

The background features a close-up, high-angle shot of a metal stormwater trap grate set into a concrete surface. The grate has a series of parallel slats. Overlaid on this image are several semi-transparent geometric shapes: a large light blue triangle on the left, a large orange triangle on the right, and a large white triangle in the center that serves as a backdrop for the text. The overall color palette is dominated by blues, oranges, and greys.

LittaTraps

Town of Bradford West Gwillimbury

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What are Litta Traps?

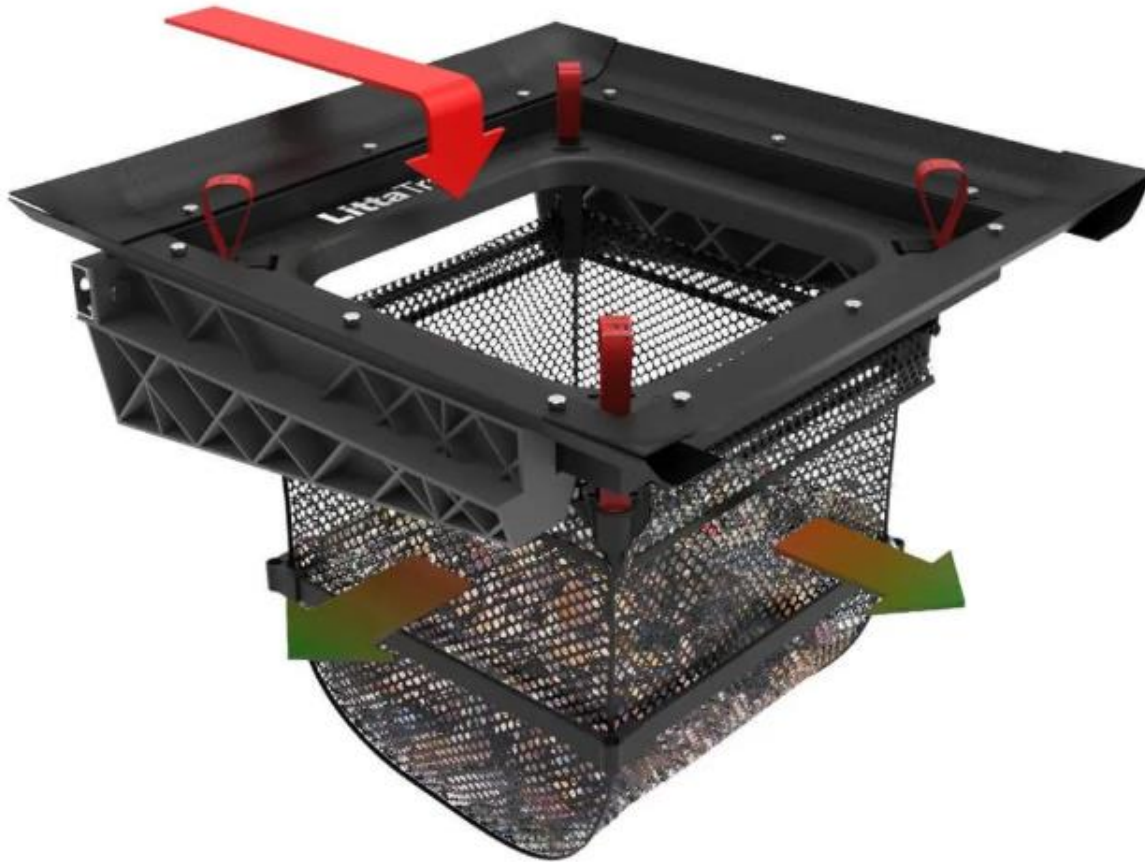


Figure 1: Litta Trap Design



Figure 2: Litta Trap design when installed

Bradford West Gwillimbury

32 LittaTraps in Town:

- ▶ Installed May 2024
- ▶ First cleanout conducted September 2024 (Fall)
(5 Months)
- ▶ Second cleanout conducted in April 2025 (Spring)
(7 Months)

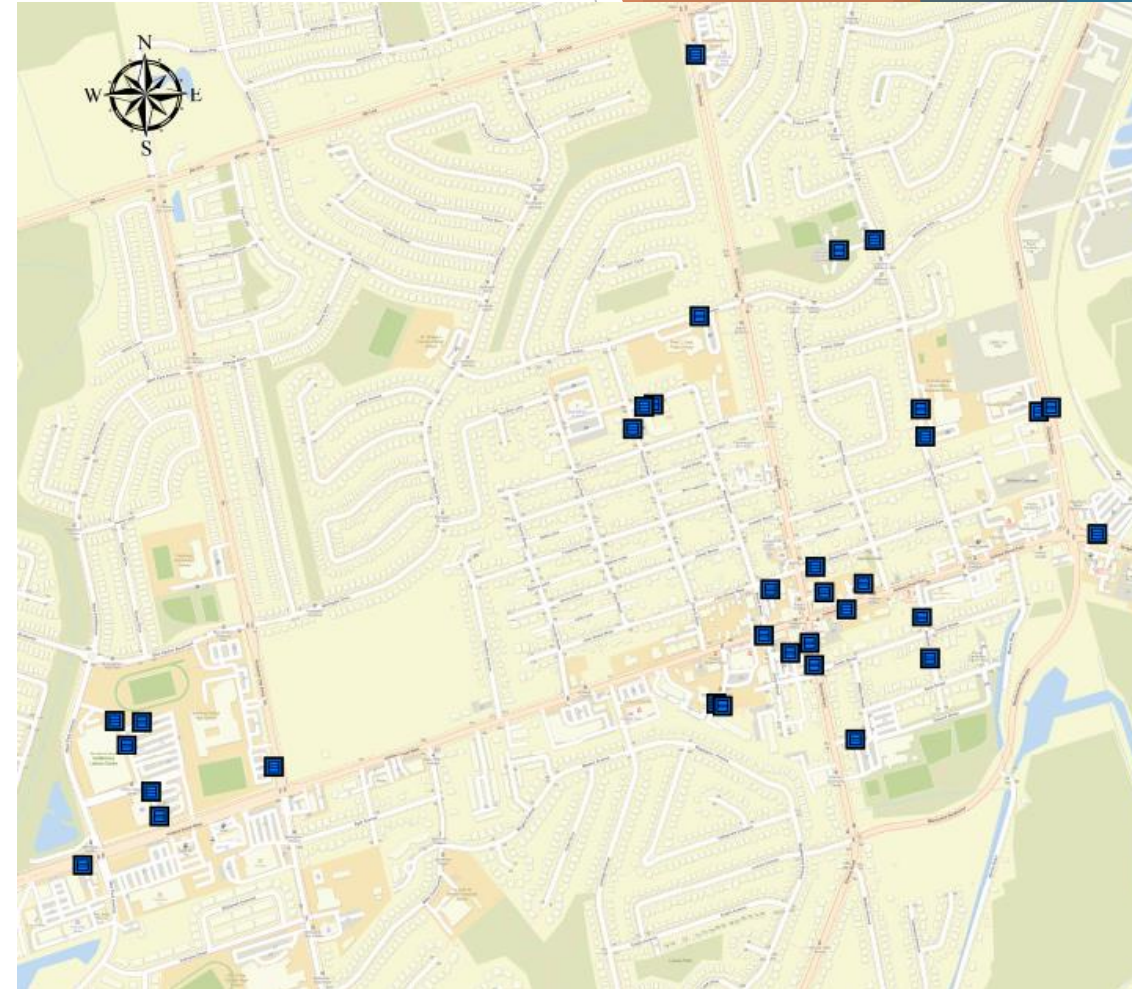


Figure 3: Litta Trap Locations in the Town of Bradford West Gwillimbury

Cleaning Process



Figure 5: LittaTrap collecting waste

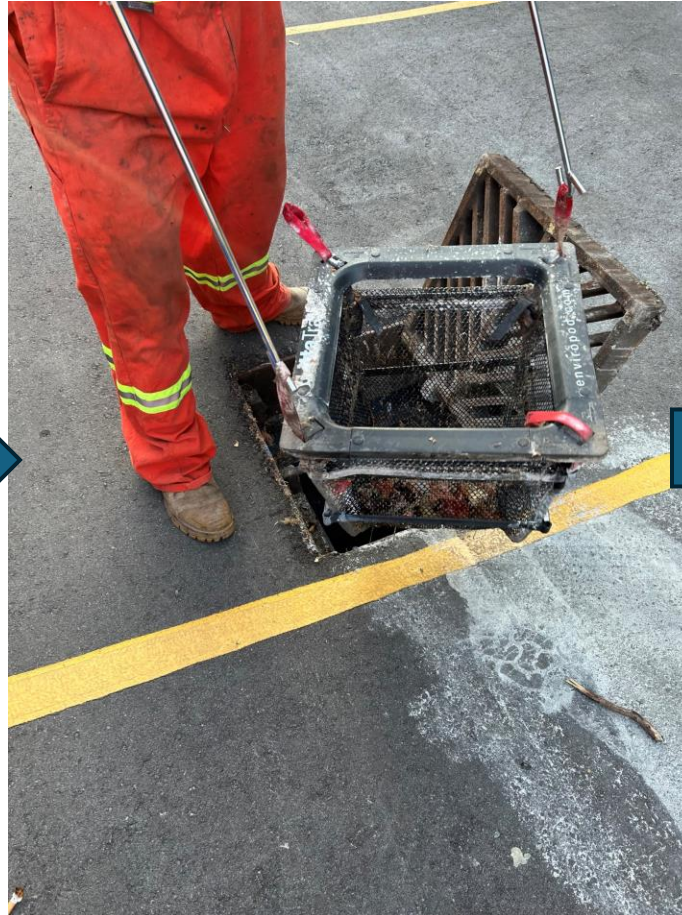


Figure 6: LittaTrap removed from Catch Basin

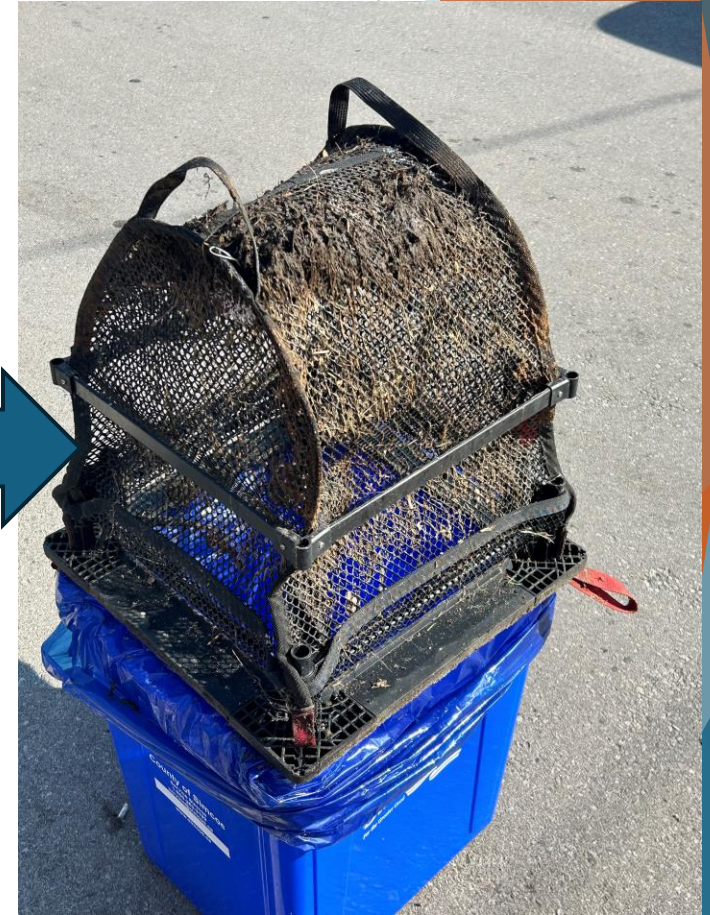


Figure 7: LittaTrap emptied into bin

Waste Audit

- ▶ Separated as much as possible into **Organics**, **Sand/Silt** and **Litter/Plastics**
- ▶ Needle Proof Gloves



Figure 8: Organic Bucket



Figure 9: Fishing Scale



Figure 10: Before Plastics Removal
(Fall Cleanout)



Figure 11: After Plastics Removal
(Fall Cleanout)

Round 1 Results (Fall)

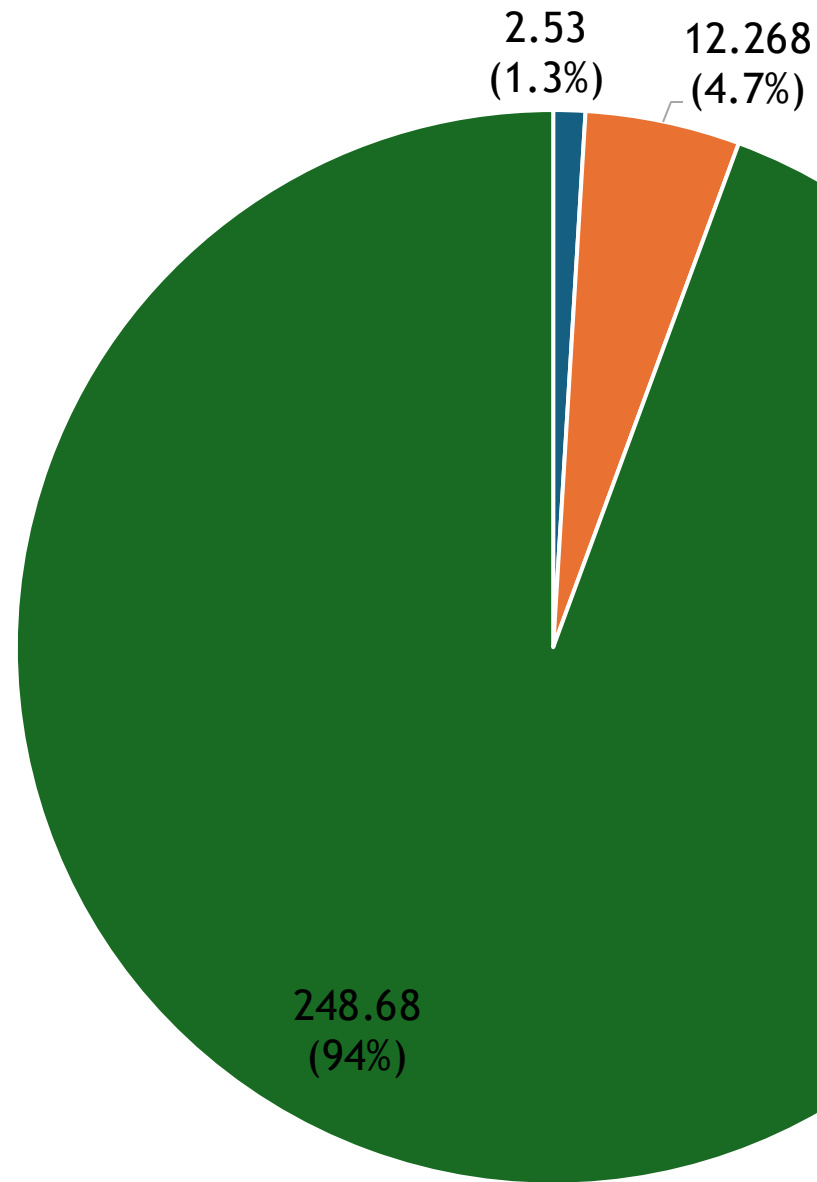
- Results categorized by **Location** and composition of **Plastics/Litter, Organics and Sand/Silt**
- Average Weight: 8.23 kg**

Locations	Plastics/Litter (kg)	Organics (kg)	Sand/Silt (kg)	Total Weight
32 Holland	0.22	0.22	14.96	15.4
Allen Lane Corner	0	0.11	1.36	1.47
Barrie Street (North)	0	0.22	0.45	0.67
Bingham North	0	0.45	0.79	1.24
Bingham south	0.22	0.45	15.7	16.37
Bridge Street	0	0.907	19.5	20.407
Church Street	0.11	0.11	10.54	10.76
Colbourne North	0	0.68	4.08	4.76
Colbourne South	0	0.22	6.12	6.34
Court house parking lot	0	0.204	0	0.204
David East	0.11	1.36	0.11	1.58
David West	0.45	0.79	1.81	3.05
Dissette East	0	0	27.21	27.21
Dissette West	0.11	0.34	1.81	2.26
Edwards	0	0.907	1.81	2.717
Fletcher	0	0.45	10.4	10.85
Holland and Drury (Dominos Pizza)	0	0.68	49.89	50.57
Holland by Tim's	0	0.68	14.06	14.74
Holland Court East	0.11	0.9	1.24	2.25
Holland Court West	0	0.11	4.87	4.98
John Street and Allen Lane	0	0.34	0.22	0.56
John Street Parking Lot	0.45	0.22	13.15	13.82
Leisure Centre Entrance	0.11	0	0.11	0.22
Leisure Centre Parking Lot (Northeast)	0.11	0.11	9.52	9.74
Library North	0.11	0.11	0.22	0.44
Library south	0.22	0.22	1.24	1.68
Lions Park Entrance	0	0.22	18.37	18.59
Lions Park Parking Lot	0	0.11	0.22	0.33
Mary street	0	0.11	0.45	0.56
Professor Day (close to holland)	0	0.22	0.45	0.67
Simcoe North	0.11	0	16.21	16.32
Simcoe south	0.09	0.82	1.81	2.72

Table 1: Litter Trap Waste Audit Data (Fall)

Round 1 Overview: (Fall)

- ▶ Total : 263.47 kg of Waste
- ▶ Sediment: 248.68 kg (94%)
- ▶ Organic Matter: 12.268 kg (4.7%)
- ▶ Plastics/Litter: 2.53 kg (1.3%)



■ Plastic ■ Organics ■ Sand/Silt

Figure 12: LittaTrap Waste Audit Summary (Fall)

Round 1
(Fall)

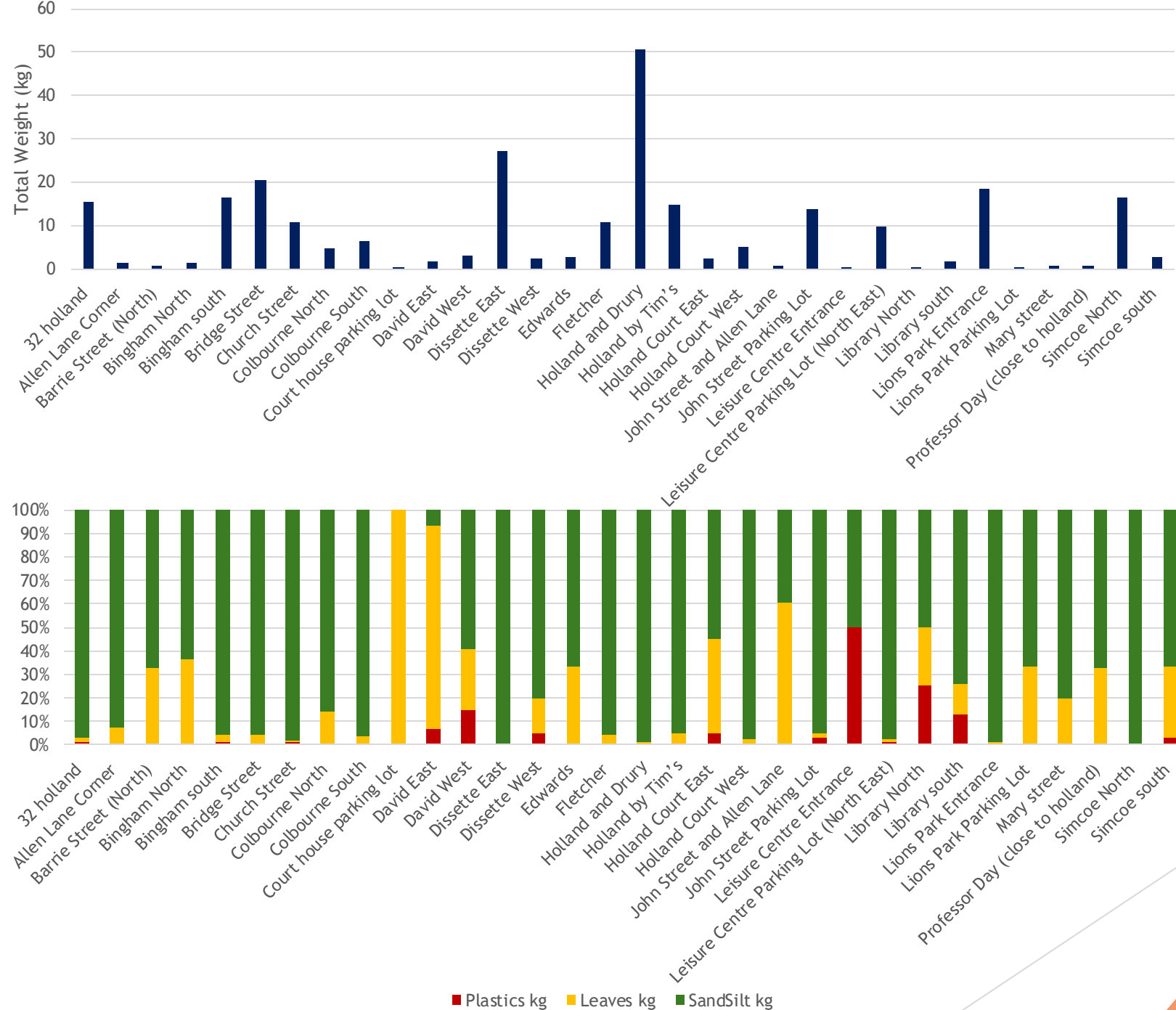


Figure 13: LitterTrap Waste Audit Data (Fall)

Round 2 Results (Spring)

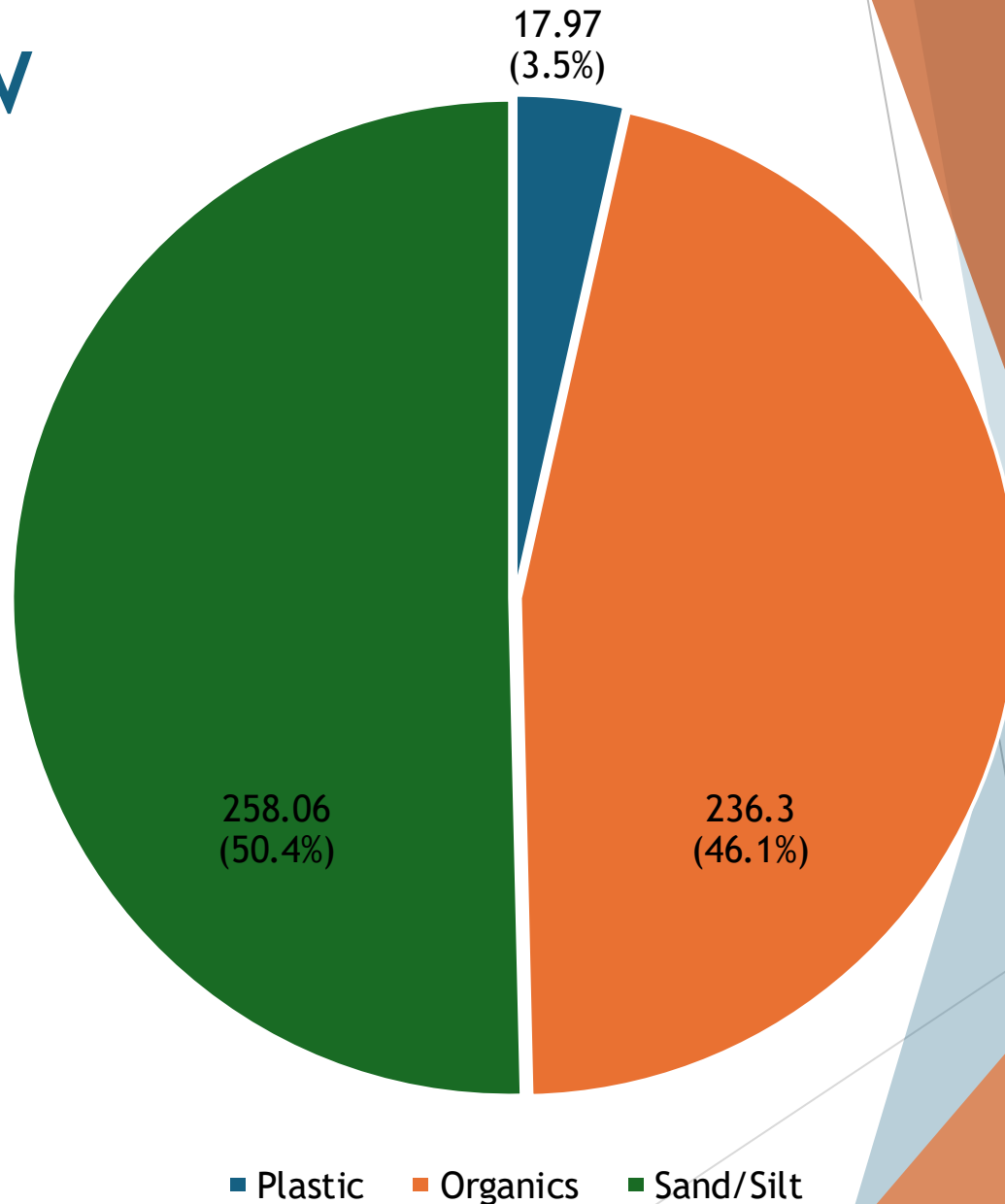
- **Average Weight: 15.99 kg**

Location	Plastic/Litter (kg)	Organics (kg)	Sand/Silt (kg)	Total Weight of Contents (Kg)
32 Holland	1.06	3.9	28.59	33.55
Allen Lane Corner	0.65	2.18	0.52	3.35
Barrie Street (North)	0.25	4.32	6.34	10.91
Bingham North	0.15	4.06	0.52	4.73
Bingham South	1.86	15.2	33.04	50.1
Bridge Street	0.82	7.71	18.93	27.46
Church Street	0.03	10.22	3.01	13.26
Colbourne North	0.1	8.56	0.46	8.66
Colbourne South	0.09	10.68	1.93	12.7
Court House Parking Lot	0.08	3.5	0.22	3.8
David East	0.08	19.47	0.68	20.23
David West	0.07	12.1	1.39	13.56
Dissette West	0.25	3.49	13.67	17.41
Dissette East	0.57	3.15	22.15	25.87
Edwards	0.21	7.36	0.05	7.62
Fletcher	0.31	26.78	1.67	28.76
Holland and Drury (Dominos)	1.25	9.38	29.25	39.88
Holland by Tim's	0.5	3.75	2.25	6.5
Holland Court East	0.13	0.48	4.92	5.53
Holland Court West	0.02	4.2	6.73	10.95
John Street and Allen Lane	0.25	3.25	0.5	4
John Street Parking Lot	0.55	3.15	1.36	5.06
Leisure Centre Entrance (South)	0.5	7.75	1.5	9.75
Leisure Centre Parking Lot (North)	0.25	3	2.25	5.5
Library North	0.25	0.75	0.5	1.5
Library South	0.25	2.75	0.75	3.75
Lion's Park Entrance	0.12	16.63	8.03	24.78
Lion's Park Parking Lot	0.05	7.52	1.25	8.82
Mary Street	0.25	0.65	0.27	1.17
Professor Day	0.13	1.8	13.31	15.24
Simcoe North	4.62	12.51	18.96	36.09
Simcoe South	2.27	16.05	33.06	51.38

Table 2: Litter Trap Waste Audit Data (Spring)

Round 2 Overview (Spring)

- ▶ Total : 511.87 kg of Waste
- ▶ Sediment: 258.06 kg (50.4%)
- ▶ Organic Matter: 236.3 kg (46.1%)
- ▶ Plastics/Litter: 17.97 kg (3.5%)



■ Plastic ■ Organics ■ Sand/Silt

Figure 14: LittaTrap Waste Audit Summary (Spring)

Round 2
(Spring)

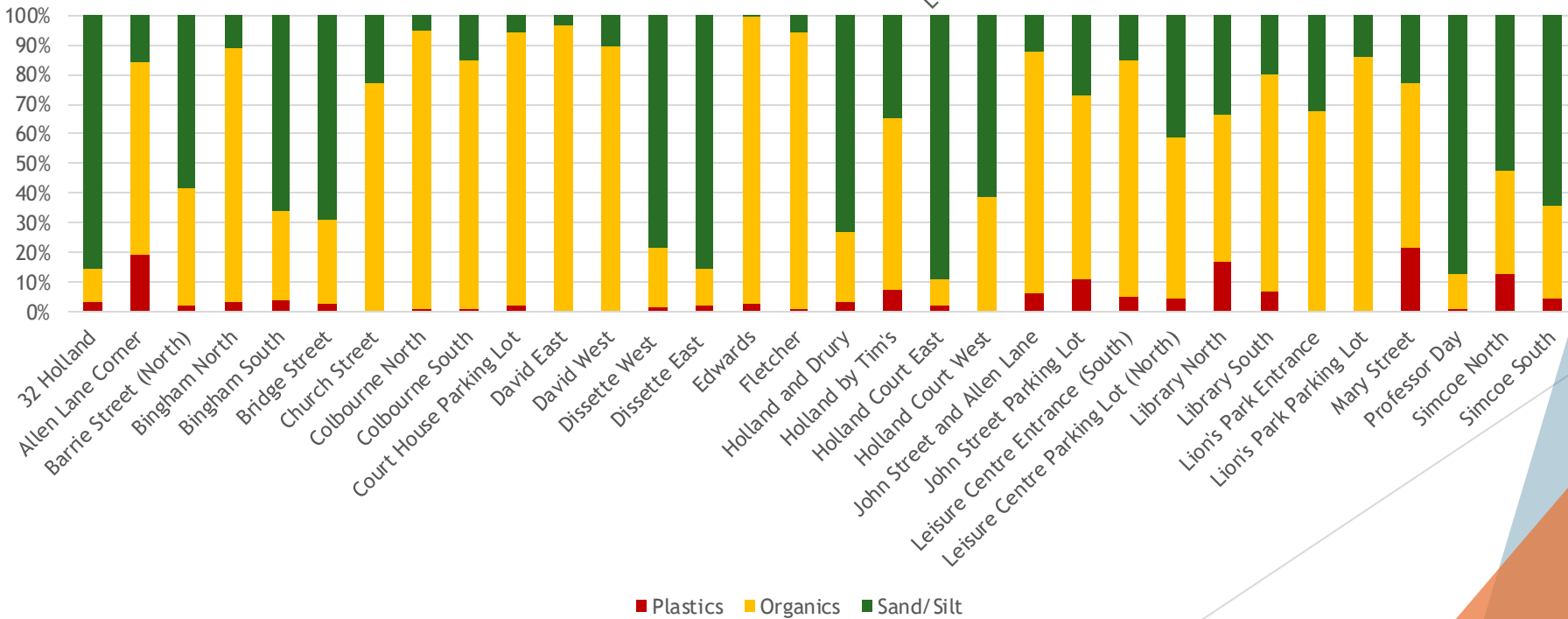
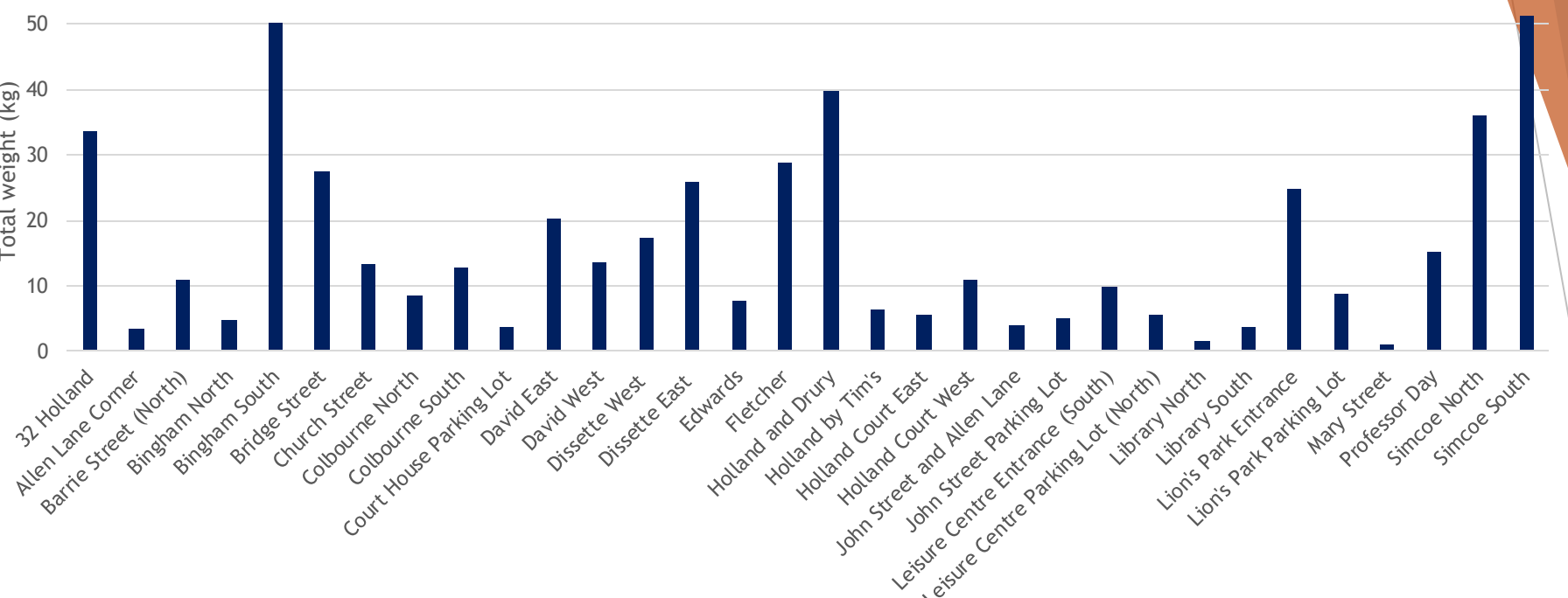
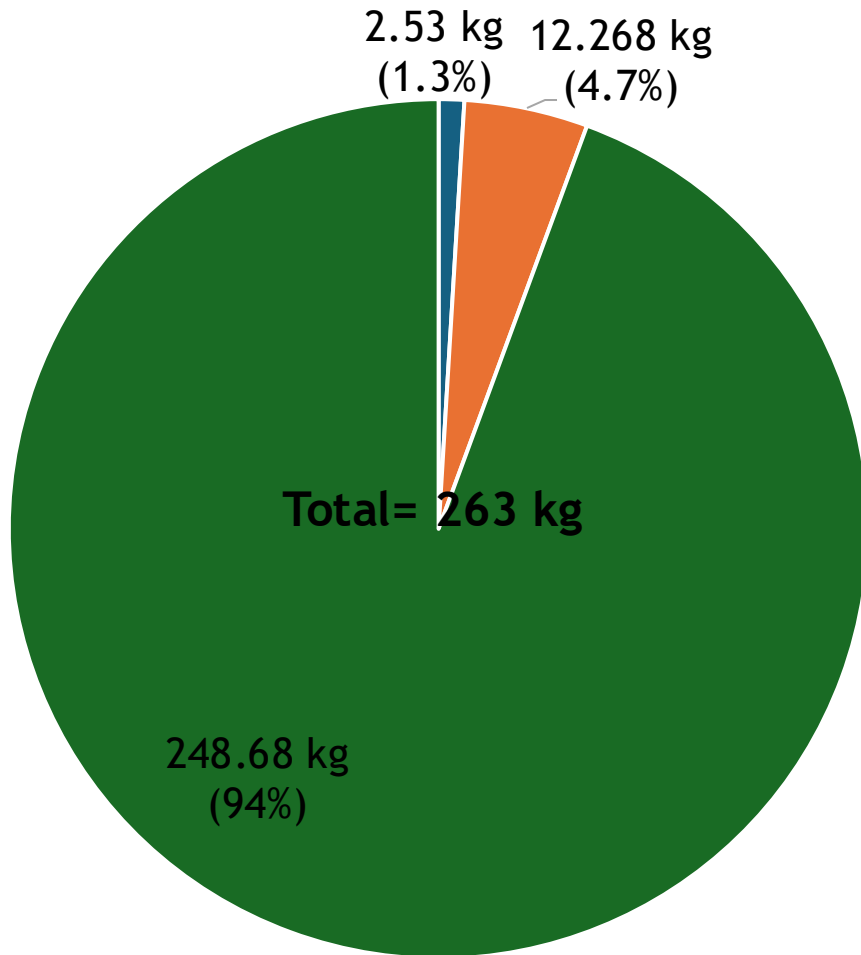


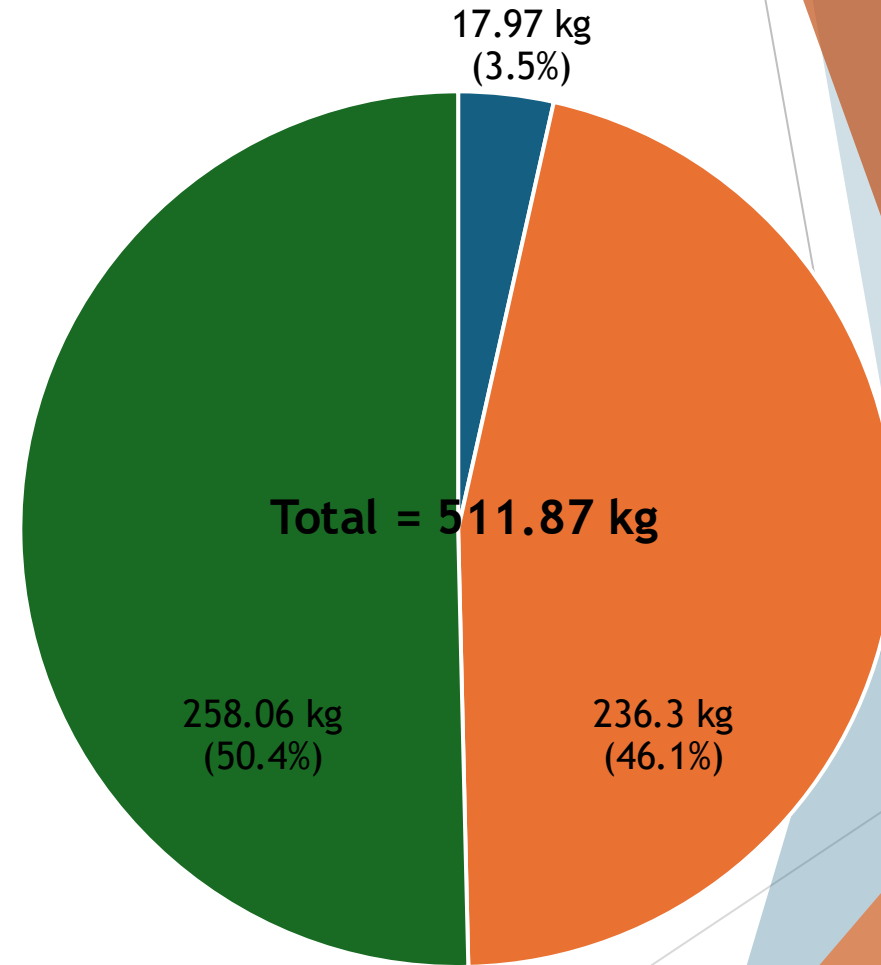
Figure 15: LittaTrap Waste Audit Data (Spring)

Comparison



■ Plastic ■ Organics ■ Sand/Silt

Figure 14: LittaTrap Waste Audit Summary (Fall)



■ Plastic ■ Organics ■ Sand/Silt

Figure 15: LittaTrap Waste Audit Summary (Spring)

Waste Audit Image Comparison



Figure 16: Fall Cleanout (Plastics Removed)

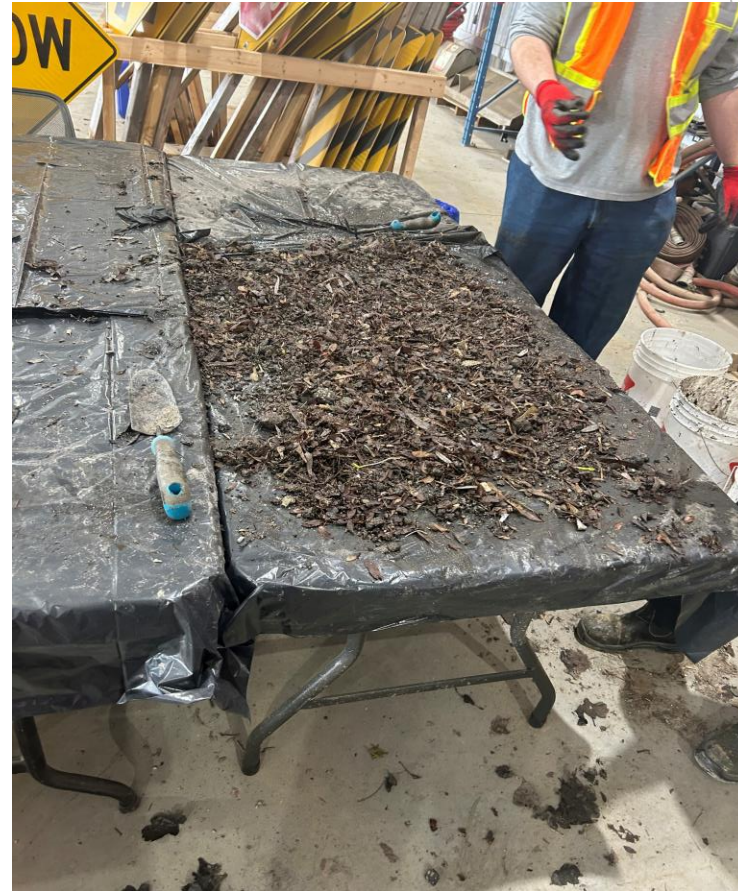
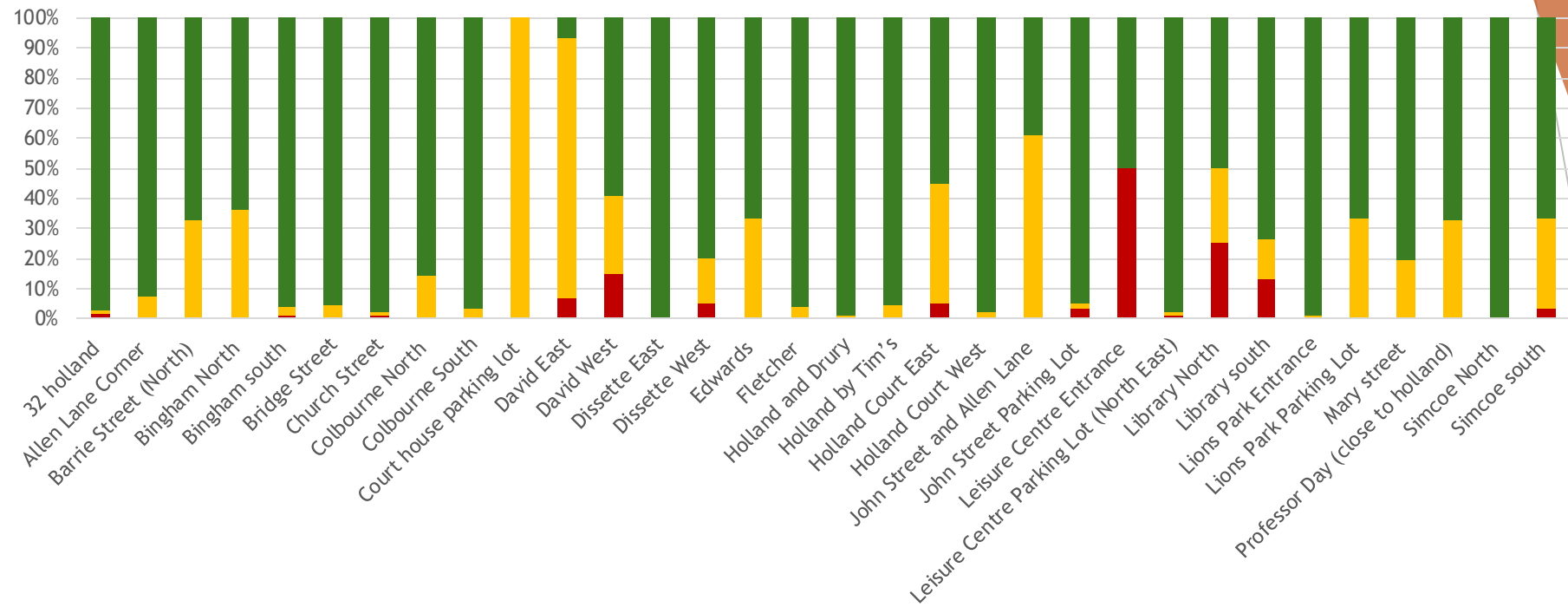
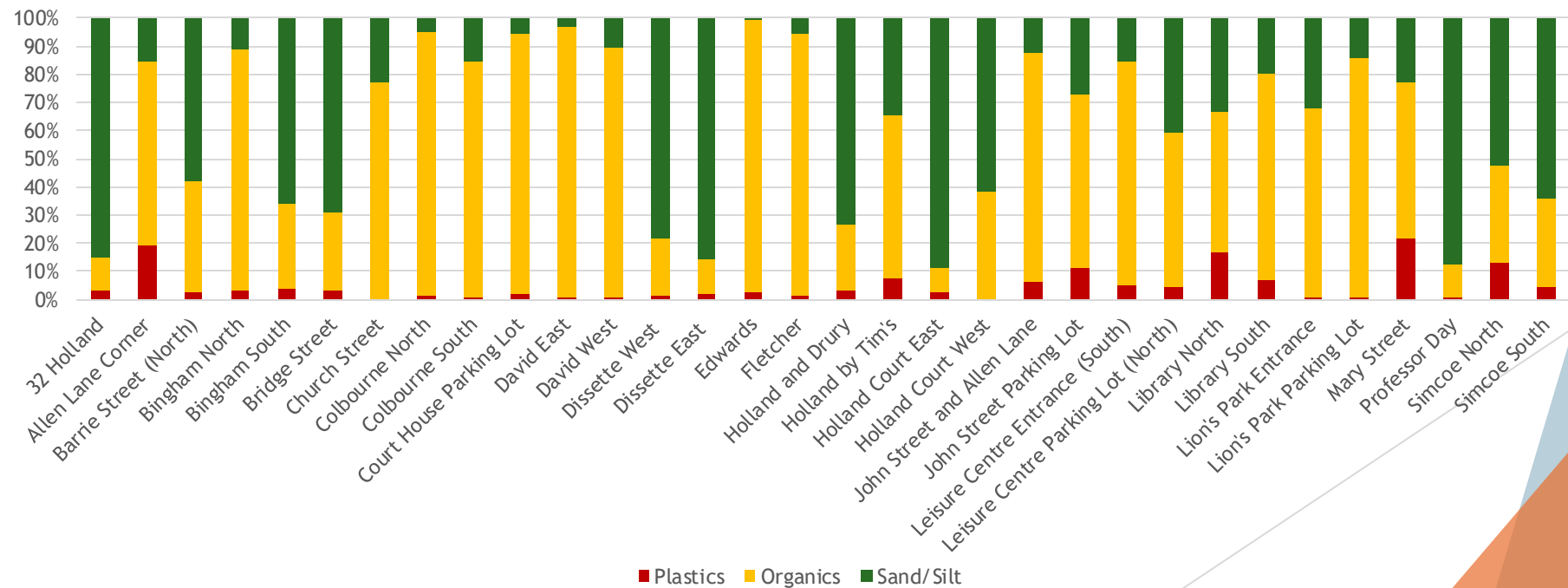


Figure 17: Spring Cleanout (Plastics Removed)

Fall



Spring



Litta Trap Content Images



Figure 18: Holland and Drury (Top View)



Figure 18: Holland and Drury (Side View)



Figure 19: David Street West (Top View)



Figure 20: David Street West (Side View)

Litta Trap Content Images



Figure 21: Fletcher (Top View)



Figure 22: Fletcher (Removed)



Figure 23: Bingham South (Top View)



Figure 24: Bingham South (Removed)

Conclusions

- ▶ Waste contents vary significantly (different cleaning frequencies)
- ▶ Spring cleanout captures much more material (19x organics, 7x plastics/litter & almost 2x overall material)
- ▶ Litta Traps are very effective in sediment removal

Future Suggestions

Install More Litta Traps:

- ▶ More the better, funding dependent
 - ▶ \$30,000 → 32 Litta Traps (current)

Choose Strategic Locations:

- ▶ High Traffic Areas
- ▶ Indicator of Littering Severity (Bond Head, Summerlyn, Crossland, Langford and Inverness Way)

Sediment Analysis:

- ▶ Nitrogen, phosphorus, road salts & other contaminants

Are Litter Traps cost effective for the service they provide?

- ▶ \$30,000 for 32 Litter Traps, and removed the following in 11 months:

1st Round of Cleanouts = 263.47 kg

2nd Round of Cleanouts = 511.87 kg

Total = **775.34 kg → 1709.33 lbs**



Questions?