Loyalist Township

Solid Waste Management Master Plan

Public Information Session

March 4, 2025

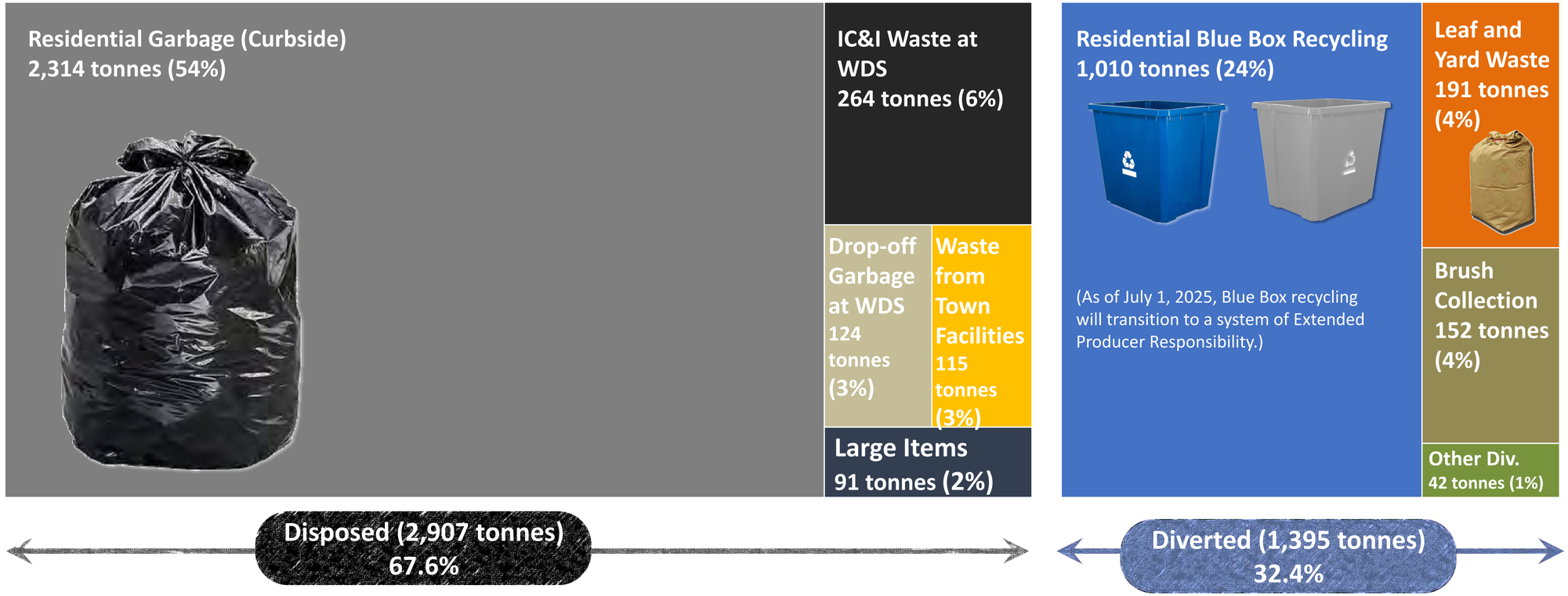
Project Purpose

Purpose of this project is to:

- Review the Township's current existing waste management services.
- Explore new and innovative ways to support the community's waste management needs:
  - ✓ Promote sustainable waste management practices.
  - ✓ Reduce waste generation.
  - ✓ Increase waste diversion.

Current Services and Performance

- Waste managed by Township in 2023: 4,302 tonnes
- Percent of waste disposed: 67.6%
- Percent of waste diverted: 32.4%



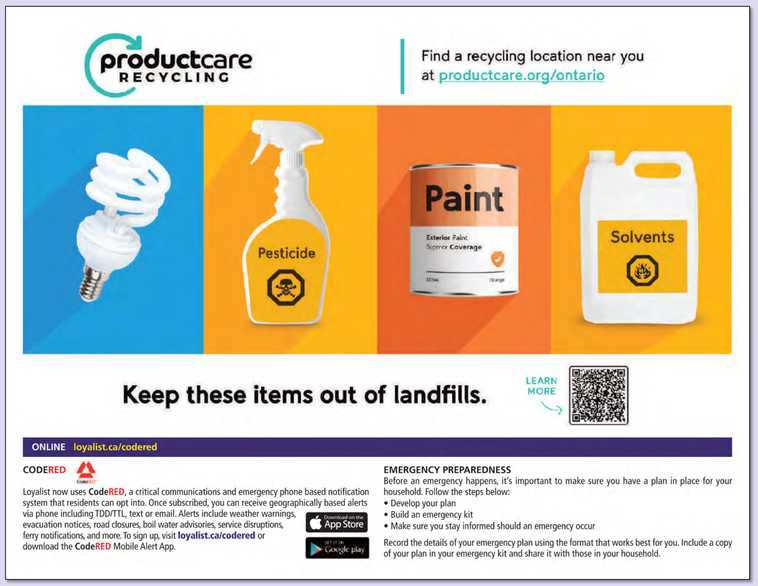
Note: Does not include solid waste generated in Loyalist but diverted through partnerships with Kingston programs, stewardship programs such as Beer Store Deposit-Return or retail take-back programs, or managed through private facilities.

Current Services and Performance

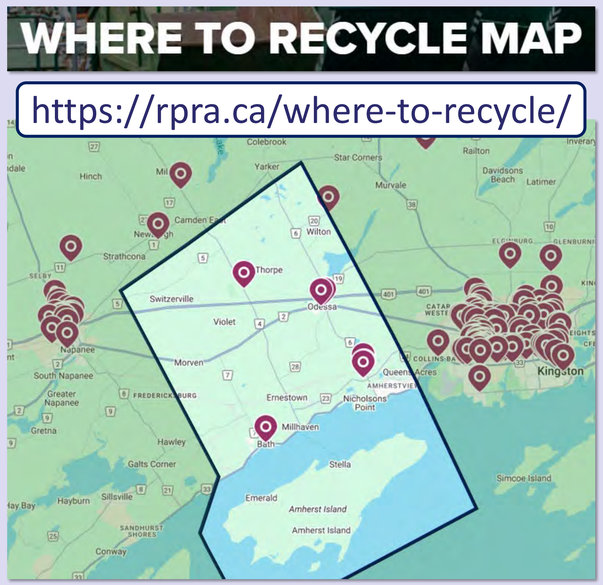
- Waste managed by Township in 2023: 4,302 tonnes
- Percent of waste disposed: 67.6%
- Percent of waste diverted: 32.4%

+ stewardship programs





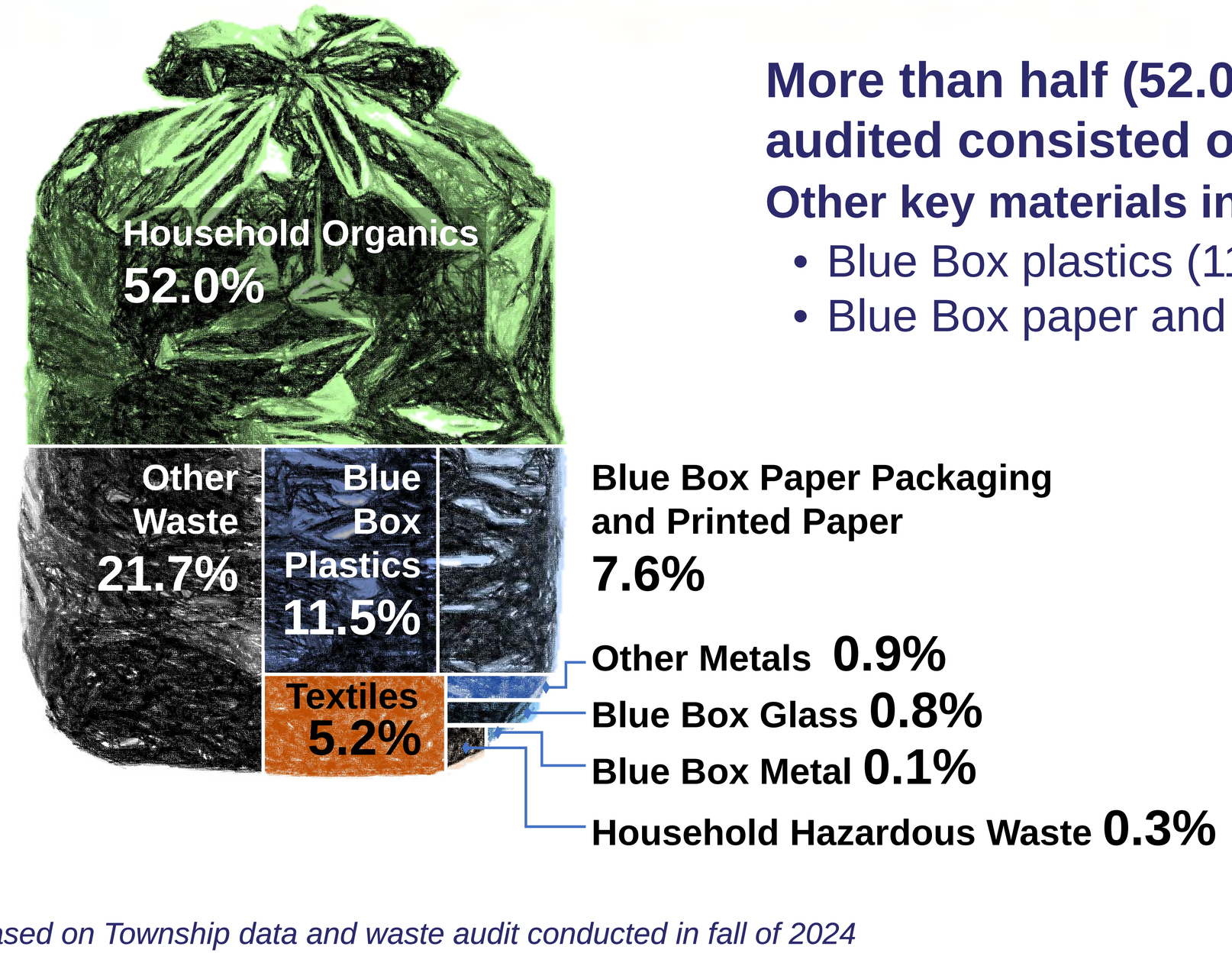




Note: Does not include solid waste generated in Loyalist but diverted through partnerships with Kingston programs, stewardship programs such as Beer Store Deposit-Return or retail take-back programs, or managed through private facilities.

Waste Composition Profile

What's in Our Household Garbage?



More than half (52.0%) of the garbage audited consisted of household organics.

Other key materials in residential garbage:

- Blue Box plastics (11.5%)
- Blue Box paper and paper packing (7.6%)

Based on the waste audit findings and Township data, Township residents are recycling 97% of their Blue Box metals and 86% of their Blue Box glass.

Based on Township data and waste audit conducted in fall of 2024

Key Waste Diversion Opportunities

Household Organics
~ 1,232 tonnes available



Up to 28.7% additional diversion
of the Township's Solid Waste

Blue Box Plastics
~ 272 tonnes available



Up to 6.3% additional diversion
of the Township's Solid Waste

Blue Box Paper / Paper Packaging
~ 179 tonnes available



Up to 4.2% additional diversion
of the Township's Solid Waste

Textiles
~ 123 tonnes available



Up to 2.9% additional diversion
of the Township's Solid Waste

Based on Township data and waste audit conducted in fall of 2024

Options for Managing Waste

Waste Reduction and Reuse

Promote On-site Management of Organics

- Increased promotion and education about on-site management of organics (e.g., backyard composting, grasscycling).
- Potential opportunities for in-home composting appliances (e.g., FoodCycler)

Estimated annual cost: $15,000 to 20,000



Support of Waste Minimization & Diversion at Special Events

- Develop resources (e.g., toolkit or online resources) for events at Township facilities that encourage waste minimization and diversion.

Estimated annual cost: $5,000 to $15,000



Support of Community Reduce & Reuse Programs

- Provide increased support for reduce & reuse programs led by community groups/ non-profit organizations.
- Examples include repair cafes, exchanges, thrift stores.

Estimated annual cost: $5,000 to $10,000



Options for Managing Waste

Recycling

Add New Categories to Recycling Programs (including Textile Recycling)

- Add new programs for additional categories of materials.
- Need to consider if materials would be collected at curb or a depot

Note: *This does not include Blue Box Recycling*

Estimated annual cost: $50,000 to $100,000





Strategy for Public Space Recycling

- Develop, implement strategy for public space recycling.
- Identify key locations for placement and opportunity for value-added functions (public art, advertising, etc)

Estimated cost: $60,000 to $100,000









Options for Managing Waste

Organics Management

Household Organics Collection and Composting Program

- Implement “Green Bin” program for food and kitchen waste.
- Assess potential for Township to process material or send to a third-party facility.

Estimated annual cost: ~$500,000 for collection and processing





Expand Pilot Testing of FoodCycler-style Home Composting Appliances

- Test pilot on a whole street, neighbourhood, or community.
- Measure achieved diversion.
- Provide units for short-term rental or trial periods.

Estimated cost: $40,000-$60,000







Options for Managing Waste

Organics Management

Expand Leaf and Yard Waste Collection and Composting

- Extend the frequency and catchment of leaf and yard waste.
- Process / compost the material in-house (e.g., at Violet WDS) or send to a third-party facility.

Estimated annual cost: $250,000 to $300,000 for collection and processing





Develop a Food Waste Reduction Strategy

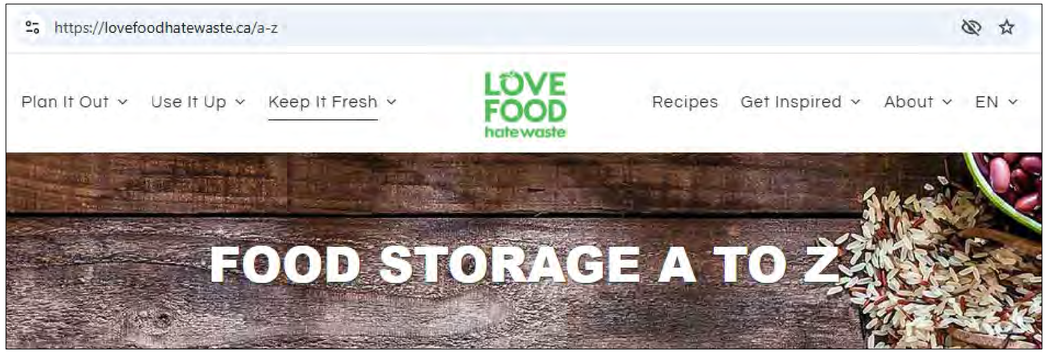
- Develop a Township-based food waste reduction strategy or partner with existing programs (e.g., lovefoodhatewaste.ca, Sustain Ontario)
- Deliver promotion and education focused on avoiding food waste and supporting surplus “food rescue” efforts.

Estimated annual cost: ~$10,000 – 20,000

LOVE FOOD hatewaste

SUSTAIN ONTARIO

FoodMesh
Give food a second chance



Options for Managing Waste

Waste Collection and Receiving

Every-other Week (EOW) Garbage Collection

- Move to collecting garbage every other week (EOW) instead of weekly.
- Include options for both weekly and EOW to help assess cost benefit.

~15-20% savings on collection costs

Curbside Garbage Collection on Amherst Island

- Provide curbside garbage collection to residents of Amherst Island.
- Collection could be performed by Township staff or contractor.

Estimated annual cost: ~$400,000 per year

Zero Emissions Solid Waste Fleet

- Identify opportunities for phasing in a zero emissions solid waste fleet.
- Include in a future waste collection 2030 contract.

Estimated Cost: 25% to 40% increased collection cost

Cart-based Garbage Collection

- Assess feasibility of introducing automated or semi-automated curbside cart collection of garbage (for future collection contract).
- The assessment should include cart collection on Amherst Island.

Estimated Cost: ~$100,000 for pilot test

RFID Technology on Waste Collection Containers

RFID = radio-frequency identification

- Equip waste collection containers with RFID capabilities.
- Would help Township monitor system and service performance.
- Would eliminate need to bag tags.

Estimated capital cost: ~$5,000

Pilot-test Alternative Collection Containers in Public Spaces

- Assess alternative waste collection containers in parks & public spaces.
- Examples include in-ground collection; multi-stream containers; solar compacting bins; dog waste bins; etc.

Estimated capital cost: ~$25,000

Options for Managing Waste

Promotion and Education

Focused Promotion & Education Campaigns

- Develop Waste Management Promotion & Education Strategy.
- Conduct targeted promotion & educational campaigns focusing on key topics/challenges.

Estimated annual cost: $5,000 – 15,000

Enhanced Social Media Presence, use of apps

- Explore expanded use of solid waste messaging with social media.
- Leverage smartphone apps (e.g., Recycle Coach) for enhanced solid waste promotion & education.

RecycleCoach

Estimated annual cost: ~$5,000

Develop Waste Management Program Branding

- Develop “Made in Loyalist” brand to provide consistent program look.
- Can reinforce public awareness and promotion and education efforts.

Estimated Cost: ~$20,000

Examples from Other Municipalities

Why We Can’t Take it: Green Bin — Toronto



Durham Region



Toronto



Options for Managing Waste

Promotion and Education

RecycleCoach

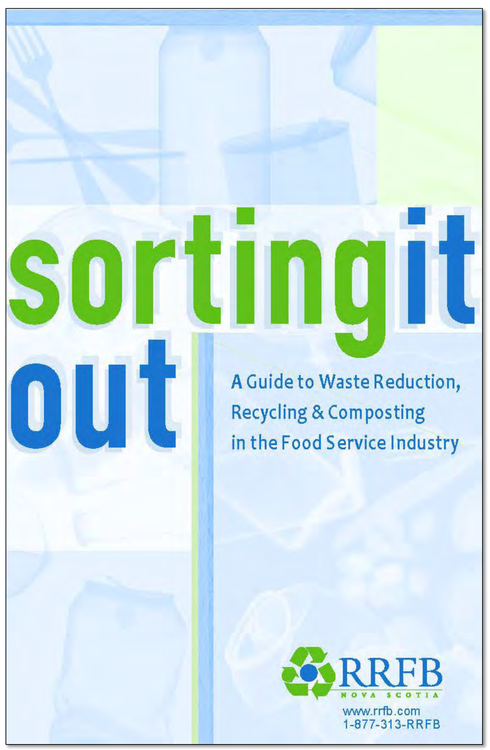
IC&I Waste Minimization/ Diversion Promotion

- Develop a strategy to encourage the local Industrial, Commercial and Institutional community to increase waste minimization/diversion.

Estimated cost: $5,000 – 15,000

Examples from Other Jurisdictions

Nova Scotia



Nova Scotia



Toronto



Options for Managing Waste

Municipal Solid Waste Management Policies

Introduce Garbage Bag Limits

- Add a limit to the number of garbage bags that can be set out for collection (e.g., 2 bags per household).
- Bag limit to encourage increased diversion.

Estimated planning/implementation cost: ~$5,000

Enforcement of Waste Collection By-Law

- Update /enforce the Waste Collection By-Law.
- Add clauses to encourage diversion and enable enforcement.

Estimated annual cost: ~$20,000

Increase Cost per Bag Tag

- Raise cost per bag tag
- Ensure cost is in line with what other municipalities are paying

Estimated cost: ~$100,000 in added revenue

Switch to Clear Garbage Bags

- Clear garbage bags encourage diversion through recycling and (potential) composting programs.
- Clear bag garbage programs are increasingly common in Ontario.

Estimated planning/implementation cost: $5,000 to $10,000

Differential (Graduated) Landfill Tip Fees

- Increase financial incentives for pre-sorted loads to better allow for waste separation & diversion at waste disposal sites.

Estimated cost: revenue neutral

Waste Diversion at Township Facilities

- Implement mandatory waste diversion in all Township facilities.

Estimated capital cost: $25,000 - $50,000

Options for Managing Waste

Municipal Solid Waste Management Policies

Develop Multi-Residential Waste Standards

- Updating existing multi-residential & related development standards/ guidelines to allow for waste diversion facilities.

Estimated cost: ~$10,000

Single-use Items Reduction Strategies & Bans

- Develop strategy to eliminate or reduce single-use plastics (SUPs).
- Ban items like plastic shopping bags, Styrofoam takeout containers.

Estimated development, planning, and implementation cost: ~$5,000

Green Procurement

- Develop / enhance / promote internal policies that recognize and indicate preference for “green” products

Negligible cost

Update Waste Performance Metrics

- Identify new metrics for measuring success of waste management programs (e.g., carbon footprints)

Estimated cost: ~$5,000

Conduct Periodic Multi-season Waste Audits

- Complete multi-season waste audits every 2 to 4 years to help assess diversion performance of Township and Blue Box stewards.

Estimated Cost: ~$50,000

Options for Managing Waste

Other Waste Diversion Opportunities

Increase Waste Diversion through EPR

EPR = Extended Producer Responsibility

- Encourage more opportunities for diversion through EPR.
- Promote EPR programs currently available.
- Explore options for local processing facilities with stewards.

Estimated annual cost: ~$5,000

More Special Waste Collection Events

- Increase number of special waste collection events, either by Township or Stewardship organizations.
- Emphasize collection of steward materials (e.g., electronics, HHW, oil, etc.).

Estimated annual cost: $5,000 to $50,000

Explore Multi-municipal Partnerships for Waste Management Services

- Explore collaborative / regional opportunities to share waste services.
- Examples include shared collection and processing contracts or facilities.

Estimated annual cost: $10,000 - $50,000

Options for Managing Waste

Disposal

Future Landfill Expansion at Amherst Island WDS

- Landfill at Amherst Island WDS has 20 to 25 years of remaining capacity.
- Potential vertical expansion could add another 44 years of capacity.
- Should be considered 10 to 15 years before capacity reached.

Estimated cost: $100,000 (approvals)

Transport Amherst Island Garbage to Violet WDS

- Transport residential garbage from Amherst Island to the Violet WDS for disposal.
- Would require a new waste transfer station with garbage compactor at the Amherst Island WDS.

Estimated cost: $95,000 (capital cost)
$15,000 (annual operating)

Amherst Island Waste Disposal Site (WDS)



Options for Managing Waste

Disposal

Future Landfill expansion at Violet WDS

- Landfill at Violet WDS has 25 to 30 years of remaining capacity.
- Potential vertical expansion could add another 47 years of capacity.
- Should be considered 10 to 15 years before capacity reached.

Estimated cost: $150,000 (approvals)

Violet Waste Disposal Site (WDS)



Next Steps

Next steps for this project include:

- Consider the feedback received from the public and stakeholders regarding the options being reviewed.
- Evaluate and recommend the preferred solid waste management options for the Township.
- Prepare the Implementation Strategy.

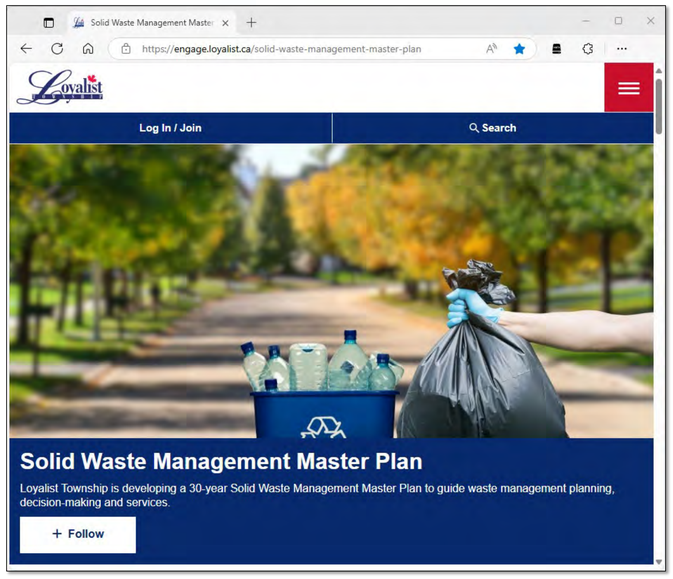


We Want to Hear from You!

Please share your thoughts with us on how solid waste should be managed in Loyalist Township.

Here's how:

- Pick up and fill out a feedback form. Drop it off before you leave or at the Township office.
- Visit the project page on Engage.Loyalist.ca. Click "Provide feedback on the options"
- Send your comments and questions, to the attention of Justina Poisson, Project Coordinator: jpoisson@loyalist.ca
- The public comment period closes on Monday, March 17, 2025, at 4 p.m.



Provide feedback on the options