

The City of North Bay
Waste Diversion Strategy

June 2023

Table of Contents

Executive Summary	2
Introduction.....	3
Background	3
Merrick Landfill Site.....	3
Household Hazardous Waste Depot.....	4
Curbside Waste Collection Program	4
Curbside Blue Box Program	5
Historical Tonnage Data.....	7
Waste Disposal Statistics.....	7
Waste Diversion Statistics	8
Mission Statement.....	11
Goals for Enhancement of Waste Diversion Programs	11
Communication.....	12
Local Radio and Newspaper Advertising	12
Displays at Tradeshows	12
The City Recycling Calendar.....	13
The City of North Bay Website	13
North Bay Recycles App	13
Social Media Channels	13
Waste Reduction Liaison Committee Meetings	13
Other Programs	13
“NEW” Communication Initiatives	14
Communication directly with local groups and organizations	14
Waste Diversion Education in Schools.....	14
Conclusion.....	15
APPENDIX A - Goals and Strategies for the Enhancement of Waste Diversion Programs	16
APPENDIX B – Implementation Timeline for “NEW” Items Identified in Appendix A.....	24
APPENDIX C – Diversion Best Practices – Monitoring and Reporting Program.....	26

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 2021, approximately 1,266,781 tonnes of waste material has been received at the Site. This corresponds to an average of approximately 46,065 tonnes per year over the last 27.5 years. The latest site life calculations based on current waste volumes indicate that there is enough space remaining in the landfill for approximately 16-17 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 23 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 has been implemented as part of the Resource Recovery and Circular Economy Act. This regulation makes 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, and mercury containing devices. The new regulation, which took effect on October 1, 2021, 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 \$1,212,000 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 two 35lb waste containers at the

curb for collection each week while commercial and institutional (ICI) users can receive weekly pick-up of 10 bags or twice-weekly pick up of 5 bags.

Curbside Blue Box Program

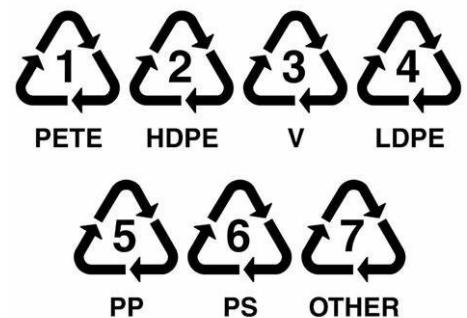
North Bay’s curbside Blue Box program complies with Ontario Regulation 101/04, which mandates the type of Blue Box collection system implemented as well as the types of materials required to be collected. Recyclables are collected on a bi-weekly basis from 17,287 single residential property households and 6,180 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 2.5 years to develop a framework for the transition.

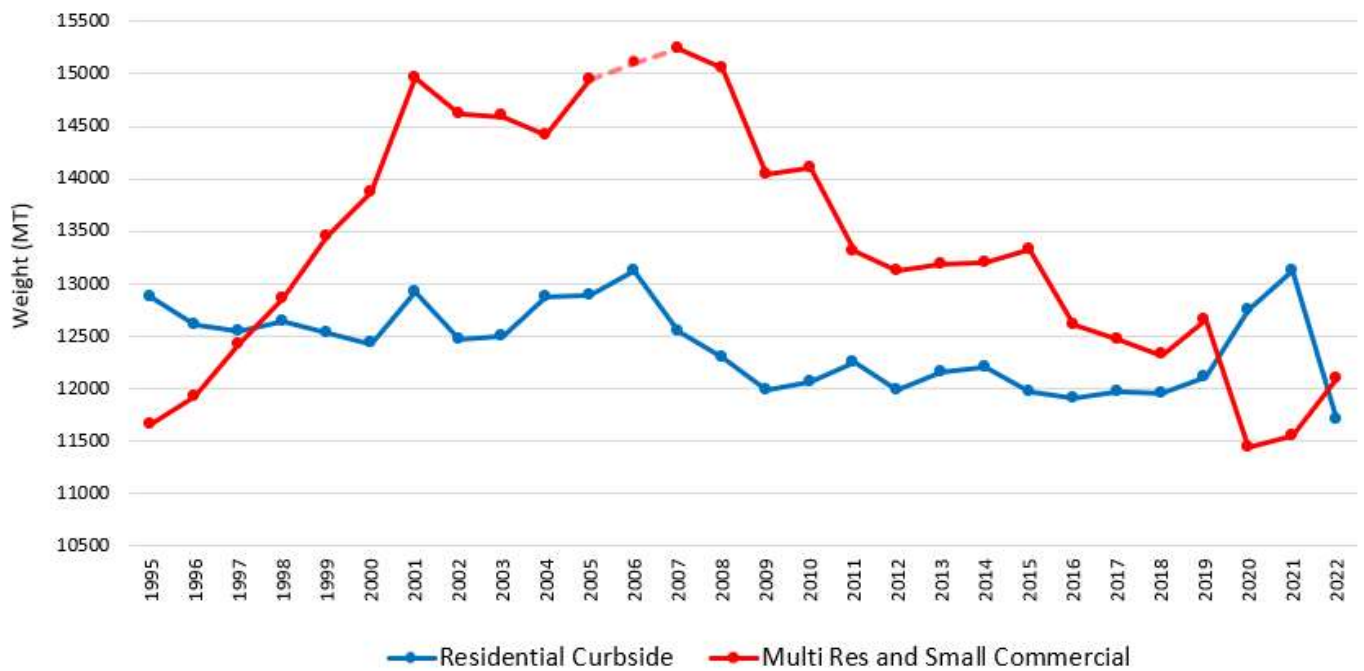
Historical Tonnage Data

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) contributed to 11,698 tonnes of waste in 2022. Multi-residential/commercial garbage trucks are contributed 12,088 tonnes of waste in 2022.

Figure 1: Annual Tonnage of Residential Curbside and Multi Residential / Small Commercial



Note: Multi Residential / Commercial weight for 2006 is an average of the years 2005 and 2007 as data was incorrect for that year.

There was a significant reduction in the amount of waste sent to Merrick Landfill from Residential Curbside Pickup in 2022. This was likely the result of the 2-bag weekly curbside waste pickup that was implemented in January 2022. By decreasing the amount of waste allowed at the curb, residents were encouraged to reduce the amount of waste through recycling and purchasing items with less waste and packaging.

The increase in Residential Curbside Pickup in 2020 and 2021 and the decrease in commercial during that same time was likely attributed to the Covid-19 pandemic as many residents were working from home offices.

Waste Diversion Statistics

Current annual waste diversion tonnages are seen in Table 1.

Table 1. 2019 - 2022 Municipal Waste Diversion by Program

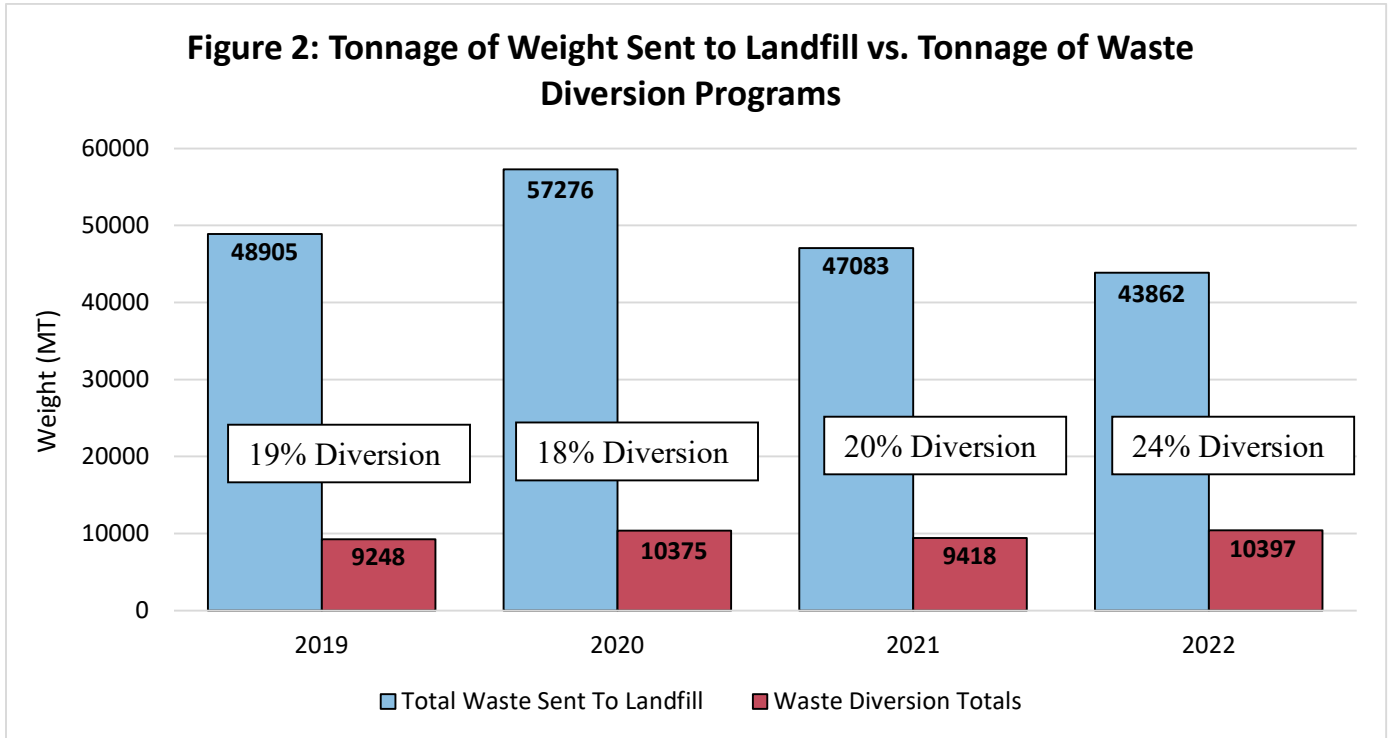
Municipal Waste Diversion	2019 Weight (MT)	2020 Weight (MT)	2021 Weight (MT)	2022 Weight (MT)
Blue Box Recycling	3311	3223.3	3,092.60	3,242.92
Tire Recycling	366	366.03	373.9	373.9
Wood Waste Chipping	1336	3597.67	2751	3,467
Organic Drop-Off	817	1028	943	1,015
White Goods and Steel	396	322.8	293.56	468.03
Household Hazardous Waste	218	351.054	320	259
Electronic Equipment	162	146.86	133.21	127.5
Mattress Recycling	97	91	133	88
Other	2545	1247.9	1,378.07	1,378.07
Total Metric Tonnes	9,248	10,374.614	9,418.34	10,397.01

Note: 1) Tire recycling weights are automatically provided through Datacall based on population. 2) 'Other' category includes grasscycling, backyard compost and LCBO returns, provided through Datacall based on population and current programs. 3) Diversion weights for some categories from 2019 – 2021 have been updates since previous reporting due to more detailed reporting.

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.

Between 2019 and 2022 there was approximately 39,437 tonnes of waste diverted from the Merrick Landfill through the City’s current diversion programs. Although there was a slight decrease in the tonnage of waste diverted between 2020 and 2021, the City also saw a decrease in the total amount of waste deposited at the Merrick Landfill during that same year. When determining waste

diversion, it is important to remember that recycling is only one component. If residents are practicing waste diversion through reducing (purchasing products with less waste) and reusing items instead of purchasing new ones, the City would see a decrease in the amount of material sent to the landfill each year that would not be shown through the waste diversion tonnage. Figure 2 below shows the comparison of total weight sent to landfill and waste diverted.



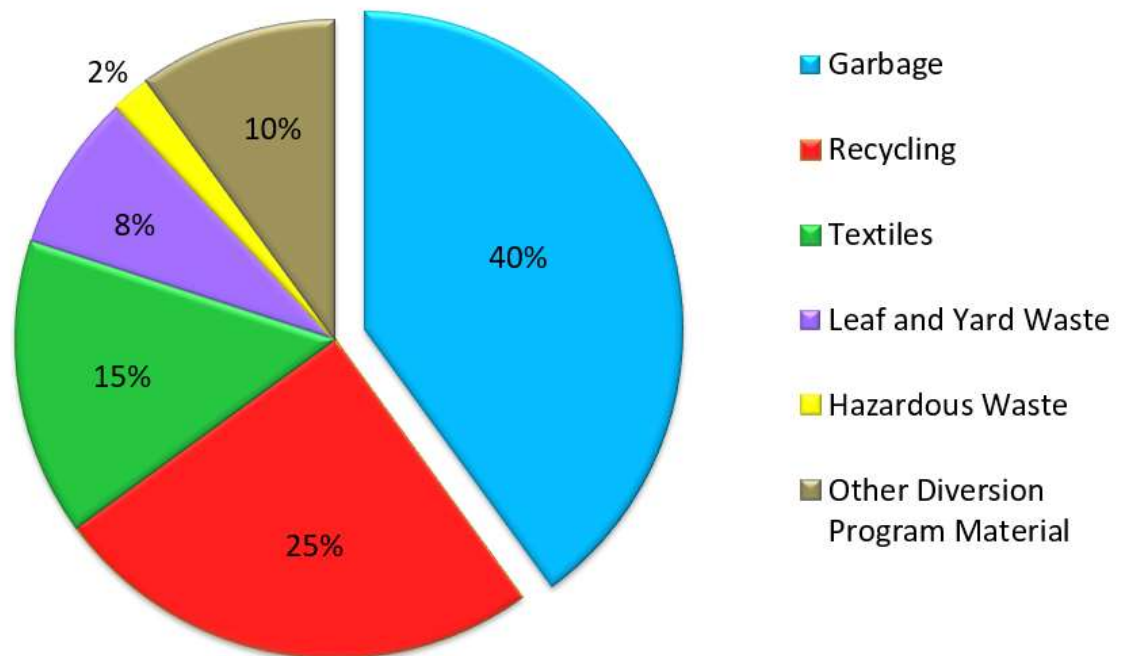
Waste Audit

A waste audit of the City’s residential curbside waste was completed in June of 2022. The purpose of the audit was to:

- Have a better understanding of what was ending up in our landfill.
- Determine what percentage of our waste is ‘garbage’.
- Tell us if residents were using our recycling programs.
- The results would determine if there were areas we need to focus.

The results of the 2022 waste audit indicated that 60 percent of the material going to landfill from residential curbside pickup is part of our current waste diversion programs. Figure 3 below provides further breakdown of the recyclable material found in the waste audit.

Figure 3: Results of 2022 Residential Curbside Waste Audit



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 2021, a total of 1,316 radio ads were placed.

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 4,492 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 6,374 times which is approximately 36% 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 10,800 followers, it’s Instagram account has 1,131 followers, and its Twitter account has 6,958 followers.

Waste Reduction Liaison Committee Meetings

- WRLC meetings are held quarterly 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.

“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 following new communication initiatives are being proposed:

Communication directly with local groups and organizations

- Environmental Services staff have develop a presentation that focuses on local waste diversion/recycling programs and provides details on how and why to participate. This presentation will continued be shared with local groups and organizations. Some local groups and organizations that have already participated include:
 - The Village, Canadore College
 - Living Fit Inside-Out
 - North Bay Chapter PEO
 - Castle Arms
 - Housing Co-op

Waste Diversion Outreach Program for Schools

North Bay’s Waste Diversion Outreach Program provides the opportunity for elementary and high school students to learn about the City’s waste diversion programs through a fun and interactive approach using the 6R’s (Rethink, Refuse, Reduce, Reuse, Repair and Recycle). Presentations focus on programs that the City has in place to help divert waste from the Merrick Landfill site, including the Household Hazardous Waste Depot, electronics recycling, leaf and yard waste drop-off, mattress recycling, and the Blue Box recycling program.

As part of the program, elementary aged students are asked to create artwork to help educate and remind North Bay residents how they can divert waste from our landfill. Every Wednesday of the school year a new Waste Diversion Spotlight is posted on the City’s Social Media pages. The art created by the students help remind residents how to divert waste from our landfill.

During the 2022/2023 school year the Waste Diversion Outreach Program has presented to 44 classes.

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
<p>Increase program participation by those eligible to receive the service – reduce recyclable items in waste stream by 5% per year (Currently at 60%, of waste stream in recyclables; goal for 2025 of 40%)</p>	<p>Electronics Drop off Depot and Electronic Equipment Ban</p>	<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>
	<p>Grass Collection Ban</p>	<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>
	<p>Paint Exchange Program</p>	<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>
	<p>Scrap Metal Drop Off</p>	<p><u>Scrap Metal Drop off Maintained</u></p> <p>Scrap metal, fridges/dishwashers can be dropped off at the Merrick Landfill.</p>
	<p>Corrugated Cardboard Ban</p>	<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>
	<p>Ban on Blue-box Recyclables</p>	<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>
	<p>Leaf and Yard Waste Depot</p>	<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>
	<p>Wood and Concrete Waste Diversion</p>	<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>

Goals /Objective	Program	Strategy
<p>Decrease Contaminants at the recycling facility - Reduce residue rate from 6% to 5%</p>		<p><u>Recycling contractor focusing on educating drivers 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>
<p>Provide diversion solutions for more types of waste products</p>	<p>Provide diversion options for all waste types where there is an environmentally and fiscally responsible option available</p>	<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><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 calendar and on City website.</p>

Goals /Objective	Program	Strategy
		<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 3. Polypropylene #5 <p>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</p>

Goals /Objective	Program	Strategy
		<p>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
<p>Reduce the amount of material entering the local waste stream</p>		<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 <i>(Completed January 2022)</i>
	2023	<ul style="list-style-type: none"> • Local Mattress drop-off <i>(one day in town event started in 2022)</i>
	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"> • Textile Ban implementation. <i>(Completed)</i>
	2022	<ul style="list-style-type: none"> • 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	48,905 tonnes	10% decrease (44,014)	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. <i>(updated from original number resulting from 2022 waste audit)</i>	60% (2022)	40%	Annually
Overall Diversion Rates Achieved	Diversion Rate Achieved <i>(updated from original numbers as 2019 Baseline was calculated with updated numbers)</i>	19%	25%	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