



WASTE AUDIT REPORT

SHERIDAN COLLEGE
DAVIS & TRAFALGAR CAMPUSES

2018 SOLID NON-HAZARDOUS WASTE
AUDIT O.REG. 102/94

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EXECUTIVE SUMMARY

This waste audit was conducted in April 2018 at the Davis Campus of Sheridan College. The Davis Campus is the largest of the four Sheridan College campuses in terms of student population and the second only to the Trafalgar Campus, in terms of physical size. The campus is comprised of multiple buildings, which total 777,888 square feet. There are over 12,000 students attending this campus with 1,393 (2015) employees (including full time and part time). In 2017, Davis officially opened its new Skilled Trades Centre: a three-storey, 130,000 square foot facility.

There are three campuses at Sheridan:

- 1) Davis
- 2) Trafalgar
- 3) Hazel McCallion (HMC)

All three campuses of Sheridan College have implemented a number of diversion programs in an effort of getting to Zero Waste by 2020. Each of the campuses has a variety of single-stream recycling/reuse programs (Ex. cardboard, E-waste) as well as the three-stream Zero Waste (ZW) bins, implemented in 2014, which are the identically marked and colour-coded collection stations for organics, mixed recycling and waste-to-landfill that are found throughout the campus.

In addition to single stream recycling/reuse collection programs and the ZW bin program, Sheridan College has implemented several reduction and sustainability programs including:

1. Installed water bottle refilling stations to reduce PET water bottle generation.
2. Implemented a program to eliminate paper towels from all washrooms by switching to air hand dryers instead of repairing broken paper towel dispensers (most washrooms have already eliminated paper towel usage).
3. Implemented a paper reduction program at all campus printers.
4. The campuses host Repair Cafe's to change society's throwaway mindset and empower people to repair broken household items.
5. The Sheridan Student Union (SSU) runs a Food Donation program.
6. The library has a well-established book donation program.

The waste reduction realized by these additional programs was not quantified for inclusion in this report.

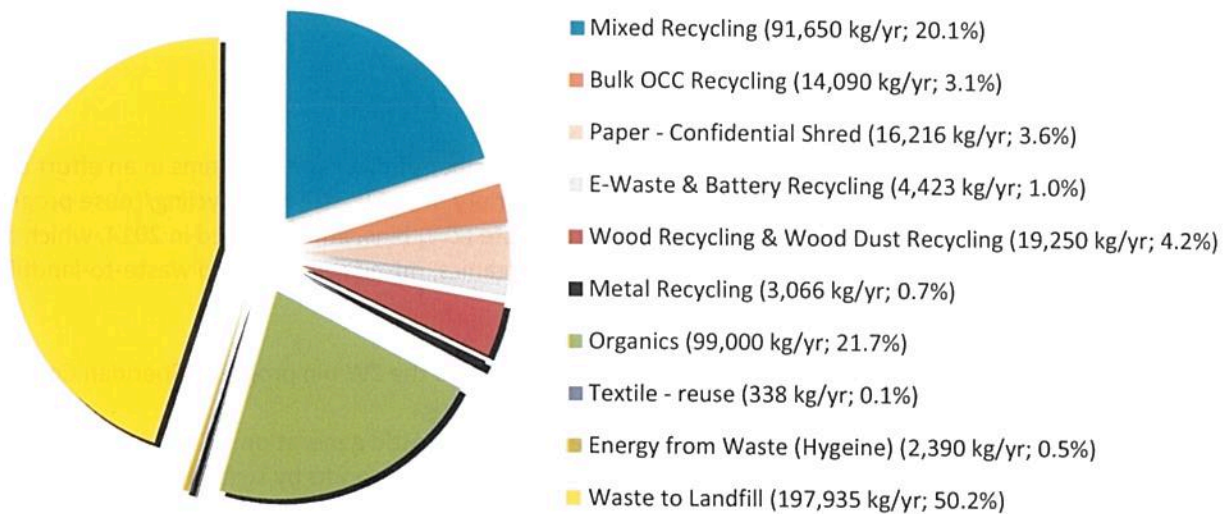
The ZW bin program was rolled out over the course of 2014 at the campuses so this program has matured: students and staff have are familiar with and knowledgeable of the ZW bin collection program. Sheridan continues to encourage participation through engagement and information programs. The weight based information for the 2018 waste audit was from 2017 data provided by the service providers. Included for the first time in the 2018 waste audit is the hygiene waste single stream program. In prior years this material was not included as the weight-based information was either not available or unreliable. Note that this material diversion program, as energy-from-waste, is considered disposal for the purposes of calculating waste diversion at the Campus.

Beyond the reporting of waste diversion at the Trafalgar Campus and the inclusion of completed Ministry Environment waste audit reports in the appendix, the body of this report deals with the 2018 waste audit at the Davis Campus.

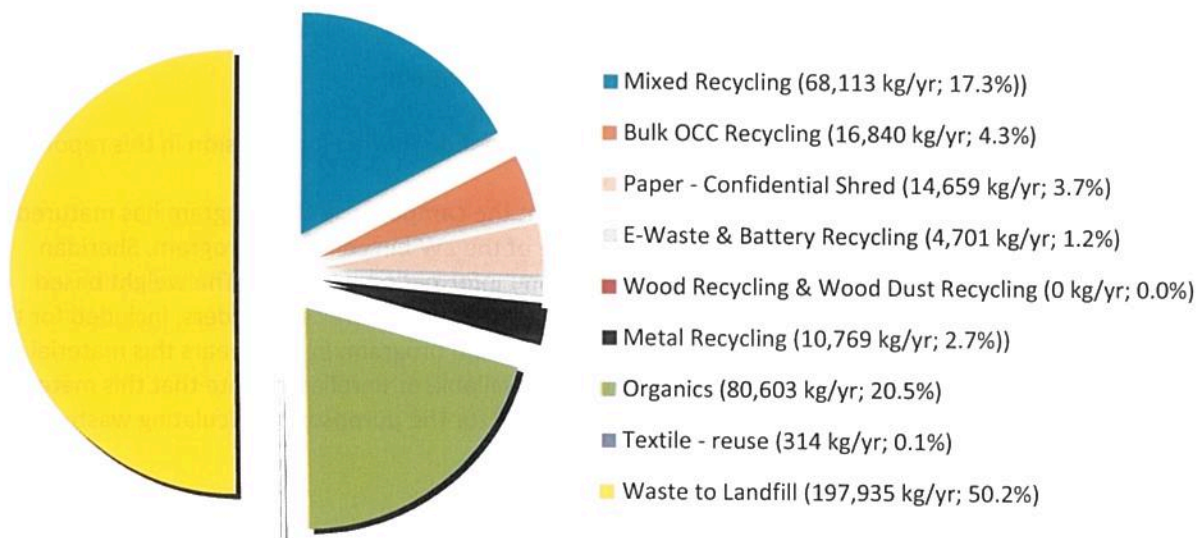
ANNUAL DIVERSION RATES OVER TIME (DAVIS & TRAFALGAR)

The 2018 waste diversion rates at the Davis and Trafalgar campuses are presented below. The 2018 diversion rates were calculated using calendar year 2017 weight-based information provided by Sheridan management and their waste service providers.

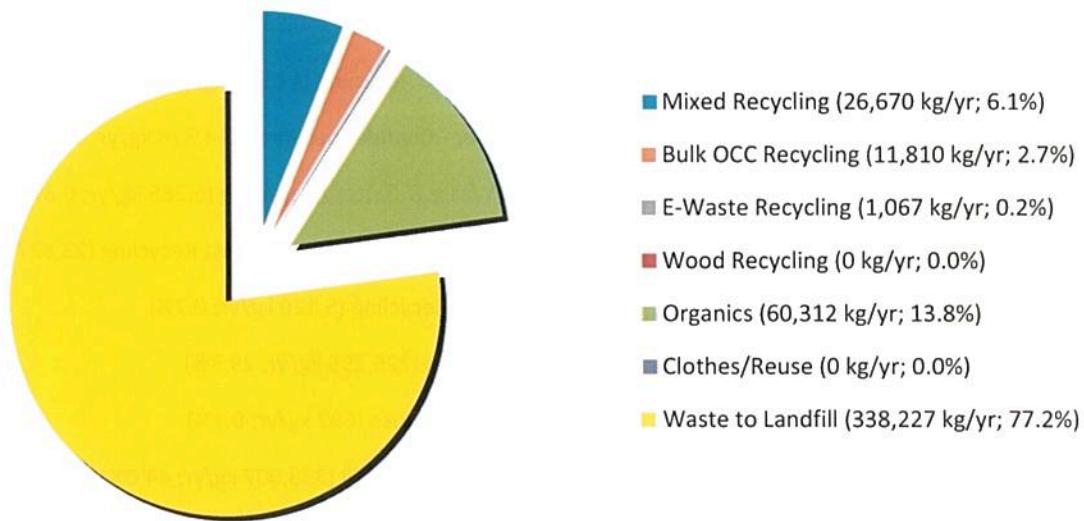
Davis Campus 2018 Waste Diversion Rate: 54.5%



Davis Campus 2017 Waste Diversion Rate: 49.8%

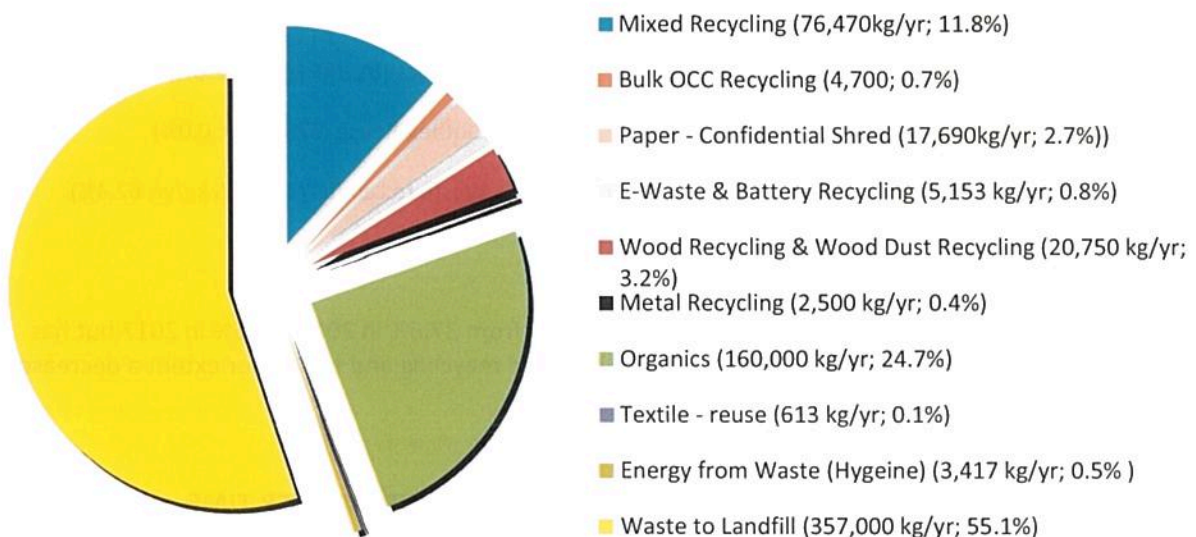


Davis Campus 2015 Waste Diversion Rate: 29.5%

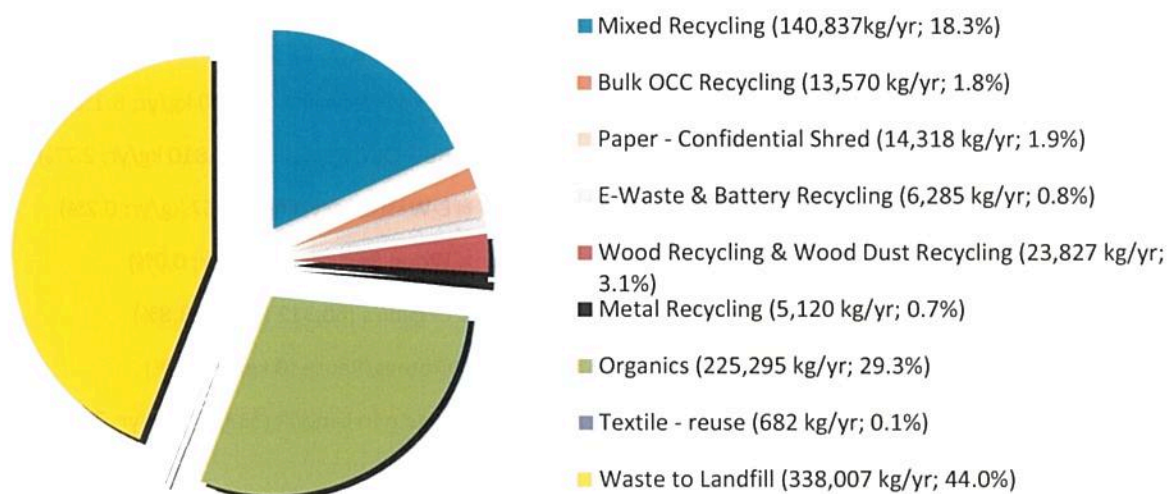


Davis Campus waste diversion rate has improved dramatically from 29.5% in 2015 to 54.5% in 2018. The increased diversion can be attributed to a significant improvement in mixed recycling diversion, to a somewhat lesser extent to an improvement in organic waste diversion, as well as reporting of metal recycling, wood recycling and confidential paper shred recycling.

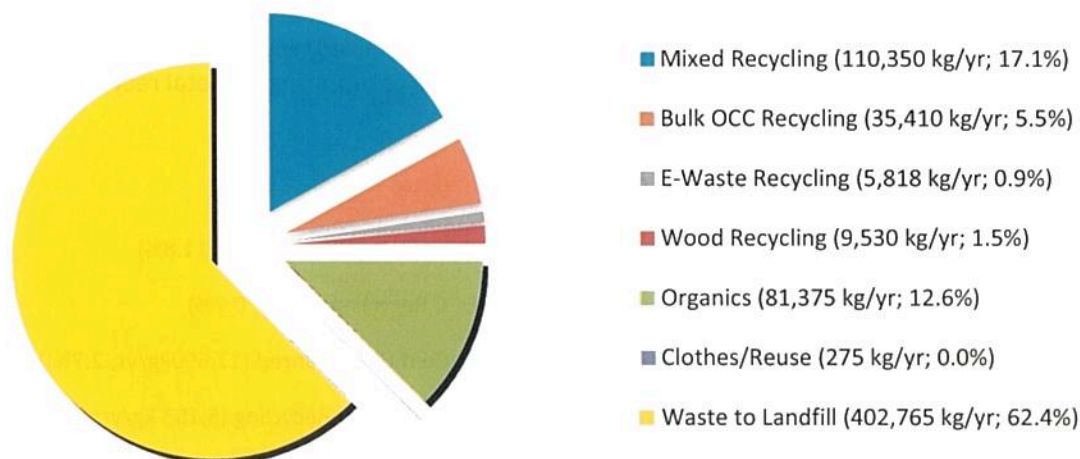
Trafalgar Campus 2018 Waste Diversion Rate: 44.4%



Trafalgar Campus 2017 Waste Diversion Rate: 56.0%



Trafalgar Campus 2015 Waste Diversion Rate: 37.6%



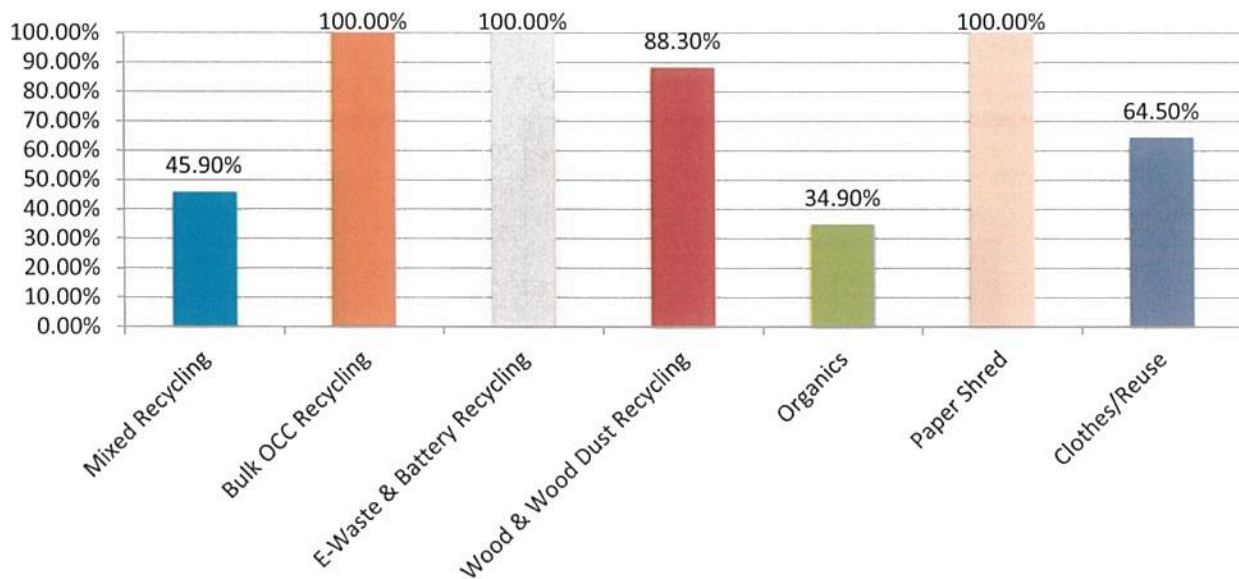
Trafalgar Campus waste diversion rate improved consistently from 37.6% in 2015 to 56% in 2017 but has declined to 44.4% in 2018 largely in due to a decrease in mixed recycling and to a lesser extent a decrease in organics from 2017 to 2018.

OVERALL CAPTURE RATES BY DIVERSION PROGRAM OVER TIME

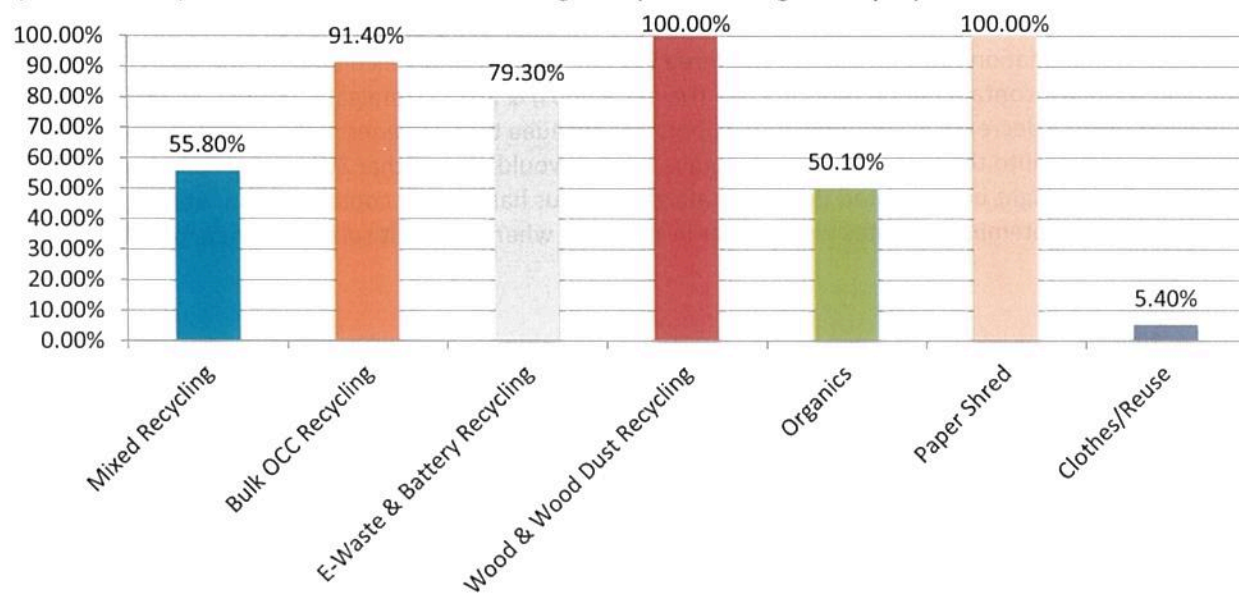
Capture rates for each diversion program were calculated at the Davis campus using results of the 2018 waste audit of the ZW bins, combined with 2017 weight based information on collection programs. The capture rates were consistently high for the bulk single-stream recycling programs where they exist. The capture rate for the

ZW mixed recycling and to a somewhat lesser extent the ZW organics have declined slightly since 2017. In 2017 the material sort waste audit was conducted at the Trafalgar campus so the 2017 and 2018 Capture Rate charts do not necessarily demonstrate a trend as there may be other factors at play at each of the campuses.

Capture Rates by Waste Diversion Collection Programs (2018- Davis Campus)

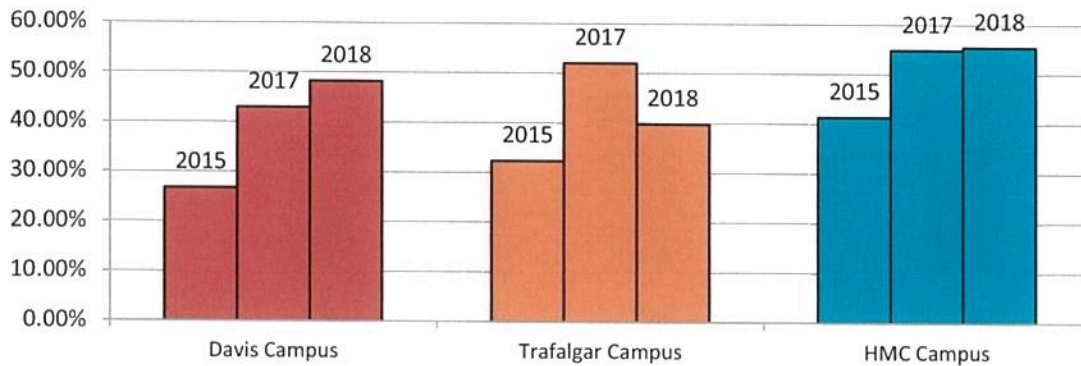


Capture Rates by Waste Diversion Collection Programs (2017-Trafalgar Campus)



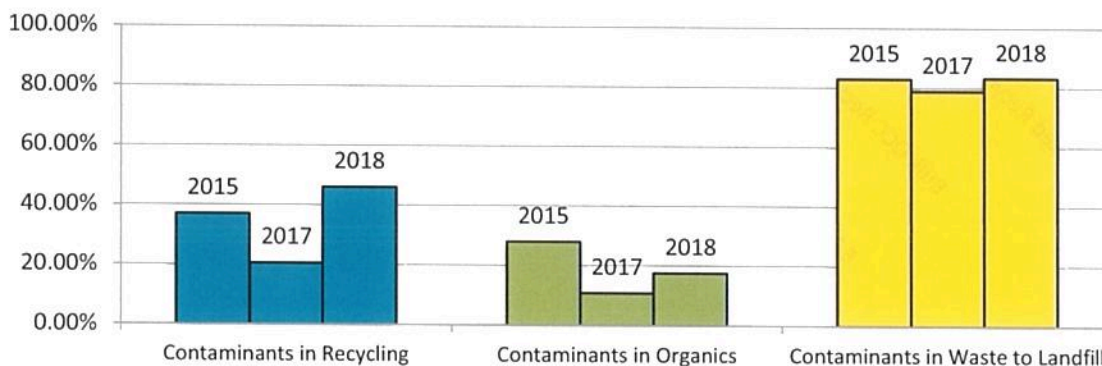
ZW COLLECTION PROGRAM PERFORMANCE OVER TIME

The ZW bin program waste diversion performance has been steadily increasing over time. Only at the Trafalgar campus and only in 2018 has there been a decline in waste diversion performance. At Trafalgar there was a slight increase in ZW waste-to-landfill, while a 45% decline in ZW mixed recycling and a 29% decline in ZW organics from 2017 to 2018.



ZW COLLECTION PROGRAM CONTAMINATION RATES OVER TIME

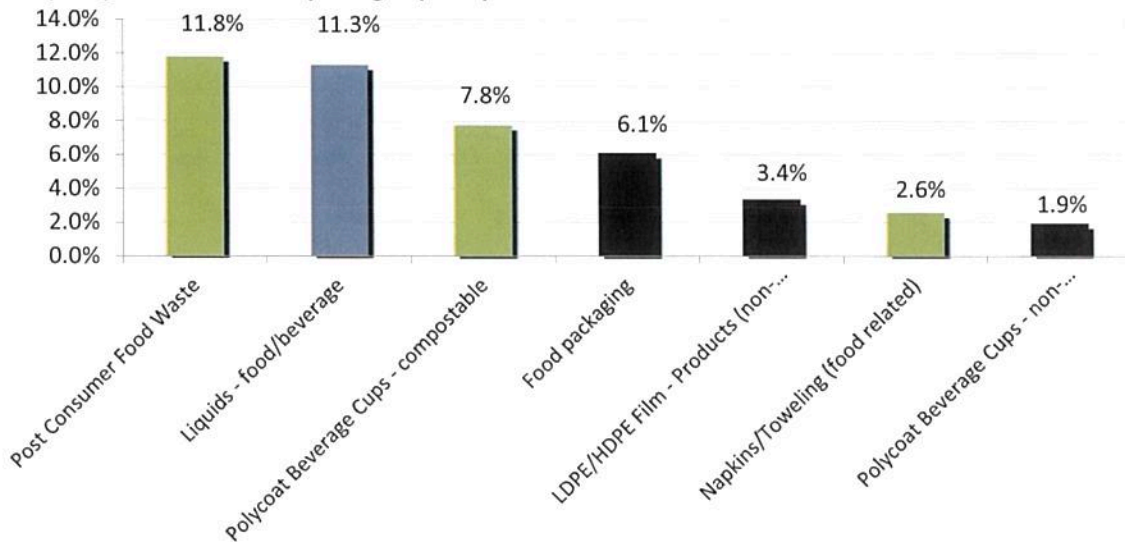
The site audits at the Davis and Trafalgar campuses have been conducted alternately: in 2015 it was at Davis, in 2016 Sheridan conducted internal audits, in 2017 at the Trafalgar Campus and in 2018 at the Davis Campus. In 2018 the contamination rates for each of the three ZW bin streams were calculated for the Davis Campus and compared against contamination rates in 2015 (Davis Campus) & 2017 (Trafalgar Campus). All three streams initially showed a decrease in contamination supporting the idea that, in general, the campus population is improving sorting into the three streams, though in 2018 it would appear that ZW sorting compliance has declined. It also might be suggested that the Trafalgar Campus has a lower contamination rate than the Davis Campus as the contamination rates were higher in the years when the audit sort was conducted at the Davis Campus.



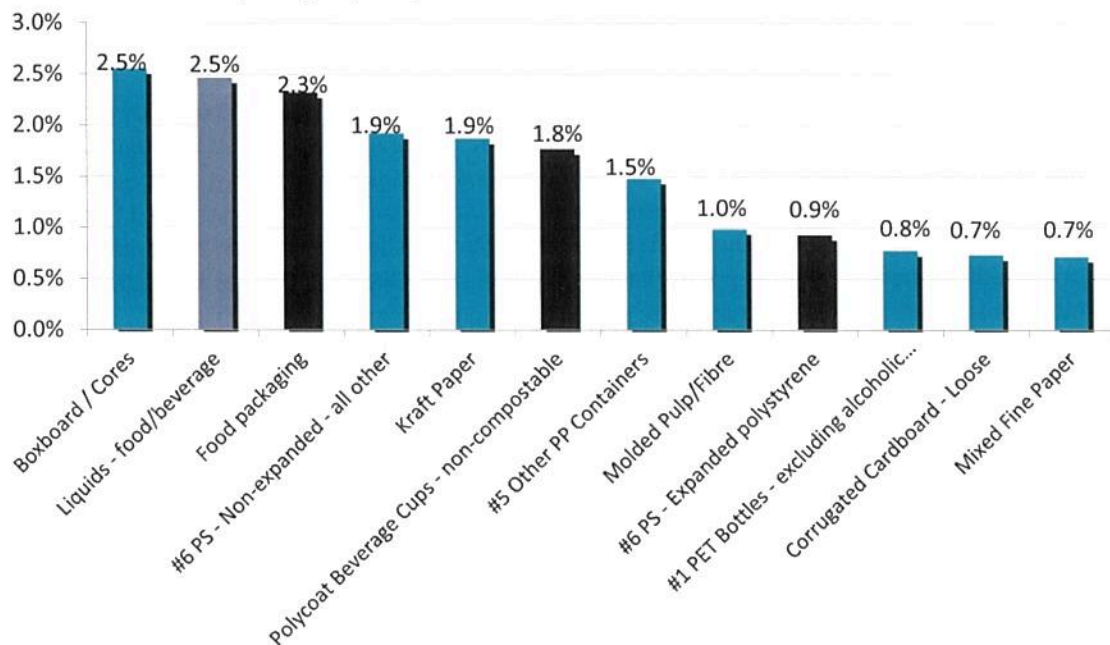
2018 DAVIS CAMPUS: ZW COLLECTION PROGRAM SPECIFIC WASTE CONTAMINANTS

The most significant contaminants in each of the ZW collection program streams are presented below. Contamination can be reduced through improving sorting behaviours with targetted programs to address the most significant contaminants. Food waste is the most consistently improperly disposed material in the ZW Recycling and ZW Waste-to-Landfill streams; while a variety of materials (mostly food packaging) contaminate the ZW Organics program.

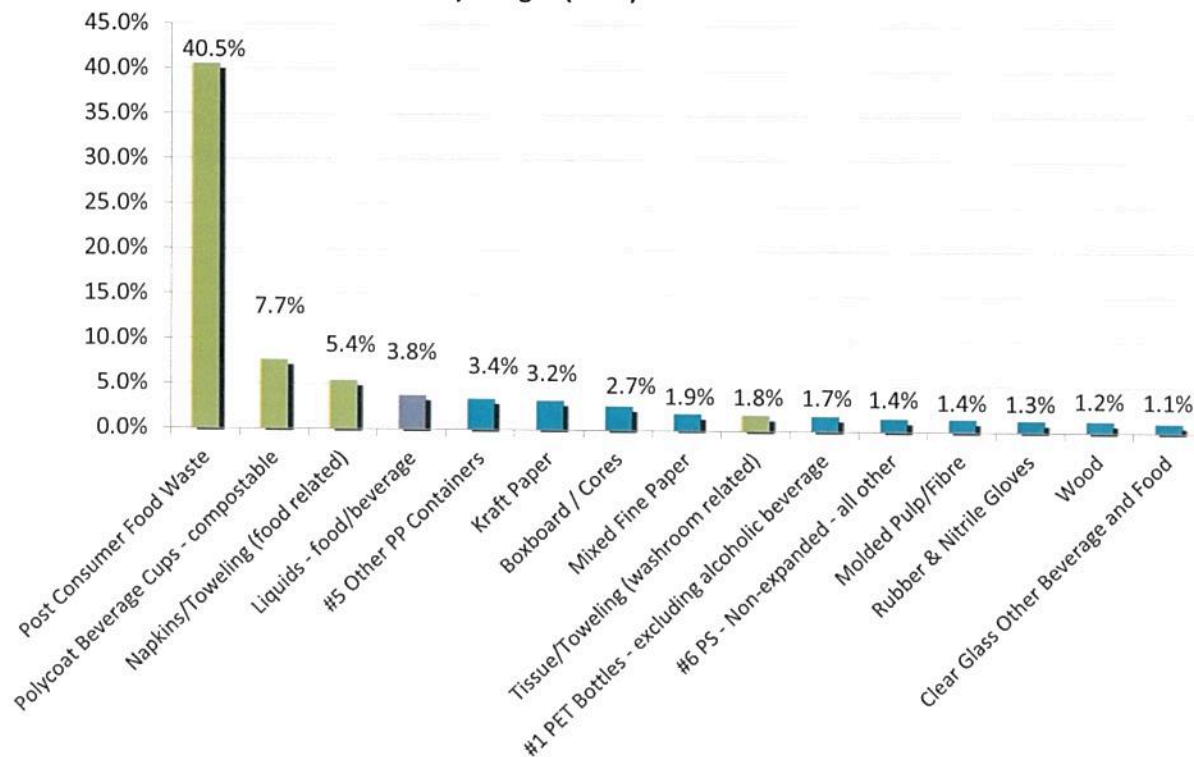
ZW Recycling Contaminants by Weight (2018)



ZW Organics Contaminants by Weight (2018)



ZW Waste-to-Landfill Contaminants by Weight (2018)



2018 DAVIS CAMPUS: ZW COLLECTION PROGRAM BY AREA

Waste diversion rates for the fourteen areas sampled during the audit at the Davis campus are presented below. You will note that the Davis Area waste diversion rate (48.2%) is lower than the 2018 Davis campus waste diversion rate (54.5%) because the area diversion rates are based on the ZW bin diversion program alone and do not include single stream recycling/reuse programs. Seven samples were delivered to the auditors for categorization and weighing during the audit: three from ZW Recycling, three from ZW Organics and 1 from ZW Waste-to-Landfill. If there was indeed material generated in these Areas and it was not delivered for auditing this could affect the area waste diversion rate significantly in these Areas.

Area	Percentage by Weight Collected During 24 Hour Sampling Period			Area Waste Diversion Rate
	ZW Recycling	ZW Organics	ZW Waste-to-Landfill	
A Wing Offices	7.9%	24.1%	68.0%	32.0%
A Wing Hallways	34.5%	23.6%	41.9%	58.1%
B Wing Cafeteria Back of House	41.5%	*	58.5%	41.5%*
B Wing Cafeteria Front of House	22.8%	41.4%	35.8%	64.2%
B Wing Animal Care	*	*	100.0%	0.0%*
C Wing Gym, Weights Room	31.1%	1.2%	67.7%	32.3%
C Wing Hallways	27.3%	28.6%	44.1%	55.9%
SC Public Spaces	*	100.0%	*	100.0%*
SC SSU Food Service	*	18.6%	81.4%	18.6%*
H Wing Athletic Therapy	31.4%	22.1%	46.4%	53.6%
J Wing Learning Commons, Floors	27.6%	23.2%	49.2%	50.8%
M Wing Public Hallways	24.3%	30.8%	44.9%	55.1%
Grounds H/J Wing Outdoors	16.3%	*	83.7%	16.3%*
Residence Ground Level	33.8%	25.8%	40.4%	59.6%
All Areas	23.2%	25.0%	51.8%	48.2%

** Area waste streams that were either not generated or missed being delivered to the auditors thereby possibly significantly affecting the Area waste diversion rate.*

GENERAL RECOMMENDATIONS

The recommendations appearing in this report are to be considered for implementation as Sheridan College feels appropriate and cost effective.

Ensure the campuses waste reduction workplans use the hierarchical components of the 3Rs. Reduction or elimination of waste should be given top priority, then reuse and lastly recycling. Similarly, choose suppliers who offer products with post-consumer recycled content. Purchasing supplies and materials with recycled content encourages and sustains growth in existing and developing recycling end-markets. The 3Rs Regulations require not only that these practices are conducted but also recorded and documented.

Review purchasing, packaging and environmental policies to ensure each reflects and emphasizes consistent hierarchical Reduce, Reuse, Recycle strategies. Reduction or elimination of waste should be given top priority, then reuse and lastly recycling. A consistent 3Rs policy will benefit the campuses by communicating its environmental stewardship to its employees, its suppliers and its patrons.

Given that the recycling programs are well established, the campuses need to examine ways of reducing waste. Many facilities fail to achieve waste reduction targets because they use the 3Rs in the reverse order. Unfortunately, many companies use this approach based on the misinformed belief that recycling is the easiest, most cost-effective and the least time consuming form of waste diversion. Consider some of the following costs associated with recycling that would not be incurred if the materials were not generated in the first place:

- Recycling requires additional material handling

- Cost of containers / floor space / storage areas
- Education and training of employees
- Promotion of the programs to maintain cooperation
- Removal service costs
- Contamination issues/disposal fees
- Sourcing available end-markets for materials

In the auditor's experience, companies that make substantial gains in waste reduction are those that periodically improve their recycling programs while continuously examining ways to eliminate materials that contribute to their daily and annual waste output.

Employees should evaluate, improve and expand waste reduction efforts in their own areas. Active employee involvement will generate cooperation and enthusiasm.

Ontario Regulation 102/94 requires that the audit findings be posted in accessible areas to inform employees of the sources of waste generation and the company's commitment to waste reduction. Further, posting waste audit findings and educating employees in waste diversion programs and including them in the successes, will generate continued compliance with and commitment to the waste diversion programs.

SPECIFIC RECOMMENDATIONS –THE WASTE REDUCTION WORKPLANS

Campus Wide Focus:

Sheridan Davis campus has an excellent combination of diversion programs that address the divertible materials generated at the campus. Consequently, future waste diversion improvements will likely come from enhancing compliance with the three stream ZW bins across campus. Sheridan should continue to assess and identify barriers to sorting and develop area-specific action plans to increase participation.

Specific Recommendations:

1. **Enhancing Food Waste and Napkins Capture Rate Throughout the Campus:** 94,174 kg/year of food waste and napkins are being disposed in waste-to-landfill. Sheridan must continue to encourage the proper disposal in organics of food waste and napkins through education/signage. Consider a campaign to encourage sorting behaviour using a multi-media approach and consider 'branding' the campaign. Engage and challenge environmental studies students to design the campaign and develop a multi-media approach/roll-out. Expected improvement in capture rate of 20%. Anticipated reduction in waste-to-landfill of 18,835 kg per year (20% of food waste and napkins improperly disposed across the campus).
2. **Enhancing Mixed Recycling Capture Rate Throughout the Campus:** Encouraging the proper disposal in mixed recycling of: polypropylene containers (predominantly cold drink containers from Tim Hortons), kraft and fine paper, boxboard/cores, PET bottles, polystyrene (predominantly cup lids and cutlery), molded pulp/fibre (predominantly drink trays & fry cups), PET bottles, cardboard and clear glass through education/signage. Expected improvement in capture rate of 20%. Anticipated reduction in waste-to-landfill of 9,309 kg per year (20% of mixed recycling improperly disposed across the campus).

3. **Capturing Anaerobically Digested Coffee Cups in Organics:** 36,277kg per year of compostable coffee cups are being disposed in mixed recycling, organics and waste-to-landfill at the Davis Campus. 7,106 kg are being disposed improperly in mixed recycling and 15,750 kg are being improperly disposed in mixed waste-to-landfill. Launch a campaign to capture compostable coffee cups in organics. Suggestions:
 - i. Improve signage on ZW bins to include a picture of a coffee cup on all three bins with an X through the cups on all but the ZW organics bin.
 - ii. Consider including the coffee cup education campaign in the action plan identified above for food waste and napkins, engaging environmental students to design the campaign. Ensure the non-compostable cups that are brought to campus are targeted as part of the education campaign. Focus should be to eliminate non-compostable beverage cups on campus since they are not recyclable at this time.

Expected improvement in capture rate of 50%. Anticipated reduction in waste-to-landfill of 7,875 kg per year (50% of coffee cups improperly disposed in waste-to-landfill).
4. **Emptying Beverage Containers:** Continue to encourage the emptying of beverage containers prior to placement in mixed recycling through a combination of education/signage and placement of emptying stations where practicable. Consider launching a campaign. Anticipated reduction in disposal of liquids in any stream: 40%. Anticipated reduction in waste-to-landfill of 3,105 kg per year as well as a significant reduction in contamination in the mixed recycling and organic streams (40% reduction in liquids in waste-to-landfill stream).
5. **Reducing/Eliminating Disposal of Washroom Paper Toweling:** Reduce/eliminate washroom paper towel use or provide facilities and education/signage to capture washroom paper toweling in the organics program. Anticipated reduction in disposal of 50% of washroom paper toweling and reduce 1,797 kg per year of waste-to-landfill.
6. **Reducing Contamination in the ZW Collection Programs at Targetted Underperforming Areas:** Sheridan should continue to identify behavioural and structural issues and opportunities to improve material sorting, with particular focus in Areas where sorting is particularly poor:
 - Grounds H/J Wing & Outdoors
 - Animal Care
 - A Wing Offices
 - A Wing Hallways
 - C-Wing Gym/Weights Room
7. **Capturing & Reporting Material Weights for All Diversion Programs at the Campus:** Sheridan has made significant progress in reporting material diversion streams since 2015 however there may be other diversion programs in place at the Davis Campus but the weight-based data is not currently captured for reporting purposes (Examples Repair Cafe and Food Donation Program). Sheridan should continue to conduct an inventory of all diversion programs, with particular focus on reduction and reuse programs, and should ensure there are procedures in place to collect, monitor and report on these programs.

Anticipated Result:

With the implementation of the above noted waste reduction plans, it is estimated that the waste diversion rate at the Davis Campus will increase from 54.5% to 63.4% and the Davis Campus will divert an additional 40,921 kg per year of waste from landfill in 2019.

1.0 INTRODUCTION

1.1 PURPOSE

The solid waste audits performed by *Spinnaker Recycling Corp.* ("Spinnaker") at the Davis Campus of Sheridan College was designed to:

CALCULATE CURRENT DIVERSION RATES FOR RECYCLED, ORGANIC AND REUSED MATERIALS TO DETERMINE THE EFFECTIVENESS OF DIVERSION PROGRAMS

IDENTIFY OPPORTUNITIES FOR IMPROVEMENT AND EXPANSION TO DIVERSION PROGRAMS

DEVELOP A WASTE REDUCTION WORKPLAN THAT IDENTIFIES POLICIES, PRACTICES, TARGETS AND GOALS FOR NEW AND DEVELOPING WASTE REDUCTION PROGRAMS

COMPLETE & DOCUMENT THE AUDIT AS PER ONTARIO REGULATION 102/94 UNDER THE ENVIRONMENTAL PROTECTION ACT

Though the body of this report references the findings of the audit at the Davis Campus, Ministry of Environment & Climate Change Reports of a Waste Audit and Waste Reduction Workplan for both Davis and Trafalgar are appended to this report. These waste audits have been conducted and documented to be compliant with Ontario Regulation 102/94. Beyond the reporting of waste diversion at Trafalgar and the inclusion of completed Ministry Environment & Climate Change waste audit reports in the appendix, the body of this report deals with the 2018 waste audit at the Davis Campus.

At the time of the 2018 audit, the Davis & Trafalgar campuses had implemented the following collection programs:

1. ZW Mixed Recycling (includes glass, metal, paper, plastic)
2. ZW Organics (rolled out in 2014)
3. ZW Waste-to-landfill
4. Bulk Old Corrugated Cardboard (OCC) Recycling
5. Paper Shred Recycling
6. Metal Recycling
7. E-Waste Recycling
8. Battery Recycling (at Davis batteries are included in E-Waste program)
9. Wood Recycling
10. Wood Dust Recycling (Trafalgar only)
11. Textile Reuse
12. Hygiene Waste Energy from Waste (EFW) Program

Sheridan College recycling programs meet and exceed Ontario Regulation 102/94 requirements for designated facilities as the recycling programs include the capture of the following recyclable materials:

- Aluminum food or beverage cans
- Cardboard
- Fine Paper

- Glass Bottles, Jars & Food/Beverage
- Newsprint
- Steel Food & Beverage Cans
- Polyethylene Terephthalate (PET)

1.2 METHODOLOGY

The waste audit results presented in this report were obtained from observations and information collected during one on-site meeting and on two days of on-site waste auditing conducted in April 10--11, 2018 at the Davis Campus.

Two data sets were employed to generate the annual waste generation rates of specific waste materials at the Davis Campus. First, the 2017 annual weight information for the individual collection streams was obtained from the service providers and the second data set was generated during the sorting and weighing of a 24 hour accumulation of material in ZW bins during the April 2018 on-site waste audit at the Davis Campus.

The 2017 single-material stream weights provided by the service providers were not audited and were assumed to be 100% single-stream without any contamination by other materials. Sheridan has implemented the following single-material stream diversion programs including:

1. Bulk Old Corrugated Cardboard (OCC) Recycling
2. Paper Shred Recycling
3. Metal Recycling
4. E-Waste Recycling
5. Battery Recycling (Trafalgar only)
6. Wood Recycling
7. Wood Dust Recycling (Trafalgar only)
8. Textile Reuse
9. Hygiene Waste Energy-from-Waste (EFW) Program

The second source of data was generated through the on-site audit of the ZW bin streams at Davis. All Sheridan College campuses have implemented a Zero Waste (ZW) program with a long-term goal of eliminating all landfill waste by 2020. The ZW program includes three regular collection streams in ZW bins:

1. Organics
2. Mixed Recycling (glass, metal, paper, plastic)
3. Waste-to-landfill

These material streams are “mixed” composition so they were sorted and weighed to determine the relative proportions by weight of specific wastes in the individual ZW bin program streams. These relative proportions were applied to the 2017 annual weight information by ZW stream provided by the service providers. In this way, it is possible to determine contamination levels and identify specific materials that are being improperly disposed in these “mixed” waste streams.



One project manager and three waste analysts sorted, quantified and recorded the waste generated over a 24-hour sample accumulation period. In order to identify opportunities to improve waste diversion at specific functional areas within the campus, the Davis campus was divided into 14 areas for the purpose of the waste audit which represented most but not all of the campus. The areas audited included:

1. A Wing Offices
2. A Wing Hallways
3. B Wing Cafeteria Back of House
4. B Wing Cafeteria Front of House
5. B Wing Animal Care
6. C Wing Gym, Weights Room
7. C Wing Hallways
8. SC Public Spaces
9. SC SSU Food Service
10. H Wing Athletic Therapy
11. J Wing Learning Commons, Floors
12. M Wing Public Hallways
13. Grounds H/J Wing Outdoors
14. Residence Ground Level

ZW bin material streams were collected by the cleaning personnel and labeled as to the area from where it was generated. The ZW mixed recycling, organics and waste-to-landfill bags were collected on-site and delivered to a designated area for sorting and weighing. All bags were sorted by generation area and ZW bin type (organics, recycling, waste-to-landfill), opened, and further sorted into labeled collection bins by specific waste category (Appendix). A Digital Receiving Scale was used for all measurements to the nearest one thousandth decimal. All recyclable material and organic material removed from the waste were discarded in appropriate containers for landfill diversion.

At the Davis Campus, Spinnaker sorted, weighed and evaluated over 80 kilograms of organics, 100 kilograms of mixed recycling, and 101 kilograms of waste-to-landfill. Seven areas were audited on the first day and seven areas were audited on the second audit day.

Because the Davis and Trafalgar campuses are of similar size, have similar functional areas including classrooms, offices, hallways, washrooms, have the same ZW bin program in place and because historical evidence suggest the material generation and disposal practices at the two campuses will be similar, the material breakdown data from the waste audit at the 2018 waste audit at Davis Campus was used in conjunction with the annual waste generation data provided by the service providers for Trafalgar. In this way the 2018 Trafalgar Campus waste audit reported in the appendix is an amalgamation of 2017 weight-based information by stream for the Trafalgar campus and the relative proportion by weight of the mixed waste ZW stream from the Davis Campus 2018 audit. Beyond the reporting of waste diversion at Trafalgar and the inclusion of completed Ministry Environment & Climate Change waste audit reports in the appendix, the body of this report deals with the 2018 waste audit at the Davis Campus.

Specific waste categories were established before the audit based on *Ontario Ministry of Environment & Climate Change* guidelines and industry best practices. Additional categories were added to the list based on

the waste composition observed during the audit. This audit surpasses the requirements outlined in the *Ontario Ministry of Environment & Climate Change's Guide to Waste Audits and Waste Reduction Work Plans* and includes completed Ministry required audit report forms in the Appendix.

The annual diversion rate was calculated by adding total recycled with total reused and dividing by the amount of total waste generated. $Annual\ Diversion\ Rate = (Total\ Recycled + Total\ Reused) / (Total\ Recycled + Total\ Reused + Total\ Landfilled)$.

1.3 DAVIS CAMPUS: OBSERVATIONS

Davis Campus located in Brampton Ontario is the largest of the college campuses by population managed by Sheridan College and includes multiple buildings. There are more than 12,000 students attending this campus with more than 1,000 employees. The campus buildings include classrooms, studios, offices, cafeterias, washrooms, hallways, athletics centre, residences, etc. In 2017 Davis officially opened its new Skilled Trades Centre: a three-story, 130,000 square foot facility.

Davis Campus of Sheridan College is committed to its Zero Waste Program: a program guiding the institution to becoming a zero waste campus by 2020. An integral part of the program, the Zero Waste (ZW) stations were introduced to increase waste diversion at Sheridan. These ZW stations have replaced the old waste bins in the public and office areas in all of the four campuses. Three waste streams are provided: Organics, Mixed Recycling, and Waste-to-landfill (see photo). All ZW stations have the same order, colour coding, labeling and signage.

Cleaning of this facility is completed by a team of cleaners who use a cart system for the collection of the ZW bin material from the office staff and students. The different ZW streams are collected daily on an as needs basis. The campus operates 7 days a week with offices open generally 5 days a week during normal business hours while other buildings such as the library are open on weekends with shortened hours. At the time of the audit there were regular classes and no unusual activities taking place in the building that may have altered the audit results.



Staff collect materials from the three stream ZW bins and deposit the bags in dedicated receptacles: roll-carts for the organics, a compactor for the mixed recycling and a compactor for the waste-to-landfill.

AUDIT: MISSING ZW STREAMS

There were several ZW streams that were not delivered to the auditors during the waste audit. This could be because there was none generated during the 24-hour period or there was an error in labeling and material handling during the audit. Labeling and material handling errors could dramatically affect both area waste diversion rate calculations and the campus as a whole.

The Areas that were missing one or more ZW streams during the audit and their accompanying diversion rate are represented in the table below:

Table 1: Davis Audit Areas with Missing ZW Streams (2018)

Area	Percent by Weight Generated During 24 hour Sample Period			Area Diversion Rate
	ZW Recycling	ZW Organics	ZW Waste-to-Landfill	
B Wing Cafeteria Back of House	41.5%	0.0%	58.5%	41.5%
B Wing Animal Care	0.0%	0.0%	100.0%	0.0%
SC Public Spaces	0.0%	100.0%	0.0%	100.0%
SC SSU Food Service	0.0%	18.6%	81.4%	18.6%
Grounds H/J Wing Outdoors	16.3%	0.0%	83.7%	16.3%

BLENDED ZW STREAMS

The C Wing Hallways (Day 1 of Audit) and the Campus Residence Ground Level (Day 2 audit) samples were mixed during the audit by accident (both were tagged with same colour). So the material sort for each area is a mix of the two area streams (essentially one area sort rather than two). This should not materially affect the results of the 2018 campus waste audit but the specific waste weights for each of these two areas are not likely representative as they are blended. In future waste audits, different tags should be employed to distinguish samples from Day 1 and Day 2.

ADDITIONAL OBSERVATIONS

Some additional comments made by the auditors at the waste audit include:

- 1) Student Centre: is a busy area with food and lounge areas it has the fewest receptacles and the receptacles were not the ZW receptacles found throughout the rest of the campus.



2) ZW Labeling: to improve the capture of coffee cups in organics, recommend that the ZW recycling receptacles have a picture of coffee cup with an X through it.



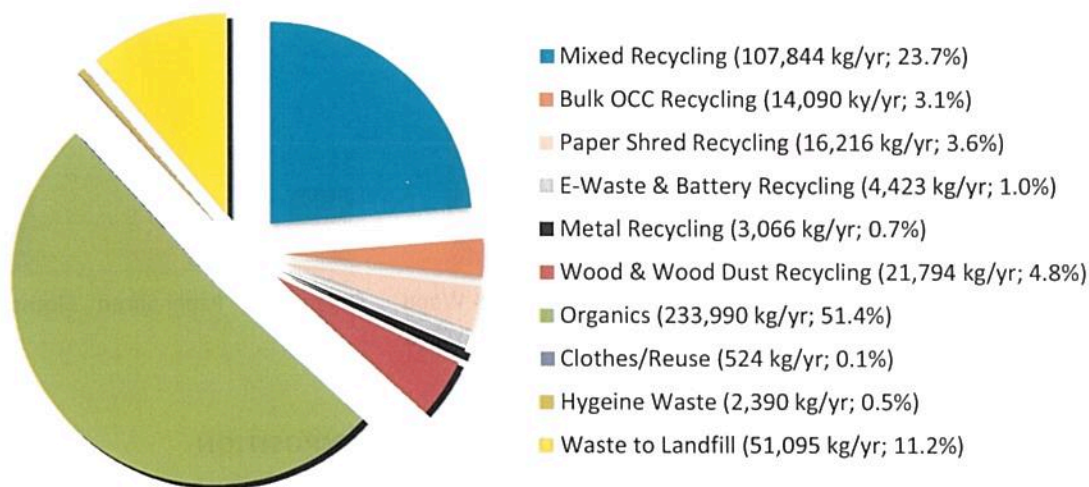
3) Examples of the additional sustainability initiatives at the campus: Food Donation Program & Repair Cafe.



1.4 DAVIS CAMPUS: WASTE DIVERSION

Analysis of all the specific wastes to be removed from Sheridan College Davis Campus in 2018 reveals that the campus could potentially achieve a waste diversion rate of 88.3% through the existing diversion programs (note: hygiene waste is not considered diversion as it is combusted in an energy from waste (EFW) facility). Figure 1 below shows the weight of the specific wastes being disposed at the campus in 2018 grouped by existing diversion, reuse and waste-to-landfill programs. This figure represents the Davis campus potential for waste diversion using existing programs and assumes a 100% capture rate for all programs.

Figure 1: Davis Campus 2018 Material Generation



The 2018 Davis waste diversion rate is 54.5%. Figure 2 below shows the 2018 weight of material being collected through the existing waste collection programs.

Figure 2: Davis Campus 2018 Waste Diversion

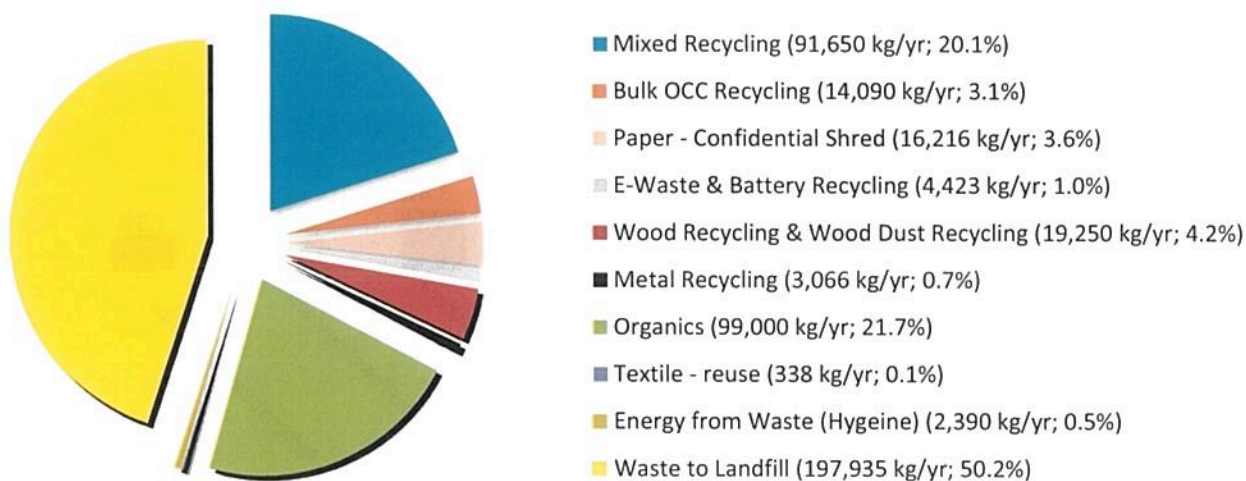
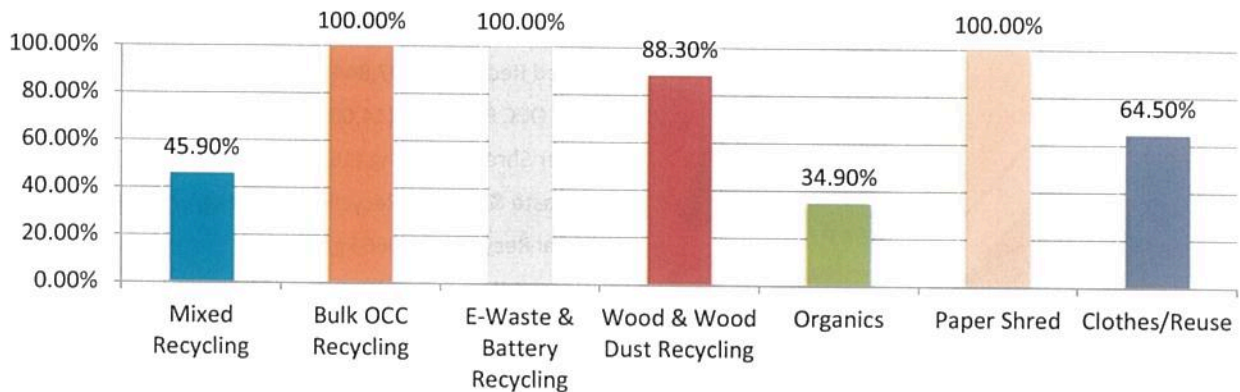


Figure 3 below shows the capture rates by the individual collection programs. The Davis Campus has eight diversion programs. Capture rates were calculated as follows: total weight of all divertible material correctly captured by the diversion stream exclusive of contaminants divided by the total weight of all divertible material generated at the campus in any stream.

The paper shred and wood recycling programs have a 100% capture rate; while the bulk OCC and E-Waste/Battery Recycling programs are also highly effective. The ZW organics and ZW mixed recycling capture rates are good but could be improved.

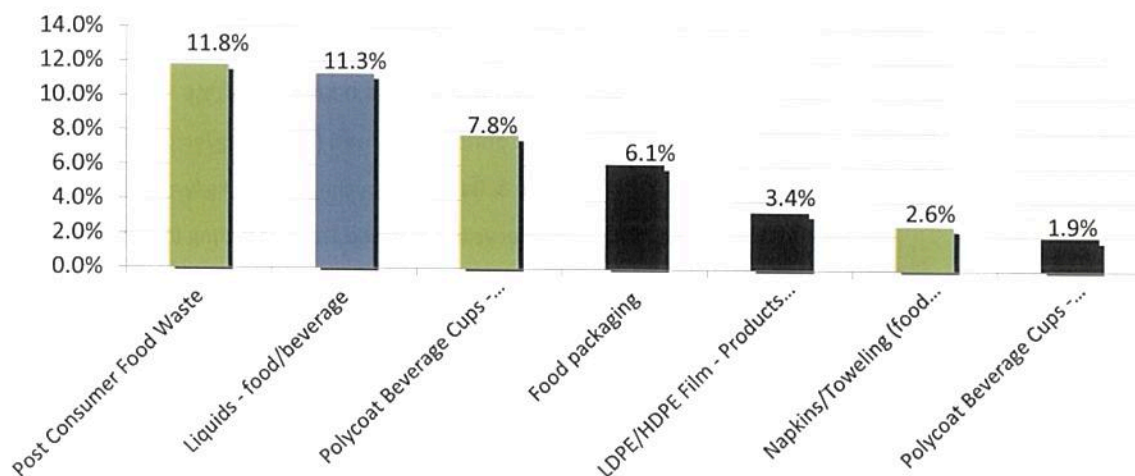
Figure 3: Davis Capture Rates by Collection Program



1.5 DAVIS CAMPUS: MIXED RECYCLING COMPOSITION

The ZW mixed recycling contamination rate was moderately high at 46.0% by weight. The most commonly disposed contaminants (i.e. non-recyclable specific wastes) disposed in the ZW mixed recycling at Davis are presented in the Figure below. Specific wastes are colour coded: green are suitable for ZW organic bin, black are suitable for ZW waste-to-landfill bin and purple are reducible wastes.

Figure 4: Davis Contaminants in Mixed Recycling (over 1.0% by weight of material stream)



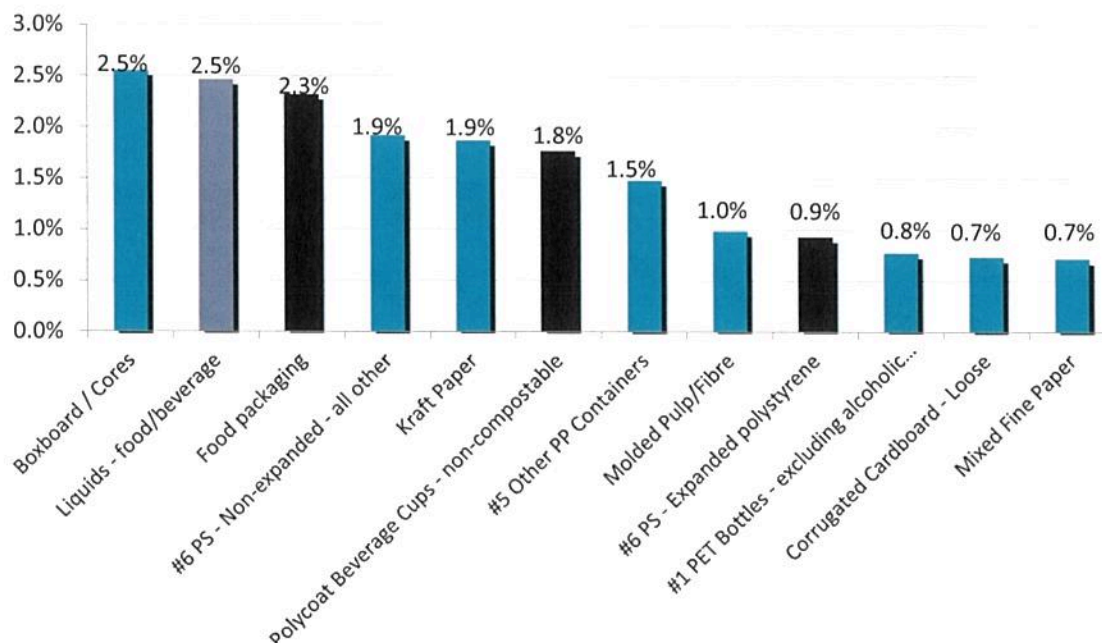
The waste reduction workplan should focus on those contaminants that can with minimal effort and cost be managed to be suitable for inclusion in ZW mixed recycling or eliminated from improper disposal. These include:

1. Minimizing post-consumer food waste, polycoat beverage cups and napkins/toweling in mixed recycling through education/signage.
2. Encouraging the emptying of beverage containers prior to placement in mixed recycling through a combination of education/signage and placement of emptying stations where practicable.

1.6 DAVIS CAMPUS: ORGANIC COMPOSITION

The contamination rate in the ZW organic bins was significantly lower than in ZW recycling at 17.6% by weight. The most commonly disposed contaminants (i.e. non-organic specific wastes) disposed in the ZW organics bins are presented in the Figure below. Specific wastes are colour coded: blue are suitable for ZW mixed recycling bin and black are suitable for ZW waste-to-landfill bin.

Figure 5: Davis Contaminants in Organic Stream (over 0.5% by weight of material stream)



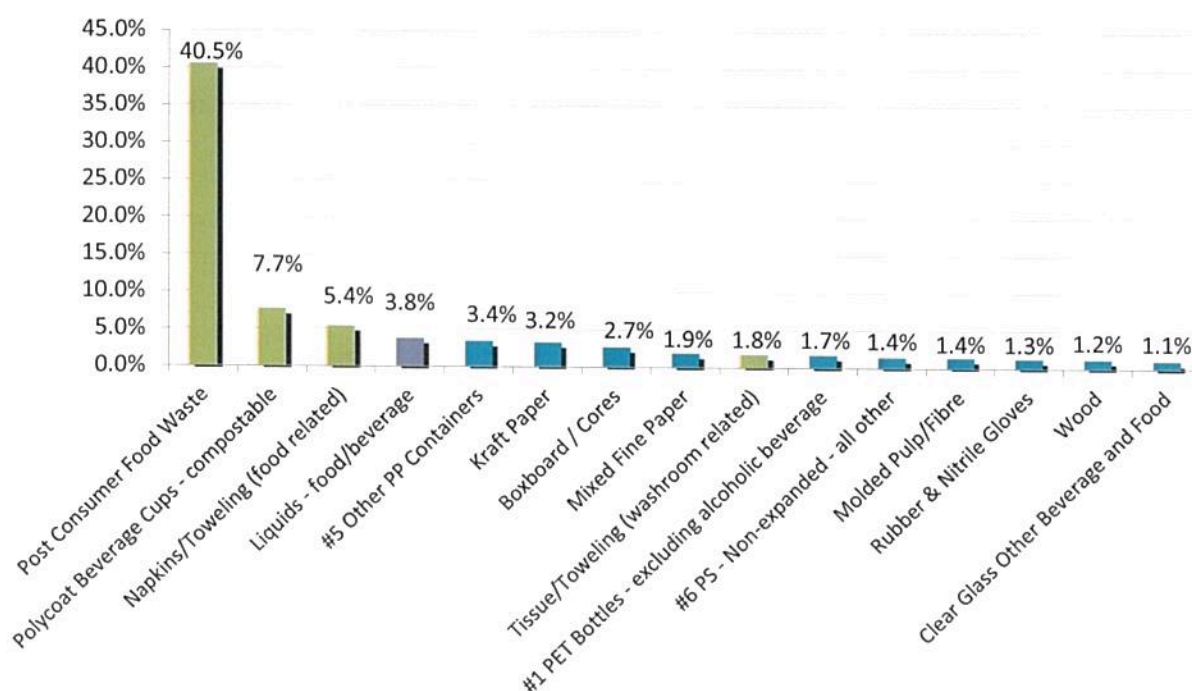
The waste reduction workplan should focus on those contaminants that can with minimal effort and cost be managed to be suitable for inclusion in ZW organics or eliminated from improper disposal. These include:

1. Encouraging the proper disposal in mixed recycling of boxboard/cores, #6 polystyrene, kraft and fine paper, polypropylene containers (cold drink cups), molded pulp/fibre (beverage trays & fry cups), PET bottles & cardboard through education/signage.
2. Encouraging the emptying of liquids then the disposal of the food packaging in the appropriate ZW recycling or ZW organics bin through education/signage.

1.7 DAVIS CAMPUS: WASTE-TO-LANDFILL COMPOSITION

The ZW waste-to-landfill contamination rate was calculated by summing the weight of material that was disposed in waste-to-landfill for which there is a diversion program available on campus divided by the total weight of material disposed in waste-to-landfill. The ZW waste-to-landfill contamination rate was high at 83.2% and most of the contamination is food waste suitable for the ZW organics program. This suggests that users are defaulting to disposing of mixed food related materials in this stream and are not sorting food waste & containers/packaging into appropriate streams. The top 10 most commonly disposed contaminants (i.e. organic or mixed recyclable wastes) disposed in the ZW waste-to-landfill bins at Davis are presented in the Figure below. Specific wastes are colour coded: blue are suitable for ZW mixed recycling bin, green are suitable for ZW organics bin and purple are reducible.

Figure 6: Davis Contaminants in Waste-to-Landfill (over 1.0% by weight of material stream)



Analysis of the ZW bin streams at this campus has indicated that the most significant impediment to improved diversion is the use of the ZW waste-to-landfill bin for the disposal of organic wastes. The waste reduction workplan must focus on those contaminants that can with minimal effort and cost be managed to be suitable for inclusion in ZW organics or eliminated from improper disposal. These include:

1. Encouraging the emptying of food waste and napkins in the organics bin, then the disposal of the food packaging in the appropriate ZW mixed recycling or ZW organics bin through education/signage.
2. Encouraging the capture of polycoat beverage cups in the ZW organics bin through education/signage.

3. Encouraging the proper disposal in ZW mixed recycling of polypropylene containers (cold cups), kraft and fine paper, boxboard/cores, PET bottles, polystyrene (lids), molded pulp/fibre (drink trays & fry cups) and clear glass
4. Encouraging the emptying of beverage containers prior to placement in mixed recycling through a combination of education/signage and placement of emptying stations where practicable.
5. Reducing washroom tissue toweling at source and/or educating and providing facilities to collect washroom tissue toweling in ZW organics bin program.

1.8 DAVIS CAMPUS: ANALYSIS OF ZW BINS BY AREA

For the purpose of identifying opportunities to improve waste diversion, fourteen areas of distinct waste generation were identified and audited. This sampling did not include every area of the campus. Each area generated a different amount of ZW mixed recycling, organics and mixed waste-to-landfill (Table 1). In order to maximize waste reduction, opportunities should focus on the areas with the lowest diversion rate.

Table 2: Davis Campus ZW Material Diversion Rate by Area

Area	Percent By Weight of Material Stream Generated During the 24-hour Sampling Period			
	ZW Mixed Recycling	ZW Organics	ZW Waste-to-landfill	ZW Diversion Rate
B Wing Animal Care	0.0%*	0.0%*	100.0%	0.0%
Grounds H/J Wing Outdoors	16.3%	0.0%*	83.7%	16.3%
SC SSU Food Service	0.0%*	18.6%	81.4%	18.6%
A Wing Offices	7.9%	24.1%	68.0%	32.0%
C Wing Gym, Weights Room	31.1%	1.2%	67.7%	32.3%
B Wing Cafeteria Back of House	41.5%	0.0%*	58.5%	41.5%
J Wing Learning Commons, Floors	27.6%	23.2%	49.2%	50.8%
H Wing Athletic Therapy	31.4%	22.1%	46.4%	53.6%
M Wing Public Hallways	24.3%	30.8%	44.9%	55.1%
C Wing Hallways	27.3%	28.6%	44.1%	55.9%
A Wing Hallways	34.5%	23.6%	41.9%	58.1%
Residence Ground Level	33.8%	25.8%	40.4%	59.6%
B Wing Cafeteria Front of House	22.8%	41.4%	35.8%	64.2%

Area	Percent By Weight of Material Stream Generated During the 24-hour Sampling Period			
	ZW Mixed Recycling	ZW Organics	ZW Waste-to-landfill	ZW Diversion Rate
SC Public Spaces	0.0%*	100.0%	0.0%*	100.0%

* It is possible that where 0% is reported that it represented an instance where material streams were not delivered for the audit

The contamination rates for each of the fourteen areas sampled during the audit were analyzed to identify the best and worst performers. This analysis was done for all three ZW bins streams. Note that the samples for the Residence Ground Level and C Wing Hallways was blended so the contamination level in these Areas is the same and represents a "blended" area.

Table 3 below presents the percentage by weight of contaminants in ZW mixed recycling by area sorted to present the worst to the best performers.

Table 3: Percentage of Contaminants in ZW Mixed Recycling by Area: the Worst to the Best Performers

Area	Contaminants in ZW Mixed Recycling
Grounds H/J Wing Outdoors	86.5%
C Wing Gym, Weights Room	65.1%
A Wing Hallways	58.8%
M Wing Public Hallways	46.2%
Residence Ground Level	43.0%
C Wing Hallways	43.0%
B Wing Cafeteria Back of House	40.0%
J Wing Learning Commons, Floors	34.8%
B Wing Cafeteria Front of House	30.2%
H Wing Athletic Therapy	29.3%
A Wing Offices	24.4%
B Wing Animal Care	*
SC Public Spaces	*
SC SSU Food Service	*
Campus-Wide	46.0%

* It is possible that the ZW recycling was not delivered for the audit from these areas thereby understating the diversion rate of the areas and the campus

Table 4 below presents the percentage by weight of contaminants in ZW organics by area sorted to present the worst to the best performers.

Table 4: Percentage of Contaminants in ZW Organics by Area: the Worst to the Best Performers

Area	Contaminants in ZW Organics
B Wing Cafeteria Front of House	27.8%
A Wing Hallways	23.7%

J Wing Learning Commons, Floors	20.6%
A Wing Offices	20.5%
M Wing Public Hallways	17.5%
SC Public Spaces	15.3%
Residence Ground Level	13.8%
C Wing Hallways	13.8%
H Wing Athletic Therapy	13.2%
C Wing Gym, Weights Room	2.8%
SC SSU Food Service	0.5%
Grounds H/J Wing Outdoors	*
B Wing Cafeteria Back of House	*
B Wing Animal Care	*
Campus-Wide	17.6%

** It is possible that the ZW organics was not delivered for the audit from these areas thereby understating the diversion rate of the areas and the campus*

Table 5 below presents the percentage by weight of contaminants in ZW waste-to-landfill by area sorted to present the worst to the best performers. The average contamination rate of ZW waste-to-landfill at the Davis campus is 83.2%. The average is the sum of the weights of the contaminants in the ZW waste-to-landfill bin in all fourteen areas audited divided by the total amount of ZW waste-to-landfill material sorted.

Table 5: Percentage of Contaminants in ZW Waste-to-Landfill by Area: the Worst to the Best Performers

Area	Contaminants in ZW Waste-to-landfill
B Wing Animal Care	98.6%
Grounds H/J Wing Outdoors	94.8%
A Wing Offices	94.7%
M Wing Public Hallways	90.6%
Residence Ground Level	88.9%
C Wing Hallways	88.9%
J Wing Learning Commons, Floors	87.3%
A Wing Hallways	86.0%
B Wing Cafeteria Front of House	85.8%
C Wing Gym, Weights Room	81.7%
SC SSU Food Service	75.1%
H Wing Athletic Therapy	72.0%
B Wing Cafeteria Back of House	67.5%
SC Public Spaces	*
Campus-Wide	83.2%

** It is possible that the ZW waste-to-landfill was not delivered for the audit from these areas thereby overstating the diversion rate of the areas and the campus*

For the purpose of identifying the areas where the ZW bin program is underperforming each Area was ranked for:

1. Waste Diversion Rate
2. ZW Recycling Contamination Rate

3. ZW Organics Contamination Rate, and
4. ZW Waste-to-Landfill Contamination Rate

Of the Areas audited at Davis in 2018 the worst to the best Area for overall ZW bin performance are in order:

1. Grounds H/J Wing & Outdoors
2. Animal Care
3. A Wing Offices
4. A Wing Hallways
5. C-Wing Gym/Weights Room
6. M Wing Public Hallways
7. B Wing Cafeteria Front of House
8. SC&SSU Food Service
9. J Wing Learning Commons, Floors
10. Residence Ground Level
11. C-Wing Cafeteria Back of House
12. C Wing Hallways

1.9 DAVIS CAMPUS: SUMMARY OF RECOMMENDATIONS

Campus Wide Focus:

Sheridan Davis campus has an excellent combination of diversion programs that address the divertible materials generated at the campus. Consequently, future waste diversion improvements will likely come from enhancing compliance with the three stream ZW bins across campus. Sheridan should continue to assess and identify barriers to sorting and develop area-specific action plans to increase participation.

Specific Recommendations:

1. **Enhancing Food Waste and Napkins Capture Rate Throughout the Campus:** 94,174 kg/year of food waste and napkins are being disposed in waste-to-landfill. Sheridan must continue to encourage the proper disposal in organics of food waste and napkins through education/signage. Consider a campaign to encourage sorting behaviour using a multi-media approach and consider 'branding' the campaign. Engage and challenge environmental studies students to design the campaign and develop a multi-media approach/roll-out. Expected improvement in capture rate of 20%. Anticipated reduction in waste-to-landfill of 18,835 kg per year (20% of food waste and napkins improperly disposed across the campus).
2. **Enhancing Mixed Recycling Capture Rate Throughout the Campus:** Encouraging the proper disposal in mixed recycling of: polypropylene containers (predominantly cold drink containers from Tim Hortons), kraft and fine paper, boxboard/cores, PET bottles, polystyrene (predominantly cup lids and cutlery), molded pulp/fibre (predominantly drink trays & fry cups), PET bottles, cardboard and clear glass through education/signage. Expected improvement in capture rate of 20%. Anticipated reduction in waste-to-landfill of 9,309 kg per year (20% of mixed recycling improperly disposed across the campus).
3. **Capturing Anaerobically Digested Coffee Cups in Organics:** 36,277kg per year of compostable coffee cups are being disposed in mixed recycling, organics and waste-to-landfill at the Davis Campus. 7,106 kg are being disposed improperly in mixed recycling and 15,750 kg are being

improperly disposed in mixed waste-to-landfill. Launch a campaign to capture compostable coffee cups in organics. Suggestions:

- iii. Improve signage on ZW bins to include a picture of a coffee cup on all three bins with an X through the cups on all but the ZW organics bin.
- iv. Consider including the coffee cup education campaign in the action plan identified above for food waste and napkins, engaging environmental students to design the campaign. Ensure the non-compostable cups that are brought to campus are targeted as part of the education campaign. Focus should be to eliminate non-compostable beverage cups on campus since they are not recyclable at this time.

Expected improvement in capture rate of 50%. Anticipated reduction in waste-to-landfill of 7,875 kg per year (50% of coffee cups improperly disposed in waste-to-landfill).

4. **Emptying Beverage Containers:** Continue to encourage the emptying of beverage containers prior to placement in mixed recycling through a combination of education/signage and placement of emptying stations where practicable. Consider launching a campaign. Anticipated reduction in disposal of liquids in any stream: 40%. Anticipated reduction in waste-to-landfill of 3,105 kg per year as well as a significant reduction in contamination in the mixed recycling and organic streams (40% reduction in liquids in waste-to-landfill stream).
5. **Reducing/Eliminating Disposal of Washroom Paper Toweling:** Reduce/eliminate washroom paper towel use or provide facilities and education/signage to capture washroom paper toweling in the organics program. Anticipated reduction in disposal of 50% of washroom paper toweling and reduce 1,797 kg per year of waste-to-landfill.
6. **Reducing Contamination in the ZW Collection Programs at Targetted Underperforming Areas:** Sheridan should continue to identify behavioural and structural issues and opportunities to improve material sorting, with particular focus in Areas where sorting is particularly poor:
 - Grounds H/J Wing & Outdoors
 - Animal Care
 - A Wing Offices
 - A Wing Hallways
 - C-Wing Gym/Weights Room
7. **Capturing & Reporting Material Weights for All Diversion Programs at the Campus:** Sheridan has made significant progress in reporting material diversion streams since 2015 however there may be other diversion programs in place at the Davis Campus but the weight-based data is not currently captured for reporting purposes (Examples Repair Cafe and Food Donation Program). Sheridan should continue to conduct an inventory of all diversion programs, with particular focus on reduction and reuse programs, and should ensure there are procedures in place to collect, monitor and report on these programs.

Anticipated Result:

With the implementation of the above noted waste reduction plans, it is estimated that the waste diversion rate at the Davis Campus will increase from 54.5% to 63.4% and the Davis Campus will divert an additional 40,921 kg per year of waste from landfill in 2019.

APPENDICES

GLOSSARY OF WASTE TERMS

In order to reduce potential confusion that may arise from the use of terms in this report, the following is a brief description of the waste and waste diversion terms.

TOTAL WASTE GENERATED

Total waste generated refers to all materials generated by the Facility's operations.

Total Waste Generated = Waste Disposed + Material Recovered From 3Rs Programs

RECOVERED WASTE

Recovered waste refers to materials diverted from the Facility's waste stream and from landfill as a result of 3Rs Programs.

CAPTURE RATES

Recycling rates for the Facility's 3Rs Programs based on the amount of material recovered versus the amount of the same material disposed into the waste stream.

Capture Rate = Recycled or Reused Material / (Material Disposed + Recycled or Reused)

ANNUAL DIVERSION RATE

The Facility's annual diversion rate is the percentage of waste material that it diverts from landfill versus what it generates in total.

Annual Diversion Rate = 3Rs Programs / Total Waste Generated

ONTARIO'S 60% REDUCTION TARGET

The *Ontario Ministry of Environment & Climate Change's* 60% reduction target is a comparison between a Facility's current year waste-to-landfill figure and a figure obtained from an earlier base year.

60% Reduction Target = (Waste Disposed 2018 - Waste Disposed Base Year 2012) / Waste Disposed Base Year 2012

SPECIFIC WASTE CATEGORIES & WASTE AUDIT DATA (DAVIS CAMPUS)

The following is the list of specific wastes, the associated appropriate waste management collection program, and the amount by weight generated per year and disposed by collection program at the Davis Campus in 2018. The specific wastes are listed alphabetically.

Specific Waste Category	Acceptable in Collection Program	All Streams (kg/yr)	ZW Mixed Recycling (kg/yr)	ZW Organics (kg/yr)	Other / Bulk Recycling (kg/yr)	Reuse (kg/yr)	Disposal (kg/yr)
#1 PET - clear thermoform packaging	Mixed Recycling	3,280	3,280	0	0	0	0
#1 PET - other thermoform (coloured)	Mixed Recycling	0	0	0	0	0	0
#1 PET Bottles - excluding alcoholic beverage	Mixed Recycling	10,848	6,605	763	0	0	3,480
#2 HDPE Bottles and Jugs	Mixed Recycling	3,224	2,053	105	0	0	1,067
#2 Other HDPE Containers	Mixed Recycling	0	0	0	0	0	0
#5 Other PP Containers	Mixed Recycling	13,324	4,825	1,464	0	0	7,035
#6 PS - Expanded polystyrene	Waste	2,471	157	917	0	0	1,397
#6 PS - Non-expanded - all other	Mixed Recycling	6,256	1,419	1,899	0	0	2,938
#7 Other Plastics	Mixed Recycling	476	476	0	0	0	0
Aluminum beverage - alcohol	Alcohol Beverage Container Reuse	0	0	0	0	0	0
Aluminum Foil & Foil Trays	Mixed Recycling	996	869	0	0	0	127
Aluminum Food & Other Beverage Cans	Mixed Recycling	4,107	1,680	295	0	0	2,131
Aseptic Containers - (excluding alcoholic beverages)	Mixed Recycling	1,951	920	76	0	0	955
Batteries	Battery Recycling	0	0	0	0	0	0
Boxboard / Cores	Mixed Recycling	12,341	4,344	2,524	0	0	5,473
Clear Glass Other Beverage and Food	Mixed Recycling	2,159	0	0	0	0	2,159
Clothing/Textiles	Dropbox/Textile Reuse	524	0	0	0	338	186
Coffee Grinds	Organics	0	0	0	0	0	0
Coffee pods	Waste	334	0	236	0	0	98
Confidential Paper - Paper Shred	Paper Shred Recycling	16,216	0	0	16,216	0	0
Corrugated Cardboard - Bulk	Cardboard Recycling	14,090	0	0	14,090	0	0
Corrugated Cardboard - Loose	Mixed Recycling	3,472	2,355	724	0	0	393
Diapers	Waste	0	0	0	0	0	0
Feminine Hygiene Products	Hygiene Waste	2,390	0	0	0	0	2,390*
Food packaging	Waste	20,865	5,599	2,295	0	0	12,971
Gable Top Containers	Mixed Recycling	2,442	139	166	0	0	2,137
Glass - Clear Other Beverage and Food	Mixed Recycling	2,718	1,424	0	0	0	1,293
Glass - Clear Alcoholic Beverage	Mixed Recycling	812	812	0	0	0	0
Kraft Paper	Mixed Recycling	10,111	1,616	1,849	0	0	6,646
Laminated Paper Packaging	Waste	0	0	0	0	0	0
Large HDPE & PP Pails & Lids	Mixed Recycling	0	0	0	0	0	0

Specific Waste Category	Acceptable in Collection Program	All Streams (kg/yr)	ZW Mixed Recycling (kg/yr)	ZW Organics (kg/yr)	Other / Bulk Recycling (kg/yr)	Reuse (kg/yr)	Disposal (kg/yr)
LDPE/HDPE Film - Products (non-packaging)	Waste	6,788	3,077	262	0	0	3,448
Liquids - food/beverage	Organics	20,547	10,346	2,438	0	0	7,763
Maintenance Waste	Waste	507	0	105	0	0	402
Metal - Bulk	Metal Recycling	3,066	0	0	3,066	0	0
E-Waste	E-Waste Recycling	4,423	0	0	4,423	0	0
Mixed Fine Paper	Mixed Recycling	17,985	13,419	707	0	0	3,859
Molded Pulp/Fibre	Mixed Recycling	5,254	1,430	974	0	0	2,850
Napkins/Toweling (food related)	Organics	21,969	2,374	8,548	0	0	11,047
Newspaper – Dailys and Weeklys	Mixed Recycling	248	0	0	0	0	248
Office Waste	Waste	8,535	330	22	0	0	8,183
Other Metal	Mixed Recycling	0	0	0	0	0	0
Other Non-Recyclable Material	Waste	0	0	0	0	0	0
Other Paper	Mixed Recycling	0	0	0	0	0	0
Parchment Paper	Waste	2,788	119	0	0	0	2,669
Polycoat Beverage Cups - compostable	Organics	36,277	7,106	13,422	0	0	15,750
Polycoat Beverage Cups - non-compostable	Waste	8,563	1,786	1,748	0	0	5,030
Post Consumer Food Waste	Organics	151,115	10,817	57,171	0	0	83,127
Rubber & Nitrile Gloves	Mixed Recycling	3,055	381	53	0	0	2,622
Spiral Wound Containers	Waste	245	0	0	0	0	245
Steel Food & Other Beverage Cans	Mixed Recycling	1,405	624	163	0	0	619
Straws/Plastic Cutlery	Mixed Recycling	1,381	824	42	0	0	516
Tissue/Toweling (cleaning related)	Waste	0	0	0	0	0	0
Tissue/Toweling (washroom related)	Organics	4,082	456	31	0	0	3,595
Wood	Wood Recycling	21,794	0	0	19,250	0	2,544
Wood Dust	Wood Dust Briquette Reuse	0	0	0	0	0	0
	Grand Total	455,433	91,660	99,000	57,045	338	207,390

**Feminine hygiene products are collected separately from ZW waste-to-landfill however the collected waste is combusted in an energy-from-waste facility so it is included as "disposal" for the purpose of calculating waste diversion rate*

MINISTRY OF THE ENVIRONMENT WASTE FORM: REPORT OF A WASTE AUDIT (DAVIS)

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 (Davis)

Name of Owner and/or Operator of Entity(ies) and Company Name: Sheridan College Institute of Technology and Advanced Learning		
Name of Contact Person: Wai Chu Cheng	Telephone #: 905 845 9430	Email address: Waichu.cheng@sheridancollege.ca
Street Address(es) of Entity(ies): Davis Campus of Sheridan College		
Municipality: Brampton, ON Canada		
Type of entity Educational Institution		

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

II. Description of Entity (Davis)

Provide a brief overview of the entity(ties):
<p>This waste audit was conducted in April 2018 at the Davis Campus of Sheridan College. The Davis Campus is the largest of the three Sheridan campuses.</p> <p>The Zero Waste streams which include mixed recycling, organics and waste-to-landfill were audited for the purpose of identifying current diversion rates by specific waste category and to calculate contamination rates. A 24-hour sample of organics, mixed recycling and waste-to-landfill was sorted and weighed in each of the 14 areas audited. Weight based generation information from 2017 for the waste and diversion programs were obtained from the service provider(s) and were used in the calculation of diversion rates.</p> <p>At the time of the audit, the campus had fully implemented the following collection programs:</p> <ol style="list-style-type: none">1. ZW Mixed Recycling (includes glass, metal, paper, plastic)2. ZW Organics3. ZW Waste-to-landfill4. Bulk Old Corrugated Cardboard (OCC) Recycling5. Paper Shred Recycling6. Metal Recycling7. E-Waste Recycling (includes Battery Recycling)8. Wood Recycling

9. Textile Reuse
10. Hygiene Waste Energy-from-Waste (EFW)

III. How Waste is Produced And Decisions Affecting the Production of Waste (Davis)

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?
#1 PET - clear thermoform packaging	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#1 PET - other thermoform (coloured)	Minimal amounts generated on campus
#1 PET Bottles - excluding alcoholic beverage	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students. ZW water bottle refill stations installed to reduce PET water bottle generation/disposal.
#2 HDPE Bottles and Jugs	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#2 Other HDPE Containers	Minimal amounts generated on campus
#5 Other PP Containers	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#6 PS - Expanded polystyrene	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#6 PS - Non-expanded - all other	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#7 Other Plastics	Minimal amounts generated on campus.
Aluminum beverage - alcohol	Alcohol is not available for sale on campus. Alcoholic beverage containers brought to campus by students, visitors and others.
Aluminum Foil & Foil Trays	Small quantities generated on campus and should be included in the ZW recycling program.
Aluminum Food & Other Beverage Cans	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Aseptic Containers - (excluding alcoholic beverages)	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Batteries	Minimal amounts generated in campus. Should be included in battery recycling program.
Boxboard / Cores	Generated all over the campus as a packaging material for food products, office products and class material supplies.

Clear Glass Other Beverage and Food	Small quantities generated on campus and disposed as waste.
Clothing/Textiles	Little generated at the campus. Likely lost or intentionally disposed articles of clothing.
Coffee Grinds	Minimal amounts generated on campus
Coffee pods	Generated at coffee stations around the campus.
Confidential Paper - Paper Shred	Generated across campus in offices and captured for shredding and recycling.
Corrugated Cardboard - Bulk	Generated in receiving area through delivery. Almost all captured in bulk recycling program.
Corrugated Cardboard - Loose	Generated across campus. Almost all captured in recycling program.
Diapers	Small quantities generated on campus and disposed as waste.
Feminine Hygiene Products	Generated across campus in washrooms. Material collected for diversion from landfill (incineration) though amounts have not been accurately quantified at this time for inclusion in this report
Food packaging	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Gable Top Containers	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Glass - Clear Other Beverage and Food	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Glass - Clear Alcoholic Beverage	Alcohol is not available for sale on campus. Alcoholic beverage containers brought to campus by students, visitors and others.
Kraft Paper	Paper products generated through campus activities. Most generated in printing and photocopying areas.
Laminated Paper Packaging	Minimal amounts generated on campus
Large HDPE & PP Pails & Lids	Minimal amounts generated on campus suitable for inclusion in the ZW recycling program.
LDPE/HDPE Film - Products (non-packaging)	Minimal amounts generated on campus
Liquids - food/beverage	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Maintenance Waste	Minimal amounts generated on campus.
Metal - Bulk	Generated in receiving and maintenance areas. Well captured by bulk metal recycling program.
E-Waste	Generated throughout campus and suitable for the E-waste recycling program.
Mixed Fine Paper	Paper products generated through campus activities. Most generated in printing and photocopying areas.

Molded Pulp/Fibre	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Napkins/Toweling (food related)	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Newspaper – Dailys and Weeklys	Available for sale at Campus. Most should be captured in the ZW mixed recycling.
Office Waste	Generated in offices and classrooms around campus. Disposed as waste.
Other Metal	Minimal amounts generated on campus and suitable for inclusion in ZW recycling program.
Other Non-Recyclable Material	Minimal amounts generated on campus.
Other Paper	Minimal amounts generated on campus
Parchment Paper	Minimal amounts generated on campus.
Polycoat Beverage Cups - compostable	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Polycoat Beverage Cups - non-compostable	Not available for sale on campus as not included in ZW recycling program. Likely brought in from off-site vendors by students/staff.
Post Consumer Food Waste	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Rubber & Nitrile Gloves	Generated in cafeterias across campus. Suitable for inclusion in the ZW recycling program.
Spiral Wound Containers	Minimal amounts generated on campus.
Steel Food & Other Beverage Cans	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Straws/Plastic Cutlery	Generated in cafeterias across campus. Suitable for inclusion in the ZW recycling program.
Tissue/Toweling (cleaning related)	Minimal amounts generated on campus.
Tissue/Toweling (washroom related)	Generated and disposed as waste in Residence. Have been removed from washrooms. Should be included in ZW organics program though much ends up in waste-to-landfill
Wood	Generated in receiving area through delivery. Almost all captured in bulk recycling program.
Wood Dust	Not generated at Davis Campus.
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 (Davis)

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
#1 PET - clear thermoform packaging		Should be included in ZW Recycling Bin Program though some may end up in landfill
#1 PET - other thermoform (coloured)		Should be included in ZW Recycling Bin Program though some may end up in landfill
#1 PET Bottles - excluding alcoholic beverage		Should be included in ZW Recycling Bin Program though some may end up in landfill. Reduction in PET water bottles through installation of reusable water bottle filling stations.
#2 HDPE Bottles and Jugs		Should be included in ZW Recycling Bin Program though some may end up in landfill
#2 Other HDPE Containers		Should be included in ZW Recycling Bin Program though some may end up in landfill
#5 Other PP Containers		Should be included in ZW Recycling Bin Program though some may end up in landfill
#6 PS - Expanded polystyrene	Generated in J Wing, C Wing Gym & J Wing Learning Commons. No diversion program currently available.	
#6 PS - Non-expanded - all other		Should be included in ZW Recycling Bin Program though some may end up in landfill
#7 Other Plastics		Should be included in ZW Recycling Bin Program though some may end up in landfill
Aluminum beverage - alcohol		Alcohol is not available for sale on campus. Alcoholic beverage containers brought to campus by students, visitors and others. Should be included in ZW Recycling Bin Program though some may end up in landfill.
Aluminum Foil & Foil Trays		Should be included in ZW Recycling Bin Program though some may end up in landfill

Aluminum Food & Other Beverage Cans		Should be included in ZW Recycling Bin Program though some may end up in landfill
Aseptic Containers - (excluding alcoholic beverages)		Should be included in ZW Recycling Bin Program though some may end up in landfill
Batteries		Should be included in E-Recycling or captured during E-Recycling Events.
Boxboard / Cores		Should be included in ZW Recycling Bin Program though some may end up in landfill
Clear Glass Other Beverage and Food		Should be included in ZW Recycling Bin Program though some may end up in landfill
Clothing/Textiles		None generated at this campus.
Coffee Grinds		Little generated. Should be included in ZW Organics Bin Program.
Coffee pods	Little generated and no diversion program currently available.	
Confidential Paper - Paper Shred		Well captured in paper shred recycling
Corrugated Cardboard - Bulk		Well captured in OCC bulk recycling program.
Corrugated Cardboard - Loose		Should be included in ZW Recycling Bins throughout the campus, though some may end up in landfill
Diapers	Small quantities generated on campus and disposed as waste.	
Feminine Hygiene Products	Generated across campus in washrooms. Material collected for diversion from landfill. Material is sent to Energy-from-Waste facility.	
Food packaging	Generated across campus (with the exception of Animal Care) and no diversion program currently available.	
Gable Top Containers		Should be included in ZW Recycling Bin Program though some may end up in landfill
Glass - Clear Other Beverage and Food		Should be included in ZW Recycling Bin Program though some may end up in landfill
Glass - Clear Alcoholic Beverage		Alcohol is not available for sale on campus. Alcoholic beverage containers brought to campus by

		students, visitors and others. Should be included in ZW Recycling Bin Program though some may end up in landfill.
Kraft Paper		Should be included in ZW Recycling Bin Program though some may end up in landfill
Laminated Paper Packaging	Little generated and no diversion program currently available.	
Large HDPE & PP Pails & Lids		Little generated and should be included in ZW Recycling Bin Program
LDPE/HDPE Film - Products (non-packaging)	Little generated and no diversion program currently available.	
Liquids - food/beverage		Should be included in ZW Organics Bin Program though much ends up in landfill
Maintenance Waste	Little generated and no diversion program currently available.	
Metal - Bulk		Generated in receiving and maintenance areas. Well captured by bulk metal recycling program.
E-Waste		Should be included in E-Recycling or captured during E-Recycling Events.
Mixed Fine Paper		Should be included in ZW Recycling Bin Program though some may end up in landfill
Molded Pulp/Fibre		Should be included in ZW Recycling Bin Program though some may end up in landfill
Napkins/Toweling (food related)		Should be included in ZW Organics Bin Program though much ends up in landfill
Newspaper – Dailys and Weeklys		Should be included in ZW Recycling Bin Program though some may end up in landfill
Office Waste	No diversion program currently available.	
Other Metal		Should be included in ZW Recycling Bin Program though some may end up in landfill
Other Non-Recyclable Material	Little generated and no diversion program currently available.	
Other Paper		Little generated and should be included in ZW Recycling Bin Program
Parchment Paper	No diversion program currently available.	

Polycoat Beverage Cups - compostable (anaerobically digested)		Should be included in ZW Organics Bin Program though much ends up in landfill
Polycoat Beverage Cups - non-compostable	Generated throughout campus and should be disposed in waste-to-landfill but much contaminates ZW mixed recycling and ZW organics streams	
Post Consumer Food Waste		Should be included in ZW Organics Bin Program though much ends up in landfill
Rubber & Nitrile Gloves		Should be included in ZW Recycling Bin Program though some may end up in landfill
Spiral Wound Containers	Little generated and no diversion program currently available.	
Steel Food & Other Beverage Cans		Should be included in ZW Recycling Bin Program though some may end up in landfill
Straws/Plastic Cutlery		Should be included in ZW Recycling Bin Program though some may end up in landfill
Tissue/Toweling (cleaning related)	Little generated. Should be included in waste-to-landfill	
Tissue/Toweling (washroom related)		Should be included in ZW organics program though most ends up in waste-to-landfill
Wood		Is captured by wood recycling program in deliveries.
Wood Dust		Not generated at Davis Campus.

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 – Davis

Estimated Amount of Waste Produced (kgs)												
Categories of Waste	Generated			Reused			Recycled			Disposed		
	"A" Base Year 2012 (kg)	"B" * Current Year (kg)	"C" * Change (A-B) (kg)	"A" Base Year 2012 (kg)	"B" * Curr ent Year (kg)	"C" * Chang e (A-B) (kg)	"A" Base Year 2012 (kg)	"B" * Current Year (kg)	"C" * Change (A-B) (kg)	"A" Base Year 2012 (kg)	"B" * Current Year (kg)	"C" * Change (A-B) (kg)
Cans/bottles/plastics (2012 grouping)	20,260		-20,260			0	8,340		-8,340	11,920		-11,920
Paper products (2012 grouping)	28,140		-28,140			#REF!	22,810		-22,810	5,330		-5,330
Other Non-Recyclable Material (2012 grouping)	121,070		-121,070			0	0		0	121,070		-121,070
#1 PET - clear thermoform packaging		3,280	3,280		0	0		3,280	3,280		0	0
#1 PET - other thermoform (coloured)		0	0		0	0		0	0		0	0
#1 PET Bottles - excluding alcoholic beverage		10,848	10,848		0	0		7,369	7,369		3,480	3,480
#2 HDPE Bottles and Jugs		3,224	3,224		0	0		2,157	2,157		1,067	1,067
#2 Other HDPE Containers		0	0		0	0		0	0		0	0
#5 Other PP Containers		13,324	13,324		0	0		6,289	6,289		7,035	7,035
#6 PS - Expanded polystyrene		2,471	2,471		0	0		1,074	1,074		1,397	1,397
#6 PS - Non-expanded - all other		6,256	6,256		0	0		3,318	3,318		2,938	2,938
#7 Other Plastics		476	476		0	0		476	476		0	0


Tissue/Toweling (cleaning related)		0	4,082		0	0		0	0			0	0
Tissue/Toweling (washroom related)	1,710	4,082	20,084		0	0		487	487		1,710	3,595	1,885
Wood		21,794	0		0	0		19,250	19,250			2,544	2,544
Wood Dust		0	455,433		0	0		0	0			0	0
FACILITY WIDE TOTALS	169,470	455,433	285,963	0	338	338	31,150	247,705	216,555	138,320	207,390	69,070	
Percent Change (total C ÷ total A x 100) from Base Year:		168.7%			-			695.20%			54.46%		
2018 Current year Diversion Rate:	54.5%												
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. <ul style="list-style-type: none"> 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. Specific waste categories appearing in RED were ones employed during 2012 base audit 													

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

Please answer the following questions (and please attach any additional page(s) as required):

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.
	<p>Sheridan's Sustainability Policy outlines one of its principles that is based on a model called The Natural Step as follows: "We must eliminate our contributions to the systematic physical degradation of nature and natural processes (e.g. overharvesting forests, destroying habitat and overfishing)".</p> <p>In the Request of Proposal documents, the contractors are required to outline how they demonstrate sustainability in their project proposals.</p>
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.
	<p>* 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.</p> <p>It is in Sheridan College's long-term plan.</p>

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

Signature of authorized official:	Title:	Date:
	DIRECTOR-SUSTAINABILITY	MARCH 31/19

**MINISTRY OF THE ENVIRONMENT WASTE FORM: REPORT OF A WASTE REDUCTION WORK PLAN
(DAVIS)**

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 (Davis)

Name of Owner and/or Operator of Entity(ies) and Company Name: Sheridan College Institute of Technology and Advanced Learning		
Name of Contact Person: Wai Chu Cheng	Telephone #: 905 845 9430	Email address: Waichu.cheng@sheridancollege.ca
Street Address(es) of Entity(ies): Davis Campus of Sheridan College		
Municipality: Brampton, ON Canada		
Type of entity Educational Institution		

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

II. Description of Entity (Davis)

<p>Provide a brief overview of the entity(ties):</p> <p>This waste audit was conducted in April 2018 at the Davis Campus of Sheridan College. The Davis Campus is the largest of the three Sheridan campuses.</p> <p>The Zero Waste streams which include mixed recycling, organics and waste-to-landfill were audited for the purpose of identifying current diversion rates by specific waste category and to calculate contamination rates. A 24-hour sample of organics, mixed recycling and waste-to-landfill was sorted and weighed in each of the 14 areas audited. Weight based generation information from 2017 for the waste and diversion programs were obtained from the service provider(s) and were used in the calculation of diversion rates.</p> <p>At the time of the audit, the campus had fully implemented the following collection programs:</p> <ol style="list-style-type: none">1. ZW Mixed Recycling (includes glass, metal, paper, plastic)2. ZW Organics3. ZW Waste-to-landfill4. Bulk Old Corrugated Cardboard (OCC) Recycling5. Paper Shred Recycling6. Metal Recycling7. E-Waste Recycling (includes Battery Recycling)8. Wood Recycling9. Textile Reuse10. Hygiene Waste Energy-from-Waste (EFW)

III. Plans to Reduce, Reuse and Recycle Waste (Davis)

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.	
#1 PET - clear thermoform packaging	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#1 PET - other thermoform (coloured)	Little generated.
#1 PET Bottles - excluding alcoholic beverage	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#2 HDPE Bottles and Jugs	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#2 Other HDPE Containers	Little generated.
#5 Other PP Containers	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#6 PS - Expanded polystyrene	Little generated. Should be disposed in ZW waste-to-landfill.
#6 PS - Non-expanded - all other	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#7 Other Plastics	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Aluminum beverage - alcohol	Little generated. Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Aluminum Foil & Foil Trays	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Aluminum Food & Other Beverage Cans	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Aseptic Containers - (excluding alcoholic beverages)	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Batteries	Most captured through E-recycling programs.
Boxboard / Cores	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Clear Glass Other Beverage and Food	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Clothing/Textiles	Little generated.
Coffee Grinds	Little generated.
Coffee pods	Little generated. Should be disposed in ZW waste-to-landfill.
Confidential Paper - Paper Shred	Well captured in recycling program. No action required.

Corrugated Cardboard - Bulk	Well captured in recycling program. No action required.
Corrugated Cardboard - Loose	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Diapers	Little generated.
Feminine Hygiene Products	Accurately quantify hygiene waste generation/disposal. Research diversion options that are higher use than incineration.
Food packaging	Little generated.
Gable Top Containers	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Glass - Clear Other Beverage and Food	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Glass - Clear Alcoholic Beverage	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Kraft Paper	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Laminated Paper Packaging	Little generated.
Large HDPE & PP Pails & Lids	Little generated. Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
LDPE/HDPE Film - Products (non-packaging)	Staff/students will be encouraged to include material in the ZW waste-to-landfill bin through education/signage.
Liquids - food/beverage	Staff/students will be encouraged to empty then recycle containers education/signage.
Maintenance Waste	Little generated.
Metal - Bulk	No action required.
E-Waste	Well captured through E-recycling programs.
Mixed Fine Paper	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Molded Pulp/Fibre	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Napkins/Toweling (food related)	Staff/students will be encouraged to include material in the ZW organics bin through education/signage.
Newspaper – Dailys and Weeklys	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Office Waste	Little generated.
Other Metal	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Other Non-Recyclable Material	Little generated.
Other Paper	Little generated.
Parchment Paper	Staff/students will be encouraged to include material in the ZW waste-to-landfill bin through education/signage.
Polycoat Beverage Cups - compostable	Staff/students will be encouraged to include material in the ZW organics bin through education/signage.

Polycoat Beverage Cups - non-compostable	Not sold or distributed at campus cafeterias or restaurants but brought to campus. Launch education on the preferred polycoat cups or use of reusable cups. These cups are waste.
Post Consumer Food Waste	Staff/students will be encouraged to include material in the ZW organics bin through education/signage.
Rubber & Nitrile Gloves	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Spiral Wound Containers	Little generated.
Steel Food & Other Beverage Cans	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Straws/Plastic Cutlery	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Tissue/Toweling (cleaning related)	Little generated.
Tissue/Toweling (washroom related)	Staff/students will be encouraged to include material in the ZW organics bin through education/signage.
Wood	Most captured through wood recycling program.
Wood Dust	Not generated at Davis Campus.

IV. Responsibility for Implementing the Waste Reduction Work Plan (Davis)

Identify who is responsible for implementing the Waste Reduction Work Plan at your entity(ies). If more than one person is responsible for implementation, identify each person who is responsible and indicate the part of the Waste Reduction Work Plan that each person is responsible for implementing.		
Name of Person	Responsibility	Telephone #
Wai Chu Cheng	Promoting, developing and implementing the Zero Waste program, tracking and assessing of data and evaluating the program.	905-845-9430 x 5423
Muhammah Ishtiaq Afridi	Tracking and assessing of waste data	905-845-9430 x 5674
Herbert Sinnock	Developing and evaluating the Zero Waste program	905-875-4405

V. Timetable for Implementing Waste Reduction Work Plan (Davis)

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
Example: Fine Paper 3Rs Program	"Desk side receptacles and centralized containers to be purchased in March. New collection contract for recycling to be arranged for April Kick off for program and instructions to staff regarding 3Rs program to occur in April" <u>OR</u> "3Rs Program currently in place."
1. Enhancing Food Waste and Napkins Capture Rate	<p>Enhancing Food Waste and Napkins Capture Rate Throughout the Campus: 94,174 kg/year of food waste and napkins are being disposed in waste-to-landfill. Sheridan must continue to encourage the proper disposal in organics of food waste and napkins through education/signage. Consider a campaign to encourage sorting behaviour using a multi-media approach and consider 'branding' the campaign. Engage and challenge environmental studies students to design the campaign and develop a multi-media approach/roll-out. Expected improvement in capture rate of 20%. Anticipated reduction in waste-to-landfill of 18,835 kg per year (20% of food waste and napkins improperly disposed across the campus).</p> <p>Due date: 2018/1019</p>
2. Enhancing Mixed Recycling Capture Rate	<p>Enhancing Mixed Recycling Capture Rate Throughout the Campus: Encouraging the proper disposal in mixed recycling of: polypropylene containers, kraft and fine paper, boxboard/cores, PET bottles, polystyrene, molded pulp/fibre, PET bottles, cardboard and clear glass through education/signage. Expected improvement in capture rate of 20%. Anticipated reduction in waste-to-landfill of 9,309 kg per year (20% of mixed recycling improperly disposed across the campus).</p> <p>Due date: 2018/2019</p>
3. Enhancing Coffee Cup Capture Rate	<p>Capturing Compostable (Anaerobically Digested) Coffee Cups in Organics: 36,277kg per year of compostable coffee cups are being disposed in mixed recycling, organics and waste-to-landfill at the Davis Campus. 7,106 kg are being disposed improperly in mixed recycling and 15,750 kg are being improperly disposed in mixed waste-to-landfill. Launch a campaign to capture compostable coffee cups in organics. Suggestions:</p> <ol style="list-style-type: none"> 1. Improve signage on ZW bins to include a picture of a coffee cup on all three bins with an X through the cups on all but the ZW organics bin. 2. Consider including the coffee cup education campaign in the action plan identified above for food waste and napkins, engaging environmental studies to design the campaign. Ensure the non-compostable cups that are brought to campus are targeted as part of the education campaign. Focus should be to eliminate non-compostable beverage cups on campus since they are not recyclable at this time.

	<p>Expected improvement in capture rate of 50%. Anticipated reduction in waste-to-landfill of 7,875 kg per year (50% of coffee cups improperly disposed in waste-to-landfill).</p> <p>Due date: 2018/2019</p>
4. Encouraging Emptying of Beverage Containers	<p>Emptying Beverage Containers: Continue to encourage the emptying of beverage containers prior to placement in mixed recycling through a combination of education/signage and placement of emptying stations where practicable. Consider launching a campaign. Anticipated reduction in disposal of liquids in any stream: 40%. Anticipated reduction in waste-to-landfill of 3,105 kg per year as well as a significant reduction in contamination in the mixed recycling and organic streams (40% reduction in liquids in waste-to-landfill stream).</p> <p>Due date: 2018/2019</p>
5. Reducing Disposal of Washroom Paper Toweling	<p>Reducing/eliminating Disposal of Washroom Paper Toweling: Reduce/eliminate washroom paper towel use or provide facilities and education/signage to capture washroom paper toweling in the organics program. Anticipated reduction in disposal of 50% of washroom paper toweling and reduce 1,797 kg per year of waste-to-landfill.</p> <p>Due date: 2018/2019</p>
5. Capturing & Reporting Material Weights for All Diversion Programs at the Campus	<p>Capturing & Reporting Material Weights for All Diversion Programs at the Campus: Sheridan has made significant progress in reporting material diversion streams since 2015 however there may be other diversion programs in place at the Davis Campus but the weight-based data is not currently captured accurately for reporting purposes (Examples Repair Cafe and Food Donation Program). Sheridan should continue to conduct an inventory of all diversion programs, with particular focus on reduction and reuse programs, and should ensure there are procedures in place to collect, monitor and report on these programs.</p> <p>Anticipated reduction in waste-to-landfill: Effect on diversion rate likely significant but not quantifiable</p> <p>Due date: 2018/2019</p>

VI. Communication to Staff, Customers, Guests and Visitors (Davis)

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

The Waste Reduction Plan will be posted on the Sheridan Sustainability website. Comprehensive strategies will be adopted in promoting the Zero Waste program, including the weekly e-newsletter Insider, Sustainability website, campus TV screens, campus newspaper, Sheridan social media and the Zero Waste promotion booths across all campuses. These media as well as promotional material and additional signage will be employed, where practicable, to promote the implementation of each of the individual waste reduction work plans.

VII. Estimated Waste Produced By Material Type And The Projected Amount (Davis)

	Estimated Annual Waste Produced * (kg)	Annual Amount Currently Diverted (2018) (kg)	Name of Proposed 3Rs Program (as stated in Part III)	Projections to Further Reduce, Reuse or Recycle Waste (kg)			Estimated Annual Amount to be Diverted ** (%)
				Reduce	Re-use	Recycle	
#1 PET - clear thermoform packaging	3,280	3,280	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			0	100.0%
#1 PET - other thermoform (coloured)	0	0					
#1 PET Bottles - excluding alcoholic beverage	10,848	7,369	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			696	74.3%
#2 HDPE Bottles and Jugs	3,224	2,157	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			213	73.5%
#2 Other HDPE Containers	0	0					
#5 Other PP Containers	13,324	6,289	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			1,407	57.8%
#6 PS - Expanded polystyrene	2,471	1,074					43.5%
#6 PS - Non-expanded - all other	6,256	3,318	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			588	62.4%
#7 Other Plastics	476	476					100.0%
Aluminum beverage - alcohol	0	0					
Aluminum Foil & Foil Trays	996	869	Enhance capture rate for specific recyclables in ZW mixed recycling across			25	89.8%

			the Campus through education and signage.				
Aluminum Food & Other Beverage Cans	4,107	1,976	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			426	58.5%
Aseptic Containers - (excluding alcoholic beverages)	1,951	996	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			191	60.8%
Batteries	0	0					
Boxboard / Cores	12,341	6,868	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			1,095	64.5%
Clear Glass Other Beverage and Food	2,159	0	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			432	20.0%
Clothing/Textiles	524	338					64.5%
Coffee Grinds	0	0					
Coffee pods	334	236***					
Confidential Paper - Paper Shred	16,216	16,216					100.0%
Corrugated Cardboard - Bulk	14,090	14,090					100.0%
Corrugated Cardboard - Loose	3,472	3,079	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			79	91.0%
Diapers	0	0					
Feminine Hygiene Products	2,390	0					0.0%
Food packaging	20,865	7,894***					
Gable Top Containers	2,442	305	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			427	30.0%
Glass - Clear Other	2,718	1,424	Enhance capture rate for specific recyclables in ZW mixed recycling across			259	61.9%

Beverage and Food			the Campus through education and signage.				
Glass - Clear Alcoholic Beverage	812	812					100.0%
Kraft Paper	10,111	3,465	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			1,329	47.4%
Laminated Paper Packaging	0	0					
Large HDPE & PP Pails & Lids	0	0					
LDPE/HDPE Film - Products (non-packaging)	6,788	3,339***					
Liquids - food/beverage	20,547	12,784	Promote the emptying of beverage containers prior to placement in ZW mixed recycling	3,105			77.3%
Maintenance Waste	507	105***					
Metal - Bulk	3,066	3,066					100.0%
E-Waste	4,423	4,423					100.0%
Mixed Fine Paper	17,985	14,126	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			772	82.8%
Molded Pulp/Fibre	5,254	2,404	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			570	56.6%
Napkins/Towel (food related)	21,969	10,922	Enhancing food waste and napkins capture rate throughout the Campus			2,209	59.8%
Newspaper – Dailys and Weeklys	248	0	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			50	20.0%
Office Waste	8,535	352***					
Other Metal	0	0					
Other Non-Recyclable Material (Laundry)	0	0					

Other Paper (paper plates)	0	0					
Parchment Paper	2,788	119***					
Polycoat Beverage Cups - compostable	36,277	20,528	Enhancing capture of compostable coffee cups in ZW organics program using education/signage			7,875	78.3%
Polycoat Beverage Cups - non-compostable	8,563	3,533***					
Post Consumer Food Waste	151,115	67,989	Enhancing food waste and napkins capture rate throughout the Campus			16,625	56.0%
Rubber & Nitrile Gloves	3,055	434	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			524	31.4%
Spiral Wound Containers	245	0					0.0%
Steel Food & Other Beverage Cans	1,405	787	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			124	64.8%
Straws/Plastic Cutlery	1,381	866	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			103	70.1%
Tissue/Towel ing (cleaning related)	0	0					
Tissue/Towel ing (washroom related)	4,082	487	Reducing/eliminating disposal of washroom paper toweling through reduction and/or capture in ZW organics program			1,797	56.0%
Wood	21,794	19,250					88.3%
Wood Dust	0	0					
CAMPUS WIDE TOTALS	455,433	248,043		3,105		37,816	63.4%

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

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

*** Waste-to-landfill material that is being diverted as a contaminant in ZW organics and/or mixed recycling

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

Signature of authorized official:



Title:

DIRECTOR - SUSTAINABILITY

Date:

MARCH 31/19

MINISTRY OF THE ENVIRONMENT WASTE FORM: REPORT OF A WASTE AUDIT (TRAFALGAR)

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 (Trafalgar)

Name of Owner and/or Operator of Entity(ies) and Company Name: Sheridan College Institute of Technology and Advanced Learning		
Name of Contact Person: Wai Chu Cheng	Telephone #: 905 845 9430	Email address: Waichu.cheng@sheridancollege.ca
Street Address(es) of Entity(ies): Trafalgar Campus of Sheridan College		
Municipality: Oakville, ON Canada		
Type of entity Educational Institution		

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

II. Description of Entity (Trafalgar)

<p>Provide a brief overview of the entity(ies):</p> <p>The Trafalgar Campus is the second largest of the three Sheridan College campuses in terms of student population and the largest in terms of physical size. There are over 1,800 employees and over 8,400 students (2014-15 data).</p> <p>Because the Davis and Trafalgar campuses are of similar size, have similar functional areas including classrooms, offices, hallways, washrooms, have the same ZW bin program in place and because historical evidence suggest the material generation and disposal practices at the two campuses will be similar, the material breakdown data from the waste audit at the 2018 waste audit at Davis Campus was used in conjunction with the annual waste generation data provided by the service providers for Trafalgar. In this way the 2018 Trafalgar Campus waste audit reported here is an amalgamation of 2017 weight-based information by stream for the Trafalgar campus and the relative proportion by weight of the mixed waste ZW stream from the Davis Campus 2018 audit.</p> <p>At the time of the audit, the campus had fully implemented the following collection programs:</p> <ol style="list-style-type: none">1. ZW Mixed Recycling (includes glass, metal, paper, plastic)2. ZW Organics3. ZW Waste-to-landfill4. Bulk Old Corrugated Cardboard (OCC) Recycling5. Paper Shred Recycling6. Metal Recycling

7. E-Waste Recycling
8. Battery Recycling
9. Wood Recycling
10. Wood Dust Recycling
11. Textile Reuse
12. Hygiene Waste Energy-from-Waste (EFW)

III. How Waste is Produced And Decisions Affecting the Production of Waste (Trafalgar)

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?
#1 PET - clear thermoform packaging	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#1 PET - other thermoform (coloured)	Minimal amounts generated on campus
#1 PET Bottles - excluding alcoholic beverage	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students. ZW water bottle refill stations installed to reduce PET water bottle generation/disposal.
#2 HDPE Bottles and Jugs	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#2 Other HDPE Containers	Minimal amounts generated on campus
#5 Other PP Containers	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#6 PS - Expanded polystyrene	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#6 PS - Non-expanded - all other	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#7 Other Plastics	Minimal amounts generated on campus.
Aluminum beverage - alcohol	Alcohol is not available for sale on campus. Alcoholic beverage containers brought to campus by students, visitors and others.
Aluminum Foil & Foil Trays	Small quantities generated on campus and should be included in the ZW recycling program.
Aluminum Food & Other Beverage Cans	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Aseptic Containers - (excluding alcoholic beverages)	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Batteries	Minimal amounts generated in campus. Should be included in battery recycling program.
Boxboard / Cores	Generated all over the campus as a packaging material for food products, office products and class material supplies.

Clear Glass Other Beverage and Food	Small quantities generated on campus and disposed as waste.
Clothing/Textiles	Little generated at the campus. Likely lost or intentionally disposed articles of clothing.
Coffee Grinds	Minimal amounts generated on campus
Coffee pods	Generated at coffee stations around the campus.
Confidential Paper - Paper Shred	Generated across campus in offices and captured for shredding and recycling.
Corrugated Cardboard - Bulk	Generated in receiving area through delivery. Almost all captured in bulk recycling program.
Corrugated Cardboard - Loose	Generated across campus. Almost all captured in recycling program.
Diapers	Small quantities generated on campus and disposed as waste.
Feminine Hygiene Products	Generated across campus in washrooms. Material collected for diversion from landfill (incineration) though amounts have not been accurately quantified at this time for inclusion in this report
Food packaging	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Gable Top Containers	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Glass - Clear Other Beverage and Food	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Glass - Clear Alcoholic Beverage	Alcohol is not available for sale on campus. Alcoholic beverage containers brought to campus by students, visitors and others.
Kraft Paper	Paper products generated through campus activities. Most generated in printing and photocopying areas.
Laminated Paper Packaging	Minimal amounts generated on campus
Large HDPE & PP Pails & Lids	Minimal amounts generated on campus suitable for inclusion in the ZW recycling program.
LDPE/HDPE Film - Products (non-packaging)	Minimal amounts generated on campus
Liquids - food/beverage	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Maintenance Waste	Minimal amounts generated on campus.
Metal - Bulk	Generated in receiving and maintenance areas. Well captured by bulk metal recycling program.
E-Waste	Generated throughout campus and suitable for the E-waste recycling program.
Mixed Fine Paper	Paper products generated through campus activities. Most generated in printing and photocopying areas.

Molded Pulp/Fibre	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Napkins/Toweling (food related)	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Newspaper – Dailys and Weeklys	Available for sale at Campus. Most should be captured in the ZW mixed recycling.
Office Waste	Generated in offices and classrooms around campus. Disposed as waste.
Other Metal	Minimal amounts generated on campus and suitable for inclusion in ZW recycling program.
Other Non-Recyclable Material	Minimal amounts generated on campus.
Other Paper	Minimal amounts generated on campus
Parchment Paper	Minimal amounts generated on campus.
Polycoat Beverage Cups - compostable	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Polycoat Beverage Cups - non-compostable	Not available for sale on campus as not included in ZW recycling program. Likely brought in from off-site vendors by students/staff.
Post Consumer Food Waste	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Rubber & Nitrile Gloves	Generated in cafeterias across campus. Suitable for inclusion in the ZW recycling program.
Spiral Wound Containers	Minimal amounts generated on campus.
Steel Food & Other Beverage Cans	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Straws/Plastic Cutlery	Generated in cafeterias across campus. Suitable for inclusion in the ZW recycling program.
Tissue/Toweling (cleaning related)	Minimal amounts generated on campus.
Tissue/Toweling (washroom related)	Generated and disposed as waste in Residence. Have been removed from washrooms. Should be included in ZW organics program though much ends up in waste-to-landfill
Wood	Generated in receiving area through delivery. Almost all captured in bulk recycling program.
Wood Dust	Generated in woodworking area and collected for recycling into briquettes.
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 (Trafalgar)

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
#1 PET - clear thermoform packaging		Should be included in ZW Recycling Bin Program though some may end up in landfill
#1 PET - other thermoform (coloured)		Should be included in ZW Recycling Bin Program though some may end up in landfill
#1 PET Bottles - excluding alcoholic beverage		Should be included in ZW Recycling Bin Program though some may end up in landfill. Reduction in PET water bottles through installation of reusable water bottle filling stations.
#2 HDPE Bottles and Jugs		Should be included in ZW Recycling Bin Program though some may end up in landfill
#2 Other HDPE Containers		Should be included in ZW Recycling Bin Program though some may end up in landfill
#5 Other PP Containers		Should be included in ZW Recycling Bin Program though some may end up in landfill
#6 PS - Expanded polystyrene	Generated in J Wing, C Wing Gym & J Wing Learning Commons. No diversion program currently available.	
#6 PS - Non-expanded - all other		Should be included in ZW Recycling Bin Program though some may end up in landfill
#7 Other Plastics		Should be included in ZW Recycling Bin Program though some may end up in landfill
Aluminum beverage - alcohol		Alcohol is not available for sale on campus. Alcoholic beverage containers brought to campus by students, visitors and others. Should be included in ZW Recycling Bin Program though some may end up in landfill.
Aluminum Foil & Foil Trays		Should be included in ZW Recycling Bin Program though some may end up in landfill

Aluminum Food & Other Beverage Cans		Should be included in ZW Recycling Bin Program though some may end up in landfill
Aseptic Containers - (excluding alcoholic beverages)		Should be included in ZW Recycling Bin Program though some may end up in landfill
Batteries		Should be included in Battery Recycling or captured during E-Recycling Events.
Boxboard / Cores		Should be included in ZW Recycling Bin Program though some may end up in landfill
Clear Glass Other Beverage and Food		Should be included in ZW Recycling Bin Program though some may end up in landfill
Clothing/Textiles		None generated at this campus.
Coffee Grinds		Little generated. Should be included in ZW Organics Bin Program.
Coffee pods	Little generated and no diversion program currently available.	
Confidential Paper - Paper Shred		Well captured in paper shred recycling
Corrugated Cardboard - Bulk		Well captured in OCC bulk recycling program.
Corrugated Cardboard - Loose		Should be included in ZW Recycling Bins throughout the campus, though some may end up in landfill
Diapers	Small quantities generated on campus and disposed as waste.	
Feminine Hygiene Products	Generated across campus in washrooms. Material collected for diversion from landfill. Material is sent to Energy-from-Waste facility.	
Food packaging	Generated across campus (with the exception of Animal Care) and no diversion program currently available.	
Gable Top Containers		Should be included in ZW Recycling Bin Program though some may end up in landfill
Glass - Clear Other Beverage and Food		Should be included in ZW Recycling Bin Program though some may end up in landfill
Glass - Clear Alcoholic Beverage		Alcohol is not available for sale on campus. Alcoholic beverage

		containers brought to campus by students, visitors and others. Should be included in ZW Recycling Bin Program though some may end up in landfill.
Kraft Paper		Should be included in ZW Recycling Bin Program though some may end up in landfill
Laminated Paper Packaging	Little generated and no diversion program currently available.	
Large HDPE & PP Pails & Lids		Little generated and should be included in ZW Recycling Bin Program
LDPE/HDPE Film - Products (non-packaging)	Little generated and no diversion program currently available.	
Liquids - food/beverage		Should be included in ZW Organics Bin Program though much ends up in landfill
Maintenance Waste	Little generated and no diversion program currently available.	
Metal - Bulk		Generated in receiving and maintenance areas. Well captured by bulk metal recycling program.
E-Waste		Should be included in E-Recycling or captured during E-Recycling Events.
Mixed Fine Paper		Should be included in ZW Recycling Bin Program though some may end up in landfill
Molded Pulp/Fibre		Should be included in ZW Recycling Bin Program though some may end up in landfill
Napkins/Toweling (food related)		Should be included in ZW Organics Bin Program though much ends up in landfill
Newspaper – Dailys and Weeklys		Should be included in ZW Recycling Bin Program though some may end up in landfill
Office Waste	No diversion program currently available.	
Other Metal		Should be included in ZW Recycling Bin Program though some may end up in landfill
Other Non-Recyclable Material	Little generated and no diversion program currently available.	
Other Paper		Little generated and should be included in ZW Recycling Bin Program

Parchment Paper	No diversion program currently available.	
Polycoat Beverage Cups - compostable (anaerobically digested)		Should be included in ZW Organics Bin Program though much ends up in landfill
Polycoat Beverage Cups - non-compostable	Generated throughout campus and should be disposed in waste-to-landfill but much contaminates ZW mixed recycling and ZW organics streams	
Post Consumer Food Waste		Should be included in ZW Organics Bin Program though much ends up in landfill
Rubber & Nitrile Gloves		Should be included in ZW Recycling Bin Program though some may end up in landfill
Spiral Wound Containers	Little generated and no diversion program currently available.	
Steel Food & Other Beverage Cans		Should be included in ZW Recycling Bin Program though some may end up in landfill
Straws/Plastic Cutlery		Should be included in ZW Recycling Bin Program though some may end up in landfill
Tissue/Toweling (cleaning related)	Little generated. Should be included in waste-to-landfill	
Tissue/Toweling (washroom related)		Should be included in ZW organics program though most ends up in waste-to-landfill
Wood		Is captured by wood recycling program in deliveries.
Wood Dust		Should be captured in wood dust recycling (briquettes) 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.

V. Estimated Quantity of Waste Produced Annually – Trafalgar

Estimated Amount of Waste Produced (kgs)												
Categories of Waste	Generated			Reused			Recycled			Disposed		
	"A" Base Year 2012 (kg)	"B" * Current Year (kg)	"C" * Change (A-B) (kg)	"A" Base Year 2012 (kg)	"B" * Curr ent Year (kg)	"C" * Chang e (A-B) (kg)	"A" Base Year 2012 (kg)	"B" * Current Year (kg)	"C" * Change (A-B) (kg)	"A" Base Year 2012 (kg)	"B" * Current Year (kg)	"C" * Change (A-B) (kg)
Cans/bottles/plastics (2012 grouping)	27,210		-27,210	0		0	10,470		-10,470	16,740		-16,740
Paper products (2012 grouping)	42,690		-42,690	0		0	36,320		-36,320	6,370		-6,370
Corrugated Cardboard	68,020		-68,020	0	0	0	68,000		-68,000	20		-20
Post Consumer Food Waste	32,150		-32,150	0	0	0	0		0	32,150		-32,150
Tissue/Toweling (washroom related)	4,060		-4,060	0	0	0	160		-160	3,910		-3,910
Other Non-Recyclable Material	155,420		-155,420	0	0	0	0		0	155,420		-155,420
#1 PET - clear thermoform packaging		2,736	2,736		0	0		2,736	2,736		0	0
#1 PET - other thermoform (coloured)		0	0		0	0		0	0		0	0
#1 PET Bottles - excluding alcoholic beverage		12,804	12,804		0	0		6,744	6,744		6,060	6,060
#2 HDPE Bottles and Jugs		3,740	3,740		0	0		1,881	1,881		1,858	1,858
#2 Other HDPE Containers		0	0		0	0		0	0		0	0
#5 Other PP Containers		18,643	18,643		0	0		6,391	6,391		12,252	12,252
#6 PS - Expanded polystyrene		4,046	4,046		0	0		1,613	1,613		2,433	2,433
#6 PS - Non-expanded - all other		9,370	9,370		0	0		4,252	4,252		5,117	5,117
#7 Other Plastics		397	397		0	0		397	397		0	0

Metal - Bulk		2,500	2,500			0	0			2,500	2,500					0	0
E-Waste		4,968	4,968			0	0			4,968	4,968					0	0
Mixed Fine Paper		19,058	19,058			0	0			12,338	12,338					6,719	6,719
Molded Pulp/Fibre		7,730	7,730			0	0			2,767	2,767					4,964	4,964
Napkins/Toweling (food related)		35,033	35,033			0	0			15,796	15,796					19,238	19,238
Newspaper – Dailys and Weeklys		431	431			0	0			0	0					431	431
Office Waste		14,561	14,561			0	0			311	311					14,251	14,251
Other Metal		0	0			0	0			0	0					0	0
Other Non-Recyclable Material (Laundry)		0	0			0	0			0	0					0	0
Other Paper (paper plates)		0	0			0	0			0	0					0	0
Parchment Paper		4,748	4,748			0	0			99	99					4,649	4,649
Polycoat Beverage Cups - compostable		55,048	55,048			0	0			27,620	27,620					27,427	27,427
Polycoat Beverage Cups - non-compostable		13,074	13,074			0	0			4,314	4,314					8,760	8,760
Post Consumer Food Waste		246,185	246,185			0	0			101,423	101,423					144,762	144,762
Rubber & Nitrile Gloves		4,969	4,969			0	0			403	403					4,565	4,565
Spiral Wound Containers		426	426			0	0			0	0					426	426
Steel Food & Other Beverage Cans		1,861	1,861			0	0			784	784					1,077	1,077
Straws/Plastic Cutlery		1,653	1,653			0	0			755	755					898	898
Tissue/Toweling (cleaning related)		0	0			0	0			0	0					0	0
Tissue/Toweling (washroom related)		6,691	6,691			0	0			431	431					6,260	6,260
Wood		20,191	20,191			0	0			15,760	15,760					4,431	4,431
Wood Dust		4,990	4,990			4,990	4,990			0	0					0	0
Total	329,550	648,293	318,743	0	5,603	5,603	5,603		114,950	282,273	167,323		214,610		360,417		145,807
Percent Change (total C ÷ total A x 100) from Base Year:		96.72%			-					145.56%					67.94%		

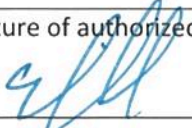
2018 Current year Diversion Rate:	44.4%
<p>Note: When completing this form, write "n/a" in the "Estimated Amount of Waste Produced" column where the entity will not produce any waste for a category of waste.</p> <ul style="list-style-type: none"> • Fill out these columns each year following the initial waste audit or baseline year to determine the progress that is being made by your waste reduction program. • <u>Specific waste categories appearing in RED</u> were ones employed during 2012 base audit 	

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

Please answer the following questions (and please attach any additional page(s) as required):

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.
	<p>Sheridan's Sustainability Policy outlines one of its principles that is based on a model called The Natural Step as follows: "We must eliminate our contributions to the systematic physical degradation of nature and natural processes (e.g. overharvesting forests, destroying habitat and overfishing)".</p> <p>In the Request of Proposal documents, the contractors are required to outline how they demonstrate sustainability in their project proposals.</p>
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.
	<p>* 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.</p>
	It is in Sheridan College's long-term plan.

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

Signature of authorized official:	Title:	Date:
	DIRECTOR - SUSTAINABILITY	MARCH 31/19

MINISTRY OF THE ENVIRONMENT WASTE FORM: REPORT OF A WASTE REDUCTION WORK PLAN (TRAFALGAR)

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 (Trafalgar)

Name of Owner and/or Operator of Entity(ies) and Company Name: Sheridan College Institute of Technology and Advanced Learning		
Name of Contact Person: Wai Chu Cheng	Telephone #: 905 845 9430	Email address: Waichu.cheng@sheridancollege.ca
Street Address(es) of Entity(ies): Trafalgar Campus of Sheridan College		
Municipality: Oakville, ON Canada		
Type of entity Educational Institution		

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

II. Description of Entity (Trafalgar)

<p>Provide a brief overview of the entity(ties):</p> <p>The Trafalgar Campus is the second largest of the three Sheridan College campuses in terms of student population and the largest in terms of physical size. There are over 1,800 employees and over 8,400 students (2014-15 data).</p> <p>Because the Davis and Trafalgar campuses are of similar size, have similar functional areas including classrooms, offices, hallways, washrooms, have the same ZW bin program in place and because historical evidence suggest the material generation and disposal practices at the two campuses will be similar, the material breakdown data from the waste audit at the 2018 waste audit at Davis Campus was used in conjunction with the annual waste generation data provided by the service providers for Trafalgar. In this way the 2018 Trafalgar Campus waste audit reported here is an amalgamation of 2017 weight-based information by stream for the Trafalgar campus and the relative proportion by weight of the mixed waste ZW stream from the Davis Campus 2018 audit.</p> <p>At the time of the audit, the campus had fully implemented the following collection programs:</p> <ol style="list-style-type: none"> 1. ZW Mixed Recycling (includes glass, metal, paper, plastic) 2. ZW Organics 3. ZW Waste-to-landfill 4. Bulk Old Corrugated Cardboard (OCC) Recycling 5. Paper Shred Recycling 6. Metal Recycling 7. E-Waste Recycling 8. Battery Recycling

9. Wood Recycling
10. Wood Dust Recycling
11. Textile Reuse
12. Hygiene Waste Energy-from-Waste (EFW)

III. Plans to Reduce, Reuse and Recycle Waste (Trafalgar)

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.	
#1 PET - clear thermoform packaging	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#1 PET - other thermoform (coloured)	Little generated.
#1 PET Bottles - excluding alcoholic beverage	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#2 HDPE Bottles and Jugs	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#2 Other HDPE Containers	Little generated.
#5 Other PP Containers	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#6 PS - Expanded polystyrene	Little generated. Should be disposed in ZW waste-to-landfill.
#6 PS - Non-expanded - all other	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#7 Other Plastics	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Aluminum beverage - alcohol	Little generated. Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Aluminum Foil & Foil Trays	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Aluminum Food & Other Beverage Cans	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Aseptic Containers - (excluding alcoholic beverages)	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Batteries	Most captured through E-recycling programs.
Boxboard / Cores	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Clear Glass Other Beverage and Food	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Clothing/Textiles	Little generated.
Coffee Grinds	Little generated.
Coffee pods	Little generated. Should be disposed in ZW waste-to-landfill.
Confidential Paper - Paper Shred	Well captured in recycling program. No action required.

Corrugated Cardboard - Bulk	Well captured in recycling program. No action required.
Corrugated Cardboard - Loose	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Diapers	Little generated.
Feminine Hygiene Products	Accurately quantify hygiene waste generation/disposal. Research diversion options that are higher use than incineration.
Food packaging	Little generated.
Gable Top Containers	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Glass - Clear Other Beverage and Food	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Glass - Clear Alcoholic Beverage	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Kraft Paper	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Laminated Paper Packaging	Little generated.
Large HDPE & PP Pails & Lids	Little generated. Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
LDPE/HDPE Film - Products (non-packaging)	Staff/students will be encouraged to include material in the ZW waste-to-landfill bin through education/signage.
Liquids - food/beverage	Staff/students will be encouraged to empty then recycle containers education/signage.
Maintenance Waste	Little generated.
Metal - Bulk	No action required.
E-Waste	Well captured through E-recycling programs.
Mixed Fine Paper	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Molded Pulp/Fibre	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Napkins/Toweling (food related)	Staff/students will be encouraged to include material in the ZW organics bin through education/signage.
Newspaper – Dailys and Weeklys	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Office Waste	Little generated.
Other Metal	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Other Non-Recyclable Material	Little generated.
Other Paper	Little generated.
Parchment Paper	Staff/students will be encouraged to include material in the ZW waste-to-landfill bin through education/signage.
Polycoat Beverage Cups - compostable	Staff/students will be encouraged to include material in the ZW organics bin through education/signage.

Polycoat Beverage Cups - non-compostable	Not sold or distributed at campus cafeterias or restaurants but brought to campus. Launch education on the preferred polycoat cups or use of reusable cups. These cups are waste.
Post Consumer Food Waste	Staff/students will be encouraged to include material in the ZW organics bin through education/signage.
Rubber & Nitrile Gloves	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Spiral Wound Containers	Little generated.
Steel Food & Other Beverage Cans	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Straws/Plastic Cutlery	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Tissue/Toweling (cleaning related)	Little generated.
Tissue/Toweling (washroom related)	Staff/students will be encouraged to include material in the ZW organics bin through education/signage.
Wood	Most captured through wood recycling program.
Wood Dust	All captured in wood briquette recycling program.

IV. Responsibility for Implementing The Waste Reduction Work Plan (Trafalgar)

Identify who is responsible for implementing the Waste Reduction Work Plan at your entity(ies). If more than one person is responsible for implementation, identify each person who is responsible and indicate the part of the Waste Reduction Work Plan that each person is responsible for implementing.		
Name of Person	Responsibility	Telephone #
Wai Chu Cheng	Promoting, developing and implementing the Zero Waste program and evaluating the program.	905-845-9430 x 5423
Muhammah Ishtiaq Afridi	Tracking and assessing of waste data	905-845-9430 x 5674
Herbert Sinnock	Developing and evaluating the Zero Waste program	905-875-4405

V. Timetable for Implementing Waste Reduction Work Plan (Trafalgar)

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
Example: Fine Paper 3Rs Program	“Desk side receptacles and centralized containers to be purchased in March. New collection contract for recycling to be arranged for April Kick off for program and instructions to staff regarding 3Rs program to occur in April” <u>OR</u> “3Rs Program currently in place.”
1. Enhancing Food Waste and Napkins Capture Rate	<p>Enhancing Food Waste and Napkins Capture Rate Throughout the Campus: A lot of food waste and napkins are being disposed in waste-to-landfill. Sheridan must continue to encourage the proper disposal in organics of food waste and napkins through education/signage. Consider a campaign to encourage sorting behaviour using a multi-media approach and consider 'branding' the campaign. Engage and challenge environmental studies students to design the campaign and develop a multi-media approach/roll-out. Expected improvement in capture rate of 20%. Anticipated reduction in waste-to-landfill of 32,800 kg per year (20% of food waste and napkins improperly disposed across the campus).</p> <p>Due date:</p>
2. Enhancing Mixed Recycling Capture Rate	<p>Enhancing Mixed Recycling Capture Rate Throughout the Campus: Encouraging the proper disposal in mixed recycling of: polypropylene containers, kraft and fine paper, boxboard/cores, PET bottles, polystyrene, molded pulp/fibre, PET bottles, cardboard and clear glass through education/signage. Expected improvement in capture rate of 20%. Anticipated reduction in waste-to-landfill of 16,212 kg per year (20% of mixed recycling improperly disposed across the campus).</p> <p>Due date:</p>
3. Enhancing Coffee Cup Capture Rate	<p>Capturing Compostable (Anaerobically Digested) Coffee Cups in Organics: A lot of compostable coffee cups are being disposed in mixed recycling, organics and waste-to-landfill. Launch a campaign to capture compostable coffee cups in organics. Suggestions:</p> <ol style="list-style-type: none"> 1. Improve signage on ZW bins to include a picture of a coffee cup on all three bins with an X through the cups on all but the ZW organics bin. 2. Consider including the coffee cup education campaign in the action plan identified above for food waste and napkins, engaging environmental students to design the campaign. Ensure the non-compostable cups that are brought to campus are targeted as part of the education campaign. Focus should be to eliminate non-compostable beverage cups on campus since they are not recyclable at this time. <p>Expected improvement in capture rate of 50%. Anticipated reduction in waste-to-landfill of 13,714 kg per year (50% of coffee cups improperly disposed in waste-to-landfill).</p>

	Due date: 2018/2019
4. Encouraging Emptying of Beverage Containers	<p>Emptying Beverage Containers: Continue to encourage the emptying of beverage containers prior to placement in mixed recycling through a combination of education/signage and placement of emptying stations where practicable. Consider launching a campaign. Anticipated reduction in disposal of liquids in any stream: 40%. Anticipated reduction in waste-to-landfill of 5,407 kg per year as well as a significant reduction in contamination in the mixed recycling and organic streams (40% reduction in liquids in waste-to-landfill stream).</p> <p>Due date: 2018/2019</p>
5. Reducing Disposal of Washroom Paper Toweling	<p>Reducing/eliminating Disposal of Washroom Paper Toweling: Reduce/eliminate washroom paper towel use or provide facilities and education/signage to capture washroom paper toweling in the organics program. Anticipated reduction in disposal of 50% of washroom paper toweling and reduce 3,130 kg per year of waste-to-landfill.</p> <p>Due date: 2018/2019</p>
5. Capturing & Reporting Material Weights for All Diversion Programs at the Campus	<p>Capturing & Reporting Material Weights for All Diversion Programs at the Campus: Sheridan has made significant progress in reporting material diversion streams since 2015 however there may be other diversion programs in place at the Trafalgar Campus but the weight-based data is not currently captured accurately for reporting purposes. Sheridan should continue to conduct an inventory of all diversion programs, with particular focus on reduction and reuse programs, and should ensure there are procedures in place to collect, monitor and report on these programs.</p> <p>Anticipated reduction in waste-to-landfill: Effect on diversion rate likely significant but not quantifiable</p> <p>Due date: 2018/2019</p>

VI. Communication to Staff, Customers, Guests and Visitors (Trafalgar)

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

The Waste Reduction Plan will be posted on the Sheridan Sustainability website. Comprehensive strategies will be adopted in promoting the Zero Waste program, including the weekly e-newsletter Insider, Sustainability website, campus TV screens, campus newspaper, Sheridan social media and the Zero Waste promotion booths across all campuses. These media as well as promotional material and additional signage will be employed, where practicable, to promote the implementation of each of the individual waste reduction work plans.

VII. Estimated Waste Produced By Material Type And The Projected Amount (Trafalgar)

	Estimated Annual Waste Produced * (kg)	Annual Amount Currently Diverted (2018) (kg)	Name of Proposed 3Rs Program (as stated in Part III)	Projections to Further Reduce, Reuse or Recycle Waste (kg)			Estimated Annual Amount to be Diverted ** (%)
				Reduce	Re-use	Recycle	
#1 PET - clear thermoform packaging	2,736	2,736	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			0	100.0%
#1 PET - other thermoform (coloured)	0	0					
#1 PET Bottles - excluding alcoholic beverage	12,804	6,744	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			1,212	62.1%
#2 HDPE Bottles and Jugs	3,740	1,881	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			372	60.2%
#2 Other HDPE Containers	0	0					
#5 Other PP Containers	18,643	6,391	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			2,450	47.4%
#6 PS - Expanded polystyrene	4,046	1,613***					
#6 PS - Non-expanded - all other	9,370	4,252	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			1,023	56.3%
#7 Other Plastics	397	397					100.0%
Aluminum beverage - alcohol	0	0					
Aluminum Foil & Foil Trays	946	725	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			44	81.3%

Aluminum Food & Other Beverage Cans	5,590	1,879	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			742	46.9%
Aseptic Containers - (excluding alcoholic beverages)	2,554	891	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			333	47.9%
Batteries	185	185					100.0%
Boxboard / Cores	17,235	7,704	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			1,906	55.8%
Clear Glass Other Beverage and Food	3,759	0	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			752	20.0%
Clothing/Textiles	937	613					65.4%
Coffee Grinds	0	0					
Coffee pods	552	382***					69.2%
Confidential Paper - Paper Shred	17,690	17,690					100.0%
Corrugated Cardboard - Bulk	4,700	4,700					100.0%
Corrugated Cardboard - Loose	3,819	3,135	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			137	85.7%
Diapers	0	0					
Feminine Hygiene Products	3,417	0					0.0%
Food packaging	30,969	8,380***					27.1%
Gable Top Containers	4,105	384	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			744	27.5%
Glass - Clear Other Beverage and Food	3,441	1,188	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			451	47.6%
Glass - Clear Alcoholic Beverage	678	678					100.0%


Kraft Paper	15,910	4,336	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			2,315	41.8%
Laminated Paper Packaging	0	0					
Large HDPE & PP Pails & Lids	0	0					
LDPE/HDPE Film - Products (non-packaging)	8,996	2,991***					
Liquids - food/beverage	26,090	12,572	Promote the emptying of beverage containers prior to placement in ZW mixed recycling	5,407			68.9%
Maintenance Waste	869	169***					19.5%
Metal - Bulk	2,500	2,500					100.0%
E-Waste	4,968	4,968					100.0%
Mixed Fine Paper	19,058	12,338	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			1,344	71.8%
Molded Pulp/Fibre	7,730	2,767	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			993	48.6%
Napkins/Towel (food related)	35,033	15,796	Enhancing food waste and napkins capture rate throughout the Campus			3,848	56.1%
Newspaper – Dailys and Weeklys	431	0	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			86	20.0%
Office Waste	14,561	311***					
Other Metal	0	0					
Other Non-Recyclable Material (Laundry)	0	0					
Other Paper (paper plates)	0	0					
Parchment Paper	4,748	99***					2.1%
Polycoat Beverage Cups - compostable	55,048	27,620	Enhancing capture of compostable coffee cups in ZW organics program using education/signage			13,714	75.1%

Polycoat Beverage Cups - non-compostable	13,074	4,314***					
Post Consumer Food Waste	246,185	101,423	Enhancing food waste and napkins capture rate throughout the Campus			28,952	53.0%
Rubber & Nitrile Gloves	4,969	403	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			913	26.5%
Spiral Wound Containers	426	0					
Steel Food & Other Beverage Cans	1,861	784	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			215	53.7%
Straws/Plastic Cutlery	1,653	755	Enhance capture rate for specific recyclables in ZW mixed recycling across the Campus through education and signage.			180	56.5%
Tissue/Towel (cleaning related)	0	0					
Tissue/Towel (washroom related)	6,691	431	Reducing/eliminating disposal of washroom paper toweling through reduction and/or capture in ZW organics program			3,130	53.2%
Wood	20,191	15,760					78.1%
Wood Dust	4,990	4,990					100.0%
CAMPUS WIDE TOTALS	648,293	287,876		5,407		65,856	55.4%

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

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

*** Waste-to-landfill material that is being diverted as a contaminant in ZW organics and/or mixed recycling

I hereby certify that the information provided in this Waste Reduction Work Plan is complete and correct.		
Signature of authorized official: 	Title: DIRECTOR - SUSTAINABILITY	Date: MARCH 31/19

