

SOURCE SEPARATED ORGANICS (SSO) Update and Options

Presented to:

- Waste Management Advisory Committee - May 3, 2023
- Committee of the Whole - June 6, 2023

SOURCE SEPARATED ORGANICS (SSO)

- Update and Options

If you have any questions, please contact Waste Management by using the contact information below:

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WHAT IS SSO?

- SSO (source separated organics) is essentially food and organic waste
- 30% or more of household garbage is SSO
- 4500 tonnes per year generated from households City-wide
- 4500T takes up 28,000 cu. meters per year landfill space

WHY DIVERT SSO FROM LANDFILL?

- Mandated by Province to divert 50% of SSO from single family residences in urban areas by 2025
- Our Waste Management Strategy goal of 70% diversion from landfilling by 2048 (currently we are at 35%)
- Sustainability - Prolong the site lives of our landfills, make waste into a resource

HOW DO WE REACH 50% DIVERSION?

- Identify urban areas (Lindsay, Bobcaygeon, Fenelon, Omemee) as per official plan
- Mandate a program that will achieve the Diversion target
- Implement by-law changes to ensure the program is followed
- Make it simple and easy for the public to participate
- Monitor and audit the diversion rate and make changes

WHAT HAVE WE DONE SO FAR?

- Integrated Waste Management Strategy (2015-19, 2020-24)
- Promoted back yard composting
- Composter giveaways in 2021
- Reported to Council on Dec 14, 2021 on Feasibility of SSO
- Request for Information released to public for ideas and interest to partner with the City in April 2022
- Researched successful SSO programs from other municipalities
- Come up with current SSO options with pros and cons

WHERE ARE WE NOW?

- Options have been reviewed (nine in total) with pros, cons and estimated costs
- Options were presented to Waste Management Advisory Committee in May 2023
- Options to be presented to COW in June 2023
- Council to recommend long term preferred option
- Start Budgeting in 2024 for long term preferred option
- Tender/procurement of services/agreements etc.

WHAT ARE THE OPTIONS?

1. Curbside collection in urban areas only
2. Curbside collection City-wide
3. Backyard composting in urban areas only
4. Backyard Composting City-wide
5. Counter top composting in urban areas only
6. Counter top composting City-wide
7. Drop off facilities at Somerville and Lindsay landfills to service the urban areas
8. Drop off facilities at all open landfills to service City-wide
9. Hybrid option

OPTION 1 - Curbside collection in urban areas

Establish consolidation site in Lindsay, provide 2 collection bins to each household, determine collection schedule

Cost - \$3.2 million start up, \$1.2 million ongoing annual for collection/transfer and cost to process at a facility

Pros - most convenient option for public, most likely option to meet target of 50%, easy to track, highest landfill space savings, no residual for residents to manage

Cons - approvals required for consolidation site, need to find processor, higher expenses for curbside collection and one-time costs

OPTION 2 - Curbside Collection City-wide

Establish consolidation site in Lindsay, provide 2 collection bins to each household, annual curbside collection

Cost - \$6.1 million start up, \$3.2 million annual for collection/transfer and cost to process at a facility

Pros - most convenient option for public, most likely option to meet target of 50%, easy to track, highest landfill space savings, no residual for resident to manage

Cons - approvals required for consolidation site, need to find processor, most expensive option for curbside collection and one-time costs, not mandated to do City-wide

OPTION 3 - Backyard Composting in Urban areas

Supply and deliver backyard composters

Cost - \$800,000, no annual fees

Pros - least expensive option, no approvals required

Cons - inconvenient and labor intensive for public, residual compost needs to be managed by resident, difficult to meet target of 50%, difficult to track diversion, animals/vermin concern, need to have strong enforcement

OPTION 4 - Backyard Composting City-wide

Supply and deliver backyard composters

Cost - \$1.9 million, no annual fees

Pros - lower expense option, no approvals required, more diversion than just urban wide program

Cons - inconvenient and labor intensive for public, residual compost needs to be managed by resident, difficult to meet target of 50%, difficult to track diversion, animals/vermin concern, need to have strong enforcement

OPTION 5 - Counter top Composting Urban areas

Supply and deliver Counter top Composters

Cost - \$1.5 million, no annual fees

Pros - comparatively lower expensive option, no approvals required, more convenient than backyard composting

Cons - new technology not proven in long term, inconvenient have to operate unit, uses electricity, residual compost needs to be managed by resident, difficult to meet target of 50%, difficult to track diversion, need to have strong enforcement

OPTION 6 - Counter top Composting City-wide

Supply and deliver Counter top Composters

Cost - \$4.2 million, no annual fees

Pros - comparatively lower expensive option, no approvals required, more convenient than backyard composting, more diversion than urban option

Cons - new technology not proven in long term, inconvenient have to operate unit, uses electricity, residual compost needs to be managed by resident, difficult to meet target of 50%, difficult to track diversion, need to have strong enforcement

OPTION 7 - Drop off Facilities at Lindsay and Somerville Landfills to service urban areas

Construct/install containers for public drop-off during regular landfill hours then transfer offsite for processing

Cost - \$365,000 start up, \$300,000 annually

Pros- lower expense compared to curbside collection. Less greenhouse gases compared to curbside.

Cons-special approvals likely required, inconvenience for residents to sort and drive to landfills. Potential congestion at landfills due to drive-in and drop-off. Need to have strong enforcement

OPTION 8 - Drop off Facilities at all open landfills to service City-wide

Construct /install containers for public drop-off during regular landfill hours then transfer offsite for processing

Cost - \$865,000 start up, \$700,000 annually

Pros - lower expense compared to curbside collection, less greenhouse gases compared to curbside

Cons - special approvals likely required, inconvenience for residents to sort and drive to landfills, potential congestion at landfills due to drive-in and drop-off, need to have strong enforcement

OPTION 9 - Hybrid option

Combination of any two or more of options 1-8

Cost - Variable and dependent on choice of options

Pros - flexibility allowing different methods of collection and processing

Cons - dependent on cons listed in each option

Summary of Options

Option	Start up	Annual costs	Annual space savings	Annual Net
1. Curbside Urban	\$3.2 million	\$1.2 million	\$1 million	-\$200,000
2. Curbside City-wide	\$6.1 million	\$3.2 million	\$2.8 million	-\$400,000
3. Compost Urban	\$800,000	nil	\$1 million*	\$1 million*
4. Compost City-wide	\$2.2 million	nil	\$2.8 million*	\$2.8 million*
5. Counter Urban	\$1.5 million	nil	\$1 million*	\$1 million*
6. Counter City-wide	\$4.2 million	nil	\$2.8 million*	\$2.8 million*
7. Drop off urban	\$365,000	\$300,000	\$1 million*	\$700,000*
8. Drop off City-wide	\$865,000	\$700,000	\$2.8 million*	\$2.1 million*

*theoretical

Important to note for backyard/counter top composting:

- Residual from composters cannot be landfilled
- Increase bylaw enforcement needed
- Strict control curbside (Miller to not pick up bags containing SSO)
- Strict monitor and control of roadside dumping
- Plan/precautions needed for animal/vermin
- 100% participation needed
- Increase in auditing needed to confirm diversion
- Risk of non-compliance/not meeting targets

Thank you!