



STAFF REPORT

Title: Council Query - Organic Collection

Meeting Date: September 19, 2023

Executive Summary:

During the 2022 operating year, green carts were delivered to every eligible house within the City of Cold Lake, and the green cart curbside pickup program fully commenced in April 2023.

On August 8, 2023, at a regular council meeting, Administration requested to defer discussions to a future Corporate Priorities meeting to determine the City's vision and desired levels of service required for the waste management program. Council approved the motion to defer discussions to the September Corporate Priorities meeting and requested cost estimates for providing weekly collection for organics.

The report presents the requested information along with an analysis of current and past trends in the curbside collection program. The recommendation is to maintain the current level of service for organic curbside collection services. Administration recommends monitoring the current collection services for an additional year to gather more data and develop plans in alignment with waste diversion goals. If approved by the Council, these goals aim for a 50% diversion rate, as recommended in the 2016 Integrated Waste Management Study (IWM). The 2016 IWM Study is attached for reference.

Background:

At Council's August 8, 2023 regular meeting of Council, it was resolved (Motion No. CRM 20230808.1022) that Council refer this report to an upcoming Corporate Priorities Committee for review and recommendation.

The City of Cold Lake currently offers the following Organic Waste Diversion Programs:

- Residential curbside pickup every two-week from April to November, alternating with curb side recycling collection. Organics are collected using automated green carts, where applicable.
- The Waste Management Facility (Landfill/Transfer Station) accepts organic materials throughout the year.
- Christmas Tree Pickup through curbside pick-up takes place in the 1st week of January every year.



- Special Organic Roundup events occurs every spring and fall, allowing up to 10 bags of organics and up to 5 bundles of branches for collection within a 2-week period.

Current Fees:

1. Monthly Curbside Fee: \$1.50 for residential
2. Drop Off Fee at Landfill: \$0.00 for residential and \$10.00 for commercial loads.

Projected Costs to Provide Weekly Organic Collection:

The implementation of weekly curbside organic collection services will necessitate deployment of an additional truck with an operator (FTE). This is primarily because, under the current system, only half of the properties on a given day receive service as compared to a black cart collection route. In the case of weekly organics collection, the number of properties to be serviced will increase, thus demanding additional resources.

It is to be noted that this analysis is based on the understanding that weekly waste collection services are being delivered (current service) along with the proposed weekly organics collection services.

Budget Category	Additional Truck	Operator	Fuel and Maintenance	Total
Capital	\$400,000	-	-	\$400,000
Operating	-	\$100,000	\$20,000	\$120,000

Additionally, there may be an additional capital investment required in the amount of \$300,000 to increase the compost pad size to facilitate increased compost operations.

The current set-out rate for black carts is 70%, meaning that on a given collection day, 70% of the black carts are placed outside for collection. The set-out rate for organics carts has been observed to be the same, if not lower. Therefore, it is expected that a weekly organics collection will have a lower set-out rate, probably around 40% to 50%, if other supporting waste diversion strategies are not implemented.

Discussion:

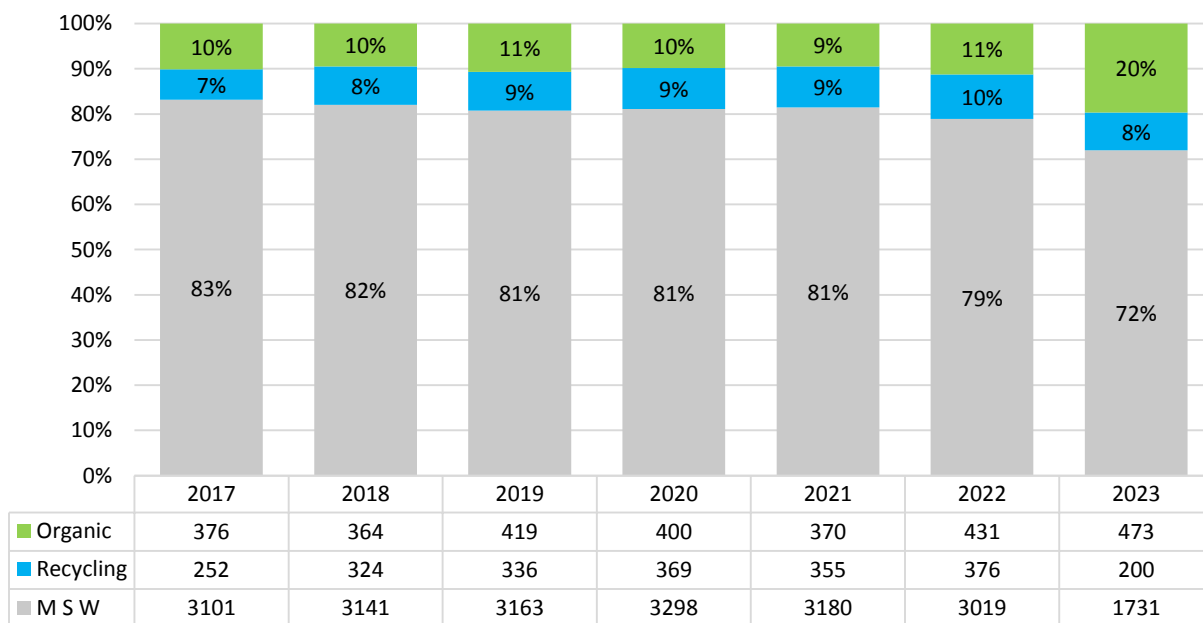
The automated cart collection for curbside organic service has only been in operation for five (5) months. Although the carts were initially distributed last fall, the actual cart-based organic collection system was introduced in April of the current year, coinciding with the commencement of the seasonal organic collection.



During the brief five-month period, the City has received twenty (20) service requests regarding the insufficient size of the carts, in addition to any calls or feedback received by Council from residents.

The chart below illustrates historical trends in curbside waste collection. Generally, Municipal Solid Waste (MSW) constitutes 80% of the curbside collection, with organics and recycling each accounting for 10%. However, there is an exception for the year 2023. Although the data for 2023 extends up to the end of August, it still reflects a positive trend in organic collection.

Curb Side Collection



Weights in Tonne

*2023 data till Aug 31

Table 1: Residential Organic Collection (Curbside vs Dropped off at Landfill)

Residential Service Organics	2019 (Tonnes)	2020 (Tonnes)	2021 (Tonnes)	2022 (Tonnes)	2023* (Tonnes)
Curbside	419 (40%)	400 (28%)	370 (39%)	431 (55%)	473 (71%)
Drop Off	634 (60%)	1029 (72%)	584 (61%)	354 (55%)	191 (29%)
Total	1053	1429	954	785	664

*January 1, 2023 to end of August 2023



Table 1 offers a more detailed comparison between residential organics collected at curbside and those dropped off at the compost pad. The trend observed in the current year, covering a five-month period, indicates a noteworthy shift towards more residential organic waste being collected at the curb (comprising 71%) rather than being delivered to the compost pad. This is an encouraging trend, although it may not yet provide a sufficiently robust baseline to support the customization of additional programming. Therefore, it is advisable to maintain the current service level for at least another year.

The City of Cold Lake conducted an Integrated Waste Management Study (IWM) in 2016, which forms the foundation for all waste management initiatives, including landfill expansion. The full report is included for reference purposes.

As part of the Integrated Waste Management (IWM) study, a residential waste sort was conducted in December 2014, yielding the following weight-based observations:

- 42% constituted organics
- 32% comprised garbage
- 20% consisted of recyclables
- 6% was classified as donatable items

The waste sort analysis underscores a significant opportunity to divert 42% of our current waste stream towards organics, potentially yielding cost savings by reducing the volume of waste transported from our transfer station to the class II landfill. However, it's worth noting that this waste sort was conducted almost nine (9) years ago. Therefore, updating the waste sort data would be beneficial as it would provide more current and accurate information, aiding in the development of targeted waste diversion goals.

For the purposes of our current discussion, if we were to achieve a 42% reduction in organics from the current residential waste stream, it would amount to approximately 1400 Tonnes of waste being diverted from the Class II landfill. At an average rate of \$120 per Tonne, this diversion could result in annual savings of approximately \$168,000 in hauling and tipping fee costs.

The Integrated Waste Study advises against implementing weekly organic collection in isolation, as it is just one component of the Integrated Waste Management system. In order for the administration to develop a meaningful waste diversion program driven by established goals, it will be recommended that City Council approve waste management diversion goals.

The 2016 Integrated Waste Study provided 16 recommendations, with the first one being to set a diversion rate goal of 50% and share it with the community. The City has been implementing several of these recommendations in a phased and systematic



manner, albeit at a slower pace than suggested in the study. This slower progress can be attributed to not having a clear goal to aim for. The City's current overall diversion rate hovers around 30%, and as mentioned earlier, by implementing waste diversion strategies, it can be easily increased to 50%.

The City of Cold Lake has successfully completed several actions recommended in the IWM study:

1. Implemented a cart waste limit by providing standard-sized carts to eligible households.
2. Implemented Automated Garbage Collection.
3. Implemented Automated Organics Collection.
4. Established a city-owned recycling facility.
5. Established two recycling drop-off depots, with a third one located at the Landfill.

The next stages for increasing diversion through our collection programs are as follows:

1. Set a diversion rate goal and communicate it with the community. The 2016 study recommended a 50% diversion rate.
2. Develop and document a strategy focused on waste reduction and diversion, considering the following recommendations:

Upon the development of the above two stages, the subsequent steps will include:

3. Implementing Year-Round Curbside Collection of Organics (bi-weekly in winter and summer). Year-round organics collection will enhance both kitchen waste capture and organics diversion.
 - a. Consider providing kitchen catchers to aid in food waste capture.
 - b. Expansion of the compost pad and the implementation of necessary bird deterrence mechanisms will be required to support year-round organic collection.
4. Evaluate the above stage for a year or two and make any necessary program adjustments.
5. Reduce the frequency of garbage collection from weekly to bi-weekly.
6. After completing alterations to organics and garbage collection, evaluate the feasibility of implementing a weekly curbside collection for recyclables.

Taking all the above into consideration, it is the administration's recommendation to monitor and evaluate the current service level for another year. In the meantime, develop strategies to align with the Council's goal for waste diversion, which is recommended to be set at 50%.



Further, it should be noted that that the procurement of additional equipment has an approximately 12 to 18-month lead time.

Alternatives:

The Committee may consider the following Alternatives:

1. The Committee may accept this report as information only.
2. The Committee may defer the issue to a future meeting of the Corporate Priorities Committee OR 2024 budget deliberations.
3. The Council may recommend and authorize the City of Cold Lake to amend the organics program to allow for weekly organics collection.
4. The Committee may recommend to the Council to maintain the current organics collections services and continue to monitor and collect further data for an additional year before implementing any changes.
5. The Committee may recommend to the Council to maintain the current organics collections services and continue to monitor and collect further data for an additional year before implementing any changes and approve a waste diversion goal of 50%.

Recommended Action:

Administration recommends that the Committee recommend to the Council to maintain the current organics collections services and continue to monitor and collect further data for an additional year before implementing any changes.

Budget Implications (Yes or No):

Yes

Submitted by:

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