



Council Report

Report Number:	WM2021-016
Meeting Date:	December 14, 2021
Title:	Source Separated Organics Feasibility Review
Description:	Review of options for a Source Separated Organics diversion program
Author and Title:	David Kerr, Manager Environmental Services

Recommendation(s):

That Report WM2021-016, **Source Separated Organics Feasibility Review**, be received; and

That Council directs Staff to issue an expression of interest to determine potential options for a Source Separated Organics diversion program.

Department Head: _____

Financial/Legal/HR/Other: _____

Chief Administrative Officer: _____

Background:

At the Council Meeting of November 19, 2019 Council adopted the following resolution:

CR2019-641

Moved By Councillor Yeo

Seconded By Deputy Mayor Elmslie

That Report WM2019-012, Making Waste Matter: Integrated Waste Management Strategy Update, be received;

That Council approves the integrated waste management strategy update for implementation with the following accelerated amendments;

That an immediate focus be placed on public education;

That an immediate enhanced online presence be implemented regarding recycling;

That a \$10/ton increase to the tipping fees be implemented in January 2020 and the increase in revenue be used to offset additional operating costs to enhance diversion; and

That the by-law for allowable recyclables in waste be amended to reduce the amount from 20% to 10% starting in early 2020.

Carried

This report addresses that direction from Council.

This report outlines the feasibility of implementing a residential Source Separated Organics (SSO) program in the City of Kawartha Lakes (CKL) to divert organics component out of municipal waste. SSO is an industry term otherwise known as a food waste, composting, or green bin program. One of the initiatives in the updated Integrated Waste Management Strategy was to complete this feasibility review by the end of 2021. Implementing an SSO program will significantly increase the site lives of landfills through waste diversion and position the City to meet potential provincial requirements governing SSO.

Provincial requirements are to take effect in 2025 which will require qualifying municipalities to meet 50% food and organic waste reduction (and resource recovery of food and organic waste) generated by single-family dwellings in urban settlement areas. Urban settlement areas (such as cities, towns and villages) are defined as built up areas where development is concentrated and which have a mix of land uses. As well the Ministry of the Environment Conservation and Parks' (MECP) "Made in Ontario Environment Plan" titled "Preserving and Protecting our Environment for future Generations" is recommending potential future bans on food waste going to landfill and

will be consulting with key partners such as municipalities, businesses and the waste industry. Further details are outlined in the Province's "Food and Organic Waste Policy Statement" which is attached to this report. Under the current Policy Statement, it identifies:

4.2 *Municipalities in Southern Ontario* that, as of the effective date, do not provide curbside collection of source separated *food and organic waste* shall provide:

- i. Curbside collection of *food and organic waste* to single-family dwellings in an *urban settlement area* within a *local municipality* if the population of the *local municipality* is greater than 50,000 and the population density of the *local municipality* is greater than or equal to 300 persons per square kilometre.
- ii. Collection of *food and organic waste* to single-family dwellings in an *urban settlement area* within a *local municipality* if:
 - a. The population of the *local municipality* is greater than 50,000 and the population density of the *local municipality* is less than 300 persons per square kilometre; or
 - b. The population of the *local municipality* is greater than 20,000 but equal to or less than 50,000 and the population density of the *local municipality* is greater than or equal to 100 persons per square kilometre.

The City of Kawartha Lakes does not qualify for 4.2, Part "i" above but it does qualify for 4.2, Part iia. The primary difference between Part i and Part ii is the requirement for curbside collection. Under the current policy statement, CKL will not be required to provide curbside SSO collection. However, the Policy statement goes on to say:

4.5 For *municipalities* subject to policies 4.2 (ii):

- i. Curbside collection of source separated *food and organic waste* is the preferred method of servicing single-family dwellings.
- ii. Alternatives to curbside collection or source separation of *food and organic waste* may be used if it is demonstrated that provincial *waste reduction* and *resource recovery* targets can be achieved efficiently and effectively.

Careful consideration of diversion techniques is essential in order to meet the provincial targets while keeping the program feasible to the municipality. It is important to note that although the Ministry indicates that curbside collection is the preferred method to achieve these targets we could provide an alternative means (that may be more cost effective) to meet these targets. The Province is anticipated to further clarify their plan to divert food and organic waste out of municipal landfills and Staff will continue to update Council and Waste Advisory Committees on any new requirements.

With these considerations in mind and before the rules are actually enforced it is an ideal time for CKL to be pro-active, prepare for the future and evaluate Municipal options for an SSO program.

As part of the research that has gone into this report, scientific studies and current experiences with different programs across the public and private sectors have been reviewed. Based on historic and recent studies, implementation of an SSO program can reduce the volume of household waste by up to 30%. This report looks at how we as a municipality, can take steps to best manage SSO in an economically and environmentally responsible manner.

The Key Performance Indicator (KPI) for the waste strategy initiative is to review the feasibility of a program that will provide SSO diversion alternatives for the entire municipality (rural and urban areas) by Q4 of 2021.

Staff have completed the following tasks:

- Review of upcoming provincial legislation on food waste reduction
- Discussion with regulatory officials on applicability of SSO programs
- Review of previous professional consultant reports/feasibility studies on the viability of SSO programs completed for Kawartha Lakes
- Pilot studies completed within Kawartha Lakes
- Public surveys and questionnaires provided by staff to the public
- Reviewed experiences gained from other municipalities and the private sector.

One of the first initiatives CKL implemented to assess the feasibility of an SSO program was a voluntary pilot SSO program in Fenelon Falls from 2006 to 2014. As part of this program, SSO was collected at curbside from 200 homes. The SSO was composted in windrows at the Fenelon landfill site. The participation from residents was initially high, however due to the strict regulatory framework in the province at the time and operating issues at plants in larger municipalities very few facilities were being approved at the time. With no clear vision in site by the Province, the program dwindled and in 2014, only 40 households were actively taking part at the end of the program. The pilot program having achieved its goal to collect some excellent information and data on SSO was discontinued in 2014.

To further evaluate the feasibility of an SSO program, Kawartha Lakes retained Urban & Environmental Management Inc. (UEM) to complete an SSO Composting Facility Summary Report and Business Case in 2011. The UEM study indicated that in the absence of provincial regulations requiring SSO diversion, landfilling SSO would be the most cost effective option for CKL. It is important to note that this option does not address saving landfill space. However, UEM did recommend that in order to achieve self-established and provincial waste diversion targets an SSO program/facility would be necessary. The UEM report provided recommendations on the best-suited type of facility and location in CKL. Unfortunately, at the time of this study there was no viable option for transportation of the SSO to a processing facility close enough or within Kawartha Lakes to make that option economically feasible.

Since that time, the situation surrounding an SSO program in CKL has changed. New legislation in Ontario has been announced and new SSO processing facilities have recently been approved and constructed closer to CKL. It is apparent that SSO diversion is essential, should the CKL commit to meeting the Integrated Waste Management Strategy's goal of a waste diversion rate of 70%.

It is important to note that CKL has had a backyard composting program to encourage management of SSO at the homeowner level for over 20 years. CKL has seen a moderate amount of residential uptake in this program in the last 5 years and have sold 30-50 composters per year on average. To encourage an even greater amount of participation in backyard composting we initiated a free composter giveaway program in 2021. As part of this program, staff also educated those members of the public on the correct way to compost. This program has been particularly successful in the last year as over 400 residents have acquired a free backyard composter. The 400 composters cost the city approximately \$16,000 in total. If used correctly, the composters are able to divert approximately 30% of each home's waste stream. Based on our curbside collection program (est. 15,000 tonnes of waste collected annually at est. 35,000 stops) about 0.4 tonnes per year waste is generated per household. Therefore 400 homes generate a total of 160 tonnes of waste. If 30% of this tonnage is diverted through backyard composting CKL saves approximately 48 tonnes per year in landfill space. At an estimated \$150/tonnes cost for deferred landfill space, 48 tonnes of diversion equates to ~\$7200/yr savings in deferred landfill space. Within 2 years, the cost of deferred landfill space savings will be close to the cost of purchasing the 400 composters.

Of note, The Food and Organic Waste policy statement also sets composting targets and requirements for the commercial and industrial sector. For instance, retail shopping establishments, retail shopping complexes, office buildings, restaurants, hotels and motels and large manufacturing establishments that generate greater than 300kg/week food and organic waste are required to reduce their food and organic waste by 50% to 70% depending on their regulated category by 2025. If any of these establishments generate less than the 300kg/week, they will still be required to have a source separated organics program in place but the diversion targets are less specific. In addition, many education institutions and hospitals generating greater than 150kg/week, will be required to meet the target of 70% diversion by 2025.

Although the Food and Organic Waste Policy statement puts the onus on these sectors to find their own ways to meet the prescribed targets there may be potential partnerships with some of these sectors worth considering in order to realize economies of scale. The more waste we can divert from our landfills the longer they will last for the benefit of the public resulting in lower overall cost for landfill management.

CKL is in a good position to implement a mandatory SSO program as we already have a clear bag program to ensure compliance. Many other municipalities who have SSO programs are now making the transition to clear bag programs. Any mandatory SSO program would involve an extensive public education and awareness campaign similar to when the clear bag program was initiated and may involve a grace period for residents to adjust to the change.

It is therefore anticipated that a preferred option for SSO diversion in CKL could be a mandatory CKL-wide residential SSO program. To support this initiative, when ready to implement a program, Staff would recommend the By-law be amended to prohibit food waste within each clear bag of residential garbage.

Although there are many different scenarios or options for implementing an SSO program in CKL, we have reviewed some common options currently employed by municipalities in southern Ontario. Since there is potential, as SSO programs are implemented across the province, that other opportunities may become feasible it is important that our plan remain somewhat flexible. This will allow us to best manage an SSO program that will help not only meet the 50% diversion of food and organic waste target in urban areas but also help achieve our overall waste strategy target of 70% residential diversion of all waste.

The following are some of the more common options and their pros and cons for Councils' consideration in this report.

Collection Options

1. Curbside Collection
2. Backyard Composting
3. Drop-off facilities
4. Hybrid

Processing Options

1. Transfer to private processing facility
2. Process at CKL owned facility
3. Process at mutual benefitting CKL and partner facility

Collection Options

1. Curbside Collection

The most convenient option for residents participating in an SSO program would be curbside collection. This option would include collection of food waste in a container at the curb in conjunction with the current curbside collection programs for waste and recyclables. Similar to many municipalities, and in order to create a higher potential for this option to be successful, CKL would purchase and deliver a set of SSO bins

(including a curbside container and a smaller indoor kitchen catcher) to each household. Although this is a convenient collection option for residents it is also expensive as over 35,000 large and small bins would have to be purchased. In addition, there would be high costs for collection of SSO at all the stops. However, there are opportunities with the transition of the blue box to producer responsibility to avoid significant increases to the current waste management operating budget as CKL will no longer be responsible to pay for curbside collection of recyclables. This may also lead to other operational and cost efficiencies like utilising existing collection vehicles or infrastructure, such as the transfer station at the Lindsay Ops landfill, for SSO purposes.

Pros and Cons of Curbside Collection	
Pros	Cons
<ul style="list-style-type: none">• Most convenient collection option for residents• Preferred collection method of MECP for highest potential to meet required targets• Likely to experience highest participation from residents	<ul style="list-style-type: none">• Most expensive collection method for supply of bins and contractor costs for curbside collection• Greater greenhouse gas emissions from collection and transportation• Need to determine method of SSO disposal

2. Backyard Composting

This scenario does not include curbside collection or drop-off of SSO. It would mandate backyard residential composting. Counter top digesters or some form of communal or other on-site backyard composting would be a requirement at a multi-residential unit. CKL would stop accepting food waste in clear garbage bags from residential properties. CKL would supply free backyard composters or other types of composters for residents to use and provide education to residents on how to backyard compost. This is a similar approach to one that has been taken in several townships in the County of Peterborough in recent years. Their program involved implementation of a backyard composter program in combination with a clear bag program and has been successful in reducing curbside waste by 40% within the first few months of implementation.

CKL could provide typical backyard composters and digesters, and there are opportunities for partnering with producers of countertop composting systems, which will compost material in 5-8 hours for residents who do not have the space to backyard compost and are looking for a quicker, easier solution. These countertop composters are commonly plugged in to an electrical outlet for grinding and processing.

This scenario is comparatively low cost however it is suspected that it would be much less desirable to residents than the other scenarios as there is more effort needed by the residents to compost properly. However, this scenario could be manageable provided it is supported by a robust public education plan and By-law enforcement.

Pros and Cons of Backyard Composting	
Pros	Cons
<ul style="list-style-type: none"> • Least expensive diversion option • Lowest greenhouse gas emissions • Does not require a processing option as residents process their own organics 	<ul style="list-style-type: none"> • Likely perceived as less desirable by residents • Steep learning curve for residents to properly manage and compost their own food waste • Increased concern from rural residents for animals intruding in the composters

3. Drop-off Facilities

This collection option would require residents to bring their SSO material to a drop off location within CKL. For example, CKL could install Moloks at several locations throughout the City. Moloks are bins which are installed mostly underground with access above ground to drop off SSO material. They are animal proof, relatively inexpensive and easy to install. The City would hire a contractor to service the Moloks by emptying them and transporting the SSO to a processing facility. The drop-off locations would likely be at CKL landfills and/or other CKL properties.

Pros and Cons of Drop-off Facilities	
Pros	Cons
<ul style="list-style-type: none"> • Less expensive than curbside collection • Less greenhouse gas emissions than curbside collection 	<ul style="list-style-type: none"> • More expensive than backyard composting • More greenhouse gas emissions than backyard composting • Increased traffic to already busy landfill sites or other CKL properties • Inconvenient for residents • Special approvals from MECP may be required • Need to determine method of SSO disposal

4. Hybrid

Hybrid collection opportunities could include a combination of two or all three of these potential options.

Processing Options

1. Transfer to private processing facility

This processing option would require consolidating of SSO material collected (curbside collection or drop-off facilities options above) and then transporting the SSO material to a processing facility.

For example, the City of Peterborough is currently in the approvals stage to construct an SSO processing facility to start accepting material in the fall of 2023. They are building this facility with extra capacity to accept material from surrounding municipalities and have indicated potential interest in processing material from CKL.

In this scenario, CKL would need to design and build a transfer facility to consolidate the SSO before transporting it to be processed. This would require an Environmental Compliance Approval (ECA) amendment to construct this facility. However, the approval process would likely be very simple as the infrastructure is already in place. The transfer facility would likely be located at the Lindsay Ops Landfill Site as this is the most centralized location and area already setup as a waste/recycling consolidation depot.

Pros and Cons of Transfer to private processing facility	
Pros	Cons
<ul style="list-style-type: none"> Investment cost is lower than building a processing facility Shorter time to obtain approvals and implement Less issues with odour, dust vermin, leachate etc. than if operating a processing facility Lower annual operations/maintenance costs than operating/owning a facility 	<ul style="list-style-type: none"> No opportunity for energy recovery/ processing revenue Risk if private processing facility stops receiving waste Cost of processing unknown will be controlled by external agencies under contract

2. Process at CKL owned facility

This scenario would involve investing in the design and building of a CKL owned facility to process the SSO and other organic wastes. A transfer station for SSO would not be necessary in this scenario as SSO from curbside collection vehicles could be dropped off directly to the processing facility located within Kawartha Lakes. It is important to note that annual operation costs will be dependant on the type and complexity of the approved SSO facility.

Potential issues associated with operating an SSO facility include odour, noise from the use of equipment, dust, vectors and vermin, litter (from compostable bags), storm water quality and leachate.

There may also be opportunities in this scenario to partially offset costs by generating revenue through energy production which could be combined with the CKL's on site landfill gas generator or providing processing for other municipalities in surrounding areas. However, it is suspected there is little demand for processing capacity from nearby areas as most municipalities surrounding Kawartha Lakes already operate SSO programs or are in the process of building their own facilities.

An Environmental Compliance Approval (ECA) would be required to construct a facility as well as other reports and applications to the MECP.

Pros and Cons of Process at CKL owned Facility	
Pros	Cons
<ul style="list-style-type: none"> No partnership conflicts or disputes Potential for energy production or processing revenue 	<ul style="list-style-type: none"> Most expensive investment and higher annual maintenance and operations costs than with partnership facility complicated and in depth site approvals process Issues with odour, dust vermin, leachate etc. May not have enough municipal SSO to sustain a facility

3. Process at CKL and partner facility

This processing option involves partnering with a private company to invest in the design and construction of a facility to process the SSO and other organic wastes within Kawartha Lakes. A transfer station for SSO would not be necessary in this scenario as SSO from curbside collection vehicles could be dropped off directly to the processing facility.

If the City partnered with a private company, the type of facility and location would have to work well for both partners since both partners would have SSO or other organic sources to be processed at the facility. This scenario assumes a 50/50 split on costs between Kawartha Lakes and the private partner but any variation could ultimately be evaluated. Similar to the option of Process at CKL owned facility annual costs for operation will be dependant on the type and complexity of the facility.

An Environmental Compliance Approval (ECA) would be required to construct a facility as well as other reports and applications to the MECP.

Pros and Cons of Process at CKL and partner facility	
Pros	Cons
<ul style="list-style-type: none"> • Potential for energy production or processing revenue • Less costly than building a completely City owned facility • Positive, mutually befitting partnership • Higher organic volume for facility than if only municipal SSO 	<ul style="list-style-type: none"> • High initial investment • Longest approval process time • Difficulties of working with a partner, agreeing on logistics • Issues with odour, dust, vermin, leachate etc. • Operations/maintenance costs • Siting and approval for adequate location

Rationale:

Staff are recommending putting forward an expression of interest in 2022 to reach commercial and government organizations (municipalities) to determine what level of interest there is in working with CKL to provide services for a residential SSO program in CKL and what the details of that service would be. The expression of interest could include the scenarios discussed in this report, a combination of scenarios, or a completely different scenario with the goal of finding the best option for CKL to move forward with a city wide diversion program.

Implementing a source separated organics program will be an excellent long-term investment for the CKL for the following reasons:

1. An SSO program has good potential to increase our waste diversion rate to our goal of 70%

The ultimate goal of the Integrated Waste Management Strategy is to achieve a diversion rate of 70%. An SSO program affords CKL a good chance to achieving its diversion targets. CKL's official diversion number is calculated by the Resource Recovery and Productivity Authority (RPRA) and largely takes into consideration the material set out for curbside collection. It is estimated that approximately 30-40% of waste set out for curbside collection (approx. 4500-6500 tonnes) is made up of food waste. Many diversion programs have already been implemented as part of the Integrated Waste Management Strategy such as the clear bag program, a decrease in the allowable recyclable percentage in each clear bag, textile recycling program, electronics recycling, household hazardous waste recycling etc. There is little else than can be diverted or

recycled from curbside household waste other than the food waste component that will have a significant impact on our waste diversion rate.

2. Upcoming legislation from the province will require municipalities to reduce SSO going to landfill

The Province released a Food and Organics Policy Statement in 2018. This policy will require municipalities in Ontario to reduce food waste and meet certain targets based on size and density. Based on the requirements CKL will be required to reduce 50% of food and organic waste generated by single-family dwellings in urban settlement areas by 2025. The province has also talked about potential food waste bans from landfills in 2030. Implementing an SSO program will ensure that CKL complies with all legislative requirements.

3. There is a high resident interest for an SSO program

Waste Management staff frequently are asked by residents why we do not have a curbside collection program for food waste. It is a service that many residents want and ask for. This demand will continue to increase as CKL grows with more residents moving to Kawartha Lakes from the GTA. These residents are already accustomed to having a SSO program where they used to live and are disappointed when they find CKL does not. During the Waste Strategy update, process in 2019 there was a survey completed by approximately 200 residents. The survey indicated 67% of respondents said more opportunities for composting food waste was important to them and 83% said they would like to see CKL invest more money on waste management to extend the life of our landfill sites and protect the environment.

4. An SSO program will reduce greenhouse gas emissions, make our landfills last longer, and contribute to a healthy environment

Food waste is a major contributor to greenhouse gasses in our landfills, which then contribute to climate change. As food and organic waste breaks down in an oxygen-deprived environment it creates methane, a potent greenhouse gas. Through the "City of Kawartha Lakes Healthy Environment Plan" we have committed to be leaders in addressing our changing climate to ensure a healthy environment and a prosperous community. The Healthy Environment Plan includes waste diversion from landfills as part of the overall plan.

By saving landfill space we can also make our landfills last longer. Our landfill space is finite and finding future landfiling options is expensive, requires an extensive approval process and takes several years. Diverting 4500-6500 tonnes of SSO per year would reduce the amount of curbside waste going to landfill by approximately 30%. The 4500 tonnes of SSO diverted per year equates to extending the site life at the Fenelon landfill

by 6 months each year, or at the Lindsay Ops landfill by 2 months each year. These are the two landfills that currently receive curbside waste.

5. Timing is ideal to implement an SSO program due to the transition of the blue box to producer responsibility

The blue box program will transition to producer responsibility in CKL in April of 2024. This means we will no longer be required to operate a blue box program or pay for any costs associated with the program as this will be the responsibility of the producers of products. This will lead to a significant reduction in the waste division operating budget each year. By implementing an SSO program around the same time as this transition, CKL can avoid a significant increase to the annual operating budgets. This may also lead to other operational and cost efficiencies like utilizing existing collection vehicles or infrastructure, such as the transfer station for recyclables at the Lindsay Ops landfill, for SSO purposes.

Staff reviewed the materials within this report with the Waste Management Advisory Committee, the Lindsay Ops Landfill Public Review Committee and the Fenelon Landfill Public Review Committee. Those committees provided the following resolutions.

Moved By Councillor Ashmore

Seconded By Councillor Veale

That the Waste Management Advisory Committee receives the SSO report.

Carried

Moved By C. Appleton

Seconded By Councillor Veale

That the Waste Management Advisory Committee recommends the City put forward an expression of interest to determine potential options for an SSO program

Carried

Moved By Brian S. Junkin

Seconded By C. Appleton

That the Waste Management Advisory Committee recommend the City consider aggressively pursuing a backyard composting program for the City to reduce our SSO in our curbside collection of waste.

Carried

Moved By Larry Scrivens

Seconded By Barry Hodgson

That the Lindsay Ops Landfill Public Review Committee receives the SSO report; and

That the Lindsay Ops Landfill Public Review Committee recommends the City put forward an expression of interest to determine potential options for an SSO program

Carried

Moved By Julia Taylor

Seconded By Mike Wilson

That the Fenelon Landfill Public Review Committee receives the SSO report; and

That the Fenelon Landfill Public Review Committee recommends the City put forward an expression of interest to determine potential options for an SSO program

Carried

Other Alternatives Considered:

In order to meet provincial requirements and CKL's own diversion targets, some sort of source separated organics diversion program must be implemented by 2025. There are several alternatives available for Council consideration within this report.

Council could opt to direct Staff to pursue one of the alternatives provided within this report, but Staff are recommending to allow for an opportunity to explore alternatives through a public request for input and for any additional viable alternatives be brought to Council for their Consideration.

Should Council not want to pursue one or more of the alternatives provided, the Resolution would read:

"That the Option(s) of _____ to address Source Separate Organic diversion not be chosen."

Alignment to Strategic Priorities

One of the four Strategic Priorities of the Plan is A Healthy Environment and one of the main items under this category is "Increase Waste Reduction and Diversion". This will be achieved through executing the updated Integrated Waste Management Strategy. A source separated organics program is an initiative from the updated Waste Strategy.

Financial/Operation Impacts:

Exact costs are unknown until the market for SSO management is further explored through "an Expression of Interest" process. There may also be opportunities for CKL to seek funding to reduce overall costs through the Federation of Canadian Municipalities or other organizations. An SSO program would require a significant investment however in the long term the landfill space savings through reduction in food waste will partially offset the initial investment. By implementing an SSO program around the same time as the blue box transition, CKL can avoid a significant increase to the annual operating budgets by re-investing the budget allocation. This may also lead to other operational and cost efficiencies like utilizing existing collection vehicles or infrastructure, such as the transfer station for recyclables at the Lindsay Ops landfill, for SSO purposes.

Some high level cost estimates for each option are listed in the table below. These are approximate estimates only based on information provided by the studies reviewed and information received from other municipalities. They are meant to help guide the discussion but exact costs will be unknown until a formal procurement process is completed.

Collection	Initial Investment	Annual Cost
1. Curbside Collection	\$1.5 million to purchase green bins, kitchen catchers	\$1.3 million for curbside collection
2. Backyard Composting	\$0 if residents purchase composters 1.5 million if CKL purchases composters	\$20,000 promotion and education
3. Drop-off facilities	\$100k to install moloks	\$30,000 promotion and education and maintenance and repairs
Processing	Initial Investment	Annual Cost
1. Transfer to private processing facility	\$1.25 million to design and build transfer station	\$1.5 million transportation and processing
2. Process at CKL owned facility	\$6 million to design and build processing facility	\$1-1.5 million processing and operations (costs dependant on facility type and complexity)
3. Process at mutual benefitting CKL and partner facility	\$3 million to design and build processing facility	\$500,000 processing and operations

Appendix

Appendix A: Ontario's Food and Organic Waste Policy Statement



Appendix A

Department Head email: brobinson@kawarthalakes.ca
Department Head: Bryan Robinson