

# Niagara Region Waste Strategy

Beyond waste: our vision for what's next  
2026 - 2051



To prevent birds from gathering at landfill sites, trained hawks are used as part of a natural pest control approach that encourages birds to stay away.



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# How We Got Here

## Niagara Region is at a pivotal moment in shaping how we manage waste.

With growing populations, rising costs, declining available landfill capacity and the urgent need to address climate change, the Region must take bold and practical steps to ensure our system remains sustainable for the next generation.

The Niagara Region Waste Strategy (Strategy) provides a 25-year roadmap to support a cleaner, more efficient and resilient

Niagara. It includes 23 key actions, phased implementation, and measurable targets to guide progress over time.

By thinking Beyond Waste, the Region commits to moving past traditional approaches of disposal toward a system where waste is minimized, resources are reused, materials are diverted and environmental impacts are reduced.

This Strategy reflects a commitment to responsible governance, community engagement, and the pursuit of a greener future for all.

This Strategy was developed through a multi-phased approach incorporating input from broad community engagement, key interested parties, research, and strategic planning:

**01**

### Investigate

Develop a vision and goals

**02**

### Create

Develop and evaluate options

**03**

### Finalize

Develop targets and an implementation plan

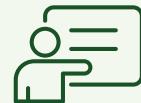
## Consultation Highlights

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online open houses for residents, businesses, community partners, and local area municipal staff

Input gathered throughout the engagement process helped shape the direction of the Strategy and provide Regional Council with a clear understanding of community priorities:

2 online surveys with  
2,800+ responses



Presentation to the Waste Management Planning Steering and Public Works Committees



In 2025, 60% of single family households used the Green Bin, highlighting the opportunity for more residents to support Niagara Region's shift toward a cleaner, more efficient and resilient waste system.

# Vision

Our vision statement articulates our long-term aspirations and guides our future direction:

**Leading the way in sustainable and innovative waste management services, to support a thriving community for generations to come.**

## Strategy Goals



### 1. Optimize System

Optimize waste management resources and infrastructure



### 2. Recover Resources

Increase beneficial recovery of material from waste



### 3. Resuse Materials

Increase beneficial reuse of materials



### 4. Increase Participation

Increase participation in waste management programs



### 5. Pursue Zero Waste

Strive to be a zero waste community



### 6. Reduce Emissions

Reduce the carbon footprint of the waste management system





Thanks to your efforts, residents are now sending 56% of their organics to the green bin. Our goal is to increase this to 66% by 2035.



## Targets

To track performance and accountability, four targets have been established. Targets and baselines will be refined as data improves:

- 01** Contribute to the Region's goal of reducing greenhouse gas emissions by 30% by 2050
- 02** Increase capture of organic waste by 10% by 2035
- 03** Increase the number of multi-residential properties participating in the green bin program by 10% by 2035
- 04** Maintain the average rating of critical waste management assets in fair condition or better

# What Guides Us

**Guiding principles provide a framework for evaluating choices, setting priorities and shaping recommendations:**

## **Customer Focused**

We design services to be accessible, convenient, and easy for the community to use.

## **Financially Responsible**

We are committed to long term financial sustainability in delivering waste management solutions that benefit the community.

## **Environmentally Considerate**

We value environmentally friendly solutions that reduce greenhouse gas emissions in our waste management practices.

## **Future Thinking**

We manage waste as a valuable resource through innovative practices and sustainable solutions.

## **Innovative and Optimized**

We continuously explore new technologies and approaches to improve waste management processes and minimize environmental impact.

## **Collaborative and Engaged**

We actively engage with our community, local organizations, and partners to foster collaborative efforts in waste reduction, resource recovery and regulatory compliance.

## **Inclusive**

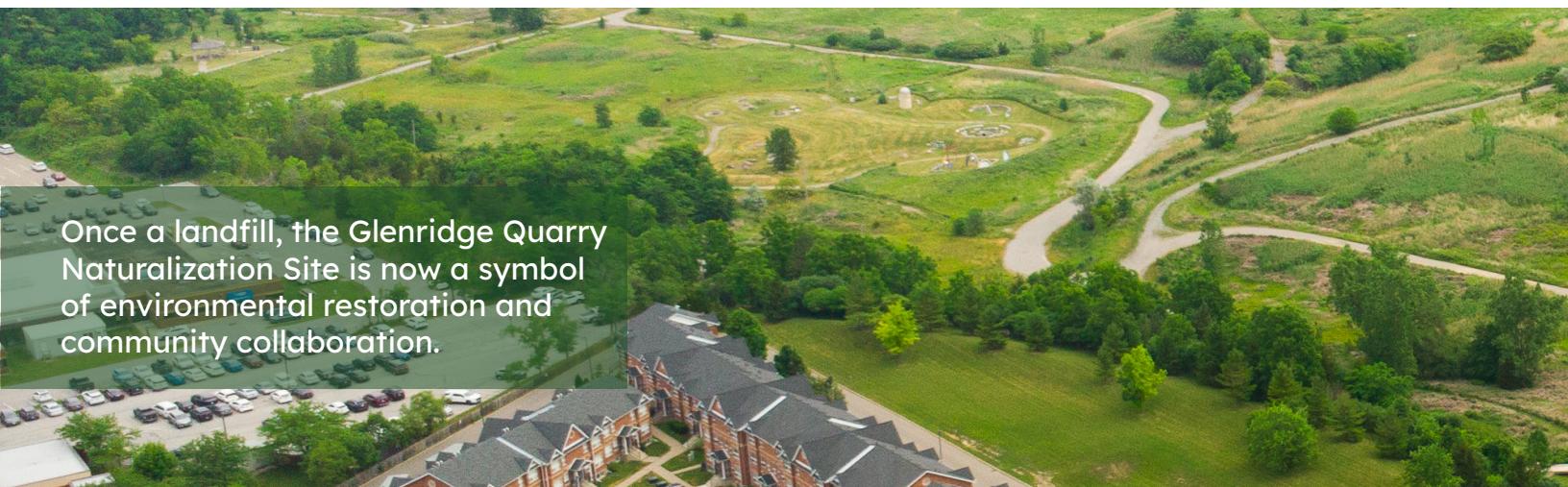
We embrace diversity and strive to serve all members of our community with respect and fairness.

## **Adaptive**

We adjust our services as needs change and the Region grows and evolves.

## **Transparent**

We maintain open communication and actively engage with the community in waste management decision making.



Once a landfill, the Glenridge Quarry Naturalization Site is now a symbol of environmental restoration and community collaboration.

# Policies and Frameworks that Guide this Strategy

The development of this Strategy was guided by a range of Regional strategies and regulatory frameworks that shape how waste is managed today and into the future.

## Niagara Region's Council Strategic Priorities and Climate Change Action Plan

Council's priority of building a Green and Resilient Region, supported by the Regional Climate Change Action Plan, emphasizes energy efficiency and reducing greenhouse gas emissions.

## Niagara Region's Waste Management By-Law (2022-32)

Defines how waste is collected, transported and managed across the Region.

## Resource Recovery and Circular Economy Act

Established Extended Producer Responsibility (EPR), transferring responsibility for collecting and recycling residential Blue Box materials from municipalities to producers as of January 2024. In Niagara, Producer Responsibility Organizations now manage the program. In addition, several other diversion programs operate under EPR regulations (e.g., tires, batteries, electronics, hazardous and special products).

## Food and Organic Waste Framework

Sets province-wide goals to reduce food waste, expand organics diversion and phase out food and organic waste from landfills by 2030.

## Regulations Respecting Reduction in the Release of Methane

New federal regulations aim to reduce methane emissions from landfills by 50% by 2030. Methane is a potent greenhouse gas produced when organic waste decomposes in landfills.

# Niagara's Waste System

Niagara Region is an upper tier municipality made up of 12 local area municipalities: Fort Erie, Grimsby, Lincoln, Niagara Falls, Niagara on the Lake, Pelham, Port Colborne, St. Catharines, Thorold, Wainfleet, Welland and West Lincoln.

Since 1996, the Region has been responsible for providing waste management services across all local area municipalities. Today, the system serves approximately 480,000 residents and businesses over an area of approximately 1,800 km<sup>2</sup>.

## What We Do

Curbside collection of waste and organics from single family households, multi-residential buildings (e.g. apartments) and eligible businesses. A bulky item service is also available for certain property types.

Special collection programs, such as exemptions for eligible residents with medical needs, and daycares.

Partnerships with local area municipalities to provide services, such as litter bin collection in public parks.

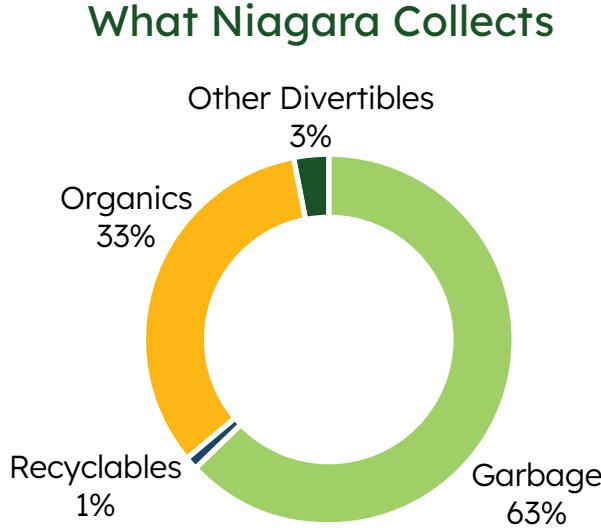
Four drop-off depots where residents and businesses can conveniently dispose of hazardous waste, oversized items, recyclable materials, and other items for reuse.

Disposal and processing system that includes two active Region-owned landfills alongside a contract with Walker Environmental for landfill disposal and organics processing.

The Region also monitors and maintains 12 closed landfill sites.

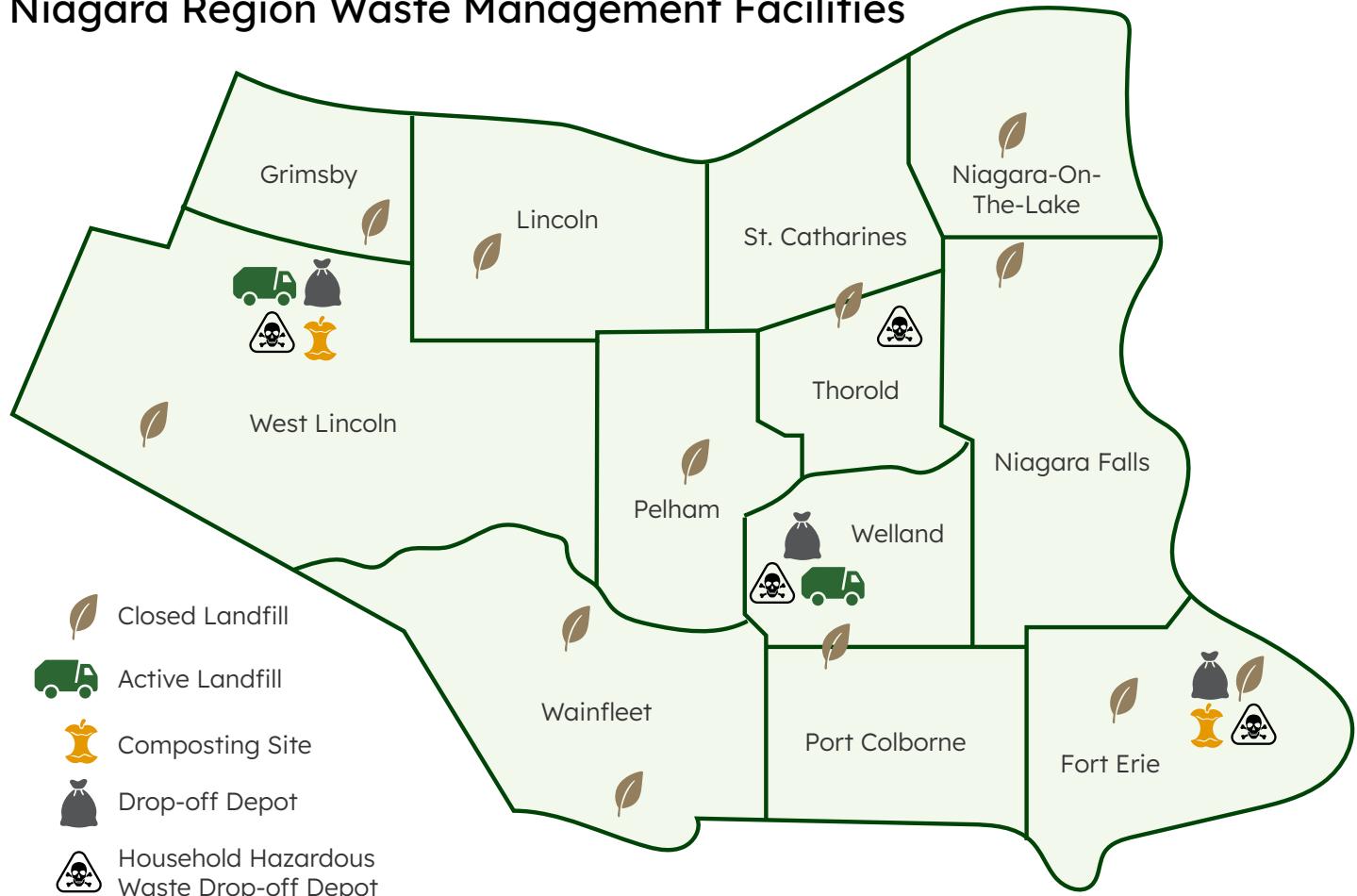
Education and outreach designed to boost waste diversion and encourage community involvement.

Advocacy to the federal and provincial governments on waste management issues.



Niagara Region processes approximately  
**190,000**  
tonnes of waste per year

## Niagara Region Waste Management Facilities

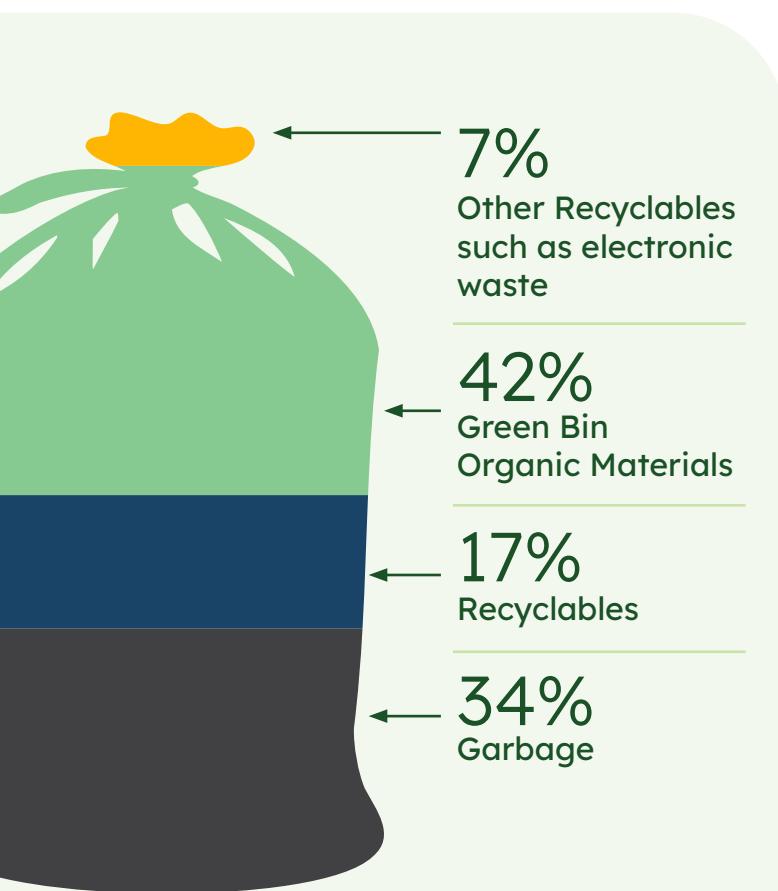


### Did you know...

The Region actively monitors 12 closed landfill sites to ensure long-term environmental protection. Four have been repurposed into naturalization sites or leash-free dog parks, turning former waste sites into community assets!

# Opportunities

Niagara Region faces several pressing challenges in managing waste sustainably. The Strategy responds to these challenges with targeted actions that will improve diversion, reduce landfill pressures, and prepare the system for the future.



About 2/3 of what is thrown in the garbage could be put in the green bin, blue bin or brought to a depot.

## Missed diversion

Organics and recyclables are still disposed of in garbage, in part due to low and incorrect participation in programs such as the green bin. Actions such as food waste reduction and diversion strategies, and multi-residential diversion initiatives will help close these gaps.

## Rising costs

The cost to collect waste is expected to rise significantly. The Strategy suggests improving contracts, exploring ways to recover costs, and reviewing service options to keep services affordable.

## Pressure on landfill space

Organics and recyclables found in the garbage stream and other materials like soils and construction waste occupy valuable capacity. New strategies for excess soil, construction and demolition materials and long-term disposal planning will help conserve space.

# 25 years

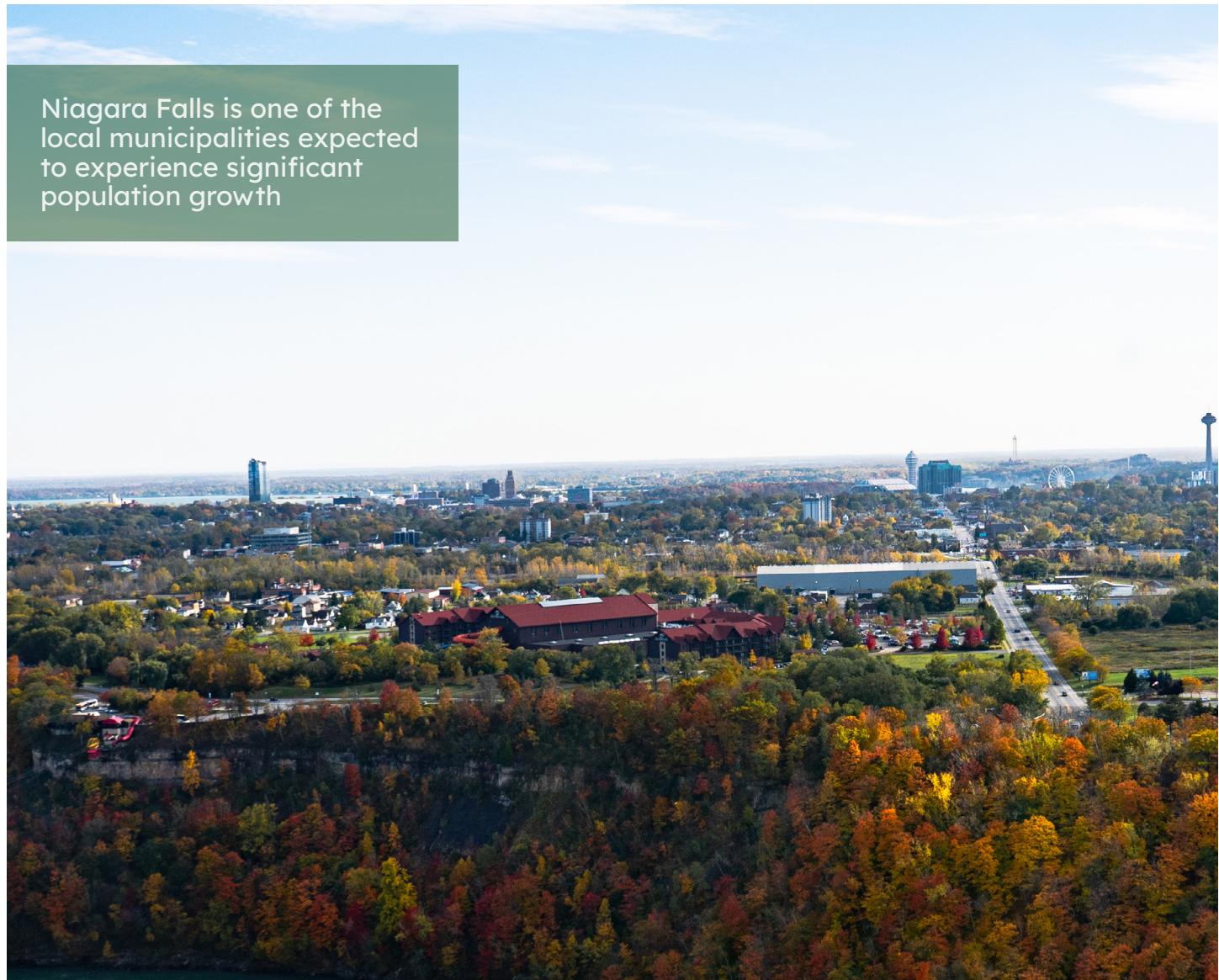
The Region has about 25 years of landfill capacity remaining. While that may seem like a long time, it can take several years to plan for new disposal capacity.

## Evolving technology and service needs

Waste management programs and customer needs are changing rapidly. To remain efficient and effective, the Region must evaluate and, where appropriate, adopt emerging technologies such as smart collection systems, advanced processing infrastructure, and alternative disposal solutions.

## Growth and housing trends

Projected population growth of 25-40% and a shift towards high density housing create new challenges. Updated design guidelines and a dedicated multi-residential strategy will ensure future developments support diversion.



# Actions

The actions in this Strategy are designed to take advantage of new opportunities while supporting six key goals: using resources wisely, increasing recycling and reuse, improving participation, working toward zero waste, and cutting the system's carbon footprint.

The Strategy recommends 23 actions, rolled out in phases over time to ensure a balanced and manageable approach. These actions are grouped into six categories—Community Engagement and Education, Policies and By-Laws, Waste Reduction and Reuse, Waste Collection and Diversion, Processing and Disposal Infrastructure, and Innovation—providing a clear roadmap for practical change, ongoing improvement, and long-term sustainability.



## Waste Education

Community engagement and education are critical components in increasing program participation and shaping behaviour change:

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### START YEAR 2026

#### Digital Public Education

Expand the use of digital platforms and tools to increase access to information and modernize the Region's public education approach, including digitized waste guides and a public dashboard



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### START YEAR 2046

#### Explore Opportunities for an Education Centre at a Waste Management Facility

Explore opportunities to establish a waste-themed educational centre with post secondary or community partners to inspire youth and provide hands-on learning.



## Community partnerships in action

The Region works with local partners to extend the reach of its diversion efforts. Through the Broken Spoke Program at Port Colborne High School, over 22,000 refurbished bicycles have been donated since 2015.

# Policies and By-Laws

Waste management policies and by-laws are essential for guiding responsible practices, ensuring public health, and supporting long-term change:

## START YEAR 2026

### Develop Waste Collection Guidelines for New Developments

Update and strengthen waste collection design guidelines for new residential, multi-residential, commercial and mixed-use developments to encourage effective, accessible waste collection and diversion systems.



## START YEAR 2027

### Explore Options for a User Fee and Cost Recovery System for Drop-off Depots and Landfills

Review potential cost recovery mechanisms and/or user fee models for depots and landfills, including options such as material specific tipping fees or surcharges for hard to divert materials or contaminated loads.



## START YEAR 2033

### Explore Options for a User Fee and Cost Recovery System for Collection and Diversion Programs

Explore cost-recovery models for collection and diversion programs, such as user-pay systems, hybrid tax/fee models or volume-based fees for multi-residential buildings.



## Legend

1. Optimize System
2. Recover Resources
3. Resuse Materials
4. Increase Participation
5. Pursue Zero Waste
6. Reduce Emissions

The landfill tipping face at Humberstone Landfill highlights the scale of waste management. Niagara Region is planning for the future through updated system design and cost recovery strategies.



# Waste Reduction and Reuse

Programs and initiatives that reduce and reuse waste help keep materials out of the landfill, lower greenhouse gas emissions, and support a more sustainable economy. These recommendations target materials and sectors where we can make the biggest difference:

## START YEAR 2027

### Develop a Multi Residential Waste Reduction and Diversion Strategy

Work with local area municipalities, property managers and developers to improve waste diversion in multi-residential buildings (i.e. apartments and condominiums with 7 or more units) by updating design standards, requiring green bin use, offering collection programs for other types of waste, and educating both residents and landlords.



About 20% of multi-residential buildings in Niagara Region participate in the Region's green bin program. Our goal is to increase this by 10% by 2035.

## START YEAR 2026

### Develop a Food Waste Diversion and Reduction Strategy

Develop a comprehensive strategy to reduce and divert food waste generated by residents and businesses. This could include food redistribution programs, expanded green bin collection and education initiatives.



## START YEAR 2038

### Develop Community Reduce and Reuse Programs and Initiatives

Partner with local organizations and area municipalities to develop reduce and reuse initiatives such as repair programs, reuse centres, share sheds and curbside giveaway days.



## START YEAR 2041

### Assess Potential Strategies to Develop a Single Use Plastic Strategy

Develop a strategy to reduce single use plastics in the industrial, commercial, and institutional sector, potentially including bans, toolkits for businesses and targeted education.



## START YEAR 2039

### Develop a Construction and Demolition Waste Reduction and Diversion Strategy

Work with local area municipalities and businesses to reduce construction and demolition waste. This could include toolkits, diversion requirements, and educational resources for contractors and homeowners.



# Waste Collection and Diversion

Understanding the types, quantity and sources of materials entering the waste system is critical in shaping collection programs and management strategies. As technology and systems advance, opportunities arise to enhance data collection and tailor programs to produce more efficient and effective systems:

## START YEAR 2025

### Conduct Waste Characterization Studies

Continue regular waste composition and set out studies to monitor diversion and contamination, providing the data needed to evaluate programs and design improvements.



## START YEAR 2025

### Assess Potential Approaches to Waste Management in Public Spaces and Parks

Develop a strategy to improve waste collection and diversion in parks and public spaces, in collaboration with local area municipalities. This could include service level agreements, innovative collection technologies, container management systems, and education programs.



## START YEAR 2029

### Review and Optimize Collection Contracts

Optimize collection contracts to provide operational and financial efficiencies and support the Region's waste goals and targets. This could include enhanced enforcement, increasing the types of materials collected, reviewing exemption programs, and looking at different bin types such as automated bin collection.



Efficient collection services are central to Niagara Region's waste system, supporting resource optimization and increased material recovery.



# Processing and Disposal Infrastructure

Processing and disposal infrastructure manages waste after it has been collected. These actions help make sure that whatever can't be reduced or reused is managed sustainably:

## START YEAR 2026

### Review Drop-off Depots Levels of Service

Review the Region's network of drop-off depots to identify service gaps and opportunities to improve service efficiency, customer experience, accessibility and diversion. This could include accepting new materials, changing hours of operation, and/or new drop-off depot construction.



## START YEAR 2027

### Develop a Long-Term Disposal Strategy

Develop a strategy to identify practical options to manage unavoidable waste, including potential alternatives such as energy-from-waste, mixed waste processing, landfill expansion or third-party disposal contracts.



## START YEAR 2043

### Review Feasibility for Leaf and Yard Waste Processing Facility

Explore the feasibility of developing a leaf and yard waste processing facility to increase the Region's internal processing capacity.



## START YEAR 2046

### Explore Shifting Organics Processing from Composting to Anaerobic Digestion

Explore development of an anaerobic digestion facility or contract with an existing anaerobic digestion facility to process organic waste.



Niagara Region's landfill sites and depots receive over 310,000 visits annually. A review of the depot network will explore opportunities to improve service efficiency, accessibility, and support diversion.



# Innovation

These recommendations include approaches to explore innovative and emerging research, technology and systems to gain efficiencies and increase waste reduction and diversion:

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## START YEAR 2026

### Conduct a Review of Operations Software and Maintenance Management



Review existing operations software and maintenance practices across waste management facilities to identify gaps, inefficiencies and opportunities to improve data management.

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## START YEAR 2026

### Develop Climate Adaptation Strategy



Develop a strategy to make the waste management system more resilient to climate change and community emergencies, including infrastructure adaptation and response planning.

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## START YEAR 2025

### Integrate Emerging Technologies for Next Collection Contract Request for Proposal



Assess and incorporate emerging technologies such as smart bins, collection vehicle cameras, and artificial intelligence tools to support automation and analytics.

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## START YEAR 2046

### Explore Opportunities with Innovation Labs



Explore partnerships with the Province, local area municipalities, academic institutions and private industry to research and test new waste reduction and diversion technology.

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## START YEAR 2030

### Conduct Study on Opportunities to Integrate with the Region's Wastewater Strategy



Study the feasibility of co-digesting the source separated organic waste and wastewater in collaboration with the Region's Water and Wastewater division.



In 2025, work began to optimize short-term disposal capacity and maintain service continuity, in preparation for the long-term disposal strategy.

# Turning Our Vision Into Reality

**The Strategy will be implemented in three stages between 2026-2051 to ensure actions are rolled out in a manageable and effective way. This approach allows the Region to balance resources, focus on what's needed first, and stay flexible. The phased approach is shown in Table 1.**

## Investing in What's Next

The strategic actions focus on practical and cost-effective solutions. As each action is developed in more detail, funding will be considered through Council's annual budget process. While some actions may require new or increased investment, the Region will:

- Look for opportunities to generate revenue such as user-fees);
- Look for opportunities to avoid or reduce

costs such as through greater diversion and efficiency; and

- Apply for provincial and federal grants.

These financial strategies will help reduce the impact on taxpayers while ensuring the Region has the resources needed to deliver on the Strategy's goals.



## Monitoring Progress

To ensure this Strategy remains current with the evolving waste management landscape, it will be reviewed every five years, or sooner if there are significant legislative changes, changes to the Region's waste management program and / or new data. Progress reports will be prepared as part of each 5-year review.



Daily operations, like managing the leaf and yard waste at the Bridge Street Depot, continue as the Region rolls out the Strategy in a phased long-term approach.

## Keys to Success

The success of the Strategy is highly dependent on the participation and collaboration of the community, interested parties, and all levels of governance. Achieving the Strategy's goals will require both behavioural change and strong partnerships.

Key success factors include:

- 01** Active participation of residents and businesses in waste reduction, reuse and diversion programs – particularly organics.
- 02** A shift in behaviour and consumption patterns from a make-take-use-dispose culture, to a culture that prioritizes waste avoidance, reduction, reuse and recycling.
- 03** Strong partnerships with businesses, community organizations, academia, and non-profit organizations.
- 04** Collaboration with other Region departments and local area municipalities to align services and resources.
- 05** Supportive policies and legislation at the local, provincial and federal levels.
- 06** Sustainable, long-term financing to ensure actions are implemented and maintained effectively.



Table 1: Implementation Plan

