

Niagara Region Waste Management Strategic Plan Update

Waste Management Planning Steering Committee
April 28, 2025

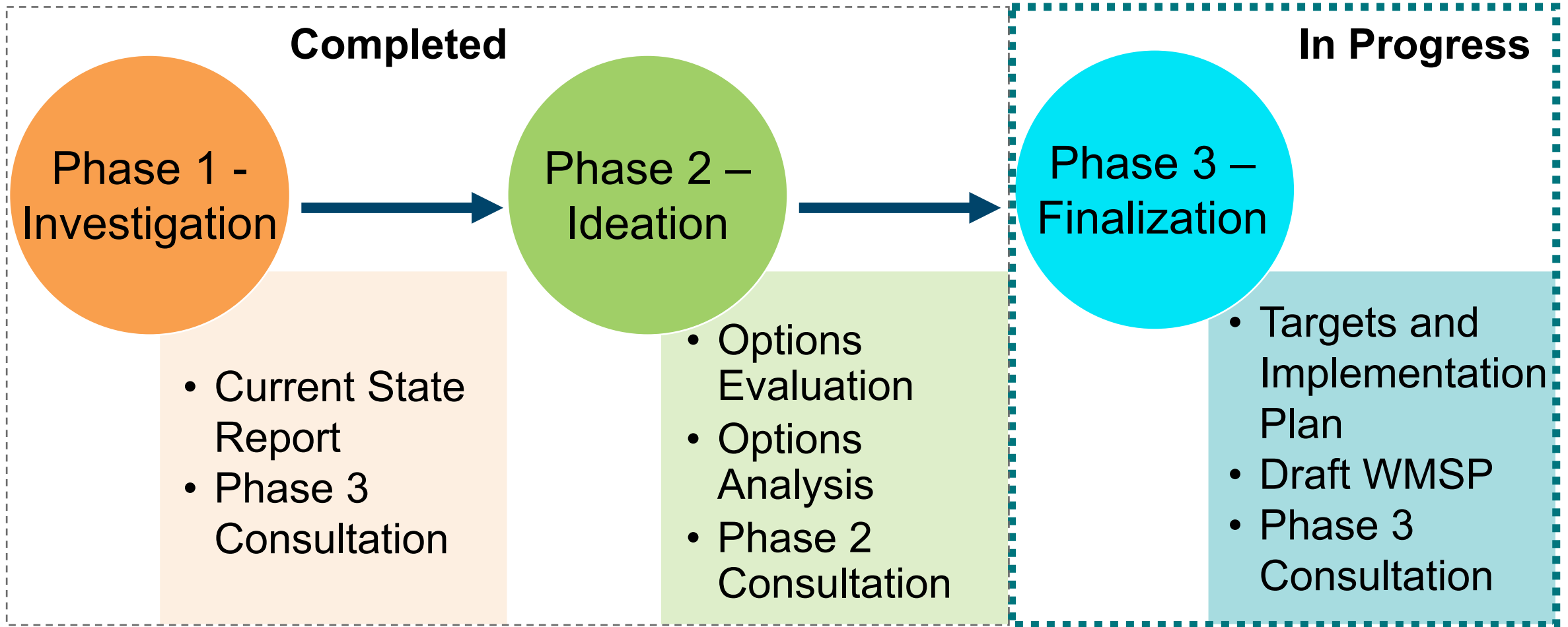
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Purpose

- Work completed since last update
- How comments have been considered
- Recommendations and targets development
- Schedule for implementation
- How feedback will be reflected in the next steps
- Share phase 3 engagement details



Strategic Plan Phases



Phase Two Public Consultation

- Surveys Returned: 1,178
- Open House Attendees: 26
- Common themes in survey responses:
 - Community in alignment with goals
 - Focus on dashboard, education, program expansion
 - Ease of participation, accessibility, affordability
- LAM Feedback:
 - Excess soils management strategy
 - Waste management in public spaces and parks
 - Population growth



Recommendations

Twenty-eight recommendations in six categories



Engagement
/ Education



Policies and
By-Laws



Reduction
/ Reuse



Collection
/ Operations



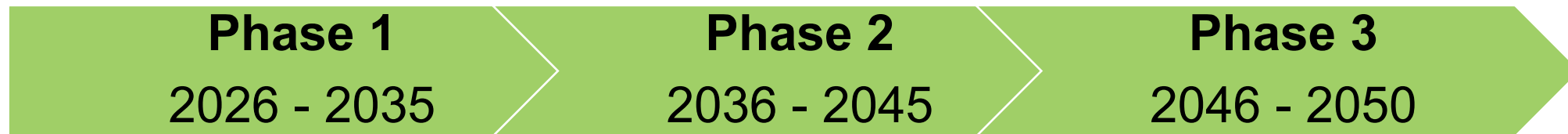
Processing
/ Disposal
Infrastructure



Innovation

Recommendations

Recommendations implemented over three phases



The WMSP and implementation progress of ongoing recommendations will be reviewed every 5 years

Recommendations (Cont'd)

A full list of recommendations with draft phasing is included in Appendix A.

Below is a subset of key recommendations:

- Explore Options for User Fee and Cost Recovery System – Depots and Landfills (2027 start)
- Explore Options for User Fee and Cost Recovery System – Collection and Diversion Program (2033 start)
- Develop Food Waste Reduction Strategy (2026 start)

Recommendations (Cont'd)

- Develop Multi-Residential Waste Reduction Strategy (2027 start)
- Review and Optimize Collection Contract (2026 start)
- Develop Public Space and Parks Strategy (2026 start)
- Develop Long-Term Disposal Strategy (2033 start)

Goals

1. Optimize waste management resources and infrastructure
2. Increase beneficial recovery of material from waste
3. Increase beneficial reuse of materials
4. Increase participation in waste management programs
5. Strive to be a zero-waste community
6. Reduce the carbon footprint of Niagara Region's waste management system

Draft Targets

- Reduce Garbage and Organics Waste Generation Rate
- Reduce Greenhouse Gas Emissions
- Increase Organics Capture Rate
- Increase Green Bin Program Participation
- Successful Implementation of Capital Projects

Next Steps

- Finalize recommendations and phasing
- Finalize costing and resourcing requirements
- Phase Three Engagement:
 - May 26 & 29: Public Open Houses
 - May 22: LAM and Regional Staff Meeting
 - May 2 – June 6: LAM Comment Period
- Incorporate feedback and present draft Plan at Public Works Committee

Questions?



Appendix A

Recommendations Being Carried Forward in the WMSP

Recommendations Phasing (DRAFT)

Community Engagement and Outreach	2026-2035	2036-2045	2046-2050
Implement Digital Public Education Incorporate public education with digital platforms (e.g., digital versions of waste guides and public diversion dashboard) to increase access.	2026		
Develop Education Centre at Waste Management Facility Partner with post-secondary institution(s) / community partners to establish educational centre, creating opportunities to collaboratively design and deliver educational programs.			TBD

Recommendations Phasing (DRAFT)

Policies & By-laws	2026-2035	2036-2045	2046-2050
Develop Waste Collection Guidelines for New Developments Review / revise guidelines - mandatory design standards for waste collection and infrastructure.	2026		
Explore Options - User Fee and Cost Recovery System - Depots and Landfills Review options for cost recovery / user fees related to infrastructure.	2027		
Explore Options - User Fee and Cost Recovery System - Collection and Diversion Program Review options for cost recovery / user fees.	2033		

Recommendations Phasing (DRAFT)

Waste Reduction & Reuse	2026-2035	2036-2045	2046-2050
Develop Food Waste Reduction Strategy Partner with LAMs, community-based organizations, and local businesses to prevent food waste / promote food waste prevention in the residential and IC&I sector.	2026		
Develop Multi-Residential Waste Reduction Strategy Partner with LAMs, property managers and developers, to increase diversion / reduce contamination.	2027		
Develop Single-Use Plastic Strategy Minimize use of single use plastics, aligned with Federal and Provincial regulations; may include bans on additional single use plastics not covered under Regulations.		TBD	

Recommendations Phasing (DRAFT)

Waste Reduction & Reuse (Cont'd)	2026-2035	2036-2045	2046-2050
Develop Community Reduce and Reuse Programs and Initiatives Partner with local organizations/LAMs to develop reduce and reuse programs and initiatives such as a “lendery”, curbside giveaway days, repair programs.		TBD	
Develop Construction and Demolition Waste Reduction Strategy Develop guidelines for residential and or commercial developments (e.g., designing for material optimization, promoting deconstruction and reuse of materials, etc.)		TBD	

Recommendations Phasing (DRAFT)

Waste Collection & Diversion	2026-2035	2036-2045	2046-2050
Conduct Waste Characterization Studies Undertake waste audits and composition studies on the garbage, recycling, and organics received at its landfills or transfer stations to help identify the quantity of waste, types of materials, diversion, and contamination rates.	2026		
Develop Public Space and Parks Strategy Focus on improving diversion and reducing litter in parks and public spaces.	2026		

Recommendations Phasing (DRAFT)

Waste Collection & Diversion (Cont'd)	2026-2035	2036-2045	2046-2050
Review and Optimize Collection Contract Explore collection contract options to provide operational and financial efficiencies and support the Region's waste goals and targets, including enhancing existing enforcement efforts. May include expanding the types of materials collected curbside and reviewing container options for pick-up (e.g., carts, clear bags).	2026		

Recommendations Phasing (DRAFT)

Processing & Disposal Infrastructure	2026-2035	2036-2045	2046-2050
Review Drop-off Depots Levels of Service Maximize efficiency and increase participation. This may include operational changes (e.g., adjusting operating hours), additional services (e.g., reuse spaces) and addition of a new location.	2026		
Develop Excess Soil Management Strategy Regulate and improve the management of soils currently occupying landfill space, which may consider Regional acquisition of a soils site.	2026		

Recommendations Phasing (DRAFT)

Processing & Disposal Infrastructure (Cont'd)	2026-2035	2036-2045	2046-2050
Develop Long-Term Disposal Strategy Identify options to manage residual waste. This may include using alternative technologies (e.g., mixed waste processing, energy from waste, etc.), landfill expansion.	2033		
Review Feasibility for Leaf and Yard Waste Processing Facility Explore feasibility of developing a leaf and yard waste processing facility at a Region facility to provide additional in-house composting capacity.		TBD	

Recommendations Phasing (DRAFT)

Processing & Disposal Infrastructure (Cont'd)	2026-2035	2036-2045	2046-2050
Shift Organics Processing from Composting to Anaerobic Digestion Transition from composting to anaerobic digestion (AD), either through development of an AD facility or contracting with an existing AD facility for organics processing.			TBD

Recommendations Phasing (DRAFT)

Innovation	2026-2035	2036-2045	2046-2050
Conduct a Review of Operations Software and Maintenance Management Review operation and updating software used at various waste infrastructure facilities, and development of a maintenance management program.	2026		
Integrate Emerging Technologies for Next Collection RFP Integrate emerging technologies (e.g., smart collection technologies, artificial intelligence (AI), automated and remote technologies).	2026		

Recommendations Phasing (DRAFT)

Innovation (Cont'd)	2026-2035	2036-2045	2046-2050
Conduct Study on Opportunities to Integrate with the Region's Wastewater Strategy Study the feasibility of integrating the solid waste system with the Region's wastewater strategy and consider opportunities to build upon current infrastructure and operations such as co digestion.	2030		
Contribute to Innovation Labs Partner with province, LAMs, community partners and/or private industry to support programs that develop and test new technologies focused on waste reduction, diversion and building a circular economy.			TBD

Recommendations Phasing (DRAFT)

Innovation (Cont'd)	2026-2035	2036-2045	2046-2050
Develop Climate Mitigation and Adaptation Strategy Strategy to reduce the GHG emissions generated through the solid waste management system from the point of material extraction to end of life disposal and adapt to climate change. This includes: <ul style="list-style-type: none">• developing a plan to ensure optimized responses to address emergency events impacting communities;• developing a plan that incorporates review and planning for potential necessary infrastructure adjustments in response to the climatic stimuli and their effects.	2026		