All blue box material must be collected in multi-unit residential dwellings, schools, specified long-term care and retirement homes, and some public spaces as specified in the regulation

The regulation details the required minimum service level for blue box services provided by producers in Ontario. The minimum service level included in the regulation is very similar to the City of North Bay's current service level and includes bi-weekly curbside blue box pick up for all residential users. There are, however, aspects of the current North Bay blue box program which will not be covered under the new regulation, for example cardboard pickup in the DIA. It's important to note that if the City would like a service level that exceeds the minimum requirements in the regulation it will not be funded by the producers but rather funded through municipal tax dollars.

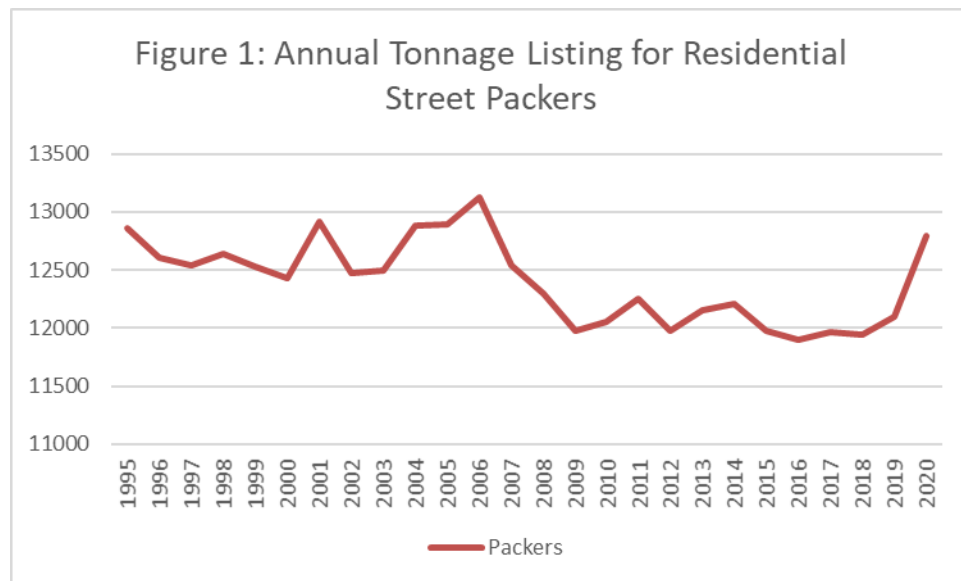
There are several unknowns in regards to how extended producer responsibility will affect the City of North Bay however staff will continue working with the province and the current service provider over the next 3.5 years to develop a framework for the transition.

Historical Tonnage Data

The following section features the data from the current waste disposal and diversion systems in place within the City of North Bay.

Waste Disposal Statistics

Curbside waste collection is separated by residential garbage truck tonnage and by multi-residential/commercial garbage truck tonnage. Residential street packers (garbage trucks) are estimated to contribute approximately 12,791 tonnes of waste per year. Multi-residential/commercial garbage trucks are estimated to contribute approximately 3,192 tonnes of waste per year.



While curbside waste collection tonnages have been at a record low since 2009, weights in 2020 increased by approximately 700 tonnes. This represents an increase of approximately 5% and the largest year over year increase in curbside residential waste ever recorded at the Merrick Landfill Site and is likely attributed to the Covid-19 pandemic and residents spending more time at home.

Waste Diversion Statistics

Current annual waste diversion tonnages are seen in Table 1.

Table 1. 2019 & 2020 Municipal Waste Diversion by Program

Municipal Waste Diversion	Tonnes 2019	Tonnes 2020
Blue Box Recycling	3311	3223.3
Tire Recycling	366	366.03
Wood Waste Chipping	1336	3597.67
Organic Drop-Off	1685	2414.6
White Goods and Steel	396	385.65
Clean Fill	8881.66	9362.87
Household Hazardous Waste	218	351.054
Electronic Equipment	162	146.86
Mattress Recycling	106	269
Other	2545	1247.9
Total:	17,914.66	21,364.93

There were 3,450 additional tonnes of materials diverted in 2020 compared to 2019 which represents a 20% increase. This could be attributed partially to COVID which saw additional use of city waste and waste diversion facilities due to people spending more time at home; however, there are noticeable increases in areas where new waste diversion programs have been implemented. For example mattress recycling is a relatively new program which more than doubled year over year. Also, the mixed load tipping fees were implemented in 2020 which placed an additional charge on un-sorted waste loads and likely contributed to additional wood and clean fill diversion.

It is important to remember when examining diverted products by weight that some materials may weigh less (mattresses/box springs) but take up a large amount of space in the Landfill site. Similarly, household hazardous waste makes up a small piece of the overall tonnage but contributes critically to the toxicity of the waste in the Landfill making it so important that it continue to be diverted.

Mission Statement

The Waste Diversion Strategy seeks to identify and implement strategies to expand participation in recycling/waste reduction initiatives and increase waste diversion from the City of North Bay Merrick Landfill site.

Goals for Enhancement of Waste Diversion Programs

The current waste diversion programs offered by the City of North Bay have five central and constant goals:

1. Increase program participation by those eligible to receive the service.
2. Expand the scope of eligibility to more users.
3. Decrease contaminants (non-recyclables) in the recycling stream.
4. Provide diversion solutions for more types of waste products; and
5. Reduce the amount of material entering the local waste stream

While maintaining the current waste diversion programs, the City is seeking to expand and add new diversion programs which will benefit the residents and business of North Bay through environmental stewardship. Appendix A provides an outline of the goals themselves, the objectives for each goal currently in place, strategies to achieve the objectives and a general description of the intended implementation of each strategy with a timeline.

The City will be using 2019 as a baseline year to gauge the progress being made towards the goals. The City has in place a monitoring strategy identified in Appendix C. Appendix B provides a visual timeline for implementation of the strategies identified as “NEW” in Appendix A

In order to achieve these goals communication is critical. The City of North Bay must clearly and effectively communicate the programs available to the residents of North Bay and explain why it is so important for them to participate. As communication is central to the success of all five goals a communication plan was developed that will be implemented for all initiatives listed in Appendix B.

Communication

Communication is instrumental in implementing and maintaining waste diversion and waste reduction strategies. Currently, the City of North Bay's waste diversion educational and promotional initiatives have been in place for several years and have included the following:

- Local radio advertising
- Local newspaper advertising
- Displays at Tradeshows
- The City's website
- North Bay Recycles App
- North Bay recycling calendar
- Social Media
- By phone via the Waste Line at (705) 474-0400 ex. 2333
- Waste Reduction Liaison Committee meetings
- Outdoor Signage
- Tours of the Hazardous Waste Depot and Merrick Landfill Site
- Public meetings/open houses for new programs
- Educational programs at schools

The initiatives are intended to provide residents with the necessary information, in an easily accessible manner, to divert waste while minimizing the contamination in recycling. The information provided to the public must be simple and repeated on a regular basis. Ultimately, an effective program should not only explain what can be diverted/recycled, but also explain how and why.

A detailed list of current communication methods are listed below:

Local Radio and Newspaper Advertising

- Radio campaigns are an ongoing part of the communication strategy for waste diversion. Radio ads are run seasonally to promote the use of the programs and answer commonly asked questions.
- Ads will continue to be placed in the local newspaper and local radio stations.
- In 2020, a total of 40 radio ads were placed and 24 print ads were run in the local newspaper.

Displays at Tradeshows

- The City runs a booth at tradeshows to promote the programs we offer.

The City Recycling Calendar

The “recycling calendar” is made available to all households and residents annually. It is distributed door to door and copies are also available at the Merrick Landfill site, HHWD, North Bay City Hall and North Bay Public Works. The calendar provides information regarding pick up dates, acceptable materials, environmental best practices, and contact information.

The City of North Bay Website

- The Garbage & Recycling section of the City’s website is continually updated in order to provide residents with the most up to date information.
- The website is a popular tool for residents to research topics, to download information or to determine how to contact us for further details.
- The website’s garbage and recycling section averages 6500 views per month.

North Bay Recycles App

- In 2018, the City of North Bay released the North Bay Recycles App, which was developed in house, to provide citizens with their personalized waste reminders, information regarding hours of operation at the landfill and Household Hazardous Waste Depot, how to contact the City for questions or concerns, and the popular “what goes where” tab which provides a list of materials and states what sites accept it.
- Since its inception, the app has been installed 2800 times which is approximately 12% of the households participating in the curbside collection program.
- The City will continue to promote user-ship of the app as a way to inform the public on our waste diversion programs and reduce contaminants in recycling.

Social Media Channels

- The City’s Facebook and Twitter pages are used to promote recycling initiatives and waste diversion programs/events.
- The City’s Facebook account has 7,981 followers and its Twitter account has 7,063 followers both accounting for approximately 1/5 of the total population.

Waste Reduction Liaison Committee Meetings

- WRLC meetings are held monthly and information regarding upcoming diversion projects is presented for discussion and all meetings are open to the public.

Other Programs

- Inquiries and concerns are fielded by email at customerservice@cityofnorthbay.ca and by phone via the Waste Line at (705) 474-0400 ex. 2333.

- Tours of both the Merrick Landfill site and the Household Hazardous Waste Depot are available upon request. Tours are done annually for the Canadore College environmental engineering technician and technology department as well as the Canadian ecology center summer school program.

“NEW” Communication Initiatives

Building upon current promotion and education successes, all methods of communication will be coordinated into a more unified and sustained public education campaign aimed at increasing awareness and understanding of the five central goals of the waste diversion strategy.

Shared branding and calls to action assist in delivering a unified message. Communication tools will vary and may include handouts/flyers, social media posts and ads, webpage updates, engagement with business and community groups, media releases/PSAs and videos highlighting programs and services. Shared branding and calls to action will be used to help deliver a unified message.

Additionally, the waste diversion strategy the following new communication initiatives are being proposed:

Communication directly with local groups and organizations

- Environmental Services staff will develop a short presentation that focuses on local waste diversion/recycling programs and provides details on how and why to participate. This presentation will be shared with local groups and organizations. Some proposed local groups and organizations include:
 - ✓ Nipissing University and Canadore College and their students unions
 - ✓ The North Bay and District Chamber of Commerce
 - ✓ Downtown North Bay
 - ✓ Nipissing District Housing Corporation
 - ✓ Near North Landlords Association
 - ✓ Greening Nipissing
 - ✓ Clean Green and Beautiful

Environmental services staff will develop the presentation materials in 2021 and begin to reach out to organizations early 2022.

Waste Diversion Education in Schools

- Environmental services staff will refresh an existing program of providing direct public education. Staff will work with local schools and provide them an option to participate in the recycling center, landfill and hazardous waste depot tours either virtually or in person.

Staff will also provide the option of in-class virtual or in-person learning opportunities focused on waste diversion and environmentally friendly best practices in waste management. The education session will focus on ways that students can make an impact, for example: “no waste lunches”

Environmental Services staff will develop the program in 2021-2022 and begin to reach out to schools fall 2022.

Conclusion

As strategies for the diversion of solid waste become more accessible to small and medium sized municipalities, the City will continue to investigate, propose, and plan for the implementation of new programs. The waste management industry continues to evolve at a rapid rate compared to most other municipal public works services and therefore a 5-year review cycle for this Strategy is considered appropriate.

This Strategy is a living document, which provides a wide-range of programs identified by staff and residents to date which warrant further examination. The programs identified will be fully investigated on the timelines noted and presented to Council in the form of Service Level Changes or Reports to Council for consideration. When the new programs are presented to Council for consideration they will include a full communication plan made up of the communication methods identified in this Strategy.

On an annual basis, the City will continue to submit a Waste Diversion Report to Council, detailing the status of the municipal diversion programs offered, as well as an update regarding any new programs having been approved and implemented during that calendar year with reference to this Waste Diversion Strategy.

APPENDIX A - Goals and Strategies for the Enhancement of Waste Diversion Programs

Goals /Objective	Program	Strategy
Increase program participation by those eligible to receive the service – reduce recyclable items in waste stream by 5% per year (Currently at 40%, of waste stream in recyclables; goal for 2025 of 20%)	Electronics Drop off Depot and Electronic Equipment Ban	<p><u>No collection or disposal of electronic waste.</u></p> <p>The City and Miller Waste will continue to enforce this ban by not picking up electronic waste placed at the curb as garbage and by not accepting it for landfilling at the Merrick Landfill. Due to the ban, all electronic waste must be recycled either at the Electronics drop off through the City or at a private business offering the same service.</p>
	Grass Collection Ban	<p><u>No collection of grass clippings for curbside collection.</u></p> <p>The City and Miller Waste will continue to enforce this ban by not picking up grass clippings placed at the curb as garbage</p>
	Paint Exchange Program	<p><u>Paint Exchange Maintained</u></p> <p>City staff place reusable paints with cans in good condition into a building accessible to the public. The public can take paint and stains that they need free of charge. This program is already popular with residents and quantities are limited therefore no additional outside promotion is deemed warranted.</p>
	Scrap Metal Drop Off	<p><u>Scrap Metal Drop off Maintained</u></p> <p>Scrap metal, fridges/dishwashers can be dropped off at the Merrick Landfill.</p>
	Corrugated Cardboard Ban	<p><u>No collection or disposal of corrugated cardboard</u></p> <p>The City and Miller Waste will continue to enforce this ban by not picking up corrugated cardboard placed at the curb as garbage and by not accepting it for landfilling at the Merrick Landfill. Due to the ban, all corrugated cardboard must be recycled.</p>
	Ban on Blue-box Recyclables	<p><u>NEW - Ban on Blue Box recyclables in curbside garbage and at the Merrick Landfill</u></p> <p>This program would start with a “soft launch” for a one year period. If blue box recyclables were visible in the waste placed at the curb, the bags/garbage cans containing the recyclables would not be picked up. An educational notice would be left at the residence detailing why the waste was not acceptable for pick-up.</p>

Goals /Objective	Program	Strategy
		<p>Bags will not be opened to verify that no recyclables are present; however there will be zero tolerance if recyclables are visible.</p> <p>After one year of banning recyclables the City would implement the requirement of transparent bags. All waste placed at the curb will need to be contained in transparent garbage bags/receptacles. Each bag will be allotted a grocery bag sized, opaque privacy bag for items that residents wish to keep isolated. Any recyclable material visible in the clear bags will not be picked up.</p>
	Leaf and Yard Waste Depot	<p><u>NEW - Leaf and Yard Waste curbside collection</u></p> <p>Environmental services staff will investigation options for Miller Waste to collect leaf and yard waste at the curb for 3 weeks in the fall and 3 weeks in the spring as part of the curbside waste collection program.</p> <p>Curbside leaf and yard waste collection events align with the Food and Organic Waste Framework which is part of the Waste-Free Ontario Act.</p>
	Wood and Concrete Waste Diversion	<p><u>Mixed load fee</u></p> <p>The City of North Bay has introduced a mixed load fee to the waste bylaw (By-Law No. 2019-95 Being a By-Law to Amend By-Law No. 2010-108) applicable to loads which contain unsorted separable materials such as wood.</p> <p><u>NEW – Alternate uses for wood waste</u></p> <p>Environmental Services staff will explore opportunities for partnering with businesses in need of wood or other alternate uses of wood waste.</p> <p><u>NEW - Wood reuse area</u></p> <p>Environmental Services and Landfill staff will investigate the possibility of facilitating a reuse area at the Merrick Landfill site. Any approved reusable material could be made available to residents with a focus on wood. Consideration will need to be given to</p>

Goals /Objective	Program	Strategy
		staff availability, site security, hygiene, and traffic management.
	Mattress Recycling Program	<p><u>NEW - Local Mattress drop-off</u></p> <p>In 2018 the City held a one day drop-off event at the Public Works yard on Franklin St to allow residents to drop off used mattresses and box springs rather than transporting them to the Merrick Landfill for recycling. There is a recycling fee applied for the mattress recycling program at the landfill and the fee was applied at the in-town drop off as well. City staff will review the merits of this this service to determine if it is something that should continue in to the future.</p>
	User-Pay Bag Tag Program	<p><u>NEW – Offer online purchase for bag tags and additional City facilities selling them.</u></p> <p>Environmental services staff will explore the possibility of having additional City facilities offer the purchase of bag tags including public works, recycling center, marina. Review options for on-line sale of bag tags with finance and IS department.</p> <p><u>NEW - Curbside bag limit reductions</u></p> <p>Beginning in January of 2022 the City is proposing to reduce the number of bags collected through curbside collection from three bags to two bags for residential users and from 12 bags to 10 bags for ICI users. One allowable bag is 35 lbs. and 33 gallons.</p> <p>This service level change would follow the same financial model as presented to Council as a service level change during 2021 budget deliberations and as noted in RTC IO 2021-09.</p>
Expand the scope of program eligibility to more users	Blue Box Program – expansion to local businesses	<p><u>NEW - Local business partnership, pilot project</u></p> <p>City staff will investigate the possibility of providing partnership opportunities with private businesses for Curbside Blue Box collection, beginning with a pilot program in the Downtown Improvement Area.</p>
Decrease		<u>Recycling contractor focusing on educating drivers</u>

Goals /Objective	Program	Strategy
Contaminants at the recycling facility - Reduce residue rate from 6% to 5%		<p><u>and leaving behind contaminants with information for residents.</u></p> <p>The North Bay recycling program currently operates at approximately 6% contamination rate.</p> <p>Work with recycling contractor to implement additional driver recyclables screening training. Ensure drivers leave behind any items that are not recyclable and provide information pamphlets to users when contaminants are found. Miller Waste is currently implementing this summer 2021.</p>
Provide diversion solutions for more types of waste products	Provide diversion options for all waste types where there is an environmentally and fiscally responsible option available	<p><u>Goods Exchange Day:</u></p> <p>This is a date that is advertised to the public and encourages residents to place any unwanted but still usable goods curbside. Re-usable items include furniture, clothing, tools, sporting goods, toys, doors, windows, sinks, etc. This is basically a city-wide free yard sale. The City will continue to promote this annual, well-advertised (most shared City Facebook post of 2019) and well used event.</p> <p>The 2021 goods exchange day was scheduled for April 2021 however was cancelled due to the stay at home order. The event is currently re-scheduled to early September 2021.</p> <p><u>Textile Ban</u></p> <p>In March 2020 City council approved the ban of collection and disposal of textiles at the Merrick Landfill Site. This ban encourages the public to donate textiles, such as clothing and blankets, which still have market value rather than throwing them away. The ban was temporarily put on hold due to the pandemic and the shutdown of local re-use stores. The City is hoping to implement the ban this fall (September 1 2021) once the re-use stores are able to resume normal operations.</p> <p>The City currently provides information in regards to composting best practices in the annual blue box</p>

Goals /Objective	Program	Strategy
		<p>calendar and on City website.</p> <p><u>NEW – rebate and education program for purchase of backyard composter units.</u></p> <p>The Strategy for a Waste-Free Ontario: Building the Circular Economy was released in 2017 and committed the Ministry of the Environment, Conservation and Parks to develop a Food and Organic Waste Framework to reduce the volume of food and organic waste sent to disposal. The framework has been developed and bans the disposal of food and organic waste with set timelines. The framework, however, does allow for an exemption for Northern communities based on population density, which applies to North Bay. Where the exemption does apply the policy states that Municipalities shall provide for the resource recovery of food and organic waste through means such as home composting, community composting and local event days. Municipalities shall also provide promotion and education materials to residents that support and increase participation efforts to residents of their community.</p> <p>A backyard composting rebate and education program would provide for the resource recovery of food and organic waste and would provide promotion and education materials to increase their participation efforts.</p> <p>Environmental Services staff will investigate the possibility of providing rebates for residents who purchase a backyard composting units.</p> <p><u>NEW - Inclusion of additional plastic types to be accepted into the current blue box program</u></p> <p>The Collection, Processing and Marketing of Recyclables contract with Miller Waste was renewed in 2020 and contains a clause whereby the City may add any of the following three plastics to the recycling program at no additional cost:</p> <ol style="list-style-type: none"> 1. High Density Polyethylene # 2 – tubs and lids 2. Low Density Polyethylene #4

Goals /Objective	Program	Strategy
		<p>3. Polypropylene #5 High Density Polyethylene # 2 – tubs and lids were added to the system; however, number 4 and number 5 plastics have not been added due to challenges with the current recycling plant set-up and storage capabilities for the materials. Environmental services staff will review these issues with Miller Waste in order to determine if additional plastics can realistically be added to the program.</p> <p><u>NEW - Development of partnerships with private recycling companies for residential waste</u></p> <p>Environmental Services staff will seek out partnership opportunities with private recycling companies who collect and/or market products that cannot be collected as part of the blue box program.</p> <p><u>NEW – Working with local environmental public interest group / creation of new waste diversion public interest group</u></p> <p>The City has supported local environmental interest groups such as “clean, green, and beautiful”, and will continue to investigate collaborations with such groups to support environmental responsibility in North Bay.</p> <p>Staff will also review the development of a new waste diversion public interest volunteer group or the expansion of an existing environmental group willing to take on new projects.</p> <p><u>NEW - Drywall Diversion Program</u></p> <p>Environmental services will examine the feasibility of segregating drywall waste to be recycled. Successful implementation of this program may result in a lower tipping fee for this material which would benefit local contractors and homeowners completing renovations. This program was in place at the Sudbury Landfill as a pilot project and that project would be used to assist in determining if such a program might be workable in North Bay.</p>

Goals /Objective	Program	Strategy
Reduce the amount of material entering the local waste stream		<p><u>NEW - Development of subsidy programs</u></p> <p>Environmental Services staff will develop subsidy programs (for which there may be outside funding available) in order to encourage the use of sustainable, reusable and zero waste products. Programs to consider will include subsidies for:</p> <ul style="list-style-type: none">• Cloth Diapers• Cloth Wipes• no waste hygiene products• Reusable ‘paper towels’

APPENDIX B – Implementation Timeline for “NEW” Items Identified in Appendix A

Goal	Year	Strategy
(1) Increase program participation by those eligible to receive the service	2022	<ul style="list-style-type: none"> • Curbside bag limit reductions
	2023	<ul style="list-style-type: none"> • Local Mattress drop-off
	2024	<ul style="list-style-type: none"> • Ban on Blue Box recyclables in curbside garbage and at the Merrick Landfill
	2025	<ul style="list-style-type: none"> • Clear Bags • Wood reuse area • Leaf and Yard Waste curbside collection • Partnerships with local businesses in need of clean wood
(2) Expand the scope of program eligibility to more users	2023	<ul style="list-style-type: none"> • Local business partnership, pilot project in DIA
(3) Decrease Contaminants at the recycling facility - Reduce residue rate from 6% to 5%	2021	<ul style="list-style-type: none"> • Waste management contractor focused on contaminants in recycling.
(4) Provide diversion solutions for more types of waste products	2021	<ul style="list-style-type: none"> • Inclusion of additional plastic types to be accepted into the current blue box program • Textile Ban implementation
	2022	<ul style="list-style-type: none"> • Development of partnerships with private recycling companies for residential waste • Backyard composting rebate
	2023	<ul style="list-style-type: none"> • Development and/or enhancement of a local residential Waste Diversion public interest group
	2024	<ul style="list-style-type: none"> • Drywall Diversion Program
(5) Reduce the amount of materials entering the local waste stream	2023	<ul style="list-style-type: none"> • Development of additional rebate programs

APPENDIX C – Diversion Best Practices – Monitoring and Reporting Program

Item Monitored	Monitoring Tool	Baseline (2019)	5 year goal	Frequency
Total Waste Generated (by type and by weight)	Landfill scale	41,578 tonnes	10% decrease (37,420)	Each load – information is populated through WasteWorks software
Diversion of recyclables in the Waste stream	Random waste audits at the Merrick landfill on residential and ICI waste.	30-40%	20%	Quarterly
Overall Diversion Rates Achieved	Diversion Rate Achieved	30%	40%	Quarterly
Recycling contamination rate	Contamination rate calculation	6%	5%	Annually
Review/Update Waste Diversion Reporting	The Waste Diversion Strategy is updated every 5 years	N/A	N/A	5 years
	The Waste Diversion Annual Report will be reviewed and updated Annually	N/A	N/A	Annually