



Committee of the Whole Report

Report Number: WM2021-010
Meeting Date: June 1, 2021
Title: Improvements to the Mattress Recycling Program
Description: Recommended action to improve the mattress recycling program and maximize the number of mattresses recycled
Author and Title: David Kerr, Manager Environmental Services

Recommendation(s):

That Report WM2021-010, **Improvements to the Mattress Recycling Program**, be received;

That Council approves recycling all mattresses in the City of Kawartha Lakes and no longer accepts mattresses for disposal at the Laxton, Eldon, Somerville, and Fenelon landfills;

That Council direct staff to present an operating budget of \$145,000 for 2022 to operate the enhanced mattress recycling program; and

That this recommendation be brought forward to Council for consideration at the next Regular Council meeting.

Department Head: _____

Financial/Legal/HR/Other: _____

Chief Administrative Officer: _____

Background:

At the Council Meeting of July 16, 2019 Council adopted the following resolution:

CR2019-448

That Report WM2019-009, **Mattress Recycling Pilot Results and Recommendations**, be received; and

That Council approves the mattress recycling program as outlined in this report to continue on a permanent basis; with an operating budget for 2020 of \$76,500.

Carried

Council also approved the update to the Integrated Waste Management Strategy on November 19, 2019 with the following resolution:

CR2019-641

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.

The mattress recycling program which started as a pilot project has been one of the City's most successful diversion programs. From the beginning of the pilot in August of

2018 to December 31, 2020 approximately 10,000 mattresses totalling 265 tonnes were recycled. If landfilled, 10,000 mattresses would consume equivalent landfill space of approximately 6500 cubic metres, which equates to approximately 4550 tonnes of regular waste. This equates to a landfill diversion savings of approximately \$683,000 in landfill volume when the value of landfill space of \$150 / tonne is applied. \$150 per tonne is an estimated value that was provided to the City by a third party consultant. Mattresses continue to be recycled in 2021.

Residents wanting to recycle their mattresses currently have the option of bringing their mattresses and box springs to the Lindsay Ops landfill or purchasing a curbside mattress tag for pick up at their home by Miller Waste to be recycled.

While the program has been very successful, the City currently cannot recycle mattresses brought to the other four landfill sites including the Laxton, Eldon, Somerville, and Fenelon landfills. Mattresses brought to these sites continue to be landfilled.

One of the initiatives in the updated Integrated Waste Management Strategy is to expand the mattress recycling program.

The Key Performance Indicators (KPIs) for this initiative are as follows:

1. Increase number of mattresses collected in 2020 by 5% or approximately 225 units.
2. Work with communications staff as well as the collection contractors to optimize the recycling program in 2020 by implementing a service for residents to purchase mattress tags online.
3. Annually review the feasibility of collecting mattresses for recycling at additional landfill sites.

The first two KPIs have been achieved. In 2020 we successfully increased the number of mattresses collected by 9.5% or 420 units from 2019. As well, on March 1, 2021 the City launched an online tag purchasing service for mattress, Freon and large item tags. The service has been successful and popular with no operational issues. The third KPI, to review the feasibility of collecting mattresses for recycling at additional landfill sites is what this report will address.

Rationale:

Due to limited space at the Laxton, Eldon, Somerville, and Fenelon landfills it is not feasible to place a trailer for collection of mattresses. It is also not cost effective to place smaller bins and then transport the mattresses to the Lindsay Ops trailer. This method also would make it difficult to keep mattresses dry and acceptable for recycling. Therefore, all mattresses brought to these landfills are disposed of as waste. This equates to approximately 2500 mattresses, which are landfilled each year.

Staff are recommending to stop accepting mattresses for disposal at the Laxton, Eldon, Somerville, and Fenelon landfills and providing the option for landfill users to either purchase a mattress tag for curbside or drive to Lindsay Ops to drop off their mattresses to be recycled beginning January 1, 2022. If people followed this procedure these estimated 2500 mattresses would be captured for recycling resulting in all mattresses within the City being recycled. This would increase the deferred landfill space savings by \$170,750 per year.

In order to prevent any inconvenience to residents, staff will ensure a wide spread education and outreach approach in 2021. This will ensure that residents know the change is coming ahead of time and prevent attempts to drop off mattresses for disposal at the four landfill sites. This could include signs at landfill sites, information in the 2022 calendar, posts on the website and social media, and information in local community guides and news outlets.

The new online mattress tag order system has made mattress recycling very convenient for residents anywhere in the City. They can order a mattress pick up without ever having to leave their home. The drop off option at the Lindsay Ops landfill will still also be in place.

Expanding the mattress recycling program in this way will increase waste diversion, save the City money, and ensure our landfills are more sustainable and stay open longer.

Staff brought this information in a memo to the three waste management committees of council and received the following resolutions of support.

At the Fenelon Landfill Public Review Committee meeting on March 25, 2021:

Moved By R. Coleman
Seconded By J. Taylor

That the Fenelon Landfill Public Review Committee supports recycling all mattresses in the City of Kawartha Lakes, no longer accepting mattresses at the Laxton, Eldon, Somerville, and Fenelon landfills.

Carried

At the Waste Management Advisory Committee meeting on April 19, 2021:

Moved By Councillor Yeo

Seconded By Councillor Veale

That the Waste Management Advisory Committee supports recycling all mattresses in the City of Kawartha Lakes, no longer accepting mattresses at the Laxton, Eldon, Somerville, and Fenelon landfills if public communication and education is to commence as soon as possible.

Carried

At the Lindsay Ops Landfill Public Review Committee meeting on April 21, 2021:

Moved By C. Appleton

Seconded By Councillor Dunn

Resolved that the Lindsay Ops Landfill Public Review Committee receive the report, and that the PRC supports recycling all mattresses in the City of Kawartha Lakes, no longer accepting mattresses at the Laxton, Eldon, Somerville, and Fenelon landfills.

Carried

Other Alternatives Considered:

The following are alternative options that Council could consider

Option 1

Council could choose to amend the Consolidated Fees Bylaw 2018-234 to increase the price charged to the public to recycle or dispose of a mattress from \$15.00 to \$18.00.

This would cover all of the costs of recycling mattresses that are currently spent on contract costs. However, this would put more of a burden on residents and may deter them from disposing of mattresses properly. Therefore, this option would unlikely achieve the results of diverting the estimated 2500 mattresses currently being landfilled.

Option 2

Council could also choose to accept them for disposal at Eldon, Fenelon, Laxton and Somerville rather than turn residents away but at the same time advertise recycling options for mattresses. A flyer could be provided to the resident when they go over the scales that explains why it is important to divert mattresses and how easy it is through curbside collection or driving them to Lindsay ops.

Although this action would likely reduce mattresses being landfilled over the long term it would unlikely be successful in achieving the diversion numbers that could otherwise be achieved through public education and non-acceptance at the landfills.

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. Expanding the mattress recycling program is part of the updated Waste Strategy.

Financial/Operation Impacts:

Recycling all mattresses in the City will result in an increase to the Waste Management Operating Budget. In 2022 staff are requesting a budget of \$145,000 to successfully recycle all mattresses. This is an increase of \$68,500 to the current annual budget for the mattress recycling program. However, the cost savings through deferring the closure of all our landfills through saving space are significant and far outweigh the program costs. The estimated cost savings are included in the table below. Although not included in this table there will be additional equipment maintenance savings by not landfilling mattresses as the springs get caught up and damage landfill equipment.

Annual Mattress Program Costs	Annual Landfill Space Savings	Total Annual Savings
\$145,000	\$481,500	\$336,500

Consultations:

Waste Management Operations Supervisor
Manager, Communications Advertising and Marketing

Department Head email: brobinson@kawarthalakes.ca

Department Head: Bryan Robinson