University of Guelph

Waste Audit and Waste Reduction Workplan

March, 2026

ENVIRONMENTAL CONSULTING, AUDITING AND SCIENTIFIC SERVICES

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1.0 EXECUTIVE SUMMARY

AET Group Inc. (AET) was contracted by University of Guelph (UOG) to conduct a waste audit and prepare a waste reduction work plan for their facility at 50 Stone Rd E, Guelph, Ontario. AET conducted the waste audit on November 26th to 28th, 2025, at the UoG facility in Guelph. The waste audit was completed to examine the waste generated over a 24-hour sample period and to calculate annual waste disposed from the samples collected and weighed. Recommendations are provided in this report to assist in reducing the amount of waste sent for disposal and to help formulate a waste reduction work plan.

The total annual waste generated amounts to 2,299,774 kg. 36.09% is diverted from disposal through recycling, organics, and reuse programs, totaling 914,013 kg. This includes 280,072 kg of recyclable materials, 584,234 kg of organic materials, and 84,024 kg of materials reused. The capture rate for the recycling stream is 45.70%, while the organics stream has a capture rate of 48.49%. The contamination rate is 15.43% for recycling and 2.08% for organics, indicating a relatively high level of source separation accuracy, particularly in the organics stream.

Waste audits must be conducted and updated annually to meet the requirements of Ontario Regulation 102/94 of the Environmental Protection Act (EPA) as components of the Ministry of Environment and Climate Change's (MOECC) 3Rs initiative. The results of the waste audit are then used to design and implement a waste reduction work plan. The work plan forms the basis of the source separation program under Ontario Regulation 103/94. A waste audit is the most effective means of measuring the waste reduction performance of a company. Compliance under Ontario Regulation 102/94 requires that a waste audit and waste reduction work plan be completed, and a written report be prepared if more than 350 persons are enrolled during the calendar year.

1.1 Definitions

Capture Rate: The capture rate is the percentage of a recyclable material collected and diverted of the total amount of that material generated (curbside).

Cart: A wheeled bin, often plastic, with a hinged lid ranging from 225 to 340 litres in size (60 to 90 US gallons).

Contamination Rate: The percentage of misplaced material in a recycling or organics program that is not currently accepted in the program.

Diversion Rate: The diversion rate is the percentage of the total waste generated that is diverted from disposal into the curbside recycling and organics program.

Divertible Material: Materials that are accepted in a reduction, recycling or organics program which can be discarded in a non-garbage collection stream. Material that does not require disposal through landfill. This material is often referred to as recyclable material, compostable material, or depot material. In the context of this report, divertible material refers only to materials currently accepted in the curbside recycling program and source separated organics program (upon implementation).

Garbage Stream: Material that is collected for disposal rather than diversion. It will include divertible material where the diversion programs are not operating at 100% efficiency. This material is sometimes referred to as residual waste.

HSW: Household Special Waste is material that is potentially harmful to the environment and should be disposed of through special handlers.

Organics: Refers to material that can be composted. The material accepted in an organics program is dependent on the type of composting facility accepting the material, how it is processed and what quality of processed material is desired.

Recycling Stream: Material that is diverted from the garbage stream in a recycling program such as blue box recycling, source-separated organics program or scrap metal recycling. A reuse program (e.g. wood skids) may be included in this stream.

Source-Separated: Refers to material that is separated from the garbage stream at the facility generating the waste.

Tonne: This is metric unit equivalent to 1,000 kg and is sometimes referred to as a 'metric ton(ne)' (MT). It is not to be confused with a 'ton' (or 'short ton') which is the Imperial unit equivalent to 2,000 pounds. All AET reports and appendices use the metric units.

Unaudited Material: Material that has not been audited but for which weights have been provided by the facility or by the waste hauler.

Waste Zone: A waste zone is a predetermined area in the facility from which waste material is collected for an audit, such that material in all of the collection bins in the zone is generated by activities that are similar in nature.

1.2 Background

AET Group (AET) was contracted by the University of Guelph (UOG) to conduct a waste audit and prepare a waste reduction work plan for the Guelph Campus. This report follows the 2025 waste audit and waste reduction work plan undertaken by AET Group.

UOG Campus consists of a 330-hectare (815-acre) site with approximately 33,226 students and staff present on campus. Operating 5 days a week and 50 weeks over the course of a year.

UOG is committed to practicing environmental sustainability through education and corporate practices and balancing future growth with the protection of the environment. These waste audits are important because they will ensure compliance with government regulations (i.e., O. Reg. 102/94 and 103/94) while gathering data that can help shape and strengthen UOG environmental initiatives.

Figure 1.1 University of Guelph Campus

This waste audit included a full review of waste handling, waste generation and waste composition. ***The goal of the waste audit was to determine the success of current recycling programs and to identify possible improvements and additional waste which could be reduced, reused, or recycled.***

1.3 Legislative Requirements

UOG fits the definition of an Educational Institution with an enrollment of greater than 350 students.

According to Waste Audits and Waste Reduction Work Plans, O. Reg. 102/94, the following must be completed at an "Educational Institution" (i.e., facilities with enrolment greater than 350 people):

51. (1) This Part applies to the operator of an educational institution in respect of a location or campus of the institution if, at the location or campus, at any time during the calendar year, more than 350 persons are enrolled.

(2) This Part continues to apply in respect of a location or campus for the two calendar years following the last year in which more than 350 persons were enrolled at the location or campus. O. Reg. 102/94, s. 51.

52. (1) The operator shall conduct a waste audit covering the waste generated by the operation of the institution at the location or campus. The audit shall also address the extent to which materials or products used consist of recycled or reused materials or products.

(2) After conducting the waste audit, the operator shall prepare a written report of the audit.

(3) In every year following the initial waste audit, the operator shall update the audit and prepare an updated written report. O. Reg. 102/94, s. 52.

53. (1) The operator shall prepare a written waste reduction work plan, based on the waste audit, to reduce, reuse and recycle waste generated by the operation of the institution at the location or campus.

(2) In every year following the preparation of the initial waste reduction work plan, the operator shall prepare an updated written plan. O. Reg. 102/94, s. 53.

54. The operator shall implement the waste reduction work plan as updated. O. Reg. 102/94, s. 54.

55. The waste reduction work plan shall include measures for communicating the plan to the operator's employees who work at the location or campus and, as a minimum, those measures shall require,

(a) that the plan or a summary be posted in places where most employees will see it; and

(b) if a summary is posted, that any employee who requests to look at the plan be allowed to do so. O. Reg. 102/94, s. 55.

According to ONTARIO REGULATION 103/94 "Industrial, Commercial and Institutional Source Separation Programs", "Educational Institutions" need to have a source separation program.

2.0 CURRENT SITUATION

2.1 Description of Waste Generation

Waste is produced through normal routine student and staff activities subject to operating schedule and attendance. UOG is a multi-building campus with various points of waste generation. Table 2.1 shows the 13 main generation zones and audit locations for UOG Campus. There are several additional areas at UOG that contribute to waste generation.

Table 2.1 University of Guelph Generation Zones

Location
Library
East Tower
MacKinnon
University Centre
Creelman Hall
Arena
Mills Hall
Rozanski Hall
Childcare
University Centre
Johnston
SSC
Thornborough
Mountain

Waste diversion programs are currently implemented on campus for cardboard, mixed recycling, papers (including confidential papers), scrap metal, scrap wood, electronics, bulbs, batteries, organics, oil and grease, large appliances, textbook donations, wood pallets, printer cartridges, manure, and used furniture donations. A key management decision that affects the production of waste has been to maximize waste diversion from landfill through various waste diversion programs (i.e., recycling and composting).

For 2025, overall waste was audited from UOG Campus. The 2024 Waste Audit Report and Waste Reduction Work Plan serves as the base year for future analysis, as audits from the previous three years may not be representative of normal waste generation due to reduced campus attendance caused by an increase in on-line learning in response to COVID-19 restrictions.

Waste generating areas generally have waste disposal and recycling bins, with organics bins present mainly in cafeterias or common areas. Figures 2.1 through 2.4 show examples of waste and recycling bins located throughout the UOG campus.

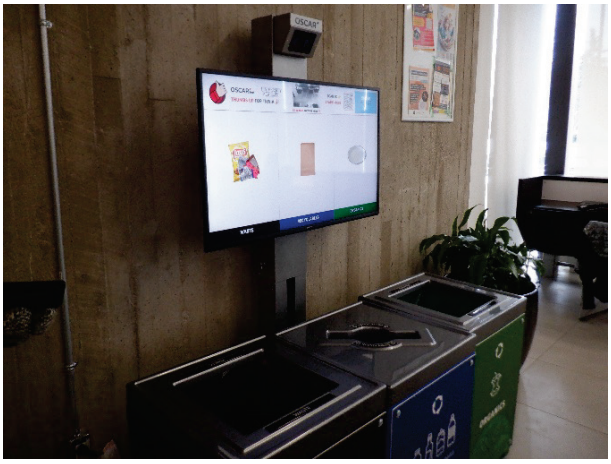


Figure 2.1 Garbage, Organic and Recycling Bins – Triple Stream Bin

Figure 2.2 Garbage and Recycling Bin

Figure 2.3 Recycling, and Garbage Bin

Figure 2.4 Single Stream Bin

2.2 Current Source Separation Program

UOG has an extensive source separation program in place that goes beyond regulatory requirements. Table 2.2 depicts the types of waste for which UOG has a source separation program and compares them to Regulation 103/94 requirements

Table 2.2 Waste Source Separated at University of Guelph Campus

Category	Source Separation Programs at UOG	Required Source Separation Programs under Reg. 103/94
Cardboard (corrugated) (OCC)	✓	✓
Fine paper	✓	✓
Newsprint	✓	✓
Plastic Beverage and Food Containers	✓	✓
Glass Beverage and Food Containers	✓	✓
Aluminum Beverage and Food Containers	✓	✓
Steel Beverage and Food Containers	✓	✓
Metal	✓	
Wood	✓	
Organic waste	✓	
Dry Fill (landscape rubble)	✓	
Computers (E-Waste)	✓	
Batteries	✓	

2.3 Current Waste Handling

Waste is collected from generation points by contracted cleaning staff and taken to central waste management locations. Waste bins size 8, 6 and 4 cubic yard are used to remove waste and recyclables from UOG campus. 32-gallon carts are used to remove organic waste from UOG campus. UOG's primary waste handling contractor is City of Guelph with additional services provided by Wasteco, Iron Mountain, Greentec, and RPR Environmental.

Recent updates to UOG waste handling programs include Oscar the sorting robot, an advanced sorting tool used by staff and students to correctly identify the type of waste and help educate people on the correct diversion stream. UOG is prioritizing the use of central bins in offices to promote more thoughtful sorting practices. On campus residences continue to be enrolled in the recycling program. Green bins have been implemented indoors through the introduction of handheld bins and dedicated bins in tri-sorters, as well as 120L green bins outside of residences where students can dispose of organic waste.

The cafeteria also has re-usable clamshell containers for food, which can be returned in designated bins (Figure 2.5). Students can pay a deposit or use a unique online ID to take a container, return it, and get a new one. This is a great way to reduce single-use plastic waste. In addition, there are water stations with reusable cups, chopstick recycling, bread and dough transporters that are re-used, and blue re-usable pallets.

Outdoor waste receptacles outside typically consisted of one concrete bin with no signage (Figure 2.6). Additionally, in the library area the recycling dumpster was hard to reach, leading to a majority of recycling being disposed of in the waste dumpster, even if it was properly source separated inside the building. Although organic receptacles are located in the university, they are not available in all buildings, which contributes to missed opportunities in diversion.

Figure 2.5 Return Bin for Containers

Figure 2.6 Entrance with only garbage receptacle

The various waste and recycling programs at the campus include:

- **Cardboard:** Cardboard recycling is provided across campus. Cardboard boxes are flattened and placed in dedicated mixed recycling bins located across campus, with the exception of the dedicated cardboard compactor located at the University Centre. Cardboard and mixed recycling bins are serviced as required by private contractors.
- **Mixed Recycling:** Mixed recycling accepts both mixed containers and mixed papers. Mixed containers include assorted plastics food and beverage containers (PET, HDPE, LDPE, PP, and PS), aluminum and metal cans, glass food and beverage containers, gable top containers and aseptic containers (i.e. tetra packaging, etc.). Mixed papers include a range of items such items as (but not limited to) newspapers, fine papers, envelopes, magazines, brochures, boxboard, packing paper, shipping/receiving supplies, paper bags and other clean food paper products. Mixed recycling is collected throughout campus in dedicated recycle depots, primarily concentrated in high waste generating areas. Collected materials are disposed into dedicated bins serviced by private contractor as required.
- **Papers & Confidential Papers:** Confidential papers are collected mainly in office/administrative areas in secure consoles or totes. All shredded materials were recycled.
- **Scrap Metals:** Recyclable scrap metals are collected by UOG staff. Scrap metal recycling service is provided by a private contractor as required.
- **Scrap Woods:** Recyclable scrap woods are collected by UOG staff. Scrap wood recycling service is provided by a private contractor as required.
- **Electronics Waste:** Electronic waste are collected across campus and stored in dedicated locations. Service was provided by private contractor as required.
- **Bulbs & Ballasts:** Bulbs and ballasts are collected across campus and stored in dedicated totes. Service is provided by private contractor as required.
- **Batteries:** Batteries are collected in dedicated containers across campus. Collected batteries are stored in dedicated totes. Service is provided by private contractor as required.

- **Oil & Grease:** Oil & grease is collected from food service areas across campus and stored in dedicated containers. Service is provided by private contractor as required.
- **Large Appliances:** Large appliances are collected across campus and stored in dedicated areas. Service is provided by private contractor as required.
- **Car, Motor & Tires:** UOG collects and stores various vehicles, motors, and tires in dedicated areas. Recycling service is provided by private contractor as required.
- **Textbooks:** UOG collects numerous textbooks, some of which are donated, repurposed and/or recycled.
- **LCBO/Beer Store Returns:** UOG returns glass beer, wine and spirit bottles, as well as aluminum cans via the LCBO/Beer Store return program.
- **Wood Pallets:** UOG collects wood pallets for reuse whenever possible.
- **Printer Toners:** Printer toner cartridges are collected for reuse whenever possible. Cartridges are returned to suppliers or diverted via private contractors.
- **Used Furniture:** Used furniture is collected for storage and reuse whenever possible.
- **Manure and Organics:** Manure is collected in some locations on-campus for composting. Organic based food waste is collected in some locations for composting.

2.3.1 Oscar Sorting

Over the past year, the University of Guelph has implemented an advanced waste-sorting system known as Oscar within its facilities. This innovative technology is designed to improve the accuracy of waste diversion by guiding users in real time. The system utilizes a scanning device that identifies the material being disposed of and determines the appropriate waste stream. Positioned directly beneath the scanner is a tri-stream sorting bin, enabling students and staff to properly dispose of items into the correct waste streams based on the system's guidance.

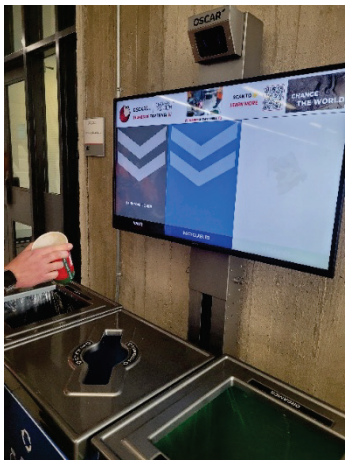


Figure 2.7 Oscar sorting area with tri-sort bins

2.4 Overview of Waste Generation

Annual waste generation at UOG campus is depicted in Table 2.3. Annual waste, mixed recycling, paper, cardboard, organics, and electronic waste streams were estimated from the waste provider data.

In 2025, the UOG campus generated an estimated 2,300 tonnes of waste (disposed, reused, and recycled). Of that, an estimated 904 tonnes were recycled, 28 tonnes were reused, and 1368 tonnes sent to landfill. Overall, the UOG campus has a waste diversion rate of 39.29%. These numbers are based on hauler data, and does not adjust to exclude contamination audited in diverted streams, for a more accurate diversion rate, refer to Section 4.0.

Excluding unaudited data, an estimated 1,032 tonnes of waste (disposed, reused, and recycled) was generated in 2025 at the UOG campus. Of that, an estimated 527 tonnes were recycled and 504 tonnes were sent to landfill. Overall, the diversion rate excluding unaudited data was 51.08%. Estimations based on audited green bins are likely inflated because sampled material are suspected to be greater than 24 hours generation in some cases. Annual tonnes were used in Section 4.0 and are more accurate.

Table 2.3 Summary of Waste Generation in 2025 - Waste Provider Data

2025	Tonnes
Reuse	27.84
Sub total	**27.84**
Recyclables	
Mixed Recycling	103.35
Paper	62.47
Cardboard	45.07
Deposit Returns	25.25
Scrap Metals	57.96
Wood	32.03
Oil	75.365
Organics	478.29
E-Waste	23.90
Dry Fill (Landscape Rubble)	0.00
Sub total	**903.68**
Waste	
Mixed Solid Waste	1366.11
Hazardous	2.36
Sub total	**1368.47**
Total	**2299.98**
Diversion	**39.29%**

3.0 METHODOLOGY

3.1 Data Collection

A waste audit information sheet/questionnaire was sent by AET staff to UOG to collect the necessary information about the size of the facility, the number of student/staff members, the facilities hours and days of operation, and current waste management practices.

3.2 Waste Auditing

From November 26th to 28th, 2025, AET staff conducted the waste audit to assess the composition of waste and recyclables from a 1-day generating period. Waste samples were collected each day. Waste, recyclables, and organics were collected from 14 different generation zones around the campus and taken to a central sorting location at the Guelph campus. A digital scale, with precision to 0.01 kg, was used to weigh the sorted waste material. The contents of each sample were examined and separated into their appropriate waste category in plastic totes (sorted waste) and weighed individually. A detailed list of material categories can be found in Appendix C. The plastic totes were tared and zeroed out to calculate the total sample weight for each waste class. This process was repeated for each waste zone. Figure 3.1 illustrates a typical waste audit set-up.

The waste audit focused on understanding the waste composition of the waste generated from the overall campus in 2025.

All data was compiled to provide an overall overview of waste composition.

The following equipment was utilized to undertake waste auditing:

- Sorting table;
- 25 blue boxes;
- Black plastic bags;
- Knives;
- Weigh scale; and
- Safety equipment (Coveralls, cut resistant gloves, safety boots, safety glasses, hearing protection).

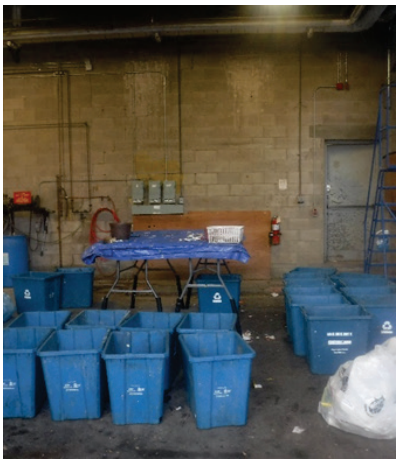


Figure 3.1 Waste Auditing Set Up

3.3 Assumptions & Calculations

3.3.1 Assumptions

The assumptions used when assessing the waste audit results are as follows:

1. That the samples gathered over the 24-hour collection period when extrapolated for annual waste disposed are representative of the composition of waste generated over the year.
2. That the annual estimate is based on 5 working days per week and 50 equivalent weeks of operation per year.

3. That the unaudited information provided by UOG is accurate.

3.3.2 Calculations

The calculations used to analyze the waste audit results are as follows:

Waste Composition (%):

$$\frac{\text{Material category weight (kg)}}{\text{Total Weight of entire sample (kg)}} \times 100\% \quad (1)$$

Annual Waste Generation (kg/yr)

Annual Waste Tonnage x Percent Composition (2)

Diversion Rate (%)s

$$\left(\frac{\text{weight of material diverted}}{\text{total weight of material generated}}\right) \times 100\% \quad (3)$$

3.4 Development of Waste Reduction Work Plan

The general waste auditing categories can be found in Appendix C. Waste was identified and sorted into various categories to mimic O.Reg. 103/94 source separation requirements, current recycling programs, and other common waste types.

Using the results of this waste audit and other information, a new waste reduction work plan was developed. The 2023 waste audit was used as the baseline data for MOE form 5.

4.0 WASTE AUDIT RESULTS

It should be noted from the outset that these results represent a "snap-shot" in time. Any extrapolations of this data are indicative rather than absolute. The waste generated from November 25th to 27th, 2025, was tagged by building and destined for landfill or diversion through recycling streams.

This section summarizes the results of the waste composition from the overall campus, as well as an overall recycling composition summary.

4.1 Overall Waste Generation Profile

The profile of waste generation for all materials including unaudited data created at UOG Campus is depicted in Figure 4.1. Of the total waste generated, composted materials made up 23.91%. Recycled materials accounted for 12.18% of overall waste while 39.87% was disposed divertible materials. Disposed non-divertible material accounted for 20.38% of overall waste.

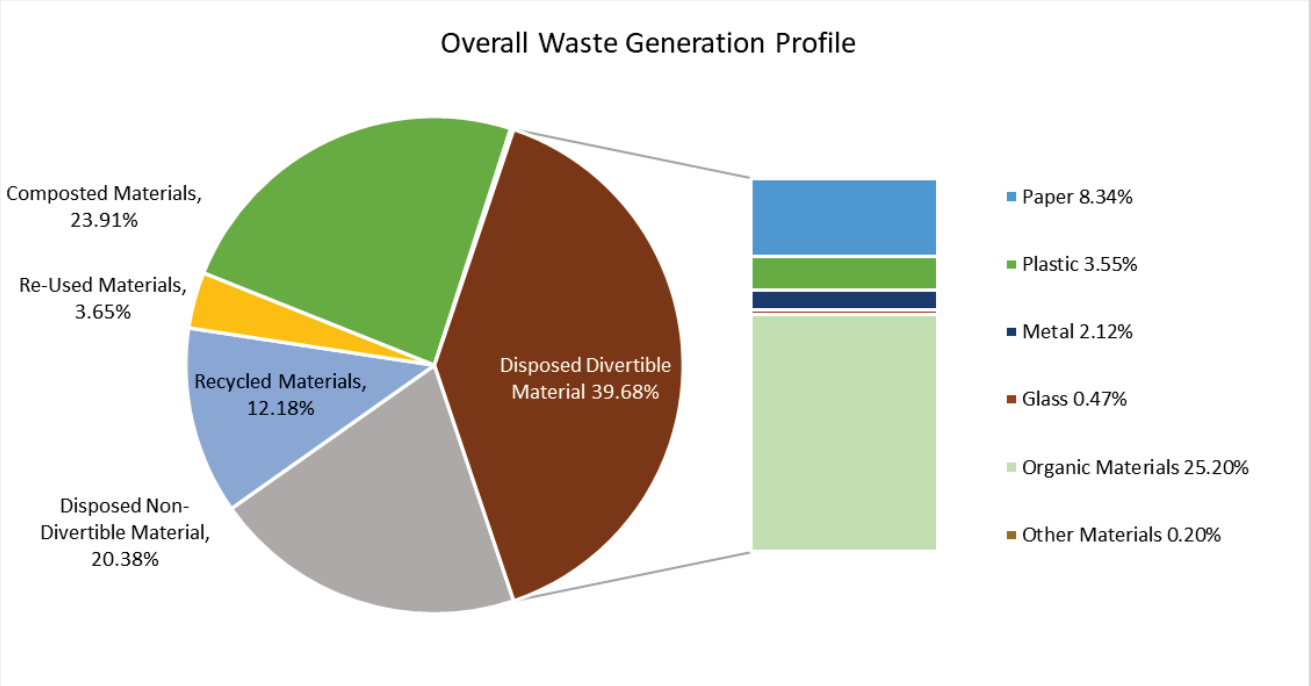


Figure 4.1 Overall Waste Generation Profile

Table 4.1 Overall Waste Generation Profile

Material Category	Recycled Materials (kg/yr)	Re-Used Materials (kg/yr)	Composted Materials (kg/yr)	Disposed Recyclable Materials (kg/yr)	Disposed Compostable Materials	Disposed Non-Divertible Materials (kg/yr)	Total (kg/yr)	Per Student (kg/yr)
Paper	172,230	0	0	191,718	0	70,505	**434,452**	**13.08**
Plastic	15,057	0	0	81,583	0	182,765	**279,405**	**8.41**
Metal	63,746	24,150	0	48,748	0	0	**136,644**	**4.11**
Glass	2,965	0	0	10,743	0	566	**14,274**	**0.43**
Organic Materials	0	0	548,298	0	579,657	0	**1,127,955**	**33.95**
Other Materials	26,075	59,870	1,623	0	4,577	214,898	**307,043**	**9.24**
Total (kg/yr)	**280,072**	**84,020**	**549,921**	**332,792**	**584,234**	**468,734**	**2,299,774**	**69.22**
Per Student (kg/yr)	**8.43**	**2.53**	**16.55**	**10.02**	**17.58**	**14.11**	**69.22**	

The largest component of waste generated at UOG is organic materials, representing 1,127,955 kg/yr of the total waste. This amounts to 49.04% of the total waste generation. The remaining 50.95% is comprised of Other Materials (307,043 kg/yr), Paper (434,452 kg/yr), Plastic (279,405 kg/yr), Metal (136,644 kg/yr), and Glass (14,274 kg/yr). The composition of the waste generated at UOG is illustrated in Figure 4.1 and Table 4.1 displaying Total Annual Generation Composition.

Figure 4.2 and Table 4.2 below demonstrate the overall waste generation excluding unaudited materials. Figure 4.2 demonstrates the overall waste generated at the UOG campus excluding unaudited data. Of the total waste generated, composted material made up the largest proportion with 37.75%, followed by disposed divertible material with 33.55%, disposed non-divertible material at 18.11%, and recycled material at 10.60%. Of the disposed divertible material, organic materials made up the largest proportion with 21.41%, followed by paper at 6.87%.

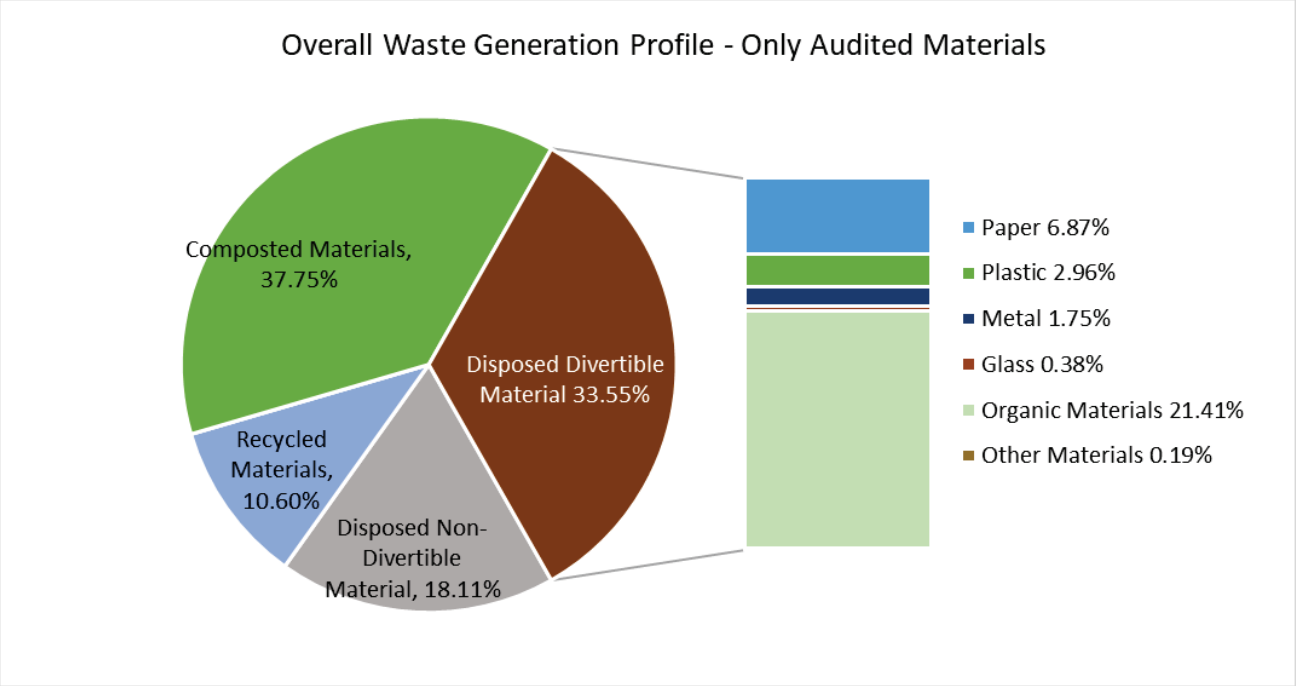


Figure 4.2 Overall Waste Generation Profile Excluding Unaudited Materials

Table 4.2 displays the overall waste generation excluding unaudited materials. The largest component of the total waste generated at the UOG campus, excluding unaudited materials was Organic Materials with approximately 607,017 kg/yr (58.81%), followed by Paper with 179,817 kg/yr (17.42%), and Plastic with 120,794 kg/yr (11.70%). The remaining waste was comprised of Other Materials at 92,817 kg/yr, Metal with 24,165 kg/yr, and Glass with 7,614 kg/yr.

Table 4.2 Overall Waste Generation Profile Excluding Unaudited Materials

Material Category	Recycled Materials (kg/yr)	Composted Materials (kg/yr)	Disposed Recyclable Materials (kg/yr)	Disposed Compostable Materials (kg/yr)	Disposed Non-Divertible Materials (kg/yr)	Total (kg/yr)
Paper	80,964	0	70,885	0	27,968	**179,817**
Plastic	18,844	0	30,520	0	71,430	**120,794**
Metal	6,143	0	18,022	0	0	**24,165**
Glass	3,434	0	3,971	0	209	**7,614**
Organic Materials	0	386,060	0	220,956	0	**607,017**
Other Materials	0	3,623	0	1,915	87,280	**92,817**
Total (kg/yr)	**109,386**	**389,683**	**123,398**	**222,871**	**186,887**	**1,032,225**

4.2 Garbage Stream Composition

The percentage of waste generated in each zone is shown in Figure 4.3. With 27.37% of the total waste generated, the University Center generated the most garbage. The SSC also made a notable contribution to the garbage generation, at 14.71%. A full breakdown of the audit results can be found in Appendix A. A total of 2,019.72 kg of garbage waste was audited from the UOG campus.

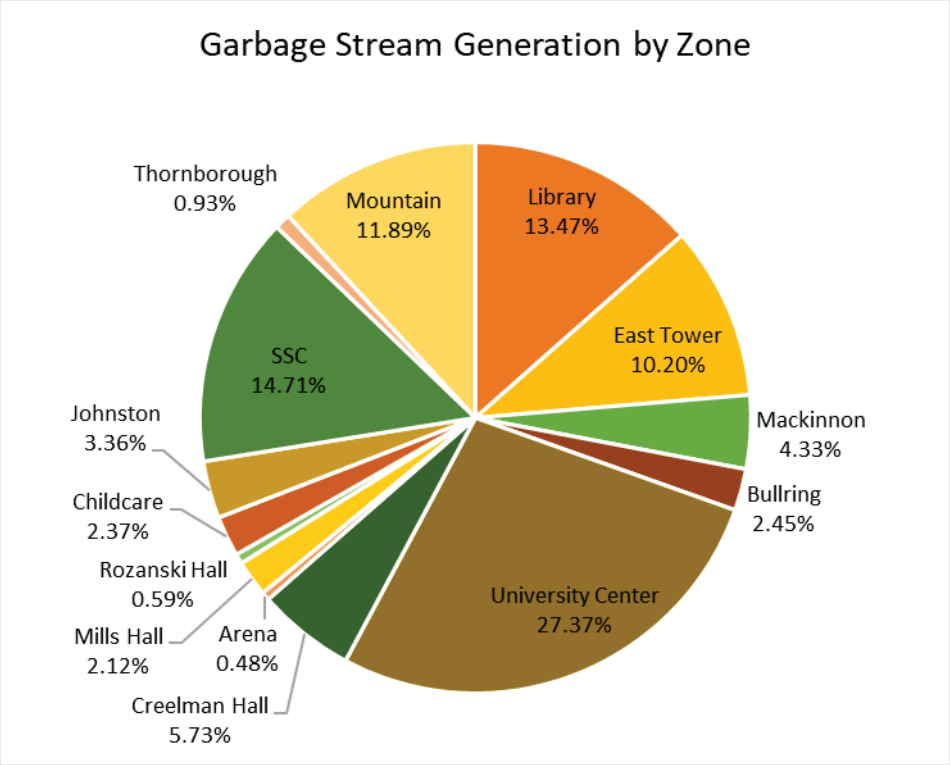


Figure 4.3 Proportion of Garbage Generated by Zone

The garbage stream composition is shown in Figure 4.4. Organic waste, plastic, paper, and other materials were the most common waste discovered in the waste stream. The total organics consisted of 41.87% Avoidable/unavoidable food waste, tissue, compostable containers, and other acceptable organics. The total plastics consisted of 31.33% divertible plastic and 68.67% non-divertible plastics with the main contributors being LDPE/HDPE Film (package and non-package), #5 Other PP Containers, Plastic Laminates and Other Film Packaging and #1 PET Bottles and Jars. The total paper consisted of Paper laminate packaging, Polycoat Beverage Cups, boxboard, and Corrugated Cardboard. The remaining amount of waste consisted of other materials (non-divertible), glass, and metal.

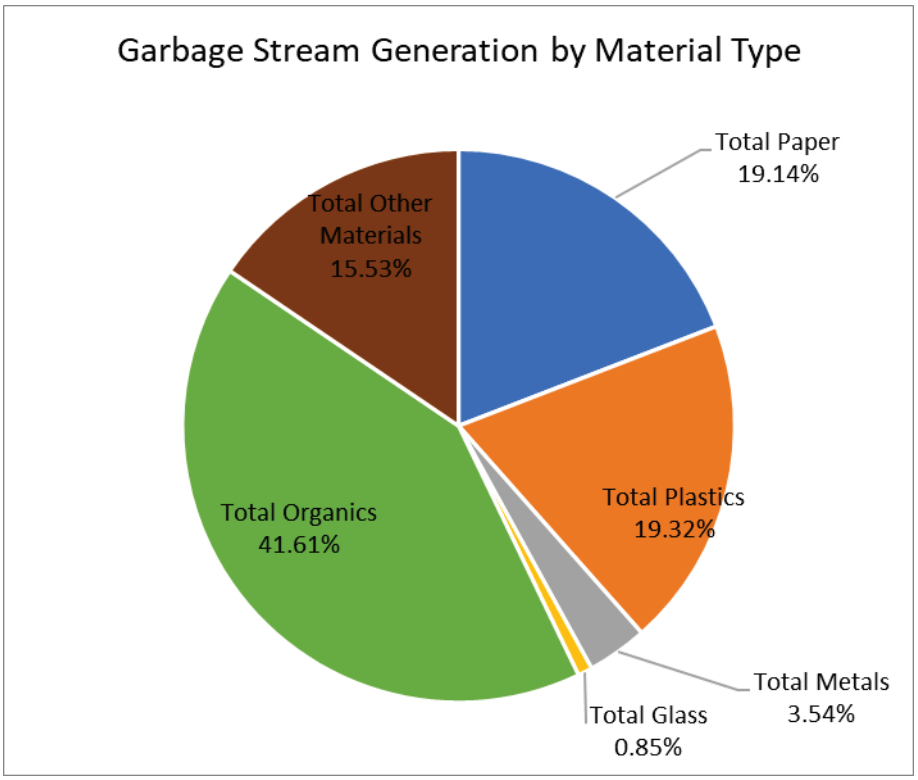


Figure 4.4 Garbage Stream Composition

4.2.1 Garbage Stream Composition by Generation Zone

Garbage stream composition varies by generation zone. Figure 4.5 through Figure 4.18 depict garbage composition from each generation zone.

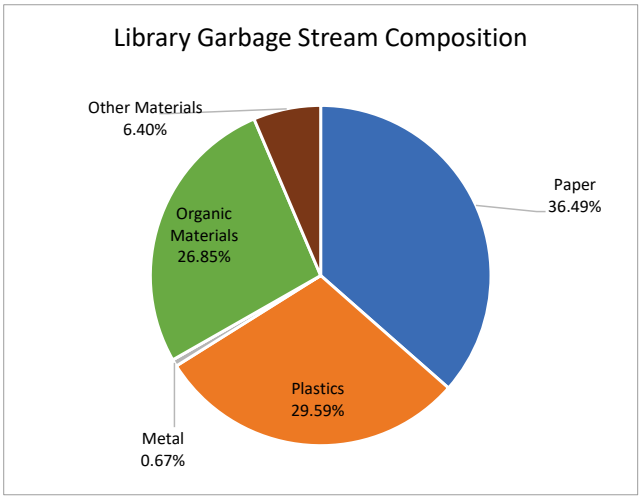


Figure 4.5 Library Garbage Stream Composition

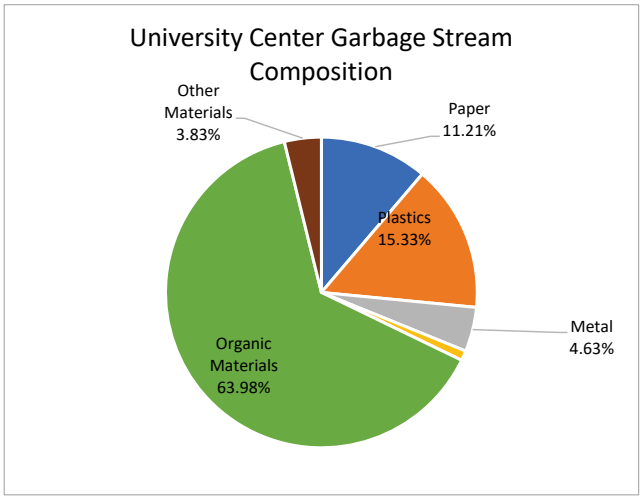


Figure 4.6 University Center Garbage Stream Composition

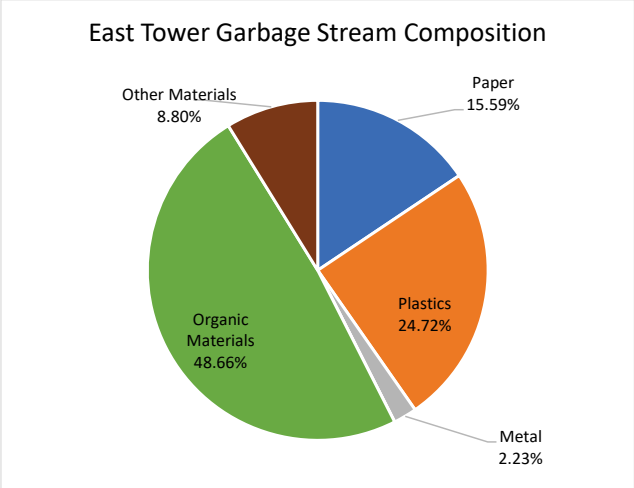


Figure 4.7 East Tower Garbage Stream Composition

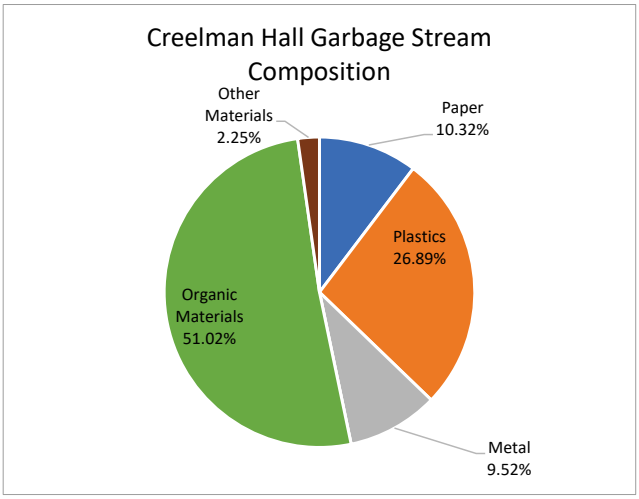


Figure 4.8 Creelman Hall Garbage Stream Composition

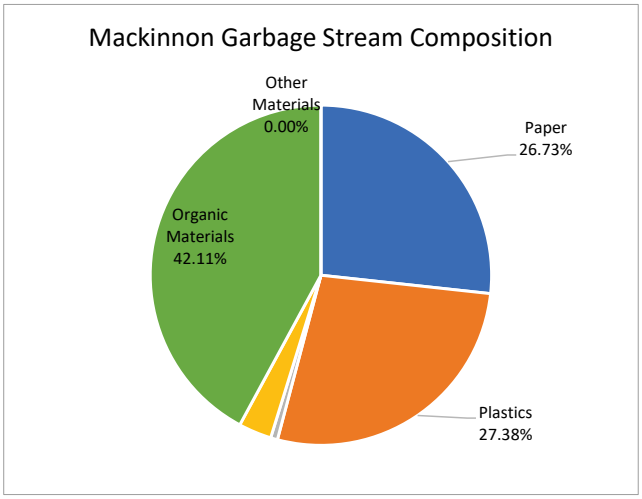


Figure 4.9 Mackinnon Garbage Stream Composition

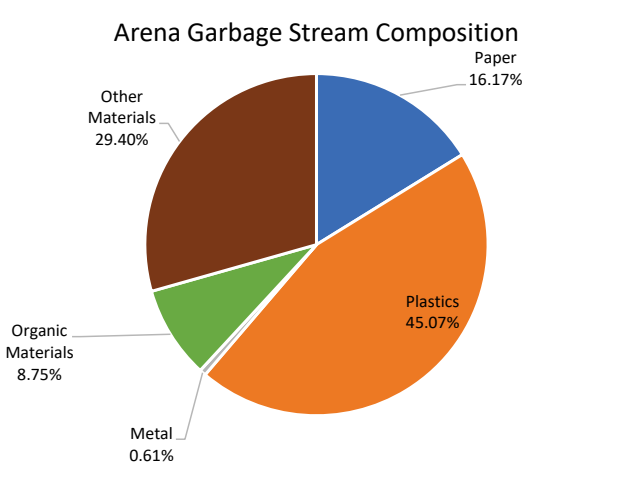


Figure 4.10 Arena Garbage Stream Composition

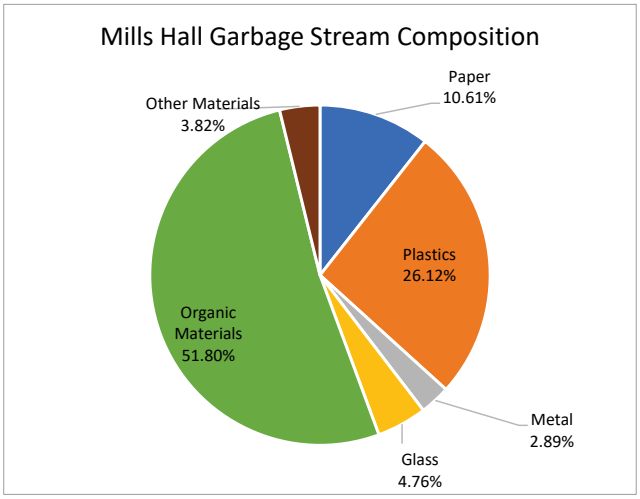


Figure 4.11 Mills Hall Garbage Stream Composition

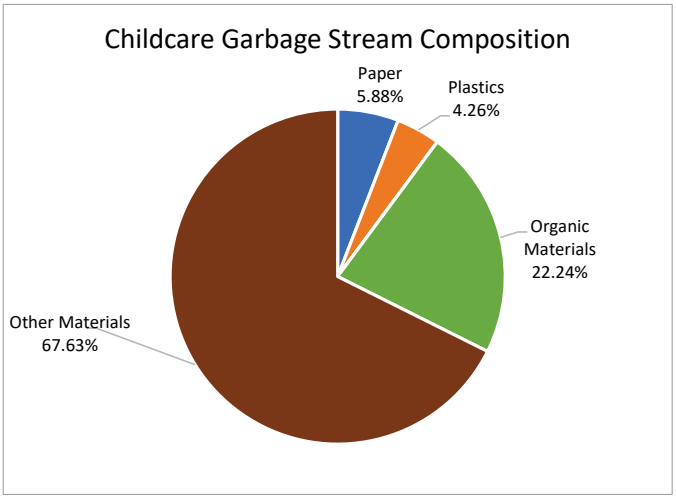


Figure 4.12 Childcare Garbage Stream Composition

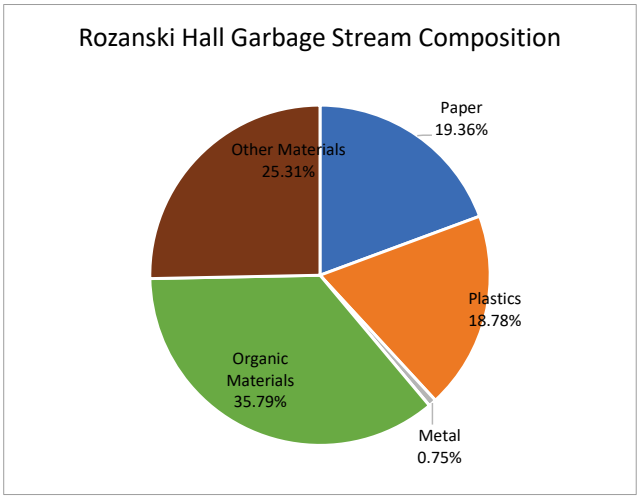


Figure 4.13 Rozanski Hill Garbage Stream Composition

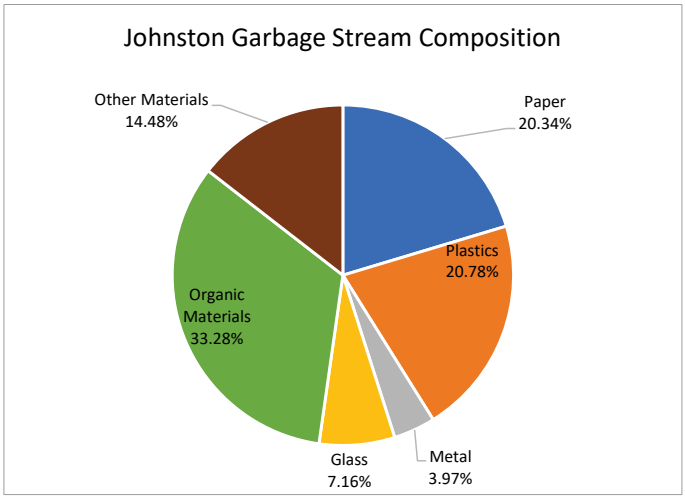


Figure 4.14 Johnston Hall Garbage Stream Composition

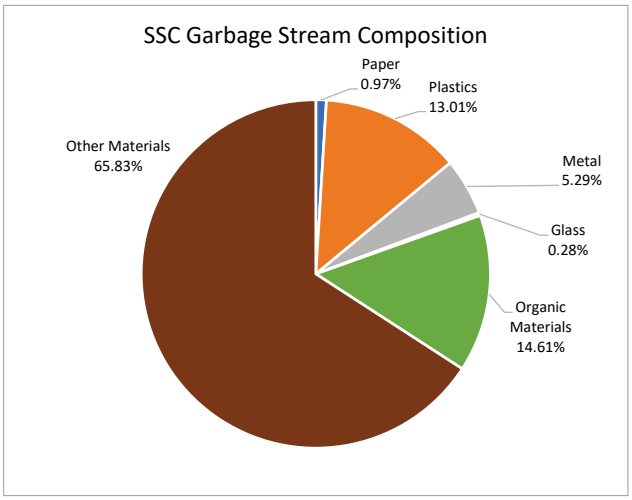


Figure 4.15 SCC Garbage Stream Composition

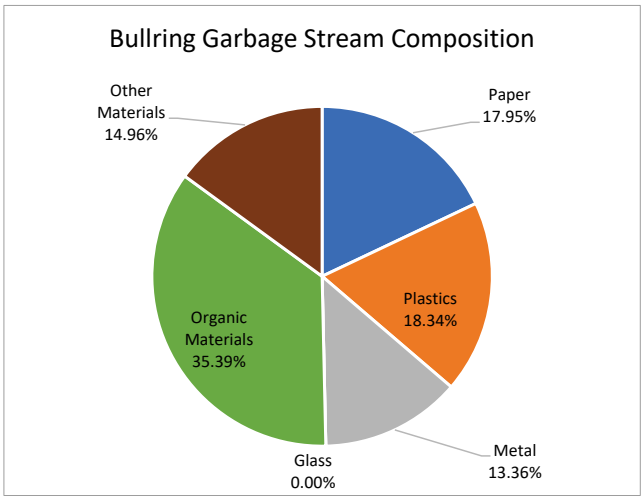


Figure 4.16 Bullring Garbage Stream Composition

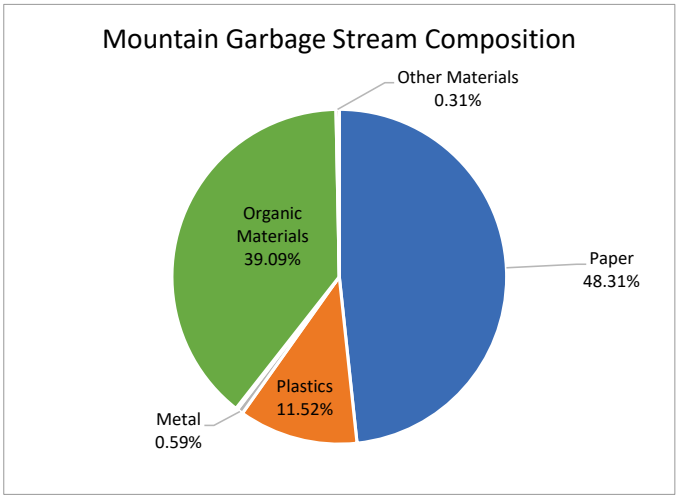


Figure 4.17 Mountain Garbage Stream Composition

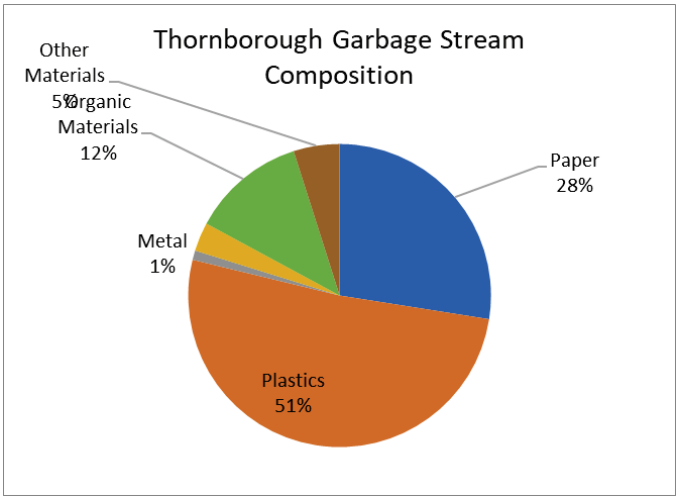


Figure 4.18 Thornborough Garbage Stream Composition

4.3 Recycling Stream Composition

Zone-by-zone recycling generation is shown in Figure 4.19 The East Tower and Creelman Hall generated the most recycling, accounting for 23.71% and 22.21%, respectively. A full breakdown of audit results can be found in Appendix A. A total of 517.38 kg of recycling was audited from the UOG Campus.

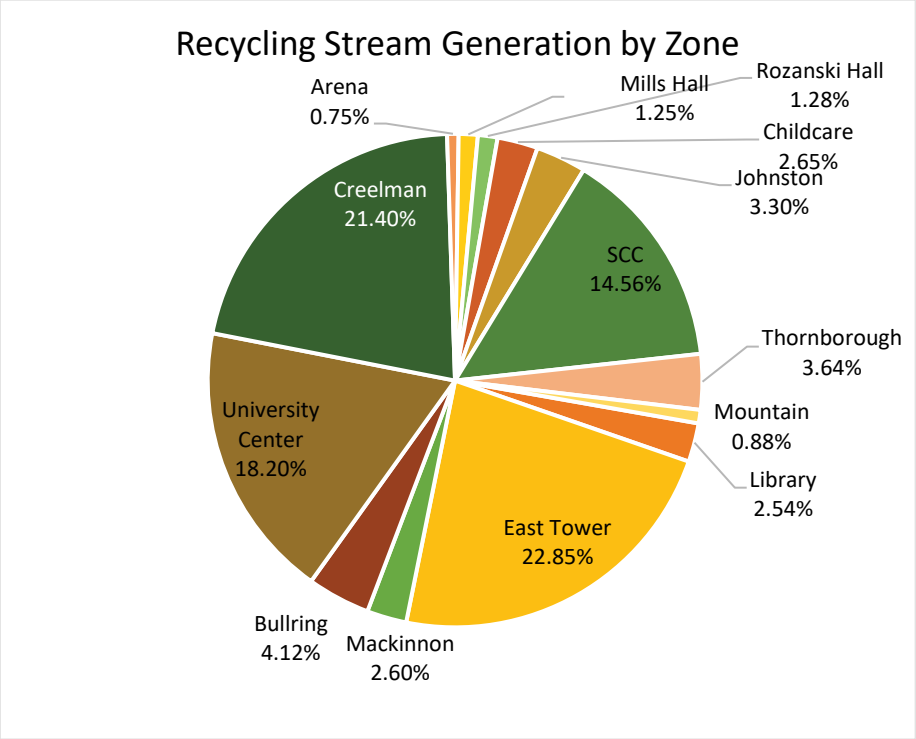


Figure 4.19 Recycling Stream Generation by Zone

The recycling stream composition for the entire campus is shown in Figure 4.20 A full breakdown of the audit results can be found in Appendix A. It should be noted that this composition only represents single stream recycling and does not include bulk recycled items such as corrugated cardboard, paper products, electronics, and cooking oil.

The most prevalent waste found in the recycling stream included paper, plastic, and organic waste. The remainder consisted of small amounts of metal, Glass, and other non-divertible materials.

The paper category consisted largely of corrugated cardboard, office paper, boxboard, and polycoat beverage cups. The plastics category consisted largely of #1 PET Bottles and jars, LDPE/HDPE film (non-packaging), #5 PP Containers, and #1 PET Thermoform. The Organics category consisted largely of Avoidable food waste, compostable containers, Paper Towels, and unavoidable food waste.

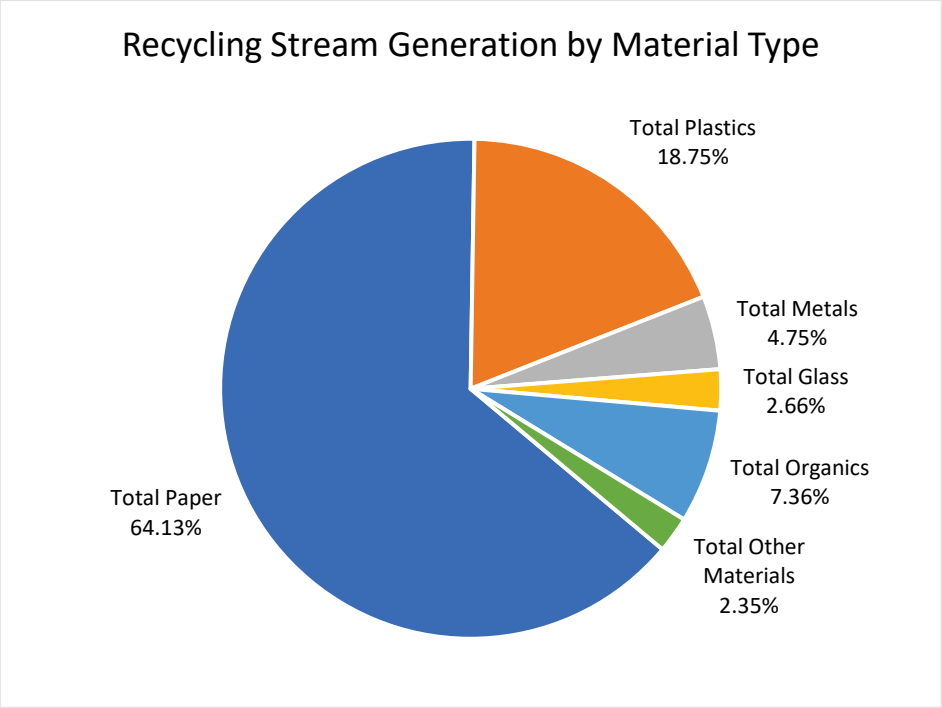


Figure 4.20 Recycling Stream Composition

The overall contamination rate for recycling stream is 12.69%, as outlined in Table 4.3. Of all the waste zones, Childcare has the highest contamination rate of 55.22% followed by Mills Hall at 48.17%, and Rozanski at 43.74%. The other waste zones with the lowest contamination rates are Bullring (2.30%), Creelman (3.36%), Thornborough (5.16%) and the Library (8.972%).

Table 4.3 Overall Contamination Rate of Recycling Stream

Waste Zone	Accepted Recycling (%)	Non-Recyclable Material (%)	Compostable Material (%)	Overall Contamination Rate (%)
Library	91.03%	5.17%	3.80%	8.97%
East Tower	71.10%	7.86%	21.04%	28.90%
Mackinnon	84.68%	12.47%	2.84%	15.32%
Bullring	97.70%	1.53%	0.77%	2.30%
University Center	88.78%	6.42%	4.79%	11.22%
Creelman	96.64%	2.92%	0.44%	3.36%
Arena	60.82%	14.95%	24.23%	39.18%
Mills Hall	51.83%	34.60%	13.57%	48.17%
Rozanski Hall	56.26%	34.39%	9.35%	43.74%
Childcare	44.78%	53.89%	1.33%	55.22%
Johnston	71.31%	10.57%	18.12%	28.69%
SCC	89.89%	8.45%	1.66%	10.11%
Thornborough	94.84%	4.41%	0.74%	5.16%
Mountain	68.79%	3.96%	27.25%	31.21%
All Zones Combined	**87.31%**	**8.31%**	**4.38%**	**12.69%**

4.3.1 Recycling Stream Composition by Generation Zone

Recycling stream composition varies by generation zone. Figure 4.21 through Figure 4.34 depict recycling composition from each generation zone.

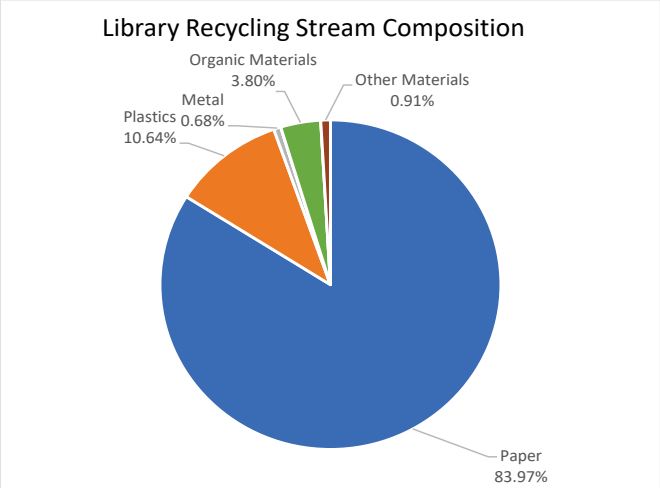


Figure 4.21 Library Recycling Stream Composition

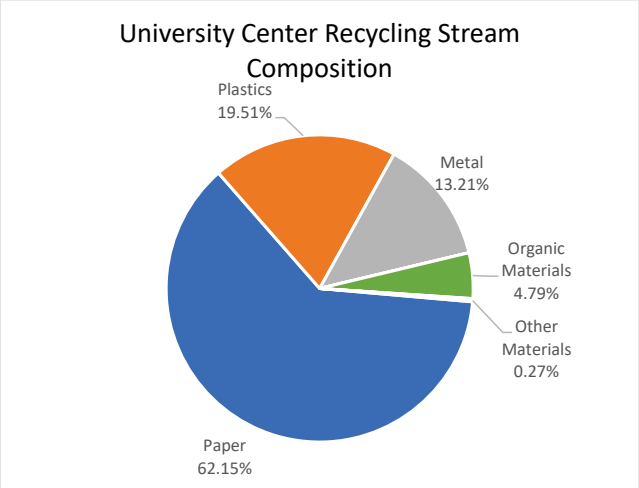


Figure 4.22 University Center Recycling Stream Composition

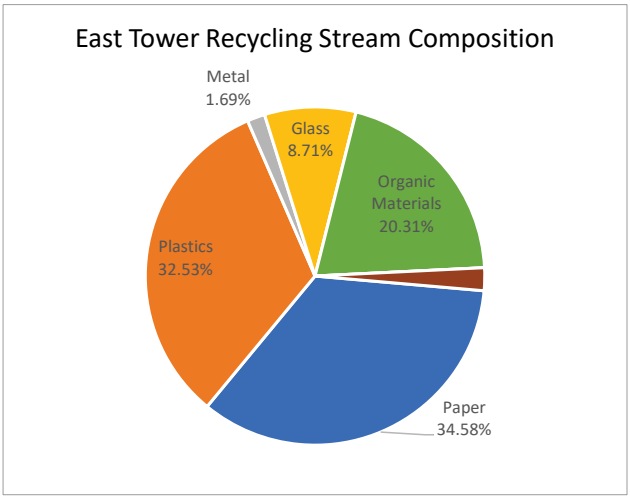


Figure 4.23 East Tower Recycling Stream Composition

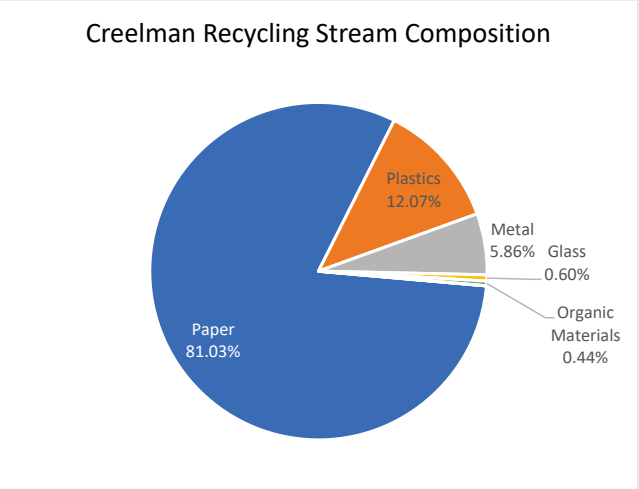


Figure 4.24 Creelman Recycling Stream Composition

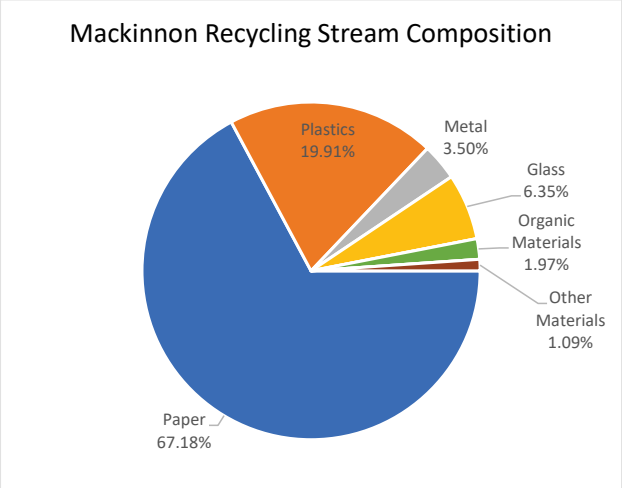


Figure 4.25 Mackinnon Recycling Stream Composition

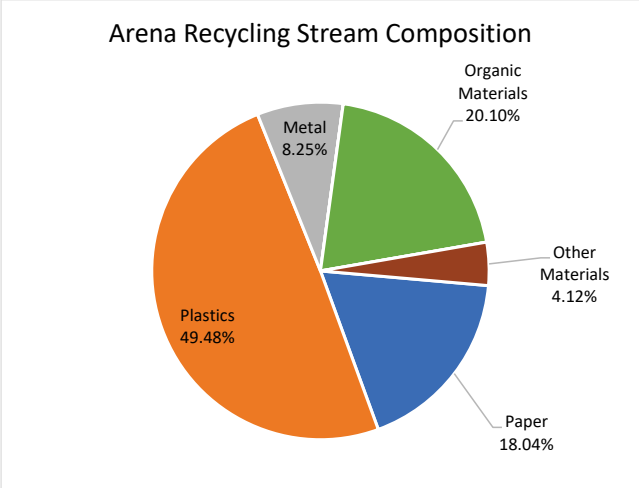


Figure 4.26 Arena Recycling Stream Composition

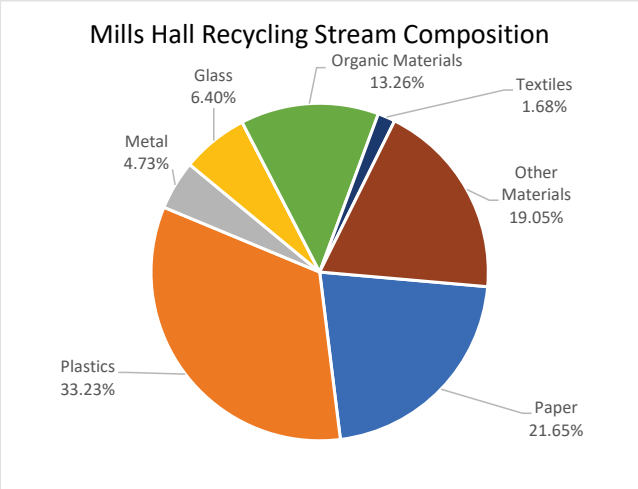


Figure 4.27 Mills Hall Recycling Stream Composition

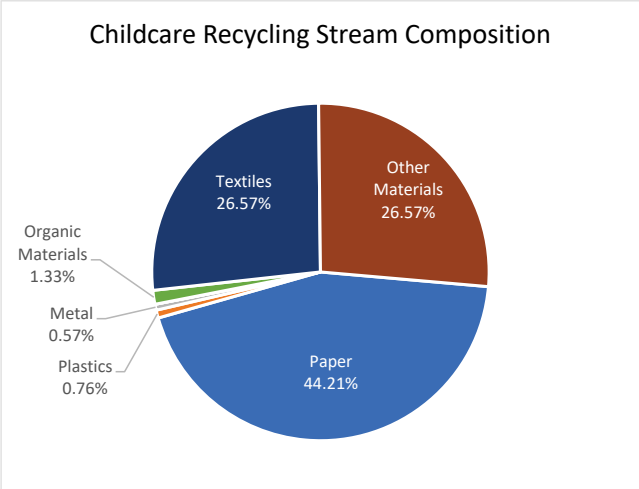


Figure 4.28 Childcare Recycling Stream Composition

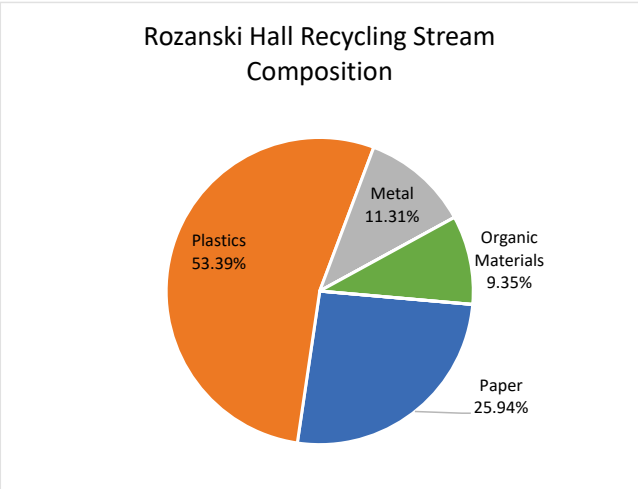


Figure 4.29 Rozanski Hall Recycling Stream Composition

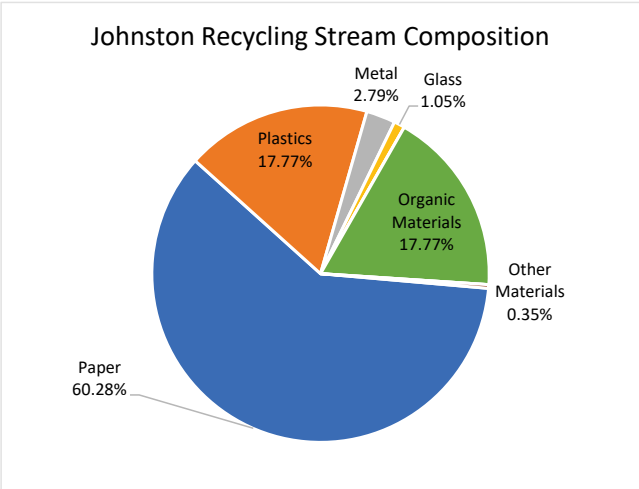


Figure 4.30 Johnston Recycling Stream Composition

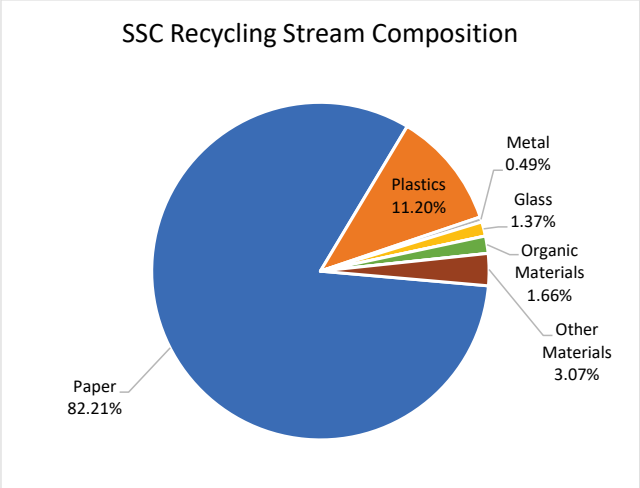


Figure 4.31 SSC Recycling Stream Composition

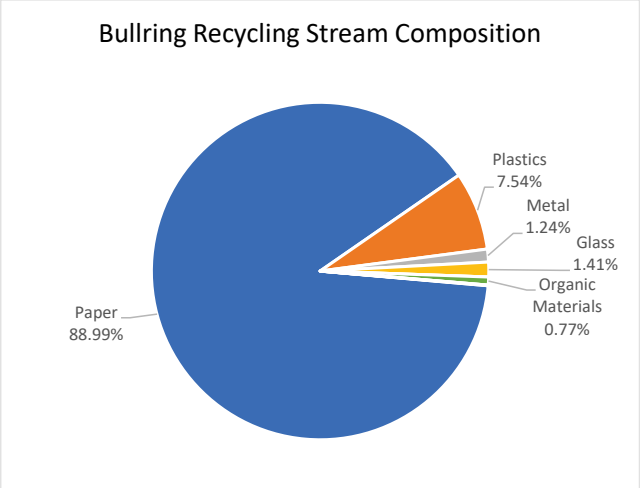


Figure 4.32 Bullring Recycling Stream Composition

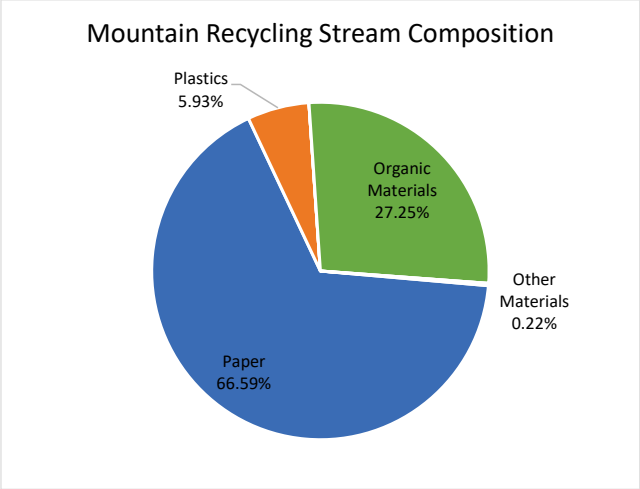


Figure 4.33 Mountain Recycling Stream Composition

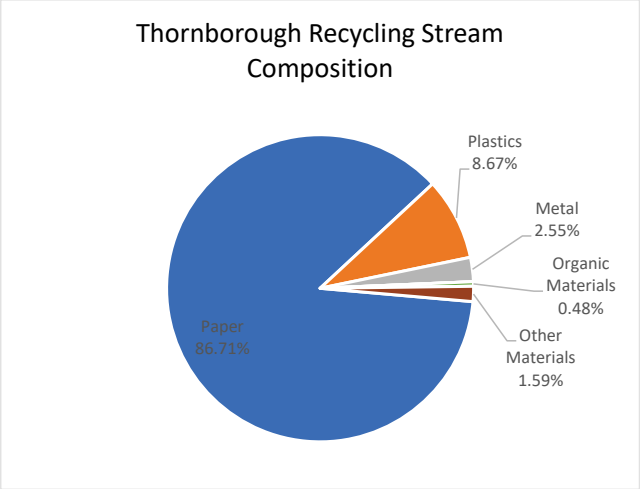


Figure 4.34 Mountain Recycling Stream Composition

4.4 Organics Stream Composition

Zone-by-zone organics stream generation is shown in Figure 4.35. Creelman Hall and the Mountain produced the largest amounts of organic waste, accounting for 26.35% and 25.01% of the total, respectively. Other notable contributors include the University Centre (15.35%) and the Library (14.84%). Smaller contributors such as Childcare and Arena made up less than 12.55% each. A complete breakdown of audit results is available in Appendix A. A total of 1,617 kg of organics was audited from the UOG Campus.

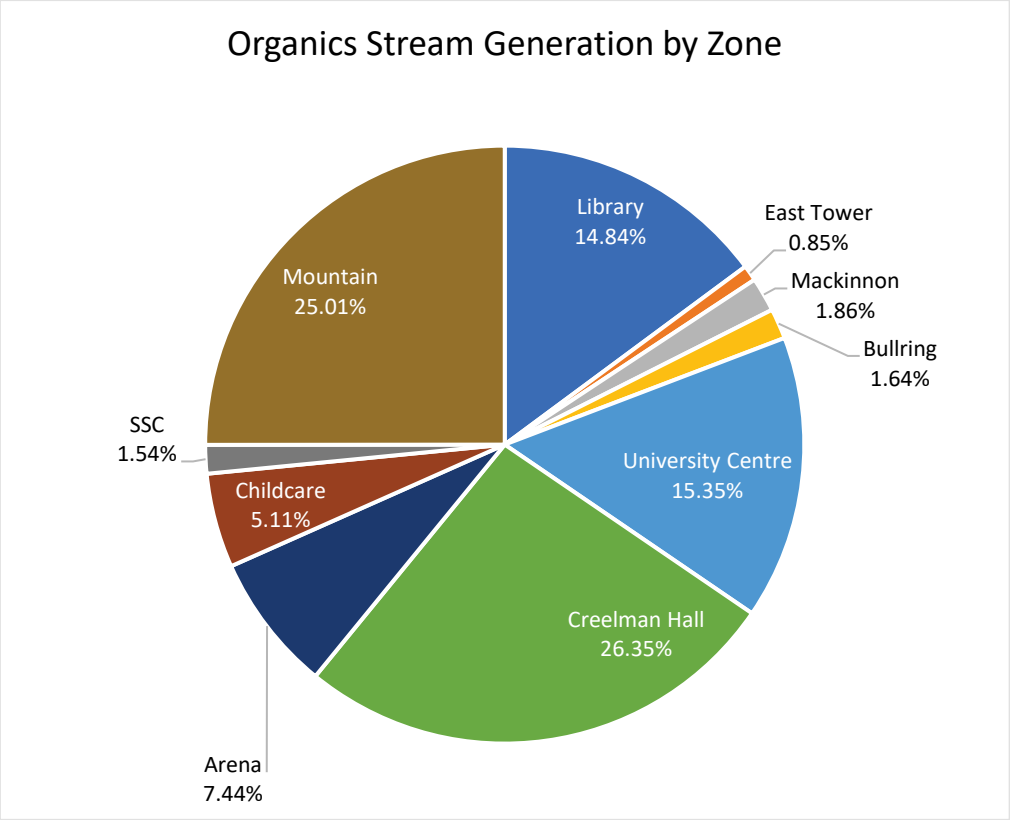


Figure 4.35 Organics Stream Generation by Zone

The organics stream composition for the entire campus is shown in Figure 4.36. The majority of this stream is made up of organic materials, accounting for 97.01% of the total. The remainder includes 2.70% categorized as other materials, with small quantities of paper (0.16%), plastics (0.13%). A full breakdown of the audit results can be found in Appendix A. It should be noted that this composition strictly reflects the materials found within the organics stream and does not include items from other waste streams. The organic material primarily consisted of avoidable food waste, compostable containers, tissue, and unavoidable food waste.

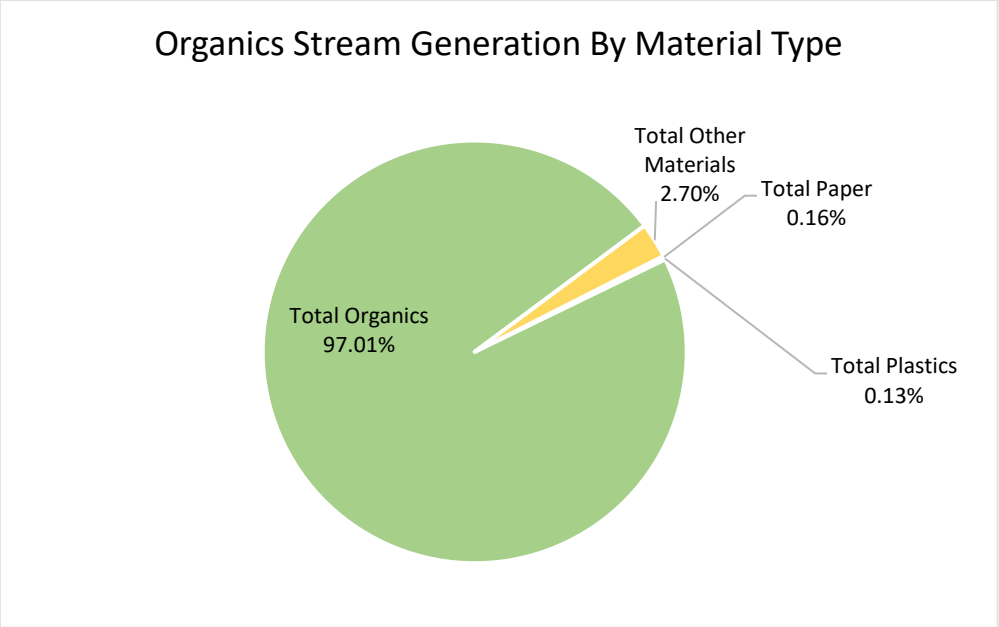


Figure 4.36 Organics Stream Composition

The overall contamination rate for organics stream is 0.35%, as outlined in Table 4.4. Of all the waste zones Creelman Hall had the highest contamination rate at 12.18% followed by East Tower at 1.99% and University Centre at 0.78%. Waste zones with minimal contamination rates are SSC (0.20%), Bullring (0.31%), and Mountain (0.03%). No contamination was found in the organics stream for the Arena, Mackinnon, and the Library.

Table 4.4 Overall Contamination Rate of Organic Stream

Waste Zone	Non-Compostable Recyclables (%)	Non-Recyclable Material (%)	Compostable Material (%)	Overall Contamination Rate (%)
Library	0.00%	0.00%	100.00%	0.00%
East Tower	0.66%	1.33%	98.01%	1.99%
Mackinnon	0.00%	0.00%	100.00%	0.00%
Bullring	0.00%	0.31%	99.69%	0.31%
University Centre	0.24%	0.54%	99.22%	0.78%
Creelman Hall	0.26%	11.92%	87.82%	12.18%
Arena	0.00%	0.00%	100.00%	0.00%
Childcare	0.00%	0.32%	99.68%	0.32%
SSC	0.20%	0.00%	99.80%	0.20%
Mountain	0.00%	0.02%	99.97%	0.03%
All Zones Combined	**0.05%**	**0.30%**	**99.65%**	**0.35%**

4.4.1 Organics Stream Composition by Generation Zone

Organics stream composition varies by generation zone. Figure 4.37 through Figure 4.46 depicts organic composition from each generation zone.

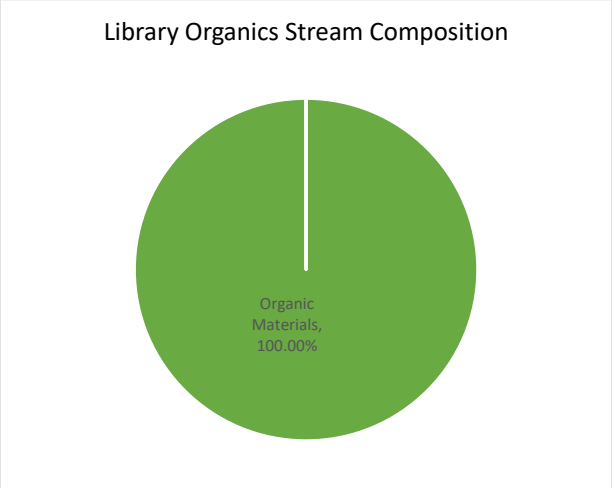


Figure 4.37 Library Organics Stream Composition

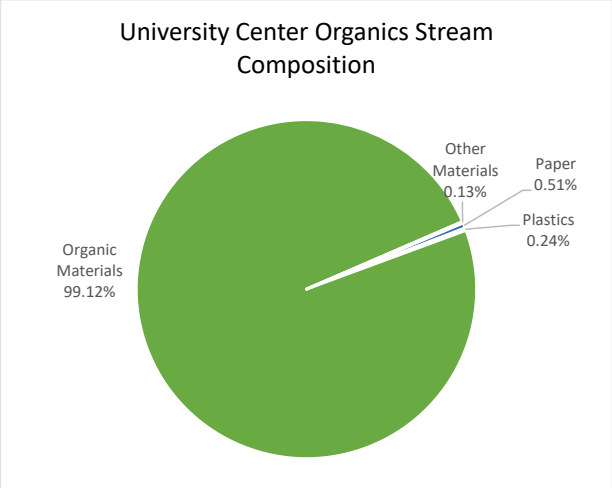


Figure 4.38 University Center Organics Stream Composition

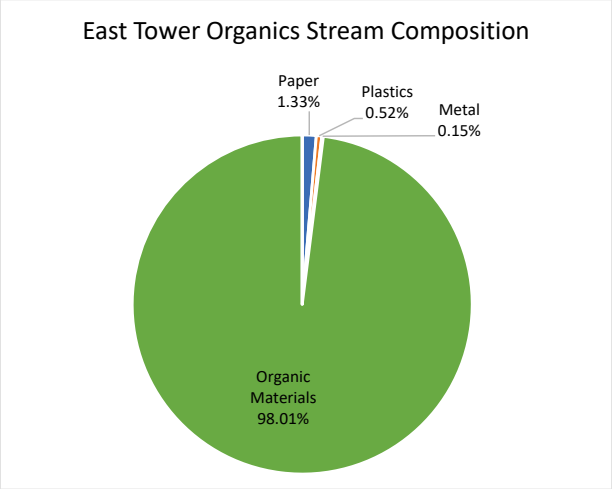


Figure 4.39 East Tower Organics Stream Composition

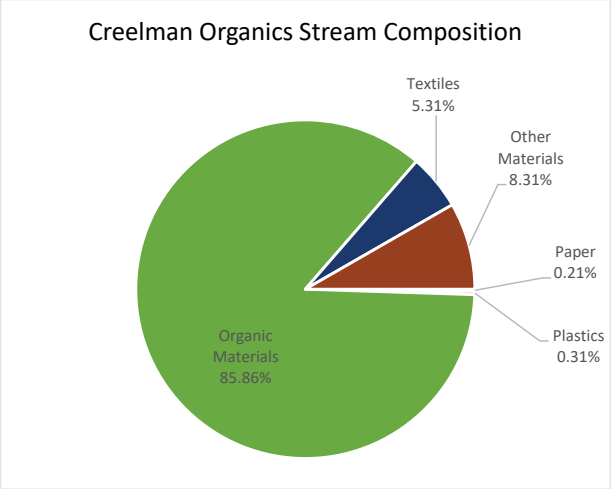


Figure 4.40 Creelman Hall Organics Stream Composition

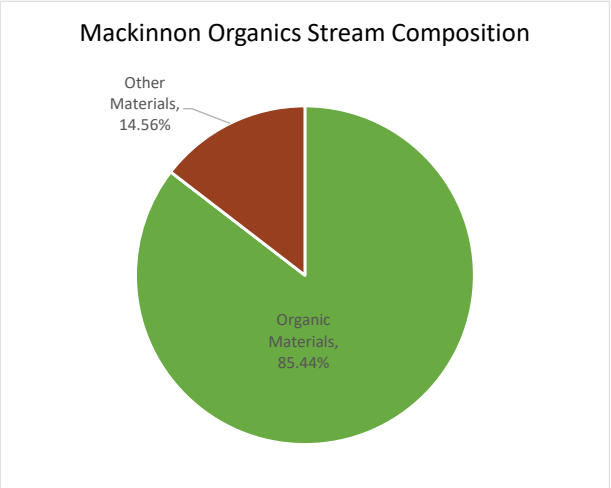


Figure 4.41 Mackinnon Organics Stream Composition

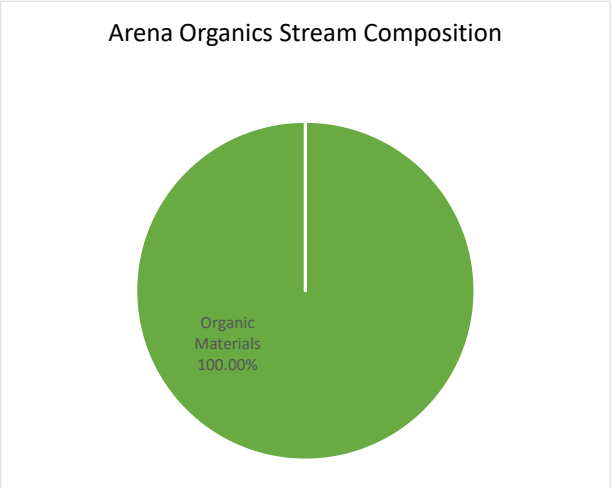


Figure 4.42 Arena Organics Stream Composition

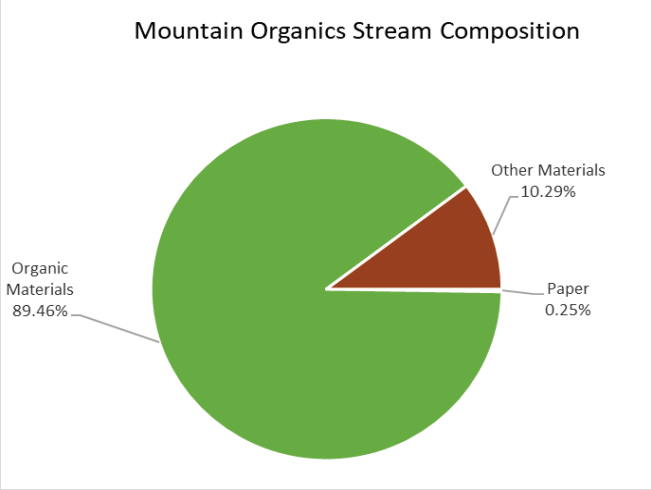


Figure 4.43 Mountain Organics Stream Composition

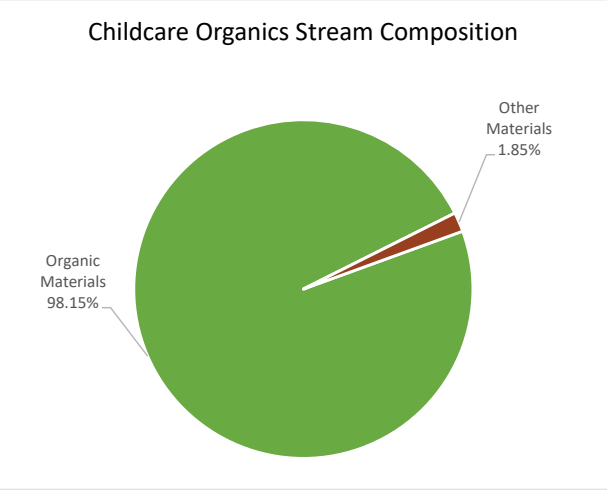


Figure 4.44 Childcare Organics Stream Composition

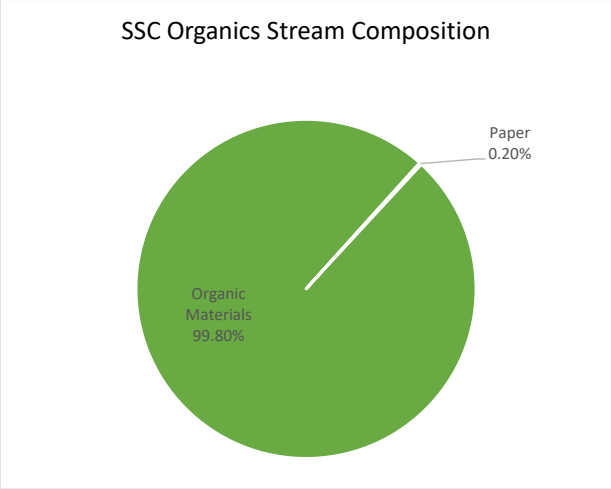


Figure 4.45 SSC Organics Stream Composition

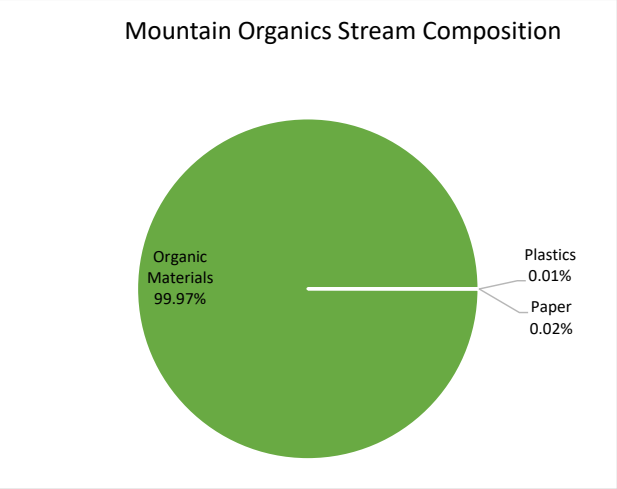


Figure 4.46 Bullring Organics Stream Composition

5.0 DATA ANALYSIS

Recyclables found in the waste stream (error rate) are depicted in Figure 5.1 and potential recyclables (missed opportunities) are depicted in Figure 5.2. It was estimated that approximately 24.17% of garbage sorted had established recycling programs (error rate) and that approximately 41.87% of garbage sorted had an established organics program (missed opportunities). Of the organics, 29.25% consisted of food waste (mostly avoidable), which could be diverted to an organics program (missed opportunities). Potentially divertible materials contributed to 66.05% of the overall garbage stream.

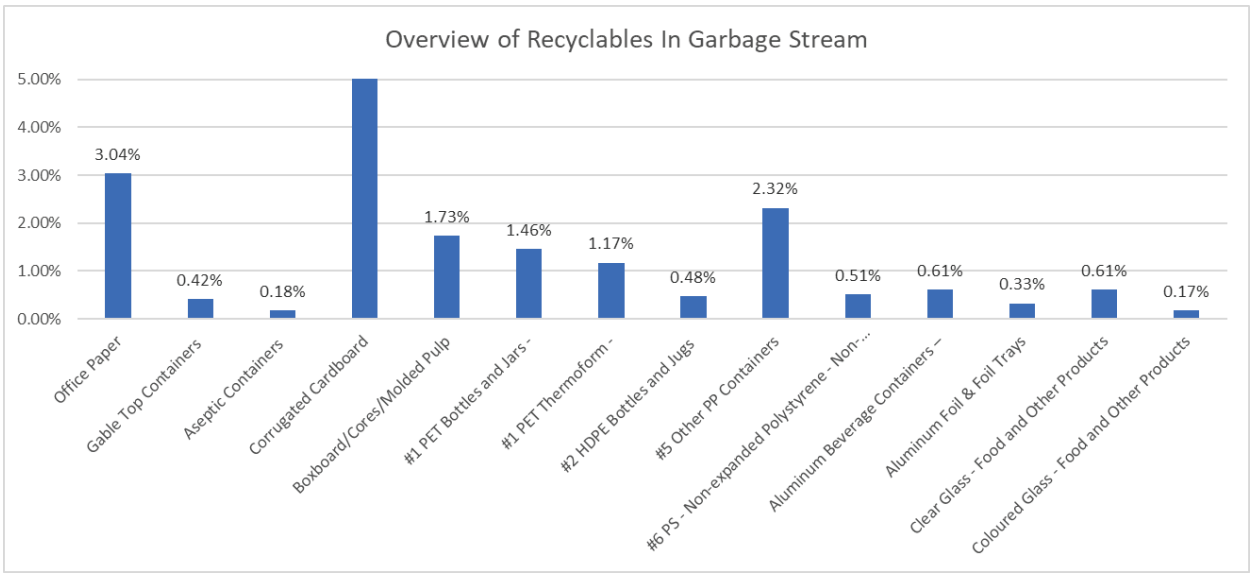


Figure 5.1 Overview of Recyclable Waste in the University of Guelph Campus Waste Stream

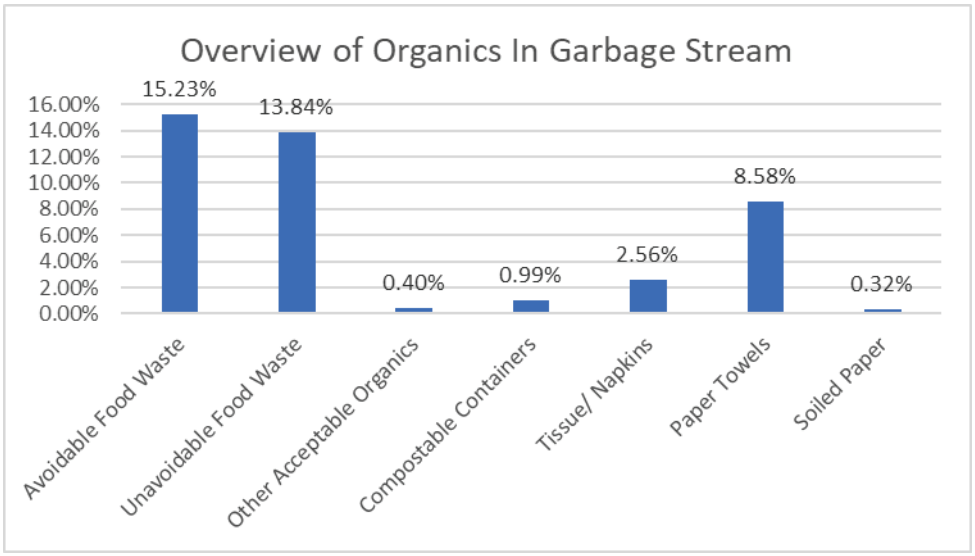


Figure 5.2 Overview of Organic Waste Found in the Garbage Stream

The capture rates for the various waste streams for which recycling programs are in place, included unaudited material are shown in Table 5.1. It is estimated that approximately 168,744 kg/year of mixed recycling, 43,234 kg/year of cardboard, and 155,465 kg/year of food waste is found in the waste stream annually and landfilled. Including unaudited data, the capture rate for all recyclables currently accepted in the recycling program is 60.51%.

Table 5.1 Estimated Capture Rates of Recyclables

Material Category	Generated (kg/yr)	Diverted (kg/yr)	Disposed (kg/yr)	Capture Rate
Newspapers - Daily and weekly	813	134	680	16.44%
Magazines and Catalogues	798	57	742	7.09%
Shredded Paper	62,530	62,530	0	100.00%
Office Paper	21,865	6,393	15,472	29.24%
Gable Top Containers	3,412	1,297	2,115	38.01%
Aseptic Containers	2,144	1,222	922	57.01%
Corrugated Cardboard	152,502	109,268	43,234	71.65%
Boxboard/Cores/Molded Pulp	16,408	7,601	8,807	46.33%
#1 PET Bottles and Jars -	13,300	5,691	7,609	42.79%
#1 PET Thermoform -	10,006	3,954	6,052	39.51%
#2 HDPE Bottles and Jugs	5,952	3,510	2,442	58.96%
#5 Other PP Containers	17,287	5,299	11,989	30.65%
#6 PS - Non-expanded Polystyrene - Non-beverage	2,997	391	2,606	13.04%
Aluminum- Food Containers	0	0	0	N/A
Aluminum Beverage Containers –	5,394	2,267	3,127	42.03%
Aluminum Foil & Foil Trays	1,666	10	1,656	0.58%
Aluminum Aerosols	289	0	289	0.00%
Other Aluminum (non-packaging)	14	14	0	100.00%
Steel Food Cans	11,812	4,713	7,099	39.90%
Steel Aerosol Container	1,776	0	1,776	0.00%
Other Steel (non-packaging)	86,236	57,977	4,109	67.23%
Clear Glass - Food and Other Products	6,497	3,397	3,100	52.29%
Coloured Glass - Food and Other Products	1,129	258	871	22.82%
Textiles	11,737	0	11,737	0.00%
Other Waste	161,521	85,945	75,576	53.21%
Total	**598,085**	**361,926**	**212,009**	**60.51%**

The current rate of organics captures, including unaudited material for which organic programs may be considered is shown in Table 5.2. It is estimated that approximately 214,518 kg/year of avoidable food waste, 190,985 kg/year of unavoidable food waste, 118,537 kg/year of paper towels and 35,382 kg/year of tissues are found in the waste stream annually. Including unaudited material, the capture rate for all organics currently accepted in the organic program is 48.49%. The greatest opportunity to increase capture rates exists for tissue/napkins (0.00%) compostable containers (5.43%), paper towel (7.20%) and avoidable food waste (16.90%).

Table 5.2 Estimated Capture Rates of Organics

Material Category	Generated (kg/yr)	Diverted (kg/yr)	Disposed (kg/yr)	Capture Rate
Avoidable Food Waste	258,159	43,640	214,518	16.90%
Unavoidable Food Waste	327,920	136,935	190,985	41.76%
Yard Waste	68	0	68	0.00%
Compostable Certified Bags	750	593	157	79.12%
Other Acceptable Organics	362,908	357,115	5,793	98.40%
Compostable Containers	15,034	817	14,217	5.43%
Tissue/ Napkins	35,382	0	35,382	0.00%
Paper Towels	127,735	9,198	118,537	7.20%
Soiled Paper	6,200	1,623	4,577	26.17%
Total	**1,134,155**	**549,921**	**584,234**	**48.49%**

Tables 5.3 and 5.4 display the capture rates for recyclable and organic materials excluding unaudited materials.

Table 5.3 displays the capture rates for recyclable materials for which recycling programs are in place, excluding unaudited materials. The overall capture rate for all audited recyclable materials is 46.99%. Other Aluminum non-packaging and Shredded Paper had the highest capture rates with 100% each, followed by Corrugated Cardboard (59.85%), and #2 HDPE Bottles and Jugs (58.94%). Aluminum aerosols and steel aerosols had a 0.00% capture rate. Other Steel non-packaging had the lowest capture rate with 0.40%, followed by aluminum foil and trays (0.58%), These categories have the most room for improvement, and can be aided by education, signage, and bin placement.

Table 5.3 Estimated Capture Rate of Recyclables Excluding Unaudited Material

Material Category	Generated (kg/yr)	Diverted (kg/yr)	Disposed (kg/yr)	Capture Rate
Newspapers - Daily and weekly	813	134	680	16.44%
Magazines and Catalogues	461	57	404	12.28%
Shredded Paper	63	63	0	100.00%
Office Paper	21,333	6,393	14,940	29.97%
Gable Top Containers	3,412	1,297	2,115	38.01%
Aseptic Containers	2,139	1,222	917	57.14%
Corrugated Cardboard	107,268	64,198	43,070	59.85%
Boxboard/Cores/Molded Pulp	16,361	7,601	8,760	46.46%
#1 PET Bottles and Jars -	13,273	5,691	7,581	42.88%
#1 PET Thermoform -	9,963	3,954	6,009	39.68%
#2 HDPE Bottles and Jugs	5,954	3,510	2,445	58.94%
#5 Other PP Containers	17,203	5,299	11,904	30.80%
#6 PS - Non-expanded Polystyrene - Non-beverage	2,972	391	2,581	13.15%
Aluminum- Food Containers	0	0	0	N/A
Aluminum Beverage Containers –	4,477	1,390	3,087	31.04%
Aluminum Foil & Foil Trays	1,664	10	1,654	0.58%
Aluminum Aerosols	289	0	289	0.00%
Other Aluminum (non-packaging)	14	14	0	100.00%
Steel Food Cans	11,812	4,713	7,099	39.90%
Steel Aerosol Container	1,776	0	1,776	0.00%
Other Steel (non-packaging)	4,133	16	4,117	0.40%
Clear Glass - Food and Other Products	6,276	3,177	3,100	50.61%
Coloured Glass - Food and Other Products	1,129	258	871	22.82%
Total	**232,784**	**109,386**	**123,398**	**46.99%**

Table 5.4 displays the capture rate for organic materials for which organic programs are in place, excluding unaudited materials. The overall capture rate for all audited organic materials is 63.62%. Compostable Certified Bags had the highest capture rate with 95.81%, followed by Unavoidable food waste (78.88%), and Soiled Paper (65.43%). Yard Waste and Tissues and napkins had the lowest capture rate (0.00%) as all the audited material was disposed, however this does not take into account other diversion methods for yard waste. Other Acceptable Organics (12.88%), Compostable Containers (23.63%), and Paper Towels (31.68%) are categories with the most room for improvement for diversion.

Table 5.4 Estimated Capture Rate of Organics Excluding Unaudited Material

Material Category	Generated (kg/yr)	Diverted (kg/yr)	Disposed (kg/yr)	Capture Rate
Avoidable Food Waste	181,651	97,424	84,228	53.63%
Unavoidable Food Waste	335,461	264,598	70,863	78.88%
Yard Waste	85	0	85	0.00%
Compostable Certified Bags	1,382	1,324	58	95.81%
Other Acceptable Organics	2,777	358	2,419	12.88%
Compostable Containers	7,713	1,823	5,890	23.63%
Tissue/ Napkins	13,125	0	13,125	0.00%
Paper Towels	64,822	20,534	44,288	31.68%
Soiled Paper	5,537	3,623	1,915	65.43%
Total	**612,554**	**389,683**	**222,871**	**63.62%**

6.0 WASTE REDUCTION WORK PLAN

A waste reduction work plan is a step-by-step process for reducing the amount of waste material, based on the 3Rs' hierarchy of 'REDUCTION, REUSE and RECYCLING'. A waste reduction work plan is required under O.Reg 102/94. While this approach can be applied to all aspects of UOG's operations, it is important to emphasize that no single 3Rs option will achieve a significant reduction in the amount of waste generated. Rather, it is a cumulative effect of all three initiatives that will result in overall waste reduction.

6.1 General Initiatives

Reduction is the highest priority of the 3Rs' hierarchy. When you eliminate or reduce a waste stream you conserve raw materials, reduce energy and labour and disposal costs, which translate into lower operating costs. The amount of waste material generated from the manufacturing process can be decreased by ensuring equipment is maintained and operated properly.

Reuse is the second priority of waste reduction followed by recycling. Reuse refers to the use of a product in its original form for its original or a different purpose. Recycling is the process of forming new materials from used ones. There are obvious recycling options for materials such as metals, paper, cardboard, and plastics. Efforts should be continued in searching for recycling markets for the various materials with recycling potential as highlighted in the waste reduction work plan to further reduce waste sent for disposal.

Through a waste reduction work plan, UOG's operating costs could be reduced through reduced tonnage of waste sent for disposal, reduced number of pickups for disposal and reduced use of materials. There is also the possibility of increased revenues through the sale of larger volumes of recycled materials through increased diversion.

The following sections describe a waste reduction work plan that is tailored to UOG's waste generation profile.

6.1.1 Environmental Purchasing Policies

An important component of any waste reduction work plan is the formulation of environmental purchasing policies that favor 'environmentally sound' products. Such products can be defined as having minimal or reduced negative effect on the environment and would include any product that contains post-consumer recycled content, or is in turn, recyclable.

The purpose of an environmental purchasing policy is to support the purchase of recycled and environmentally preferred products to minimize waste disposal rates. Environmental purchasing policies can also play an important role in waste reduction by giving preference to reusable products. If developed, the policy would outline the purchase of products containing a certain percentage of recycled content.

Consider the following purchasing policies that are environmentally responsible:

- Purchase materials with recycled content.
- Consider the disposal options and recycling potential of all materials before purchasing.
- Adopt waste prevention, recycling, and use of recycled materials as a priority.
- Ensure that all materials are packaged minimally – shipped, if possible, in returnable containers from your suppliers.
- Contact suppliers to find out whether they offer an environmentally friendly line of products. If not, encourage them to do so, or switch to a supplier who does.
- Contractors and vendors should be encouraged to provide products and services which are produced from recycled materials, can be recycled or re-used, reduce waste and/or conserve natural resources.

The following resources can be used to find suppliers of products that are environmentally friendly and/or manufactured with recycled content:

- Green Seal Certification: http://www.greenseal.org/

Purchasing policies should reflect measurable goals and objectives. The purchasing policy should also address the roles and responsibilities of suppliers. For example, it may be appropriate to require that supply contracts include provisions for suppliers to take back excess materials.

6.1.2 Education and Promotion

UOG should continue its training program, making changes to it as the diversion program changes. The program is used to educate and promote the waste reduction work plan and to generate participation. Employee commitment is vital to achieving reduction goals. Continue to facilitate such involvement, promote the success of your work plan and the financial, environmental, and public relations benefits to staff on a regular basis. UOG can adopt the following methods (if not already done so) and/or investigate these further to be used as a tool to create more student and staff awareness about your waste reduction work plan strategies.

In general, students and staff need to be:

Made aware of the program:

- Post or send a notice to students and staff, signed or endorsed by senior management explaining the waste reduction program and procedures and highlighting the benefits of the program;
- Establish realistic and measurable waste reduction goals, such as reducing overall waste generation, increasing recycling rates and minimizing landfill disposal with target dates;
- Educate new students and staff about environmental initiatives by including a written summary of UOG's environmental policies and programs in an orientation package;
- Direct all students and staff (new and existing) to consider waste minimization as part of their job performance; and,
- Keep students and staff informed of new waste management procedures.

Informed on waste issues and opportunities for improvement:

- Set up a suggestion box for new 3Rs ideas, give credit to initiators of successful ideas; and,
- Highlight the positive environmental effects of employee waste reduction efforts.

Instructed on how they can participate:

- Prepare waste reduction documents that detail concrete waste reduction, reuse and recycling actions, guidelines and requirements;
- Conduct periodic information sessions about the waste reduction work plan to increase awareness and participation; and,
- Provide visual signs on the recycling containers of the materials accepted and materials to be avoided.

It is important to seek input and feedback from stakeholders to ensure their support and participation in waste reduction efforts.

6.1.3 An Achievable Waste Reduction Work Plan

The waste reduction work plan is designed to improve waste minimization at the facility by setting attainable goals for the most significant waste categories. Section 5.1.4 outlines several action statements that are recommended to assist in the diversion of waste from disposal. Appendix E summarizes the recommended actions to divert priority items from the waste stream. The material category, weight of waste, proposed action to divert, as well as reduction, reuse and recycling programs, start date and end date are listed in Appendix E as well. It should be noted that individuals from the facility should be assigned the responsibility for implementing and monitoring each action item. For UOG, the Facilities Manager has been assigned the task.

6.1.4 Action Statements

1. Increase Capture Rate for Blue Box Materials

There is room for improvement with the capture of recyclable blue box materials such as OCC and mixed recyclable materials in most of the U of G buildings.

Throughout the collection of garbage and recyclable materials, it seems that a large amount of recycling bags are being disposed of in the garbage stream. Recycling bags in the facility are blue whereas the organics and garbage bags are clear. The previous year's audit had AET separate the labelled bags once delivered, for 2025 campus haulers were able to collect the streams separately allowing for accurate auditing of UoG disposal practices.

Figure 6.1 Recycling bin placed behind garbage bin

Corrugated Cardboard in the Mountain building has a high amount of OCC being disposed of in the garbage stream. There are 26,729 kg annually being disposed of in the garbage stream, that is 44.12% of the Mountain garbage stream. The current amount of total recycling this area produced is estimated at only 1,137 kg/yr. There is room for improvement through adding additional diversion bins to be more accessible or ensuring that recycled material is being diverted properly.

The placement of bins should also be taken into account. During the site tour it was noted that the recycling dumpster at the Library is placed in a manner that makes it impossible for staff to reach and dump recycling materials in (Figure 6.1). This led to the majority of recyclable materials at the library being disposed of. Additionally, during the audit it was observed that waste was delivered from the same loader or dumpster which included both garbage and recycling waste. This could mean that waste is not being separated correctly at the haulage stage (i.e. when it is placed into a dumpster for collection), and recyclables could be disposed of with garbage. It is important to have separate dumpsters which are clearly labelled that staff can access to divert and dispose of materials accordingly.

Figure 6.2 Recycling bin placed behind garbage bin

Figure 6.3 Recyclable material found in Library dumpster

Figure 6.4 Disposed #1 PET Bottles in Garbage Stream

Figure 6.5 Disposed Corrugated Cardboard in Garbage Stream

Figure 6.6 Disposed Steel Containers in the Garbage Stream

Figure 6.7 Disposed Recyclable Mixed Paper Packaging in the Garbage Stream

It is recommended that UOG continues to educate students and staff on the acceptance criteria within the campus-wide recycling program. Displaying large, clearly visible signs on, or above, the garbage/recycling bins reminding employees of what material belongs in each bin will also help serve as reminder of the acceptance criteria. If required, developing signage relative to the types of waste generated within each specific waste zone may aid in increasing capture rates. In addition, promoting the use of reusable plastics by staff and students can ultimately help in minimizing the waste generated and disposed of on campus.

A goal of 65% capture has been set for Mixed Recyclables and 75% for Corrugated Cardboard.

2. Increase Capture Rate for Organic Materials

Approximately 1,134,155 kg of Organic Materials is generated annually at UOG. Of that total, 549,921 kg is diverted, and 584,234 kg is disposed of annually at UOG. This represents approximately 42.16% of the overall disposed waste annually. The waste zones contributing to the most disposed Organic Materials are the University Centre, Mills Hall, and East Tower.

Additional diversion opportunities for materials could be implemented if an organics program expanded its list of acceptable materials. Materials such as soiled Paper Cups, Moulded Pulp, and Kraft Paper could be diverted through

the organics program depending on the acceptance criteria at the composting facility. In addition, signs could be implemented in residences to let students know of the green bins outside to dispose of their organic waste.

A source separated organics program requires commitment from both management and employees yet has great diversion potential.

A goal of 35% capture has been set for Avoidable Food Waste, and a goal of 65% has been set for Unavoidable Food Waste.

3. General

Whenever possible, incorporate reusable/returnable containers with closed-loop supplier and customer relationships. Investigate vendors who offer products containing materials with recycled content. Utilizing materials with recycled content encourages and sustains the growth and development of recycling end-markets.

Continued implementation of the training program for all UOG staff which provides details on the waste management program and focuses on the need for acceptance and participation is integral to UOG's commitment to waste reduction. Consistent communication of ideas and the need for employee participation at all levels of the facility is vital to the success of the waste reduction work plan. In order to increase waste diversion further, staff should be made aware of the amount of material already diverted; the diversion rate could be increased. A focus on education and communication in the areas with the greatest potential for improvement can help to increase diversion rates. Training programs should highlight the results of this waste audit, the waste reduction work plan and the current waste management practices/programs in place.

The continued strategic placement of recycling, reusing, and garbage receptacles is also very important. Having receptacles grouped together where the types of waste are generated will help to capture materials in the proper receptacle. With continued use of properly labeled signage displaying pictures of real life items generated around the facility (or by specific waste zone), UOG may be able to increase the capture of divertible materials being disposed annually. All waste materials whether reused, recycled or disposed should be tracked. Keeping track of waste reduction actions on a monthly basis will be helpful in tracking the results of the waste reduction work plan efforts. This practice will assist in providing accurate diversion weights for future waste audit studies. Consider developing a comprehensive waste information manual to track all information pertaining to waste management at the facility. This would include information such as: tracking waste and recycling generation rates and costs, waste reduction actions and their ongoing results, contact information for haulers and suggestions for waste reduction initiatives.

6.1.5 Implementing the Waste Reduction Work Plan

Increased diversion rates are possible by implementing the waste reduction work plan through an Environmental Coordinator (with assistance from an environmental committee). If possible, the committee should be made up of members from management and employee representatives meeting on a quarterly basis to discuss progress. The so-called "3Rs habit" is easily developed, however, without continual promotion and enforcement, the habit can disappear.

The environmental committee could monitor the waste collection stations regularly and respond to any problems with contaminants or recyclable materials found in the waste stream promptly. All aspects of the waste reduction work plan should be monitored on a continual basis, particularly during the early stages. It is important that responsibilities be assigned for the implementation of the waste reduction actions. Waste reduction goals with

timelines should be posted and communicated to all staff. Ultimately, the success of the waste reduction work plan is a direct result of commitment and level of participation from all staff at UOG. Staff should be encouraged to provide suggestions for improving the program.

The waste audit, including the waste audit summary sheet and the waste reduction work plan summary sheet together with this report should be displayed and made available for all employees in order to communicate to staff the types and amounts of waste generated on their floor and to encourage participation.

The timeline for this waste reduction work plan is from **January 1st to December 31st of 2026.** This work plan sets out the framework to meet a goal of 69% waste diversion.

In 2025, it was estimated that the UOG campus generated 2,300 tonnes of waste (disposed, recycled, and composted). Of that, an estimated 914 tonnes was diverted through re-use, recycling, organics and 1,386 tonnes sent to landfill. Based on this data, the UOG campus has a waste diversion rate of 36.09%.

Based on this audit, it is estimated that approximately 39.87% of waste destined for landfill are potentially divertible through existing programs. Of this, approximately 14.47% are recyclable and 25.40% are compostable organics.

6.2 Recommendations

To facilitate continuous improvement it is **recommended** that UOG campus set a goal and engage in a process to:

- Increase waste diversion rate to 69% by December 31st, 2026, from 2023 diversion rate of 50.22%

To help develop a more accurate estimate of waste diversion it is **recommended** that the tracking of waste and recycling weights (i.e. garbage, printed paper and packaging, cardboard etc.) is continued. This could include using monthly reporting from waste haulers and density estimates from dumpsters to estimate annual tonnage for the various waste diversion programs.

It is **recommended** that UOG staff document all recycling activities (i.e. number and type of carts emptied, weights of mixed container bin etc.) to improve the accuracy of future waste diversion rate calculations.

It is **recommended** that UOG continue to replace individual garbage and recycling cans in offices to centralized waste stations at all UOG's locations. UOG has started this process and can continue it across the rest of the campuses.

In general, it is **recommended** that UOG prepare and update communications and education material bi-annually (i.e. for Earth Week and Waste Reduction Week). This should include information on reduction, re-use and recycling programs, successes, missed opportunities and areas for improvement. Refined communications and education material could include posters, printed materials and displays that report on progress to date and provide a call to action for students and employees on UOG's diversion goal and how they can best participate.

Consider implementing signs in residences to make students aware of the organics bins located outside of the buildings. These signs should include where the organics bins are located and what is currently accepted in the organics program.

According to Ontario Regulation 102/94 the waste reduction work plan should have regard to:

- Reduction as the first objective;
- Re-use as the next objective; and

- Recycling as the final objective.

To facilitate continuous improvement it is **recommended** that UOG undertake the following efforts to reduce, re-use and recycle waste. Also, UOG should stay informed about emerging trends and best practices in waste reduction and sustainability.

6.3 Reduction Initiatives

The amount of paper used could be reduced through ensuring efficient use of paper. Students and staff will be encouraged to use both sides of paper when printing and photocopying documents. Computers for permanent office staff should have the default print setting to 'print on both sides.'

6.4 Re-Use Initiatives

It is **recommended** that UOG investigate forging links with community organizations such as Habitat for Humanity (building materials) and Goodwill Industries (furniture, other items) to facilitate additional re-use of waste.

6.5 Recycling Initiatives

It is **recommended** that UOG strengthen its recycling programs.

There was a considerable amount of disposed divertible material (39.87%) from the overall waste generation profile. It is important to focus on capturing all divertible materials during regular operations.

For instance, 1.47% of the waste stream consisted of #1 PET Bottles and Jars that can be easily recycled which equates to 20,047 kg/yr. Another 2.32% of the waste stream consisted of #5 Other PP Containers. This equates to 31,739 kg/yr.

In addition, 8.53% of the waste stream consists of Corrugated Cardboard that can be easily recycled. This equates to 116,483 kg/yr. An additional 2.96% is Office Paper at 40,422 kg/yr.

Organic material made up 42.19% of the garbage stream in the 2025 audit. There are diversion opportunities for much of this waste. It is **recommended** that consideration be given to expanding the placement of organics bins around the university and updating signage.

Improved communications and education materials (e.g. posters etc.) described above will help better advertise and educate students and staff of available programs and how best to participate. Additional bins to divert organic waste could be set out and the organics diversion programs could be expanded to residences.

6.6 Implementation Plan

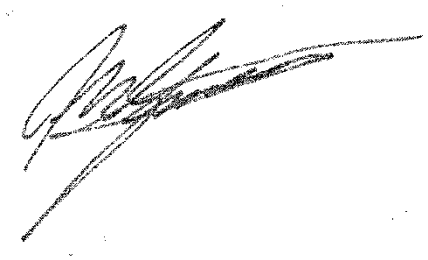
The work includes UOG staff meeting with relevant staff to update the plan to reduce, re-use and recycle waste and to update communications and education material by **December 31st, 2026.** This should include a summary of waste audit results.

A summary of these waste audit results, and waste reduction work plan will be posted for staff to see by **August 1st, 2026**.

The results of the waste audit are summarized in the signed Ministry of the Environment Waste Form Report of a Waste Audit (Appendix D). UOG has indicated that they will work to address the recommendations set out in this

Waste Reduction Work Plan and has signed the Ministry of Environment Waste Reduction Work Plan form in Appendix E indicating same.

Report Prepared By:



Mackenzie Johnston, BSC (Honors)
Waste Sector Team Lead

Report Reviewed By:

Ross Littlejohn, B.A, Cert. Sustain. BUS. MAN., EP(Waste), LEED GA
Sr. Project Manager

Disclaimer

AET Group Inc. makes no warranty and assumes no liability for the information contained in this report outlining the waste audit results. These results reflect measurements made over 72-hours as described in the methodology. As such, waste generation measurements should be considered snapshots and may not reflect accurately conditions across the University of Guelph over time. These reported generation and diversion rates more accurately reflect the quantity of each material generated over 24-hours and have been extrapolated to calculate annual rates based on total operating days as outlined in the calculations. In addition, some diverted material data provided by the University of Guelph is un-audited and AET assumes no responsibility for any inaccuracy in this data.

APPENDIX A

AUDITED RESULTS

University Of Guelph
Waste Audit
Audited Waste Sort Results - 2025

Number of Students & Staff: 33,226
Hours of Sample Generation: 24
Days of Operation Per Week: 5
Weeks of Operation Per Year: 50

Waste Stream: Garbage — Net Weight (kg)

Material Category	Acceptable Recyclable=R, Non-Recyclable=W, Acceptable Organics=O	Library	East Tower	Mackinnon	Bullring	University Center	Creelman Hall	Arena	Mills Hall	Rozanski Hall	Childcare	Johnston	SSC	Thornborough	Mountain
1. PAPER															
1 Newspapers - Daily and weekly	R	0.00	0.00	0.00	0.00	2.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Magazines and Catalogues	R	0.00	0.00	0.00	0.00	1.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.35	0.00
3 Shredded Paper	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4 Office Paper	R	36.74	5.32	1.84	2.88	10.51	0.08	0.01	0.09	0.36	0.22	0.06	1.46	2.13	0.17
5 Gable Top Containers	R	0.00	0.00	3.33	0.00	2.26	0.93	0.00	0.00	0.00	0.00	0.24	0.00	0.00	1.69
6 Aseptic Containers	R	0.46	1.62	0.11	0.00	0.40	0.00	0.00	0.16	0.02	0.00	0.47	0.00	0.02	0.42
7 Polycoat Beverage Cups (Coffee cups)	W	25.10	0.93	8.39	1.09	5.66	0.34	0.22	0.81	0.80	0.00	1.12	0.21	0.44	0.93
8 Spiral Wound Containers	W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9 Ice Cream Containers and Other Bleached Long Polycoat Fibre	W	0.23	1.16	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	1.06	0.00	0.00	0.00
10 Paper Laminate Packaging	W	6.16	6.48	6.44	3.48	10.19	10.45	0.10	0.78	0.70	1.95	1.83	0.83	0.41	3.89
11 Corrugated Cardboard	R	30.81	1.85	3.10	0.50	20.95	0.25	1.20	1.09	0.18	0.67	4.49	0.21	0.66	106.92
12 Boxboard/Cores/Molded Pulp	R	0.68	15.04	0.34	0.99	8.25	0.00	0.06	1.50	0.25	0.00	4.67	0.21	0.19	3.05
Total Recyclable Paper	TR	68.69	23.83	8.74	4.37	46.66	1.27	1.27	2.84	0.81	0.89	9.92	1.88	4.35	112.25
Total Non-Divertible Paper	TND	31.49	8.56	14.83	4.57	15.85	10.78	0.32	1.75	1.50	1.95	4.02	1.04	0.85	4.82
Total Acceptable Compostable Paper	TAO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Paper		100.18	32.39	23.56	8.94	62.51	12.06	1.59	4.58	2.31	2.84	13.94	2.92	5.20	117.07
2. PLASTICS															
1 #1 PET Bottles and Jars -	R	3.42	6.94	2.07	0.80	4.45	0.93	0.10	2.65	0.08	0.00	2.36	0.00	0.11	5.84
2 #1 PET Thermoform -	R	1.83	5.09	1.03	0.00	4.37	0.51	0.02	0.62	0.17	0.00	2.07	0.00	0.17	8.04
3 #2 HDPE Bottles and Jugs	R	0.00	1.16	0.00	0.00	1.70	0.00	0.14	0.06	0.15	0.67	0.18	2.50	0.00	3.21
4 Flexible Film Plastic – LDPE & HDPE	W	0.00	3.47	0.46	0.94	11.40	5.77	3.43	0.03	0.00	0.50	0.53	0.21	0.01	0.34
5 LDPE/HDPE Film - Products (non-packaging)	W	40.39	11.80	10.34	5.47	22.97	7.98	0.45	4.58	1.10	0.83	6.20	7.30	0.89	3.98
6 #5 Other PP Containers	R	23.51	3.70	5.63	0.10	2.91	6.20	0.02	1.56	0.53	0.00	1.42	0.42	0.34	0.93
7 #6 PS - Expanded Polystyrene	W	0.00	0.00	0.00	0.00	1.62	0.00	0.00	0.00	0.00	0.00	0.24	1.04	0.00	0.00
8 #6 PS - Non-expanded Polystyrene - Non-beverage	R	6.39	0.23	1.95	0.15	0.32	0.00	0.07	0.06	0.13	0.00	0.00	0.00	0.10	0.93
9 Plastic Laminates and Other Film Packaging	W	3.65	11.11	2.53	0.89	30.17	8.83	0.09	0.53	0.05	0.06	1.00	2.92	0.08	0.93
10 Other Rigid Plastic Packaging - Non-Beverage	W	0.23	7.64	0.00	0.05	1.37	1.10	0.05	0.50	0.01	0.00	0.18	4.17	0.00	0.00
11 Other Plastics - (non-packaging/durable)	W	1.83	0.23	0.11	0.75	4.21	0.08	0.06	0.69	0.02	0.00	0.06	20.44	8.00	3.72
Total Recyclable Plastics	TR	35.14	17.12	10.69	1.04	13.75	7.64	0.35	4.96	1.06	0.67	6.02	2.92	0.72	18.95
Total Non Recyclable Plastics	TND	46.10	34.24	13.45	8.10	71.73	23.78	4.08	6.33	1.18	1.39	8.21	36.09	8.98	8.97
Total Plastics		81.24	51.37	24.14	9.14	85.48	31.42	4.43	11.29	2.24	2.06	14.23	39.01	9.70	27.91
3. METALS															
1 Aluminum- Food Containers	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Aluminum Beverage Containers –	R	1.83	3.01	0.46	2.39	1.37	0.00	0.06	1.06	0.09	0.00	1.83	0.00	0.16	0.25
3 Aluminum Foil & Foil Trays	R	0.00	0.46	0.11	4.27	0.97	0.17	0.00	0.06	0.00	0.00	0.06	0.42	0.01	0.08
4 Aluminum Aerosols	R	0.00	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 Other Aluminum (non-packaging)	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6 Steel Food Cans	R	0.00	0.00	0.00	0.00	23.05	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
7 Steel Aerosol Container	R	0.00	0.00	0.00	0.00	0.00	6.45	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.00
8 Other Steel (non-packaging)	R	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.12	0.00	0.00	0.18	15.44	0.02	0.25
Total Recyclable Metals	TR	1.83	4.63	0.57	6.66	25.80	11.12	0.06	1.25	0.09	0.00	2.72	15.85	0.19	1.44
Total Non Recyclable Metals	TND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Metals		1.83	4.63	0.57	6.66	25.80	11.12	0.06	1.25	0.09	0.00	2.72	15.85	0.19	1.44
4. GLASS															
1 Clear Glass - Food and Other Products	R	0.00	0.00	2.76	0.00	5.74	0.00	0.00	2.06	0.00	0.00	1.42	0.00	0.00	0.42
2 Coloured Glass - Food and Other Products	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.48	0.00	0.00	0.00
3 Other Glass - Non Blue Box	W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.58	0.00
Total Recyclable Glass	TR	0.00	0.00	2.76	0.00	5.74	0.00	0.00	2.06	0.00	0.00	4.90	0.00	0.00	0.42
Total Non Recyclable Glass	TND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.58	0.00
Total Glass		0.00	0.00	2.76	0.00	5.74	0.00	0.00	2.06	0.00	0.00	4.90	0.83	0.58	0.42
5. ORGANICS															
1 Avoidable Food Waste	O	36.51	59.00	6.78	3.28	74.89	33.03	0.56	15.99	1.51	0.33	10.75	0.00	1.36	66.23
2 Unavoidable Food Waste	O	10.04	19.44	8.62	3.28	175.25	18.68	0.22	0.41	0.27	0.00	2.13	39.64	0.27	3.81
3 Yard Waste	O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4 Compostable Certified Bags	O	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 Other Acceptable Organics	O	2.28	0.93	1.61	0.05	1.21	0.00	0.00	0.09	0.10	0.00	0.47	0.00	0.01	1.35
6 Compostable Containers	O	10.04	2.55	4.14	0.00	0.00	0.00	0.00	0.44	0.02	0.00	0.24	0.00	0.18	2.54
7 Tissue/ Napkins	O	0.00	0.69	0.00	0.00	27.50	0.25	0.00	1.65	0.38	0.00	0.94	0.00	0.01	20.81
8 Paper Towels	O	14.83	18.28	15.98	11.03	77.96	7.64	0.08	3.80	1.99	10.40	8.27	4.17	0.48	0.00
Total Acceptable Organics	TAO	73.71	101.11	37.13	17.64	356.81	59.61	0.86	22.38	4.27	10.74	22.80	43.81	2.31	94.74
Total Non-Acceptable Organics	TND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Organics		73.71	101.11	37.13	17.64	356.81	59.61	0.86	22.38	4.27	10.74	22.80	43.81	2.31	94.74
6. OTHER MATERIALS															
1 Textiles	W	0.46	5.09	0.00	0.00	1.62	0.00	1.69	1.47	0.00	6.84	1.12	0.00	0.00	0.00
2 Other Waste	W	17.12	13.19	0.00	7.45	19.73	2.63	1.13	0.19	3.02	20.25	8.80	197.34	0.79	0.00
3 Soiled Paper	O	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	5.56	0.00	0.00	0.14	0.76
Total Acceptable Compostable Other Materials	TAO	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	5.56	0.00	0.00	0.14	0.76
Total Recyclable Other Materials	TR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Non-Divertible Other Materials	TND	17.57	18.28	0.00	7.45	21.35	2.63	2.82	1.65	3.02	27.09	9.92	197.34	0.79	0.00
Total Other Materials		17.57	18.28	0.00	7.45	21.35	2.63	2.89	1.65	3.02	32.65	9.92	197.34	0.93	0.76
Total Recyclable Materials	TR	105.66	45.58	22.76	12.07	91.95	20.04	1.68	11.10	1.96	1.56	23.57	20.65	5.26	133.05
Total Acceptable Organic Materials	TAO	73.71	101.11	37.13	17.64	356.81	59.61	0.93	22.38	4.27	16.30	22.80	43.81	2.45	95.50
Total Non-Divertible Materials	TND	95.16	61.08	28.28	20.12	108.93	37.19	7.22	9.73	5.70	30.43	22.15	235.31	11.20	13.79
Total All Materials		274.53	207.78	88.16	49.84	557.69	116.85	9.83	43.21	11.93	48.28	68.51	299.77	18.91	242.34
Total Daily Average Weight (1 day)		274.53	207.78	88.16	49.84	557.69	116.85	9.83	43.21	11.93	48.28	68.51	299.77	18.91	242.34
Total Annual Weight (5 days/wk, 50 wks/yr)		68,632.50	51,945.00	22,040.00	12,460.00	139,422.50	29,212.50	2,457.50	10,802.50	2,982.50	12,070.00	17,127.50	74,942.50	4,727.50	60,585.00

Waste Stream: Recycling — Net Weight (kg)

Material Category	Library	East Tower	Mackinnon	Bullring	University Center	Creelman	Arena	Mills Hall	Rozanski Hall	Childcare	Johnston	SSC	Thornborough	Mountain
1. PAPER														
1 Newspapers - Daily and weekly	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.00
2 Magazines and Catalogues	0.00	0.00	0.18	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 Shredded Paper	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4 Office Paper	0.31	2.43	4.58	0.05	1.51	0.26	0.30	0.03	0.05	1.59	0.16	13.83	0.47	0.00
5 Gable Top Containers	0.00	1.14	0.18	0.03	2.98	0.00	0.03	0.05	0.07	0.42	0.00	0.29	0.00	0.00
6 Aseptic Containers	0.00	1.43	0.12	0.04	3.13	0.00	0.00	0.01	0.03	0.00	0.04	0.05	0.05	0.00
7 Polycoat Beverage Cups (Coffee cups)	0.15	0.86	0.24	0.05	0.34	0.12	0.21	0.09	0.85	0.00	0.18	1.08	0.25	0.02
8 Spiral Wound Containers	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.04	0.07	0.00	0.14	0.00	0.00	0.00
9 Ice Cream Containers and Other Bleached Long Polycoat Fibre	0.00	1.00	0.00	0.00	0.00	0.12	0.00	0.06	0.00	0.00	0.00	0.46	0.00	0.00
10 Paper Laminate Packaging	0.16	0.00	0.26	0.01	0.23	0.12	0.03	0.01	0.05	0.00	0.16	0.39	0.06	0.07
11 Corrugated Cardboard	10.06	16.58	1.41	18.44	48.67	86.31	0.08	0.93	0.52	6.09	7.23	43.67	13.98	2.82
12 Boxboard/Cores/Molded Pulp	0.12	17.44	2.06	0.25	1.70	2.80	0.00	0.20	0.08	0.14	1.84	2.15	1.50	0.12
Total Recyclable Paper	10.74	39.02	8.52	18.81	57.98	89.37	0.46	1.22	0.75	8.25	9.81	59.99	16.00	2.94
Total Non-Divertible Paper	0.31	1.86	0.50	0.16	0.57	0.35	0.24	0.20	0.97	0.00	0.48	1.93	0.31	0.09
Total Acceptable Compostable Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Paper	11.05	40.88	9.02	18.97	58.55	89.71	0.70	1.42	1.72	8.25	10.28	61.92	16.31	3.03
2. PLASTICS														
1 #1 PET Bottles and Jars -	0.24	10.58	0.91	0.19	1.68	3.78	0.83	0.93	0.81	0.00	0.83	1.35	0.61	0.03
2 #1 PET Thermoform -	0.08	7.00	0.06	0.01	3.27	2.63	0.13	0.12	0.14	0.00	0.38	1.67	0.18	0.15
3 #2 HDPE Bottles and Jugs	0.00	3.86	0.06	0.43	5.68	3.49	0.03	0.24	0.02	0.00	0.00	0.23	0.00	0.00
4 Flexible Film Plastic – LDPE & HDPE	0.03	0.86	0.24	0.00	0.34	0.03	0.00	0.16	0.00	0.00	0.12	0.00	0.04	0.00
5 LDPE/HDPE Film - Products (non-packaging)	0.20	1.43	0.71	0.14	1.93	0.00	0.28	0.47	1.08	0.11	0.79	1.34	0.01	0.04
6 #5 Other PP Containers	0.82	10.43	0.44	0.78	2.56	0.55	0.55	0.16	1.16	0.00	0.44	2.92	0.38	0.01
7 #6 PS - Expanded Polystyrene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8 #6 PS - Non-expanded Polystyrene - Non-beverage	0.01	0.86	0.06	0.05	0.03	0.03	0.04	0.00	0.10	0.00	0.06	0.14	0.19	0.00
9 Plastic Laminates and Other Film Packaging	0.01	1.00	0.15	0.00	0.82	0.87	0.04	0.04	0.18	0.00	0.28	0.26	0.04	0.04
10 Other Rigid Plastic Packaging - Non-Beverage	0.00	0.29	0.03	0.00	1.70	1.99	0.00	0.05	0.01	0.00	0.12	0.51	0.05	0.00
11 Other Plastics - (non-packaging/durable)	0.01	2.14	0.03	0.01	0.37	0.00	0.02	0.01	0.04	0.04	0.02	0.02	0.13	0.00
Total Recyclable Plastics	1.15	32.73	1.53	1.46	13.21	10.47	1.58	1.45	2.23	0.00	1.70	6.31	1.36	0.19
Total Non Recyclable Plastics	0.25	5.72	1.15	0.15	5.17	2.89	0.34	0.73	1.31	0.14	1.33	2.13	0.27	0.08
Total Plastics	1.40	38.45	2.67	1.61	18.38	13.36	1.92	2.18	3.54	0.14	3.03	8.44	1.63	0.27
3. METALS														
1 Aluminum- Food Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Aluminum Beverage Containers –	0.09	1.57	0.47	0.26	0.06	0.55	0.32	0.28	0.74	0.07	0.30	0.37	0.48	0.00
3 Aluminum Foil & Foil Trays	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
4 Aluminum Aerosols	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 Other Aluminum (non-packaging)	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6 Steel Food Cans	0.00	0.43	0.00	0.00	12.33	5.92	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00
7 Steel Aerosol Container	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8 Other Steel (non-packaging)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.04	0.00	0.00	0.00	0.00
Total Recyclable Metals	0.09	2.00	0.47	0.26	12.44	6.49	0.32	0.31	0.75	0.11	0.48	0.37	0.48	0.00
Total Non Recyclable Metals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Metals	0.09	2.00	0.47	0.26	12.44	6.49	0.32	0.31	0.75	0.11	0.48	0.37	0.48	0.00
4. GLASS														
1 Clear Glass - Food and Other Products	0.00	10.29	0.85	0.30	0.00	0.66	0.00	0.42	0.00	0.00	0.18	0.00	0.00	0.00
2 Coloured Glass - Food and Other Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.00	0.00
3 Other Glass - Non Blue Box	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Recyclable Glass	0.00	10.29	0.85	0.30	0.00	0.66	0.00	0.42	0.00	0.00	0.18	1.03	0.00	0.00
Total Non Recyclable Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Glass	0.00	10.29	0.85	0.30	0.00	0.66	0.00	0.42	0.00	0.00	0.18	1.03	0.00	0.00
5. ORGANICS														
1 Avoidable Food Waste	0.38	18.87	0.00	0.00	3.10	0.09	0.55	0.53	0.39	0.00	2.67	0.56	0.00	0.90
2 Unavoidable Food Waste	0.00	1.43	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00
3 Yard Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
4 Compostable Certified Bags	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 Other Acceptable Organics	0.05	0.71	0.06	0.00	0.06	0.06	0.03	0.06	0.09	0.00	0.06	0.39	0.01	0.00
6 Compostable Containers	0.03	2.14	0.18	0.16	0.54	0.17	0.12	0.07	0.02	0.00	0.00	0.17	0.00	0.00
7 Tissue/ Napkins	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.05	0.01	0.00
8 Paper Towels	0.04	0.86	0.03	0.00	0.82	0.17	0.08	0.00	0.00	0.25	0.30	0.08	0.07	0.00
Total Acceptable Organics	0.50	24.01	0.26	0.16	4.52	0.49	0.78	0.87	0.62	0.25	3.03	1.25	0.09	1.24
Total Non-Acceptable Organics	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Organics	0.50	24.01	0.26	0.16	4.52	0.49	0.78	0.87	0.62	0.25	3.03	1.25	0.09	1.24
6. OTHER MATERIALS														
1 Textiles	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.11	0.00	4.96	0.00	0.00	0.00	0.00
2 Other Waste	0.12	1.72	0.03	0.01	0.20	0.00	0.00	1.12	0.00	0.00	0.00	2.31	0.25	0.01
3 Soiled Paper	0.00	0.86	0.12	0.00	0.00	0.00	0.16	0.02	0.00	0.00	0.06	0.00	0.05	0.00
Total Acceptable Compostable Other Materials	0.00	0.86	0.12	0.00	0.00	0.00	0.16	0.02	0.00	0.00	0.06	0.00	0.05	0.00
Total Recyclable Other Materials	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Non-Divertible Other Materials	0.12	1.72	0.03	0.01	0.26	0.00	0.00	1.23	0.00	4.96	0.00	2.31	0.25	0.01
Total Other Materials	0.12	2.57	0.15	0.01	0.26	0.00	0.16	1.25	0.00	4.96	0.06	2.31	0.30	0.01
Total Recyclable Materials	11.98	84.05	11.37	20.83	83.64	107.00	2.36	3.40	3.73	8.35	12.17	67.70	17.84	3.13
Total Acceptable Organic Materials	0.50	24.87	0.38	0.16	4.52	0.49	0.94	0.89	0.62	0.25	3.09	1.25	0.14	1.24
Total Non-Divertible Materials	0.68	9.29	1.68	0.33	5.99	3.23	0.58	2.16	2.28	5.10	1.80	6.37	0.83	0.18
Total All Materials	13.16	118.21	13.43	21.32	94.15	110.72	3.88	6.45	6.63	13.70	17.06	75.31	18.81	4.55
Total Daily Average Weight (1 day)	13.16	118.21	13.43	21.32	94.15	110.72	3.88	6.45	6.63	13.70	17.06	75.31	18.81	4.55
Total Annual Weight (5 days/wk, 50 wks/yr)	3,290.00	29,552.50	3,357.50	5,330.00	23,537.50	27,680.00	970.00	1,612.50	1,657.50	3,425.00	4,265.00	18,827.50	4,702.50	1,137.50

Waste Stream: Organics — Net Weight (kg)

Material Category	Library	East Tower	Mackinnon	Bullring	University Centre	Creelman Hall	Arena	Childcare	SSC	Mountain
1. PAPER										
1 Newspapers - Daily and weekly	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
2 Magazines and Catalogues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 Shredded Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4 Office Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 Gable Top Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6 Aseptic Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7 Polycoat Beverage Cups (Coffee cups)	0.00	0.00	0.00	0.08	0.79	0.23	0.00	0.00	0.00	0.07
8 Spiral Wound Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9 Ice Cream Containers and Other Bleached Long Polycoat Fibre	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10 Paper Laminate Packaging	0.00	0.18	0.00	0.00	0.39	0.69	0.00	0.00	0.00	0.00
11 Corrugated Cardboard	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00
12 Boxboard/Cores/Molded Pulp	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Recyclable Paper	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.05	0.00
Total Non-Divertible Paper	0.00	0.18	0.00	0.08	1.18	0.91	0.00	0.00	0.00	0.07
Total Acceptable Compostable Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Paper	0.00	0.18	0.00	0.08	1.24	0.91	0.00	0.00	0.05	0.07
2. PLASTICS										
1 #1 PET Bottles and Jars -	0.00	0.00	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.00
2 #1 PET Thermoform -	0.00	0.00	0.00	0.00	0.07	0.23	0.00	0.00	0.00	0.00
3 #2 HDPE Bottles and Jugs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4 Flexible Film Plastic – LDPE & HDPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 LDPE/HDPE Film - Products (non-packaging)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6 #5 Other PP Containers	0.00	0.07	0.00	0.00	0.39	0.23	0.00	0.00	0.00	0.00
7 #6 PS - Expanded Polystyrene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8 #6 PS - Non-expanded Polystyrene - Non-beverage	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.02
9 Plastic Laminates and Other Film Packaging	0.00	0.00	0.00	0.00	0.07	0.23	0.00	0.00	0.00	0.02
10 Other Rigid Plastic Packaging - Non-Beverage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11 Other Plastics - (non-packaging/durable)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Recyclable Plastics	0.00	0.07	0.00	0.00	0.52	1.14	0.00	0.00	0.00	0.02
Total Non Recyclable Plastics	0.00	0.00	0.00	0.00	0.07	0.23	0.00	0.00	0.00	0.02
Total Plastics	0.00	0.07	0.00	0.00	0.59	1.37	0.00	0.00	0.00	0.04
3. METALS										
1 Aluminum- Food Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Aluminum Beverage Containers –	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 Aluminum Foil & Foil Trays	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4 Aluminum Aerosols	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 Other Aluminum (non-packaging)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6 Steel Food Cans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7 Steel Aerosol Container	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8 Other Steel (non-packaging)	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Recyclable Metals	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Non Recyclable Metals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Metals	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4. GLASS										
1 Clear Glass - Food and Other Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Coloured Glass - Food and Other Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 Other Glass - Non Blue Box	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Recyclable Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Non Recyclable Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. ORGANICS										
1 Avoidable Food Waste	0.00	9.05	0.08	6.57	56.46	173.70	0.00	55.01	0.00	88.82
2 Unavoidable Food Waste	236.04	3.43	25.01	19.01	172.27	133.24	118.44	17.75	24.16	309.03
3 Yard Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4 Compostable Certified Bags	0.26	0.48	0.00	0.15	1.31	2.74	0.00	0.00	0.36	0.00
5 Other Acceptable Organics	0.00	0.11	0.01	0.02	1.05	0.23	0.00	0.00	0.00	0.02
6 Compostable Containers	0.00	0.05	0.14	0.00	5.50	1.60	0.00	0.00	0.00	0.00
7 Tissue/ Napkins	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8 Paper Towels	0.00	0.18	0.00	0.28	5.63	68.79	0.00	7.07	0.00	0.18
Total Acceptable Organics	236.30	13.30	25.24	26.02	242.23	380.31	118.44	79.83	24.52	398.05
Total Non-Acceptable Organics	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Organics	236.30	13.30	25.24	26.02	242.23	380.31	118.44	79.83	24.52	398.05
6. OTHER MATERIALS										
1 Textiles	0.00	0.00	0.00	0.00	0.00	23.54	0.00	0.00	0.00	0.00
2 Other Waste	0.00	0.00	0.00	0.00	0.07	4.57	0.00	0.26	0.00	0.00
3 Soiled Paper	0.00	0.00	4.30	0.00	0.26	8.68	0.00	1.24	0.00	0.00
Total Acceptable Compostable Other Materials	0.00	0.00	4.30	0.00	0.26	8.68	0.00	1.24	0.00	0.00
Total Recyclable Other Materials	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Non-Divertible Other Materials	0.00	0.00	0.00	0.00	0.07	28.11	0.00	0.26	0.00	0.00
Total Other Materials	0.00	0.00	4.30	0.00	0.33	36.80	0.00	1.51	0.00	0.00
Total Recyclable Materials	0.00	0.09	0.00	0.00	0.59	1.14	0.00	0.00	0.05	0.02
Total Acceptable Organic Materials	236.30	13.30	29.54	26.02	242.49	388.99	118.44	81.08	24.52	398.05
Total Non-Divertible Materials	0.00	0.18	0.00	0.08	1.31	29.25	0.00	0.26	0.00	0.09
Total All Materials	236.30	13.57	29.54	26.10	244.39	419.39	118.44	81.34	24.57	398.16
Total Daily Average Weight (1 day)	236.30	13.57	29.54	26.10	244.39	419.39	118.44	81.34	24.57	398.16
Total Annual Weight (5 days/wk, 50 wks/yr)	59,075.00	3,392.50	7,385.00	6,525.00	61,097.50	104,847.50	29,610.00	20,335.00	6,142.50	99,540.00

Totals — Net Weight (kg)

Material Category	Total - 24-Hour Sample Disposed (kg) (Garbage)	Total - Daily Disposed (kg/day) (Garbage)	Total Annual Disposed (kg/yr) (Garbage)	Disposed Per Employee Per Year (kg/employee/yr) (Garbage)	Total - 24 Hour Organics Sample (kg) (Organics)	Total - Daily Organics (kg/day) (Organics)	Total Annual Organics (kg/yr) (Organics)	Organics Per Employee Per Year (kg/employee/yr) (Organics)	Total - 24 Hour Recycled Sample (kg) (Recycling)	Total - Daily Recycling (kg/day) (Recycling)	Total Annual Recycling (kg/yr) (Recycling)	Recycling Per Employee Per Year (kg/employee/yr) (Recycling)
1. PAPER												
1 Newspapers - Daily and weekly	2.67	2.67	667.19	0.02	0.05	0.05	12.50	0.00	0.53	0.53	133.75	0.00
2 Magazines and Catalogues	2.97	2.97	741.86	0.02	0.00	0.00	0.00	0.00	0.23	0.23	56.58	0.00
3 Shredded Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.25	62.50	0.00
4 Office Paper	61.89	61.89	15,471.64	0.47	0.00	0.00	0.00	0.00	25.57	25.57	6,392.89	0.19
5 Gable Top Containers	8.46	8.46	2,114.95	0.06	0.00	0.00	0.00	0.00	5.19	5.19	1,296.94	0.04
6 Aseptic Containers	3.69	3.69	921.67	0.03	0.00	0.00	0.00	0.00	4.89	4.89	1,222.33	0.04
7 Polycoat Beverage Cups (Coffee cups)	46.04	46.04	11,511.10	0.35	1.17	1.17	291.88	0.01	4.43	4.43	1,106.90	0.03
8 Spiral Wound Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.35	87.29	0.00
9 Ice Cream Containers and Other Bleached Long Polycoat Fibre	2.60	2.60	651.02	0.02	0.00	0.00	0.00	0.00	1.64	1.64	409.00	0.01
10 Paper Laminate Packaging	53.68	53.68	13,420.67	0.40	1.26	1.26	314.67	0.01	1.55	1.55	387.06	0.01
11 Corrugated Cardboard	172.87	172.87	43,218.12	1.30	0.07	0.07	16.38	0.00	256.79	256.79	64,197.89	1.93
12 Boxboard/Cores/Molded Pulp	35.23	35.23	8,806.96	0.27	0.00	0.00	0.00	0.00	30.40	30.40	7,601.14	0.23
Total Recyclable Paper	287.77	287.77	71,942.38	2.17	0.12	0.12	28.88	0.00	323.86	323.86	80,964.02	2.44
Total Non-Divertible Paper	102.33	102.33	25,582.79	0.77	2.43	2.43	606.54	0.02	7.96	7.96	1,990.25	0.06
Total Acceptable Compostable Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Paper	390.10	390.10	97,525.17	2.94	2.54	2.54	635.42	0.02	331.82	331.82	82,954.27	2.50
2. PLASTICS												
1 #1 PET Bottles and Jars -	29.75	29.75	7,437.35	0.22	0.69	0.69	171.41	0.01	22.77	22.77	5,691.30	0.17
2 #1 PET Thermoform -	23.91	23.91	5,978.35	0.18	0.29	0.29	73.51	0.00	15.81	15.81	3,953.68	0.12
3 #2 HDPE Bottles and Jugs	9.77	9.77	2,442.45	0.07	0.00	0.00	0.00	0.00	14.04	14.04	3,509.61	0.11
4 Flexible Film Plastic – LDPE & HDPE	27.10	27.10	6,775.58	0.20	0.00	0.00	0.00	0.00	1.81	1.81	452.85	0.01
5 LDPE/HDPE Film - Products (non-packaging)	124.29	124.29	31,072.18	0.94	0.00	0.00	0.00	0.00	8.52	8.52	2,130.86	0.06
6 #5 Other PP Containers	47.26	47.26	11,815.78	0.36	0.69	0.69	172.89	0.01	21.19	21.19	5,298.70	0.16
7 #6 PS - Expanded Polystyrene	2.90	2.90	724.18	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8 #6 PS - Non-expanded Polystyrene - Non-beverage	10.34	10.34	2,585.12	0.08	0.08	0.08	20.80	0.00	1.56	1.56	390.83	0.01
9 Plastic Laminates and Other Film Packaging	62.84	62.84	15,709.52	0.47	0.31	0.31	77.94	0.00	3.72	3.72	929.86	0.03
10 Other Rigid Plastic Packaging - Non-Beverage	15.30	15.30	3,825.10	0.12	0.00	0.00	0.00	0.00	4.75	4.75	1,187.44	0.04
11 Other Plastics - (non-packaging/durable)	40.20	40.20	10,049.48	0.30	0.00	0.00	0.00	0.00	2.84	2.84	710.14	0.02
Total Recyclable Plastics	121.04	121.04	30,259.04	0.91	1.75	1.75	438.62	0.01	75.38	75.38	18,844.13	0.57
Total Non Recyclable Plastics	272.62	272.62	68,156.03	2.05	0.31	0.31	77.94	0.00	21.64	21.64	5,411.14	0.16
Total Plastics	393.66	393.66	98,415.08	2.96	2.07	2.07	516.56	0.02	97.02	97.02	24,255.28	0.73
3. METALS												
1 Aluminum- Food Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Aluminum Beverage Containers –	12.51	12.51	3,126.99	0.09	0.00	0.00	0.00	0.00	5.56	5.56	1,389.82	0.04
3 Aluminum Foil & Foil Trays	6.62	6.62	1,656.16	0.05	0.00	0.00	0.00	0.00	0.04	0.04	9.71	0.00
4 Aluminum Aerosols	1.16	1.16	289.23	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 Other Aluminum (non-packaging)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06	14.20	0.00
6 Steel Food Cans	28.40	28.40	7,098.75	0.21	0.00	0.00	0.00	0.00	18.85	18.85	4,713.08	0.14
7 Steel Aerosol Container	7.10	7.10	1,775.90	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8 Other Steel (non-packaging)	16.42	16.42	4,104.25	0.12	0.02	0.02	5.00	0.00	0.07	0.07	16.35	0.00
Total Recyclable Metals	72.21	72.21	18,051.27	0.54	0.02	0.02	5.00	0.00	24.57	24.57	6,143.17	0.18
Total Non Recyclable Metals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Metals	72.21	72.21	18,051.27	0.54	0.02	0.02	5.00	0.00	24.57	24.57	6,143.17	0.18
4. GLASS												
1 Clear Glass - Food and Other Products	12.40	12.40	3,099.62	0.09	0.00	0.00	0.00	0.00	12.71	12.71	3,176.78	0.10
2 Coloured Glass - Food and Other Products	3.48	3.48	871.14	0.03	0.00	0.00	0.00	0.00	1.03	1.03	257.50	0.01
3 Other Glass - Non Blue Box	1.41	1.41	353.61	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Recyclable Glass	15.88	15.88	3,970.76	0.12	0.00	0.00	0.00	0.00	13.74	13.74	3,434.28	0.10
Total Non Recyclable Glass	1.41	1.41	353.61	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Glass	17.30	17.30	4,324.37	0.13	0.00	0.00	0.00	0.00	13.74	13.74	3,434.28	0.10
5. ORGANICS												
1 Avoidable Food Waste	310.23	310.23	77,558.52	2.33	389.69	389.69	97,423.62	2.93	28.04	28.04	7,009.00	0.21
2 Unavoidable Food Waste	282.04	282.04	70,510.40	2.12	1,058.39	1,058.39	264,598.18	7.96	1.55	1.55	387.35	0.01
3 Yard Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.34	85.00	0.00
4 Compostable Certified Bags	0.23	0.23	57.85	0.00	5.30	5.30	1,323.88	0.04	0.00	0.00	0.00	0.00
5 Other Acceptable Organics	8.11	8.11	2,027.23	0.06	1.43	1.43	357.68	0.01	1.58	1.58	394.36	0.01
6 Compostable Containers	20.13	20.13	5,033.59	0.15	7.29	7.29	1,823.02	0.05	3.61	3.61	901.64	0.03
7 Tissue/ Napkins	52.24	52.24	13,060.19	0.39	0.00	0.00	0.00	0.00	0.27	0.27	67.50	0.00
8 Paper Towels	174.92	174.92	43,729.75	1.32	82.14	82.14	20,534.03	0.62	2.70	2.70	674.76	0.02
Total Acceptable Organics	847.91	847.91	211,977.52	6.38	1,544.24	1,544.24	386,060.41	11.62	38.08	38.08	9,519.60	0.29
Total Non-Acceptable Organics	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Organics	847.91	847.91	211,977.52	6.38	1,544.24	1,544.24	386,060.41	11.62	38.08	38.08	9,519.60	0.29
6. OTHER MATERIALS												
1 Textiles	18.28	18.28	4,570.79	0.14	23.54	23.54	5,885.17	0.18	5.12	5.12	1,280.72	0.04
2 Other Waste	291.64	291.64	72,909.93	2.19	4.90	4.90	1,224.62	0.04	5.77	5.77	1,441.52	0.04
3 Soiled Paper	6.53	6.53	1,633.37	0.05	14.49	14.49	3,622.81	0.11	1.26	1.26	316.16	0.01
Total Acceptable Compostable Other Materials	6.53	6.53	1,633.37	0.05	14.49	14.49	3,622.81	0.11	1.26	1.26	316.16	0.01
Total Recyclable Other Materials	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Non-Divertible Other Materials	309.92	309.92	77,480.72	2.33	28.44	28.44	7,109.79	0.21	10.89	10.89	2,722.24	0.08
Total Other Materials	316.46	316.46	79,114.09	2.38	42.93	42.93	10,732.61	0.32	12.15	12.15	3,038.40	0.09
Total Recyclable Materials	496.89	496.89	124,223.45	3.74	1.89	1.89	472.50	0.01	437.54	437.54	109,385.60	3.29
Total Acceptable Organic Materials	854.44	854.44	213,610.89	6.43	1,558.73	1,558.73	389,683.23	11.73	39.34	39.34	9,835.76	0.30
Total Non-Divertible Materials	686.29	686.29	171,573.16	5.16	31.18	31.18	7,794.28	0.23	40.49	40.49	10,123.64	0.30
Total All Materials	2,037.63	2,037.63	509,407.50	15.33	1,591.80	1,591.80	397,950.00	11.98	517.38	517.38	129,345.00	3.89
		3.48	24.39%									
Total Daily Average Weight (1 day)			41.93%									
Total Annual Weight (5 days/wk, 50 wks/yr)			33.68%									

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APPENDIX B

UNAUDITED RESULTS

University Of Guelph Waste Audit Unaudited Material Weights - 2025		Number of Days of Reused Materials Data: 1 Number of Days of Recycled Materials Data: 1 Number of Days of Waste Materials Data: 1 Number of Days of Operation Per Year 250 Number of Students & Employees 33,226								
Sample Area:		Reused Materials	Recycled Materials	Waste Materials	Total - Yearly Reused (kg/yr)	Reused (kg/employee/yr)	Total - Yearly Recycled (kg/yr)	Recycled (kg/employee/yr)	Total - Yearly Disposed (kg/yr)	Disposed (kg/employee/yr)
Waste Stream:		Reused Materials	Recycled Materials	Waste Materials	Reused Materials	Reused Materials	Recycled Materials	Recycled Materials	Waste Materials	Waste Materials
Material Category	Acceptable: Recyclable=R, Non-Recyclable=W, Acceptable Organics=O	Net Weight (kg)	Net Weight (kg)	Net Weight (kg)						
1. PAPER										
1 Newspapers - Daily and weekly	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Magazines and Catalogues	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 Shredded Paper	R	0.00	0.00	0.00	0.00	0.00	62,467.21	1.88	0.00	0.00
4 Office Paper	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 Gable Top Containers	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6 Aseptic Containers	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7 Polycoat Beverage Cups (Coffee cups)	W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8 Spiral Wound Containers	W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9 Ice Cream Containers and Other Bleached Long Polycoat Fibre	W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10 Paper Laminate Packaging	W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11 Corrugated Cardboard	R	0.00	0.00	0.00	0.00	0.00	45,070.00	1.36	0.00	0.00
12 Boxboard/Cores/Molded Pulp	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Paper	T	0.00	0.00	0.00	0.00	0.00	107,537.21	3.24	0.00	0.00
2. PLASTICS										
1 #1 PET Bottles and Jars -	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 #1 PET Thermoform -	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 #2 HDPE Bottles and Jugs	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4 Flexible Film Plastic – LDPE & HDPE	W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 LDPE/HDPE Film - Products (non-packaging)	W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6 #5 Other PP Containers	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7 #6 PS - Expanded Polystyrene	W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8 #6 PS - Non-expanded Polystyrene - Non-beverage	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9 Plastic Laminates and Other Film Packaging	W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10 Other Rigid Plastic Packaging - Non-Beverage	W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11 Other Plastics - (non-packaging/durable)	W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Plastics	T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3. METALS										
1 Aluminum- Food Containers	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Aluminum Beverage Containers –	R	0.00	0.00	0.00	0.00	0.00	877.65	0.03	0.00	0.00
3 Aluminum Foil & Foil Trays	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4 Aluminum Aerosols	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 Other Aluminum (non-packaging)	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6 Steel Food Cans	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7 Steel Aerosol Container	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8 Other Steel (non-packaging)	R	0.00	0.00	0.00	24,150.00	0.00	57,960.27	1.74	0.00	0.00
Total Metals	T	0.00	0.00	0.00	24,150.00	0.00	58,837.92	1.77	0.00	0.00
4. GLASS										
1 Clear Glass - Food and Other Products	R	0.00	0.00	0.00	0.00	0.00	220.56	0.01	0.00	0.00
2 Coloured Glass - Food and Other Products	R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 Other Glass - Non Blue Box	W	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Total Glass	T	0.00	0.00	0.00	0.00	0.00	220.56	0.01	0.00	0.00
5. ORGANICS										
1 Avoidable Food Waste	O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Unavoidable Food Waste	O	0.00	0.00	0.00	0.00	0.00	18,410.00	0.55	0.00	0.00
3 Yard Waste	O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4 Compostable Certified Bags	O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 Other Acceptable Organics	O	0.00	0.00	0.00	0.00	0.00	356,955.00	10.74	0.00	0.00
6 Compostable Containers	O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7 Tissue/ Napkins	O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8 Paper Towels	O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Organics	T	0.00	0.00	0.00	0.00	0.00	375,365.00	11.30	0.00	0.00
6. OTHER MATERIALS										
1 Textiles	W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Other Waste	W	0.00	0.00	0.00	59,870.00	1.80	26,074.52	0.78	0.00	0.00
3 Soiled Paper	O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Other Materials	T	0.00	0.00	0.00	59,870.00	1.80	26,074.52	0.78	0.00	0.00
Total Materials		**0.00**	**0.00**	**0.00**	**84,020.00**	**1.80**	**568,035.21**	**17.10**	**0.00**	**0.00**

APPENDIX C

MATERIAL CATEGORIES

#	Material Category	Recyclable, Organic, Waste	Description / Examples
1. PAPER			
1	Newspapers - Daily and weekly	R	
2	Magazines and Catalogues	R	
3	Shredded Paper	R	
4	Office Paper	R	
5	Gable Top Containers	R	
6	Aseptic Containers	R	
7	Polycoat Beverage Cups (Coffee cups)	W	
8	Spiral Wound Containers	W	
9	Ice Cream Containers and Other Bleached Long Polycoat Fibre	W	
10	Paper Laminate Packaging	W	
11	Corrugated Cardboard	R	includes kraft paper
12	Boxboard/Cores/Molded Pulp	R	
2. PLASTICS			
1	#1 PET Bottles and Jars -	R	
2	#1 PET Thermoform -	R	
3	#2 HDPE Bottles and Jugs	R	
4	Flexible Film Plastic – LDPE & HDPE	W	
5	LDPE/HDPE Film - Products (non-packaging)	W	
6	#5 Other PP Containers	R	
7	#6 PS - Expanded Polystyrene	W	
8	#6 PS - Non-expanded Polystyrene - Non-beverage	R	
9	Plastic Laminates and Other Film Packaging	W	
10	Other Rigid Plastic Packaging - Non-Beverage	W	
11	Other Plastics - (non-packaging/durable)	W	
3. METALS			
1	Aluminum- Food Containers	R	
2	Aluminum Beverage Containers –	R	
3	Aluminum Foil & Foil Trays	R	
4	Aluminum Aerosols	R	
5	Other Aluminum (non-packaging)	R	
6	Steel Food Cans	R	
7	Steel Aerosol Container	R	
8	Other Steel (non-packaging)	R	
4. GLASS			
1	Clear Glass - Food and Other Products	R	
2	Coloured Glass - Food and Other Products	R	
3	Other Glass - Non Blue Box	W	
5. ORGANICS			
1	Avoidable Food Waste	O	
2	Unavoidable Food Waste	O	
3	Yard Waste	O	
4	Compostable Certified Bags	O	
5	Other Acceptable Organics	O	
6	Compostable Containers	O	
7	Tissue/ Napkins	O	
8	Paper Towels	O	
6. OTHER MATERIALS			
1	Textiles	W	
2	Other Waste	W	
3	Soiled Paper	O	

APPENDIX D

MINISTRY OF THE ENVIRONMENT FORMS: REPORT OF A WASTE AUDIT

Ministry of the Environment Waste Form

Report of a Waste Audit

Industrial, Commercial and Institutional Establishments

As required by O. Reg. 102/94

- ***This report must be prepared 6 months after becoming subject to O. Reg. 102/94 and a copy retained on file for at least five years after it is prepared, and be made available to the ministry upon request.***
- ***For large construction and demolition projects, please refer to the forms included with "A Guide to Waste Audits and Waste Reduction Work Plans for Construction and Demolition Projects as Required Under Ontario Regulation 102/94"*** **(revised July 2008)**

I. General Information

Name of Owner and/or Operator of Entity(is) and Company Name:		
University of Guelph		
Name of Contact Person:	**Telephone #:**	**Email address:**
Paul Fortune	519.745.5546	paul.fortune@gdi.com
Street Address(as) of Entity(is):		
70 Trent Lane, Guelph, ON		
Municipality:		
Guelph		

Type of Entity (check one)			
Retail Shopping Establishments		Hotels and Motels	
Retail Shopping Complexes		Hospitals	
Office Buildings		Educational Institutions	✓
Restaurants		Large Manufacturing Establishments	

Note: O. Reg. 102/94 does not apply to multi-unit residential buildings.

II. Description of Entity

Provide a brief overview of the entity(ties):

The Univeristy of Guelph main campus is an educational institution located in Guelph, Ontario that consists of a 330-hectare (815 acre) site with approximately 32,226 undergraduate and graduate students and staff. The university boasts seven schools across theree campuses, and offers programs in physical and life sciences, business, arts, social sciences, and agricultural and veterinary sciences.

III. How Waste is Produced And Decisions Affecting the Production of Waste	
For each category of waste that is produced at the entity(ies), explain how the waste will be produced and how management decisions and policies will affect the production of waste.	
Categories of Waste	**How Is the Waste Produced and What Management Decisions/Policies Affect Its Production?**
Newspapers - Daily and weekly	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Magazines and Catalogues	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Shredded Paper	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Office Paper	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Gable Top Containers	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Aseptic Containers	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Polycoat Beverage Cups (Coffee cups)	Generated by employees, disposed, reviewing methods of reducing material.
Spiral Wound Containers	Generated by employees, disposed, reviewing methods of reducing material.
Ice Cream Containers and Other Bleached Long Polycoat Fibre	Generated by employees, disposed, reviewing methods of reducing material.
Paper Laminate Packaging	Generated by employees, disposed, reviewing methods of reducing material.
Corrugated Cardboard	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Boxboard/Cores/Molded Pulp	Generated by employees, recycling program implemented. Disposed of in recycling bins.
#1 PET Bottles and Jars -	Generated by employees, recycling program implemented. Disposed of in recycling bins.
#1 PET Thermoform -	Generated by employees, recycling program implemented. Disposed of in recycling bins.
#2 HDPE Bottles and Jugs	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Flexible Film Plastic – LDPE & HDPE	Generated by employees, disposed, reviewing methods of reducing material.
LDPE/HDPE Film - Products (non-packaging)	Generated by employees, disposed, reviewing methods of reducing material.
#5 Other PP Containers	Generated by employees, recycling program implemented. Disposed of in recycling bins.
#6 PS - Expanded Polystyrene	Generated by employees, disposed, reviewing methods of reducing material.
#6 PS - Non-expanded Polystyrene - Non-beverage	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Plastic Laminates and Other Film Packaging	Generated by employees, disposed, reviewing methods of reducing material.
Other Rigid Plastic Packaging - Non- Beverage	Generated by employees, disposed, reviewing methods of reducing material.
Other Plastics - (non-packaging/durable)	Generated by employees, disposed, reviewing methods of reducing material.
Aluminum- Food Containers	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Aluminum Beverage Containers –	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Aluminum Foil & Foil Trays	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Aluminum Aerosols	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Other Aluminum (non-packaging)	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Steel Food Cans	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Steel Aerosol Container	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Other Steel (non-packaging)	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Clear Glass - Food and Other Products	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Coloured Glass - Food and Other Products	Generated by employees, recycling program implemented. Disposed of in recycling bins.
Avoidable Food Waste	Generated by employees, disposed of in organics program.
Unavoidable Food Waste	Generated by employees, disposed of in organics program.
Yard Waste	Generated by employees, disposed of in organics program.
Compostable Certified Bags	Generated by employees, disposed of in organics program.
Other Acceptable Organics	Generated by employees, disposed of in organics program.
Compostable Containers	Generated by employees, disposed of in organics program.
Tissue/ Napkins	Generated by employees, disposed of in organics program.
Paper Towels	Generated by employees, disposed of in organics program.
Textiles	Generated by employees, disposed, reviewing methods of reducing material.
Other Waste	Generated by employees, disposed, reviewing methods of reducing material.
Soiled Paper	Generated by employees, disposed of in organics program.
Note: When completing this form, write “n/a” in the columns where the entity will not produce any waste for a category of waste.	

IV. Management of Waste

For each category of waste listed below, indicate which waste items will be disposed or reused/recycled and how each item will be managed at the entity(ies).

Category	Waste to be Disposed	Reused or Recycled Waste
Newspapers - Daily and weekly		Staff place in recycling collection containers. Item captured and recycled.
Magazines and Catalogues		Staff place in recycling collection containers. Item captured and recycled.
Shredded Paper		Staff place in recycling collection containers. Item captured and recycled.
Office Paper		Staff place in recycling collection containers. Item captured and recycled.
Gable Top Containers		Staff place in recycling collection containers. Item captured and recycled.
Aseptic Containers		Staff place in recycling collection containers. Item captured and recycled.
Polycoat Beverage Cups (Coffee cups)	Staff may place in garbage bins.	
Spiral Wound Containers	Staff may place in garbage bins.	
Ice Cream Containers and Other Bleached Long Polycoat Fibre	Staff may place in garbage bins.	
Paper Laminate Packaging	Staff may place in garbage bins.	
Corrugated Cardboard		Staff place in recycling collection containers. Item captured and recycled.
Boxboard/Cores/Molded Pulp		Staff place in recycling collection containers. Item captured and recycled.
#1 PET Bottles and Jars -		Staff place in recycling collection containers. Item captured and recycled.
#1 PET Thermoform -		Staff place in recycling collection containers. Item captured and recycled.
#2 HDPE Bottles and Jugs		Staff place in recycling collection containers. Item captured and recycled.
Flexible Film Plastic – LDPE & HDPE	Staff may place in garbage bins.	
LDPE/HDPE Film - Products (non-packaging)	Staff may place in garbage bins.	
#5 Other PP Containers		Staff place in recycling collection containers. Item captured and recycled.
#6 PS - Expanded Polystyrene	Staff may place in garbage bins.	
#6 PS - Non-expanded Polystyrene - Non-beverage		Staff place in recycling collection containers. Item captured and recycled.
Plastic Laminates and Other Film Packaging	Staff may place in garbage bins.	
Other Rigid Plastic Packaging - Non- Beverage	Staff may place in garbage bins.	
Other Plastics - (non-packaging/durable)	Staff may place in garbage bins.	
Aluminum- Food Containers		Staff place in recycling collection containers. Item captured and recycled.
Aluminum Beverage Containers –		Staff place in recycling collection containers. Item captured and recycled.
Aluminum Foil & Foil Trays		Staff place in recycling collection containers. Item captured and recycled.
Aluminum Aerosols		Staff place in recycling collection containers. Item captured and recycled.
Other Aluminum (non-packaging)		Staff place in recycling collection containers. Item captured and recycled.
Steel Food Cans		Staff place in recycling collection containers. Item captured and recycled.
Steel Aerosol Container		Staff place in recycling collection containers. Item captured and recycled.
Other Steel (non-packaging)		Staff place in recycling collection containers. Item captured and recycled.
Clear Glass - Food and Other Products		Staff place in recycling collection containers. Item captured and recycled.
Coloured Glass - Food and Other Products		Staff place in recycling collection containers. Item captured and recycled.
Avoidable Food Waste		Staff place in organics collection containers. Item captured and composted.
Unavoidable Food Waste		Staff place in organics collection containers. Item captured and composted.
Yard Waste		Staff place in organics collection containers. Item captured and composted.
Compostable Certified Bags		Staff place in organics collection containers. Item captured and composted.
Other Acceptable Organics		Staff place in organics collection containers. Item captured and composted.
Compostable Containers		Staff place in organics collection containers. Item captured and composted.
Textiles	Staff may place in garbage bins.	
Other Waste	Staff may place in garbage bins.	
Soiled Paper		Staff place in organics collection containers. Item captured and composted.

Note: When completing this form, write “n/a” in the columns where the entity will not produce any waste for a category of waste.

V. Estimated Quantity of Waste Produced Annually

Categories of Waste	Estimated Amount of Waste produced (kg)											
	Generated			Reused			Recycled			Disposed		
	"A" Base Year 2023	"B" * Current Year 2025	"C" * Change (A-B)	"A" Base Year 2023	"B" * Current Year 2025	"C" * Change (A-B)	"A" Base Year 2023	"B" * Current Year 2025	"C" * Change (A-B)	"A" Base Year 2023	"B" * Current Year 2025	"C" * Change (A-B)
Newspapers - Daily and weekly	2,134	1,918	-216	0	0	0	0	107	107	2,134	1,811	-323
Magazines and Catalogues	721	1,139	418	0	0	0	0	45	45	721	1,094	373
Shredded Paper	11,854	62,517	50,664	0	0	0	0	62,517	62,517	11,854	0	-11,854
Office Paper	7,853	40,422	32,569	0	0	0	0	0	0	7,853	40,422	32,569
Gable Top Containers	1,701	6,758	5,058	0	0	0	0	1,036	1,036	1,701	5,722	4,021
Aseptic Containers	3,062	3,457	395	0	0	0	0	977	977	3,062	2,480	-582
Polycoat Beverage Cups (Coffee cups)	13,338	31,862	18,523	0	0	0	0	0	0	13,338	31,862	18,523
Spiral Wound Containers	68	5,178	5,109	0	0	0	0	5,108	5,108	68	70	1
Ice Cream Containers and Other Bleached Long Polycoat Fibre	2,065	2,088	24	0	0	0	0	0	0	2,065	2,088	24
Paper Laminate Packaging	18,644	36,485	17,841	0	0	0	0	0	0	18,644	36,485	17,841
Corrugated Cardboard	6,121	212,856	206,734	0	0	0	0	96,366	96,366	6,121	116,490	110,369
Boxboard/Cores/Molded Pulp	20,075	29,773	9,698	0	0	0	0	6,074	6,074	20,075	23,700	3,624
#1 PET Bottles and Jars -	8,187	24,672	16,485	0	0	0	0	4,547	4,547	8,187	20,124	11,937
#1 PET Thermoform -	3,040	19,252	16,211	0	0	0	0	3,159	3,159	3,040	16,093	13,052
#2 HDPE Bottles and Jugs	2,783	9,418	6,635	0	0	0	0	2,804	2,804	2,783	6,614	3,831
Flexible Film Plastic – LDPE & HDPE	11,686	18,687	7,001	0	0	0	0	0	0	11,686	18,687	7,001
LDPE/HDPE Film - Products (non-packaging)	17,110	85,184	68,074	0	0	0	0	0	0	17,110	85,184	68,074
#5 Other PP Containers	13,754	36,050	22,297	0	0	0	0	4,234	4,234	13,754	31,817	18,063
#6 PS - Expanded Polystyrene	687	1,962	1,275	0	0	0	0	0	0	687	1,962	1,275
#6 PS - Non-expanded Polystyrene - Non-beverage	1,200	7,248	6,048	0	0	0	0	312	312	1,200	6,936	5,736
Plastic Laminates and Other Film Packaging	4,575	43,233	38,659	0	0	0	0	0	0	4,575	43,233	38,659
Other Rigid Plastic Packaging - Non- Beverage	1,302	11,307	10,005	0	0	0	0	0	0	1,302	11,307	10,005
Other Plastics - (non-packaging/durable)	75	22,392	22,317	0	0	0	0	0	0	75	22,392	22,317
Aluminum- Food Containers	0	0	0	0	0	0	0	0	0	0	0	0
Aluminum Beverage Containers –	1,791	10,340	8,549	0	0	0	0	1,988	1,988	1,791	8,352	6,561
Aluminum Foil & Foil Trays	761	4,483	3,722	0	0	0	0	8	8	761	4,475	3,714
Aluminum Aerosols	0	783	783	0	0	0	0	0	0	0	783	783
Other Aluminum (non-packaging)	0	11	11	0	0	0	0	11	11	0	0	0
Steel Food Cans	3,235	22,972	19,736	0	0	0	0	3,766	3,766	3,235	19,206	15,971
Steel Aerosol Container	568	4,805	4,237	0	0	0	0	0	0	568	4,805	4,237
Other Steel (non-packaging)	221	93,251	93,030	0	24,150	24,150	0	57,973	57,973	221	11,128	10,906
Clear Glass - Food and Other Products	55,824	11,145	-44,679	0	0	0	51,736	2,759	-48,977	4,088	8,386	4,298
Coloured Glass - Food and Other Products	0	2,563	2,563	0	0	0	0	206	206	0	2,357	2,357
Other Glass - Non Blue Box	0	566	566	0	0	0	0	0	0	0	566	566
Avoidable Food Waste	17,792	258,159	240,367	0	0	0	0	43,640	43,640	17,792	214,518	196,727
Unavoidable Food Waste	2,741	327,920	325,180	0	0	0	2,741	136,935	134,194	0	190,985	190,985
Yard Waste	1,961	68	-1,893	0	0	0	1,961	0	-1,961	0	68	68
Compostable Certified Bags	1,928	750	-1,178	0	0	0	979	593	-386	949	157	-793
Other Acceptable Organics	20,874	362,908	342,034	0	0	0	12,887	357,115	344,228	7,987	5,793	-2,194
Compostable Containers	24,759	15,034	-9,725	0	0	0	0	817	817	24,759	14,217	-10,542
Tissue/ Napkins	0	35,382	35,382	0	0	0	0	0	0	0	35,382	35,382
Paper Towels	0	127,735	127,735	0	0	0	0	9,198	9,198	0	118,537	118,537
Textiles	0	16,026	16,026	0	0	0	0	0	0	0	16,026	16,026
Other Waste	16,793	284,817	268,024	0	59,870	59,870	0	26,075	26,075	16,793	198,872	182,079
Soiled Paper	0	6,200	6,200	0	0	0	0	1,623	1,623	0	4,577	4,577
Total	**301,282**	**2,299,774**	**1,998,493**	**0**	**84,020**	**84,020**	**70,303**	**829,993**	**759,690**	**230,978**	**1,385,761**	**1,154,783**
Percent Change (total C ÷ total A x 100)			**663.33%**			**N/A**			**1080.59%**			**499.95%**

* - Recycling weights from these material categories are represented by Mixed Recyclable Paper; **- Recycling weights from these material categories represented by Mixed Recyclable Containers; §- PET / HDPE combined;
φ- Aluminum / Steel containers combined.

Note: When completing this form, write "n/a" in the "Estimated Amount of Waste Produced" column where the entity will not produce any waste for a category of waste.
* Fill out these columns each year following the initial waste audit or baseline year to determine the progress that is being made by your waste reduction program.

VI. Extent to Which Materials or Products Used Or Sold By the Entity Consist of Recycled or Reused Materials or Products

Please answer the following questions:

1. Do you have a management policy in place that promotes the purchasing and/or use of materials or products that consist of recycled and/or reused materials or products? If yes, please describe.

The University of Guelph does have a policy in place to assit in the reduction and recyling of furniture such as desks, file cabinets, and more throughout their campus. This is thorugh a campus-based service called furniture swap that aims to keep excess furniture out of landfills by allowing staff and students to resell to eachother. Other than this policy all recycling is sent to the City of Guelph Waste Resource Innovation Centre.

2. Do you have plans to increase the extent to which materials or products used or sold* consist of recycled or reused materials or products? If yes, please describe.

To be completed by University of Guelph representative.

***** Information regarding materials or products "sold" that consist of recycled or reused materials or products is only required from owner(s) of retail shopping establishments and the owner(s) or operator(s) of large manufacturing establishments.

Please attach any additional page(s) as required to answer the above questions.

I hereby certify that the information provided in this Report of Waste Audit is complete and correct.

Signature of authorized official:	**Title:**	**Date:**

APPENDIX E

MINISTRY OF THE ENVIRONMENT FORMS: WASTE REDUCTION WORK PLAN

Ministry of the Environment Waste Form

Report of a Waste Reduction Work Plan

Industrial, Commercial and Institutional Establishments

As required by O. Reg. 102/94

This report must be prepared 6 months after becoming subject to O. Reg. 102/94 and a copy retained on file for at least five years after it is prepared, and be made available to the ministry upon request.

I. General Information

Name of Owner and/or Operator of Entity(is) and Company Name: **University of Guelph**		
Name of Contact Person: **Paul Fortune**	**Telephone #:** **519.745.5546**	**Email address:** **paul.fortune@gdi.com**
Street Address(as) of Entity(is): **70 Trent Lane, Guelph, ON**		
Municipality: **Guelph**		

Type of Entity (check one)			
Retail Shopping Establishments		Hotels and Motels	
Retail Shopping Complexes		Hospitals	
Office Buildings		Educational Institutions	✓
Restaurants		Large Manufacturing Establishments	

Note: O. Reg. 102/94 does not apply to multi-unit residential buildings.

II. Description of the Entity

Provide a brief overview of the entity(ties):

The Univeristy of Guelph main campus is an educational institution located in Guelph, Ontario that consists of a 330-hectare (815 acre) site with approximately 32,226 undergraduate and graduate students and staff. The university boasts seven schools across theree campuses, and offers programs in physical and life sciences, business, arts, social sciences, and agricultural and veterinary sciences.

III. Plans to Reduce, Reuse and Recycle Waste

For each category of waste described in Part V of "Report of a Waste Audit" (on which this plan is based), explain what your plans are to reduce, reuse and recycle the waste, including: 1) how the waste will be source separated at the establishment, and 2) the programs to reduce, reuse and recycle all source separated waste.

Waste Category (as stated in Part V of your "Report of a Waste Audit")	**Source Separation and 3Rs Program**
Newspapers - Daily and weekly	Review placement of recycling receptacles throughout facility. Ensuring twinned beside garbage bins in all areas. Ensure signage includes large graphics identifying recyclable materials. Educate staff on waste management policies via presentations and e-mail communication. Set up hauling contract to ensure material is brought to a recycling facility.
Magazines and Catalogues	(Same as newspaper)
Shredded Paper	(Same as newspaper)
Office Paper	(Same as newspaper)
Gable Top Containers	(Same as newspaper)
Aseptic Containers	(Same as newspaper)
Polycoat Beverage Cups (Coffee cups)	N/A
Spiral Wound Containers	N/A
Ice Cream Containers and Other Bleached Long Polycoat Fibre	N/A
Paper Laminate Packaging	N/A
Corrugated Cardboard	(Same as newspaper)
Boxboard/Cores/Molded Pulp	(Same as newspaper)
#1 PET Bottles and Jars -	(Same as newspaper)
#1 PET Thermoform -	(Same as newspaper)
#2 HDPE Bottles and Jugs	(Same as newspaper)
Flexible Film Plastic – LDPE & HDPE	N/A
LDPE/HDPE Film - Products (non-packaging)	N/A
#5 Other PP Containers	(Same as newspaper)
#6 PS - Expanded Polystyrene	N/A
#6 PS - Non-expanded Polystyrene - Non-beverage	(Same as newspaper)
Plastic Laminates and Other Film Packaging	N/A
Other Rigid Plastic Packaging - Non- Beverage	N/A
Other Plastics - (non-	N/A
Aluminum- Food Containers	(Same as newspaper)
Aluminum Beverage Containers –	(Same as newspaper)
Aluminum Foil & Foil Trays	(Same as newspaper)
Aluminum Aerosols	(Same as newspaper)
Other Aluminum (non-packaging)	(Same as newspaper)
Steel Food Cans	(Same as newspaper)
Steel Aerosol Container	(Same as newspaper)
Other Steel (non-packaging)	(Same as newspaper)
Clear Glass - Food and Other Products	(Same as newspaper)
Coloured Glass - Food and Other Products	(Same as newspaper)
Avoidable Food Waste	Review placement of organics receptacles throughout facility for 2023. Will continue to divert via program. Initiate discussion on reduction opportunities. Ensure twinned beside garbage and recycle bins in the cafeteria and other areas where permitted.
Unavoidable Food Waste	(Same as Food Waste)
Yard Waste	(Same as Food Waste)
Compostable Certified Bags	(Same as Food Waste)
Other Acceptable Organics	(Same as Food Waste)
Compostable Containers	(Same as Food Waste)
Tissue/ Napkins	(Same as Food Waste)
Textiles	N/A
Other Waste	N/A
Soiled Paper	(Same as Food Waste)

IV. Responsibility for Implementing The Waste Reduction Work Plan

Identify who is responsible for implementing the Waste Reduction Work Plan at your entity(ies). If more than one person is responsible for

Name of Person	**Responsibility**	**Telephone #**
Natalie Vasilivetsky	Implementing the Waste Reduction Work Plan	(519) 824-4120 ext. 58129

V. Timetable for Implementing Waste Reduction Work Plan

Provide a timetable indicating when each Source Separation and 3Rs program of the Waste Reduction Work Plan will be implemented.

Source Separation and 3Rs Program	Schedule for Completion
Newspapers - Daily and weekly	Set up recycling contact to ensure recycling is delivered to a recycling facility. Review recycling bin placements/signage: Fall 2025. Continue ongoing communication about waste reduction measures.
Magazines and Catalogues	Same as Newspaper
Shredded Paper	Same as Newspaper
Office Paper	Same as Newspaper
Gable Top Containers	Same as Newspaper
Aseptic Containers	Same as Newspaper
Polycoat Beverage Cups (Coffee cups)	N/A
Spiral Wound Containers	N/A
Ice Cream Containers and Other Bleached Long Polycoat Fibre	N/A
Paper Laminate Packaging	N/A
Corrugated Cardboard	Same as Newspaper
Boxboard/Cores/Molded Pulp	Same as Newspaper
#1 PET Bottles and Jars -	Same as Newspaper
#1 PET Thermoform -	Same as Newspaper
#2 HDPE Bottles and Jugs	Same as Newspaper
Flexible Film Plastic – LDPE & HDPE	N/A
LDPE/HDPE Film - Products (non-packaging)	N/A
#5 Other PP Containers	Same as Newspaper
#6 PS - Expanded Polystyrene	N/A
#6 PS - Non-expanded Polystyrene - Non-beverage	Same as Newspaper
Plastic Laminates and Other Film Packaging	N/A
Other Rigid Plastic Packaging - Non- Beverage	N/A
Other Plastics - (non-packaging/durable)	N/A
Aluminum- Food Containers	Same as Newspaper
Aluminum Beverage Containers –	Same as Newspaper
Aluminum Foil & Foil Trays	Same as Newspaper
Aluminum Aerosols	Same as Newspaper
Other Aluminum (non-packaging)	Same as Newspaper
Steel Food Cans	Same as Newspaper
Steel Aerosol Container	Same as Newspaper
Other Steel (non-packaging)	Same as Newspaper
Clear Glass - Food and Other Products	Same as Newspaper
Coloured Glass - Food and Other Products	Same as Newspaper
Avoidable Food Waste	Review organics bin placements/signage: Spring 2025. Continue ongoing communication about waste reduction measures.
Unavoidable Food Waste	Same as Food Waste
Yard Waste	Same as Food Waste
Compostable Certified Bags	Same as Food Waste
Other Acceptable Organics	Same as Food Waste
Compostable Containers	Same as Food Waste
Tissue/ Napkins	Same as Food Waste
Textiles	N/A
Other Waste	N/A
Soiled Paper	Same as Food Waste

VI. Communication to Staff, Customers, Guests and Visitors

Explain how the Waste Reduction Work Plan will be communicated to employees, customers, tenants, guests/visitors and students:

To be completed by University of Guelph Representative.

VII. Estimated Annual Waste Produced By Material Type And The Projected Annual Amount to be Diverted by the 3Rs					
Material Categories (as stated in Part III)	**Estimated Annual Waste Produced *** (kgs)	**Projections to Reduce, Reuse or Recycle Waste/Yr** (kgs)			**Estimated Waste Diversion Rate **** (%)
		Reduce	**Reuse**	**Recycle**	
Newspapers - Daily and weekly	**1,918**	-	-	*384*	20%
Magazines and Catalogues	**1,139**	-	-	*1,139*	100%
Shredded Paper	**62,517**	-	-	-	100%
Office Paper	**40,422**	-	-	*28,295*	70%
Gable Top Containers	**6,758**	-	-	*2,028*	30%
Aseptic Containers	**3,457**	-	-	*1,728*	50%
Polycoat Beverage Cups (Coffee cups)	**31,862**	-	-	-	
Spiral Wound Containers	**5,178**	-	-	-	
Ice Cream Containers and Other Bleached Long Polycoat Fibre	**2,088**	-	-	-	
Paper Laminate Packaging	**36,485**	-	-	-	
Corrugated Cardboard	**212,856**	-	-	*159,642*	75%
Boxboard/Cores/Molded Pulp	**29,773**	-	-	*14,887*	50%
#1 PET Bottles and Jars -	**24,672**	-	-	*9,869*	40%
#1 PET Thermoform -	**19,252**	-	-	*7,701*	40%
#2 HDPE Bottles and Jugs	**9,418**	-	-	*6,122*	65%
Flexible Film Plastic – LDPE & HDPE	**18,687**	-	-	-	
LDPE/HDPE Film - Products (non-packaging)	**85,184**	-	-	-	
#5 Other PP Containers	**36,050**	-	-	*14,420*	40%
#6 PS - Expanded Polystyrene	**1,962**	-	-	-	
#6 PS - Non-expanded Polystyrene - Non-beverage	**7,248**	-	-	*1,450*	20%
Plastic Laminates and Other Film Packaging	**43,233**	-	-	-	
Other Rigid Plastic Packaging - Non- Beverage	**11,307**	-	-	-	
Other Plastics - (non-packaging/durable)	**22,392**	-	-	-	
Aluminum- Food Containers	**0**	-	-	*0*	100%
Aluminum Beverage Containers –	**10,340**	-	-	*4,653*	45%
Aluminum Foil & Foil Trays	**4,483**	-	-	*90*	2%
Aluminum Aerosols	**783**	-	-	-	
Other Aluminum (non-packaging)	**11**	-	-	-	
Steel Food Cans	**22,972**	-	-	*8,040*	35%
Steel Aerosol Container	**4,805**	-	-	*96*	2%
Other Steel (non-packaging)	**93,251**	-	-	*93,251*	100%
Clear Glass - Food and Other Products	**11,145**	-	-	*4,477*	40%
Coloured Glass - Food and Other Products	**2,563**	-	-	*769*	30%
Avoidable Food Waste	**258,159**	*64,540*	-	*77,448*	30%
Unavoidable Food Waste	**327,920**	*81,980*	-	*213,148*	65%
Yard Waste	**68**	*17*	-	*1*	2%
Compostable Certified Bags	**750**	*187*	-	*712*	95%
Other Acceptable Organics	**362,908**	*90,727*	-	*362,908*	100%
Compostable Containers	**15,034**	*3,758*	-	*4,510*	30%
Tissue/ Napkins	**35,382**	*8,846*	-	*5,307*	15%
Paper Towels	**127,735**	*31,934*	-	*38,320*	30%
Textiles	**16,026**	-	-	*321*	2%
Other Waste	**284,817**	-	-	*42,723*	15%
Soiled Paper	**6,200**	*1,550*	-	*4,650*	75%
Total	**2,299,208**	***283,539***	**-**	***1,109,087***	61%

* Estimated Waste Produced = Waste Diverted (3Rs) + Waste Disposed

** Estimated Waste Diversion Rate = Amount of Waste Diverted (3Rs) ÷ Estimated Waste Produced x 100%

I hereby certify that the information provided in this Waste Reduction Work Plan is complete and correct.

Signature of authorized official:		**Date:**