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Litter Strategy Monitoring Wave 83 – May 2022 Report

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Section 1

Introduction

- 1.1 This document has been prepared by McGregor Tan Research to report on Wave 83 of the quarterly KESAB Litter Monitor. Surveys for the current wave were conducted in South Australia during May 2022.

Background

- 1.2 Regular monitoring of the litter stream is necessary in order to maintain a clear picture of its components, such as the various material types that contribute to the litter stream as well as the distribution of litter across different area types. Keep South Australia Beautiful (KESAB) had been monitoring the State's litter stream for many years, but the level of detail required during the South Australian Government's moratorium on changes to Container Deposit Legislation was considerably greater than previously recorded.
- 1.3 An expanded monitoring program commenced in February 1998, and McGregor Tan Research was commissioned at that time to undertake the actual count and to report regularly on the outcomes. This expanded program has been continued ever since and is planned to continue in future as well.
- 1.4 The count was completed quarterly, with the exception of August 2002, carried out in February, May, August and November of each year until 2015. Since then, the data has been counted twice a year, in May and November.
- 1.5 During each Wave of the survey, litter counts are undertaken at 151 sites across South Australia. In conjunction with the national litter count, a review of all South Australian sites showed that 11 of the sites surveyed were disproportionately represented in the data. These original sites were found to be unusual in nature, and were replaced with 11 revised sites.
- 1.6 The data collection form utilised for the count was jointly developed by McGregor Tan Research and KESAB. A copy of this form is provided in Appendix 2.
- 1.7 In January 2003, Container Deposit Legislation (CDL) was extended to cover most beverages under 1 litre, such as juice cartons, fruit boxes, flavoured milk cartons, etc. As a result, a new method of analysing the data had to be adopted so that the changes to the CDL, and the effect on the total litter stream could be evaluated.

- 1.8 Prior to the August 2004 Litter Count, the data collection form was re-evaluated and re-designed to take into account the changes to the CDL and also to incorporate new categories for litter items that were previously coded as 'other' or in an inappropriate category. The changes that were made to the data collection form include:
- Plastic bags were separated into 3 types of litter:
 - Supermarket type lightweight shopping bags
 - Heavier glossy, typically branded carry bags
 - Sacks, sheeting and other bags
 - Bottle and can tops were moved and separated from the Miscellaneous Category into both 'plastic bottle top' and 'metal bottle and can tops'.
 - The following four litter types were also added to the Plastic Category:
 - Bread bag tags
 - Lollipop sticks
 - Spoons/ cutlery
 - Drink pouches
 - The Metal Cans category name was changed to Metal.
 - Foil takeaway was moved from Miscellaneous to Metal.
 - Cigarette butts were separated from the Miscellaneous Category.
 - Two extra items were added to the Paper/paperboard Category:
 - Paper bags
 - Shopper docket & related shopping paper
- 1.9 In previous waves, the data collection form separated each litter type into CDL and non-CDL categories. However, extended Container Deposit Legislation (CDL) has now meant that the litter categories alone (e.g., Flavoured milk, < 1 litre) can be used to establish whether or not beverage containers are covered under CDL or not.
- 1.10 In order to determine the effectiveness of the current CDL (as of January 2003,) and for comparative purposes, it was necessary to re-calculate the number of current CDL items from the waves prior to the extension. References to CDL items in Waves prior to Wave 17 (waves 1-16) therefore denote beverage containers that are currently covered by CDL – not the items that were covered by the legislation prior to this time.
- 1.11 During the Wave 29 Monitor estimates of the volumes for each litter item category were defined. The assignments of volume estimates to each litter item category were based on actual measurements of containers/ items, the condition that these items were most commonly found (which was based on the audits of at least three Waves), and the most common or average size of the items that were found within each category.

- 1.12 The auditors were an important part of the volume formulation process, and they were able to record the number, size and type of different items within each category over a number of waves. Volumes ascribed to each item represented the average size for that category across all site types.
- 1.13 The final volume attributed to each litter item category furthermore took into account the fact that some items were often found crushed and weathered. For example, some drink cans and cartons are often crushed and/ or weathered when they are identified by the auditors and counted. The same volume measurements have been used for all subsequent Waves.
- 1.14 Two noteworthy events that have taken place since the beginning of this longitudinal study include:
- The deposit on drink containers was increased from 5 cents to 10 cents in September 2008.
 - The ban on thin plastic shopping bags came into effect in May 2009.
- 1.15 This document reports on Wave 83 of the longitudinal study. The litter count was conducted during May 2022. Section 2 of this report outlines the litter characteristics of the 151 sites, which include 11 revised sites (replacing 11 of the original 151). Appendix 1 contains charts tracking results back across all prior Monitors, and includes weighted results to facilitate meaningful comparison of results established at the 151 original sites with results derived from the 151 revised sites.

Section 2

Wave 83

Executive Summary

The following Executive Summary covers the findings of the May 2022 KESAB Litter Monitor (Wave 83). Where possible, results have been tracked against those derived from any previous Waves which incorporated revised sites. All 151 sites were counted during the May 2022 count.

Items Counted

A total of 8,177 litter items were counted across the 151 South Australian sites during Wave 83. This figure is lower than the previous monitor in November 2021 (8,716) but marginally higher than the monitor conducted May 2021 (7,821) at the same time last year.

Cigarette butts remained the main contributor (29%) to the litter count with 2,350 butts counted in Wave 83, down from Wave 82 (2,512) in November 2021 and from Wave 81 (2,550) in May 2021 conducted at the same time in the previous year.

The overall decrease in number of items counted was most strongly demonstrated by several litter types in Wave 83, including:

- CIGARETTE BUTTS - Cigarette butts 2350 items, down from 2512 items in Wave 82 (6% decrease)
- PLASTIC - Snack bags & confectionery wrappers 281 items, down from 388 items in Wave 82 (28% decrease)
- PAPER/PAPERBOARD - Other cups/take away containers 102 items, down from 172 items in Wave 82 (41% decrease)
- PAPER/PAPERBOARD - Packages & boxes 74 items, down from 144 items in Wave 82 (49% decrease)
- PLASTIC - Packing tape & straps 73 items, down from 129 items in Wave 82 (43% decrease)
- PLASTIC - Bags - heavier glossy typically branded carry bags 8 items, down from 62 items in Wave 82 (87% decrease)
- MISCELLANEOUS - Other miscellaneous 29 items, down from 81 items in Wave 82 (64% decrease)
- PLASTIC - Straws 36 items, down from 75 items in Wave 82 (52% decrease)
- METAL - Other foil 163 items, down from 200 items in Wave 82 (19% decrease)
- PAPER/PAPERBOARD - Cigarette packets 47 items, down from 71 items in Wave 82 (34% decrease)
- PLASTIC - Styrene foam boxes, sheets, etc. 64 items, down from 88 items in Wave 82 (27% decrease)

Litter types that experienced larger increases in the number of items in Wave 83 included:

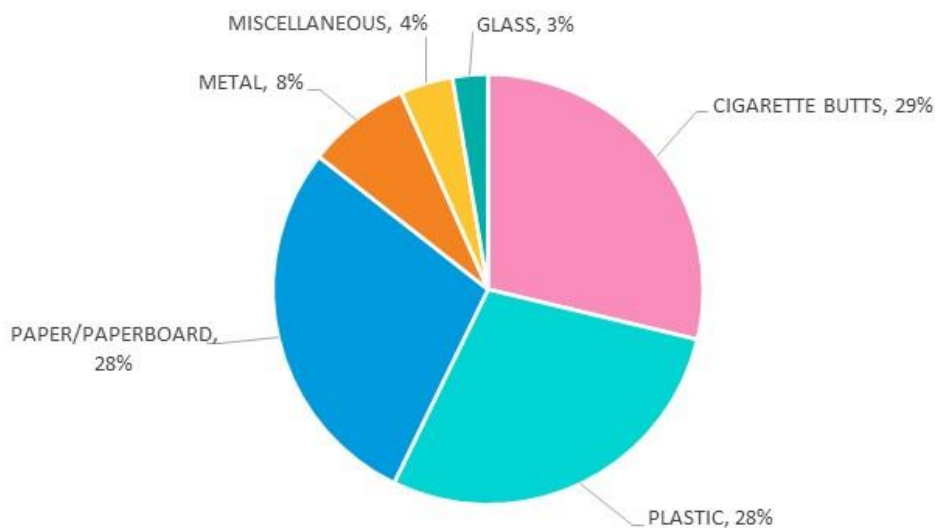
- PLASTIC - Other plastic 1,113 items, up from 985 items in Wave 82 (13% increase)

- PAPER/PAPERBOARD - Coffee cups 181 items, up from 135 items in Wave 82 (34% increase)
- PAPER/PAPERBOARD - Paper bags 90 items, up from 46 items in Wave 82 (96% increase)
- PAPER/PAPERBOARD - Shopper docket & related shopping paper (e.g. lists) 78 items, up from 51 items in Wave 82 (53% increase)
- PLASTIC - Plastic bottle tops 304 items, up from 283 items in Wave 82 (7% increase)
- METAL - Metal pieces 113 items, up from 96 items in Wave 82 (18% increase)
- METAL - Metal bottle tops and can pull rings 251 items, up from 236 items in Wave 82 (6% increase)
- PAPER/PAPERBOARD - Newspapers & magazines 27 items, up from 12 items in Wave 82 (125% increase)

Cigarette butts (29%, unchanged from 29% in Wave 82) accounted for the largest proportions of litter items counted in Wave 83. Other material types represented the following proportions:

- Plastic items (28%, down from 29% in Wave 82)
- Paper/ paperboard (28%, up from 27% in Wave 82)
- Metal items (8%, up from 7% in Wave 82)
- Glass items (3%, unchanged from 3% in Wave 82)
- Miscellaneous items (4%, down from 5% in Wave 82)

Items as Proportions of Total by Material Type



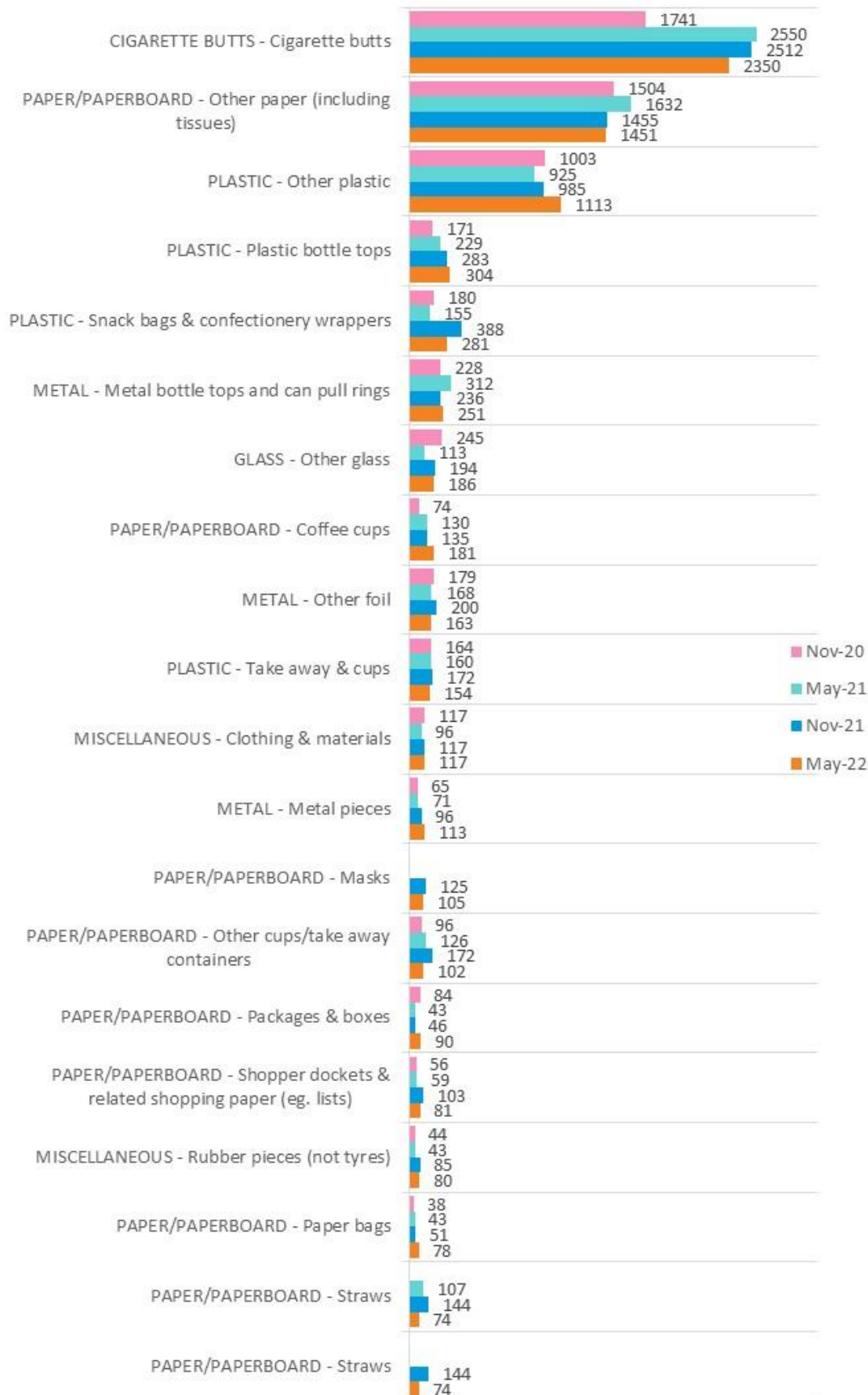
The top 20 ranking of litter type by number of items in Wave 83 was similar to the results for Wave 82, with new items entering the Top 20:

- PAPER/PAPERBOARD - Packages & boxes
- PAPER/PAPERBOARD – Paper bags

With new entrants, there are always those items that exit from the top 20 item list, in Wave 83 these items were:

- PLASTIC – Wipes
- PLASTIC – Styrene foam boxes, sheets etc.

Top 20 categories - highest counts



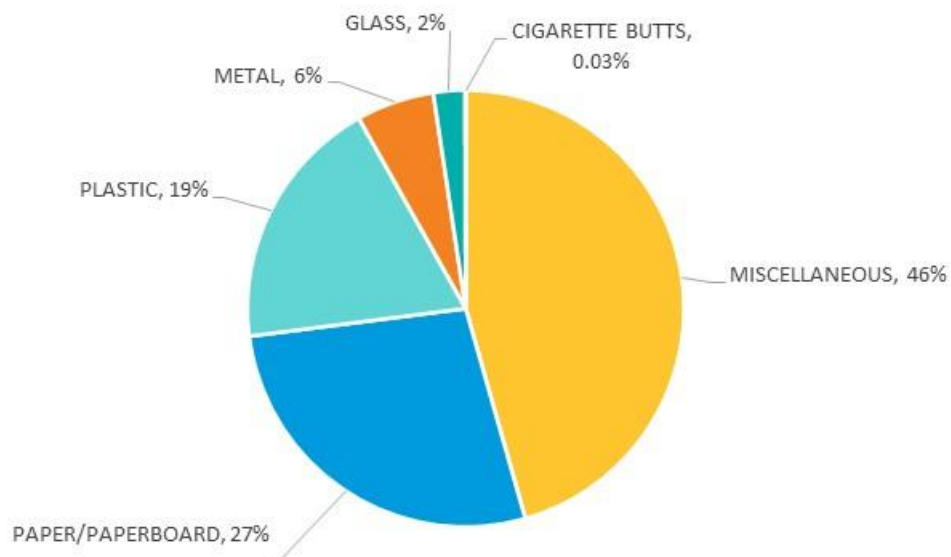
Litter Volume

The total volume of litter recorded in May 2022 amounted to 0.902 cubic metres, lower than the estimated litter volume of November 2021 (0.933m³) and marginally higher than May 2021 (0.822m³) conducted at the same time in the previous year.

The largest proportion of litter volume for Wave 83 was contributed by miscellaneous items (46%, up from 40% in Wave 82). Other material types represented the following proportions of the total volume of litter items counted:

- Paper Items (27%, unchanged from 27% in Wave 82).
- Plastic items (19%, down from 24% in Wave 82)
- Metal (6%, up from 5% in Wave 82)
- Glass (2%, down from 3% in Wave 82)
- Cigarette butts (<1%, unchanged from Wave 82)

Litter Volume as a Proportion of Total Volume



MISCELLANEOUS - Illegal dumping accounted for the highest volume of litter in Wave 83, with an estimated volume of 0.384m³ (up from 0.336m³ in Wave 82). Other items associated with large estimated litter volumes in Wave 83 included:

- PAPER/PAPERBOARD - Coffee cups 0.089m³ (up from 0.066m³ in Wave 82)
- PAPER/PAPERBOARD - Other cups/take away containers 0.074m³ (down from 0.125m³ in Wave 82)

- PLASTIC - Take away & cups 0.032m³ (down from 0.036m³ in Wave 82)
- PAPER/PAPERBOARD - Newspapers & magazines 0.032m³ (up from 0.014m³ in Wave 82)
- PLASTIC - Containers, domestic type 0.025m³ (down from 0.058m³ in Wave 82)
- PLASTIC - Plain water (carbonated or non-carb), <1 litre 0.024m³ (unchanged from 0.024m³ in Wave 82)
- PLASTIC - Containers, industrial e.g. oil 0.022m³ (down from 0.045m³ in Wave 82)
- METAL - Flav. water/soft drink, (carbonated), all sizes 0.017m³ (down from 0.022m³ in Wave 82)
- MISCELLANEOUS - Construction materials 0.021m³ (up from 0.021m³ in Wave 82)

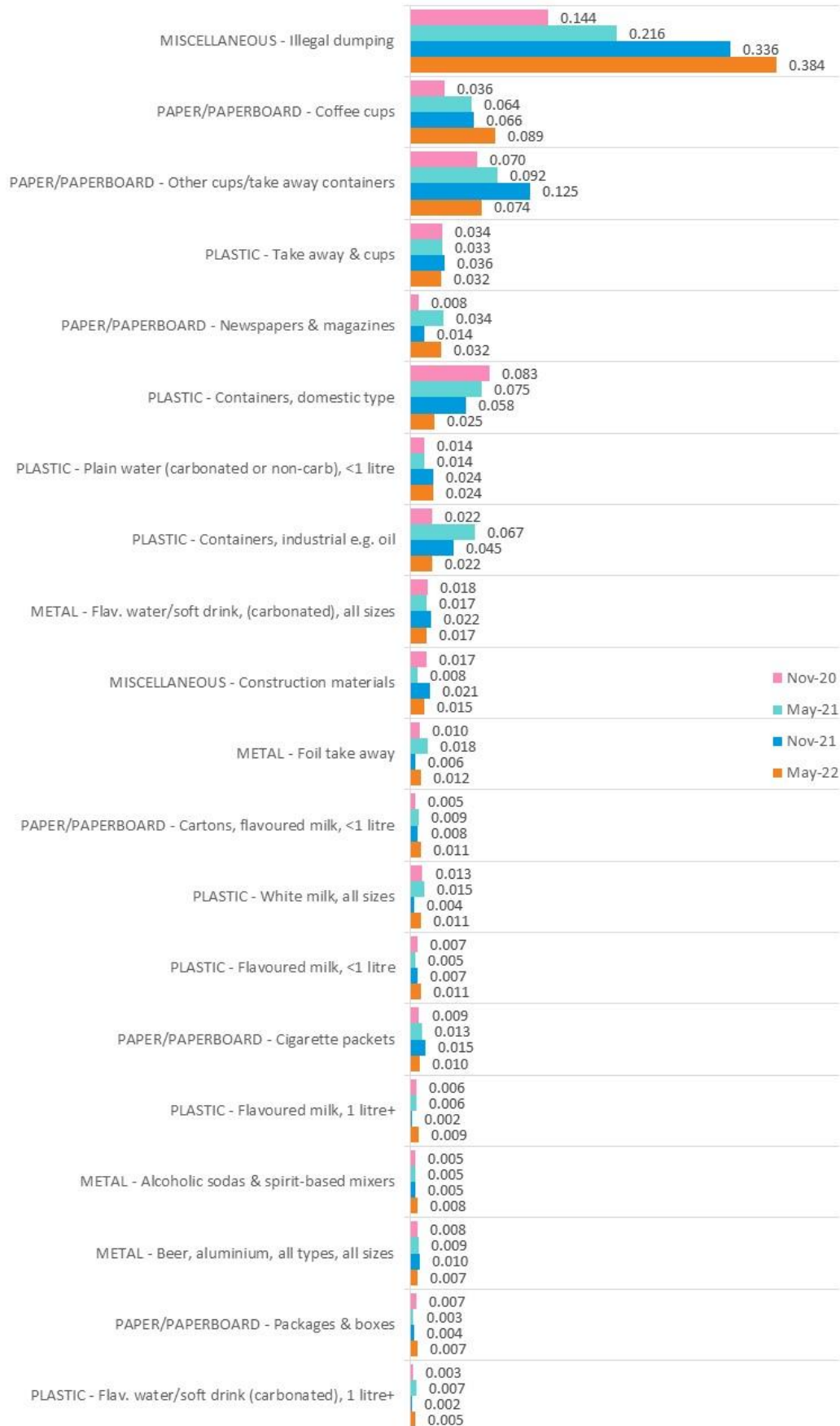
The top 20 ranking of litter items by volume in Wave 83 was similar to the results for Wave 82, with 5 new items entering the Top 20. These items were:

- METAL - Foil take away
- PLASTIC - White milk, all sizes
- PLASTIC - Flav. milk, 1 litre+
- METAL - Alcoholic sodas & spirit-based mixers
- PAPER/PAPERBOARD - Packages & boxes

With new entrants, there are always those items that exit from the top 20 volume list, in Wave 83 the following items were removed:

- PLASTIC - Plain water (carbonated or non-carb), 1 litre+
- PLASTIC - Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+
- PLASTIC - Flav. water/soft drink (carbonated), <1 litre
- MISCELLANEOUS - Disposable nappies
- GLASS - Beer, all colours of glass, <750ml

Top 20 categories - highest counts



3.1 Glass

Items

A total of 217 glass litter items (down from 240 items in Wave 82) were counted during Wave 83. The most frequently recorded glass items included:

- Other glass (186 items, down from 194 items in Wave 82)
- Beer, all colours of glass <750ml (9 items, down from 13 items in Wave 82)
- Flavoured water / soft drink (carbonated) < 1 litre (7 items, up from 2 items in Wave 82)
- Beer, all colours of glass 750ml+ (4 items, down from 6 items in Wave 82)
- Wine & spirits, all sizes (3 items, down from 4 items in Wave 82)
- Alcoholic sodas / spirit-based mixers (3 items, down from 4 items in Wave 82)

Glass Count

	May 2022	November 2021	May 2021	November 2020	May 2020
GLASS - Other glass	186 ↓ -4%	194 ↑ 72%	113 ↓ -54%	245 ↑ 37%	179
GLASS - Beer, all colours of glass, <750ml	9 ↓ -31%	13 ↓ -35%	20 ↓ -13%	23 ↑ 77%	13
GLASS - Flav. water/soft drink (carbonated), <1 litre	7 ↑ 250%	2		4	
GLASS - Beer, all colours of glass, 750ml+	4 ↓ -33%	6 ↓ -33%	9		6
GLASS - Alcoholic sodas/spirit-based mixers, all sizes	3 ↓ -25%	4 ↑ 100%	2 ↓ -60%	5	
GLASS - Wine & spirit, all sizes	3 ↓ -25%	4 ↑ 33%	3 ↑ 50%	2 ↓ -33%	3

Volume

Glass litter items accounted for 0.021m³ (down from 0.032m³ in Wave 82) in estimated litter volume during Wave 83. Glass items which contributed the largest volumes to the total included:

- Beer, all colours of glass <750ml (0.004m³, down from 0.006m³ in Wave 82)
- Other glass (0.0037m³, down from 0.0038m³ in Wave 82)
- Beer, all colours of glass 750ml+ (0.004m³, down from 0.005m³ in Wave 82)
- Flavoured water / soft drink (carbonated), < 1 litre (0.0027m³, up from 0.0008m³, in Wave 82)
- Wine & spirits, all sizes (0.003m³, down from 0.004m³ in Wave 82)

Glass Volume

	May 2022	November 2021	May 2021	November 2020	May 2020
GLASS - Beer, all colours of glass, <750ml	0.004166 ↓-0.308	0.006018 ↓-0.350	0.009258 ↓-0.130	0.010647 ↑0.769	0.006018
GLASS - Other glass	0.003653 ↓-0.041	0.003810 ↑0.717	0.002219 ↓-0.539	0.004812 ↑0.369	0.003516
GLASS - Beer, all colours of glass, 750ml+	0.003629 ↓-0.333	0.005444 ↓-0.333	0.008166		0.005444
GLASS - Flav. water/soft drink (carbonated), <1 litre	0.002771 ↑2.500	0.000792		0.001583	
GLASS - Wine & spirit, all sizes	0.002674 ↓-0.250	0.003566 ↑0.333	0.002674 ↑0.500	0.001783 ↓-0.333	0.002674

3.2 Metal

Items

A total of 637 metal litter items (down from 643 items in Wave 82) were counted during Wave 83. The most frequently counted metal litter items included:

- Metal bottle tops and can pull rings 251 items, up from 236 items in Wave 82)
- Other foil (163 items, down from 200 items in Wave 82)
- Metal pieces (113 items, up from 96 items in Wave 82)
- Flavoured water/soft drink (carb), all sizes (40 items, down from 51 items in Wave 82)
- Foil takeaway (25 items, up from 12 items in Wave 82)

Metal Count

	May 2022	November 2021	May 2021	November 2020	May 2020
METAL - Metal bottle tops and can pull rings	251 ↑ 6%	236 ↓ -24%	312 ↑ 37%	228 ↑ 12%	203
METAL - Other foil	163 ↓ -19%	200 ↑ 19%	168 ↓ -6%	179 ↑ 47%	122
METAL - Metal pieces	113 ↑ 18%	96 ↑ 35%	71 ↑ 9%	65 ↓ -4%	68
METAL - Flav. water/soft drink, (carbonated), all sizes	40 ↓ -22%	51 ↑ 31%	39 ↓ -7%	42 ↑ 180%	15
METAL - Foil take away	25 ↑ 108%	12 ↓ -69%	39 ↑ 77%	22 ↑ 38%	16

Volume

Metal litter items accounted for a total estimated litter volume of 0.052m³ (up from 0.051m³ in Wave 82). The metal items associated with the largest estimated volumes of litter during Wave 83 included:

- Flavoured water/soft drink (carbonated), all sizes (0.017m³, down from 0.022m³ in Wave 82)
- Foil takeaway (0.012m³, up from 0.006m³ in Wave 82)
- Alcoholic sodas & spirit-based mixers (0.008m³, up from 0.005m³ in Wave 82)
- Beer, aluminium cans, all types, all sizes (0.007m³, down from 0.010m³ in Wave 82)
- Aerosols – pressure packs (0.004m³, up from nil in Wave 82)

Metal Volume

	May 2022	November 2021	May 2021	November 2020	May 2020
METAL - Flav. water/soft drink, (carbonated), all sizes	0.01702 ↓-0.216	0.02170 ↑0.308	0.01660 ↓-0.071	0.01787 ↑1.800	0.00638
METAL - Foil take away	0.01156 ↑1.083	0.00555 ↓-0.692	0.01803 ↑0.773	0.01017 ↑0.375	0.00740
METAL - Alcoholic sodas & spirit-based mixers	0.00777 ↑0.636	0.00475 ↓-0.083	0.00518 ↑0.091	0.00475 ↑0.375	0.00345
METAL - Beer, aluminium, all types, all sizes	0.00733 ↓-0.261	0.00992 ↑0.150	0.00863 ↑0.111	0.00777 ↑3.500	0.00173
METAL - Aerosols - pressure packs	0.00411		0.00479 -0.000	0.00479 ↑1.333	0.00205

3.3 Plastic

Items

A total of 2,327 plastic litter items (down from 2,527 items in Wave 82) were counted during Wave 83. The most frequently counted plastic litter items included:

- Other plastic (1,223 items, up from 985 items in Wave 82)
- Plastic bottle tops (304 items, up from 283 items in Wave 82)
- Snack bags & confectionery wrappers (281 items, down from 388 items in Wave 82)
- Take away & cups (154 items, down from 172 items in Wave 82)
- Packaging tape & straps (73 items, down from 129 items in Wave 82)

Plastic Count

	May 2022	November 2021	May 2021	November 2020	May 2020
PLASTIC - Other plastic	1,113 ↑ 13%	985 ↑ 6%	925 ↓ -8%	1,003 ↑ 31%	767
PLASTIC - Plastic bottle tops	304 ↑ 7%	283 ↑ 24%	229 ↑ 34%	171 ↓ -11%	192
PLASTIC - Snack bags & confectionery wrappers	281 ↓ -28%	388 ↑ 150%	155 ↓ -14%	180 ↑ 49%	121
PLASTIC - Take away & cups	154 ↓ -10%	172 ↑ 8%	160 ↓ -2%	164 ↑ 10%	149
PLASTIC - Packing tape & straps	73 ↓ -43%	129 ↑ 174%	47 ↓ -34%	71 ↑ 9%	65

Volume

Plastic items were associated with an estimated litter volume of 0.170m³ (down from 0.226m³ in Wave 82). Items which represented the largest volumes within the Wave 83 litter count included:

- Take away & cups (0.032m³, down from 0.036m³ in Wave 82)
- Containers, domestic type (0.025m³, down from 0.058m³ in Wave 82)
- Plain water (carbonated or non-carbonated), < 1 litre (0.024m³, unchanged from 0.024 m³ in Wave 82)
- Containers, industrial type (0.023m³, down from 0.045 m³ in Wave 82)
- Plain white milk, all sizes (0.011m³, up from 0.004 m³ in Wave 82)

Plastic Volume

	May 2022	November 2021	May 2021	November 2020	May 2020
PLASTIC - Take away & cups	0.03188 ↓ -0.105	0.03561 ↑ 0.075	0.03312 ↓ -0.024	0.03395 ↑ 0.101	0.03085
PLASTIC - Containers, domestic type	0.02497 ↓ -0.571	0.05827 ↓ -0.222	0.07492 ↓ -0.100	0.08324 ↑ 2.333	0.02497
PLASTIC - Plain water (carbonated or non-carb), <1 litre	0.02442 ↑ 0.000	0.02442 ↑ 0.722	0.01418 ↓ 0.000	0.01418 ↑ 2.000	0.00473
PLASTIC - Containers, industrial e.g. oil	0.02246 ↓ -0.500	0.04492 ↓ -0.333	0.06737 ↑ 2.000	0.02246 - 0.000	0.02246
PLASTIC - White milk, all sizes	0.01068 ↑ 1.500	0.00427 ↓ -0.714	0.01496 ↑ 0.167	0.01282 ↓ -0.739	0.04914

3.4 Paper/ Paperboard

Items

A total of 2,321 paper/paperboard litter items (down from 2,388 items in Wave 82) were recorded during Wave 83.

The most frequently identified items within this material type were:

- Other paper – including tissues (1,451 items, down from 1,455 items in Wave 82)
- Coffee cups (181 items, up from 135 items in Wave 82)
- Masks (105 items, down from 125 items in Wave 82)
- Other cups/ take away containers (102 items, down from 172 items in Wave 82)
- Packages & boxes (90 items, up from 46 items in Wave 82)

Paper/paperboard Count

	May 2022	November 2021	May 2021	November 2020	May 2020
PAPER/PAPERBOARD - Other paper (including tissues)	1,451 ↓ 0%	1,455 ↓ -11%	1,632 ↑ 9%	1,504 ↑ 28%	1,176
PAPER/PAPERBOARD - Coffee cups	181 ↑ 34%	135 ↑ 4%	130 ↑ 76%	74 ↓ -23%	96
PAPER/PAPERBOARD - Masks	105 ↓ -16%	125			
PAPER/PAPERBOARD - Other cups/take away containers	102 ↓ -41%	172 ↑ 37%	126 ↑ 31%	96 ↓ -19%	119
PAPER/PAPERBOARD - Packages & boxes	90 ↑ 96%	46 ↑ 7%	43 ↓ -49%	84 ↑ 56%	54

Volume

Paper/ Paperboard items accounted for 0.247m³ in estimated litter volume (down from 0.253m³ in Wave 82) in May 2022.

Paper/ paperboard items which contributed the largest volumes to the total included:

- Coffee cups (0.089m³, up from 0.066m³ in Wave 82)
- Other cups/take away containers (0.074m³, down from 0.125m³ in Wave 82)
- Newspapers & magazines (0.032m³, up from 0.014m³ in Wave 82)
- Cartons, flavoured milk, < 1litre (0.011m³, up from 0.008m³ in Wave 82)
- Cigarette packets (0.010m³, down from 0.016m³ in Wave 82)

Paper/paperboard Volume

	May 2022	November 2021	May 2021	November 2020	May 2020
PAPER/PAPERBOARD - Coffee cups	0.0887 ↑ 0.341	0.0662 ↑ 0.038	0.0637 ↑ 0.757	0.0363 ↓ -0.229	0.0470
PAPER/PAPERBOARD - Other cups/take away containers	0.0744 ↓ -0.407	0.1254 ↑ 0.365	0.0918 ↑ 0.313	0.0700 ↓ -0.193	0.0867
PAPER/PAPERBOARD - Newspapers & magazines	0.0319 ↑ 1.250	0.0142 ↓ -0.586	0.0342 ↑ 3.143	0.0083 ↓ -0.125	0.0094
PAPER/PAPERBOARD - Cartons, flavoured milk, <1 litre	0.0114 ↑ 0.417	0.0081 ↓ -0.077	0.0087 ↑ 0.625	0.0054 ↑ 3.000	0.0013
PAPER/PAPERBOARD - Cigarette packets	0.0102 ↓ -0.338	0.0155 ↑ 0.224	0.0126 ↑ 0.349	0.0094 ↓ -0.218	0.0120

3.5 Miscellaneous

Items

A total of 406 miscellaneous items (up from 406 items in Wave 82) were counted during Wave 83.

The most frequently recorded items included:

- Clothing & materials (117 items, unchanged from 117 items in Wave 82)
- Rubber pieces – not tyres (80 items, down from 85 items in Wave 82)
Rubber pieces in this category include vehicle rubber mouldings, hose pipes and tubing, bicycle handlebar grips and casings, pram mouldings and strips.
- Construction materials (42 items, down from 58 items in Wave 82)
- Other miscellaneous (29 items, down from 81 items in Wave 82)
- Tyres & pieces (20 items, up from 21 items in Wave 82)

Miscellaneous Count

	May 2022	November 2021	May 2021	November 2020	May 2020
MISCELLANEOUS - Clothing & materials	117 -0%	117 ↑ 22%	96 ↓ -18%	117 ↑ 31%	89
MISCELLANEOUS - Rubber pieces (not tyres)	80 ↓ -6%	85 ↑ 98%	43 ↓ -2%	44 ↓ -41%	75
MISCELLANEOUS - Construction materials	42 ↓ -28%	58 ↑ 164%	22 ↓ -54%	48 ↑ 433%	9
MISCELLANEOUS - Other miscellaneous	29 ↓ -64%	81 ↑ 103%	40 ↓ -44%	71 ↑ 109%	34
MISCELLANEOUS - Tyres & pieces	20 ↑ 18%	17 ↑ 21%	14 ↓ -33%	21 ↑ 5%	20

Volume

Miscellaneous litter was associated with an estimated litter volume of 0.370m³ up from 0.370m³ in Wave 82) during Wave 83.

Illegal dumping remained the major contributor to the total volume of miscellaneous items, with an estimated total volume of 0.384m³ (up from 0.336m³ in Wave 82).

Other miscellaneous items which contributed to the litter stream volume included:

- Construction materials (0.015m³, down from 0.021m³ in Wave 82)
- Disposable nappies (0.006m³, down from 0.007m³ in Wave 82)
- Tyres & pieces (0.005m³, up from 0.004m³ in Wave 82)
- Clothing and materials (0.002m³, unchanged from 0.002m³ in Wave 82)

Miscellaneous Volume

	May 2022	November 2021	May 2021	November 2020	May 2020
MISCELLANEOUS - Illegal dumping	0.3840 ↑ 0.143	0.3360 ↑ 0.556	0.2160 ↑ 0.500	0.1440 ↓ -0.400	0.2400
MISCELLANEOUS - Construction materials	0.0151 ↓ -0.276	0.0209 ↑ 1.636	0.0079 ↓ -0.542	0.0173 ↑ 4.333	0.0032
MISCELLANEOUS - Disposable nappies	0.0056 ↓ -0.167	0.0068 ↑ 2.000	0.0023 ↑ 1.000	0.0011 ↓ -0.500	0.0023
MISCELLANEOUS - Tyres & pieces	0.0045 ↑ 0.176	0.0038 ↑ 0.214	0.0032 ↓ -0.333	0.0047 ↑ 0.050	0.0045
MISCELLANEOUS - Clothing & materials	0.0018 -0.000	0.0018 ↑ 0.219	0.0015 ↓ -0.179	0.0018 ↑ 0.315	0.0014

3.6 Cigarette Butts

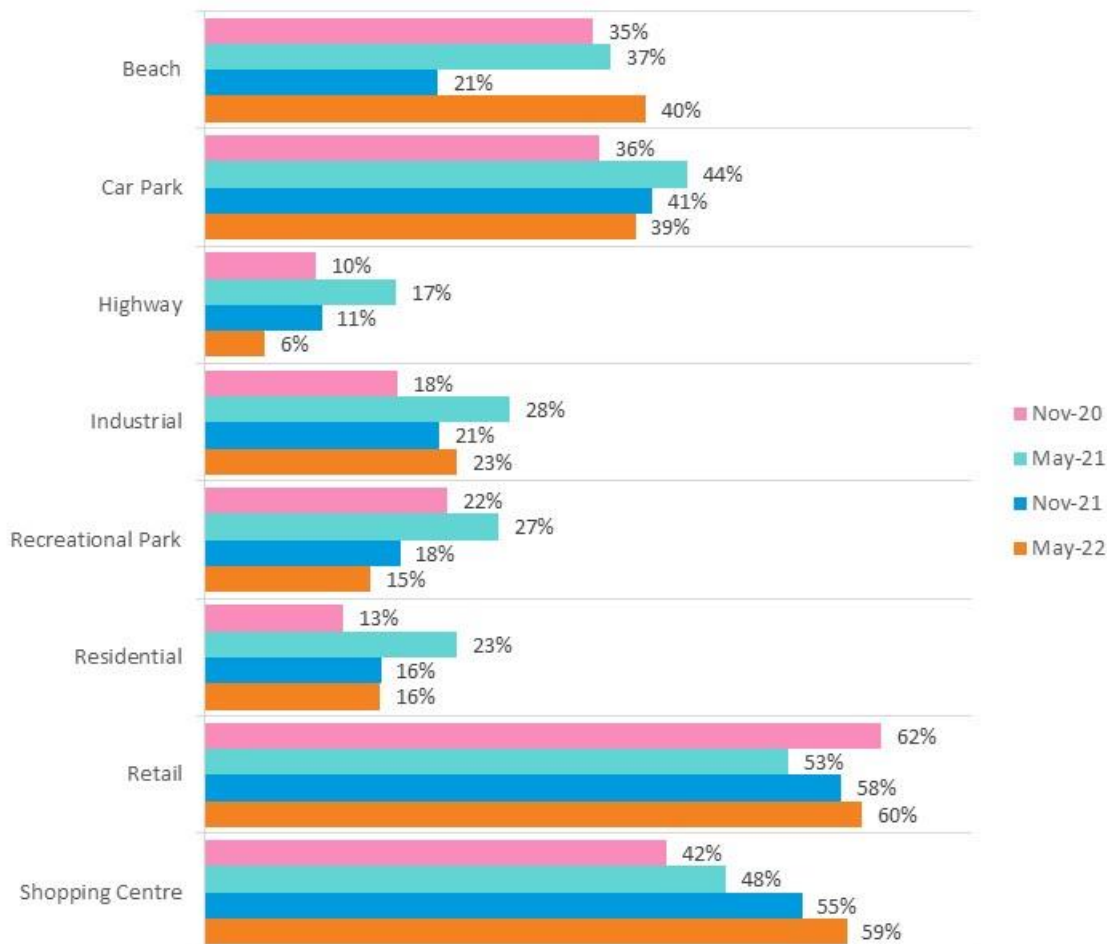
Items

The total number of cigarette butts recorded during Wave 83 was 2,350, down from 2,512 in Wave 82 and 2,550 in Wave 81 at the same time the previous year.

The proportion of cigarette butts against the total number of litter items was highest at retail sites (60%, up from 58% in Wave 82). Cigarette butts also contributed the following proportions of total litter at the following site types:

- Shopping centres (59%, up from 55% in Wave 82)
- Beaches (40%, up from 21% in Wave 82)
- Car parks (39%, down from 41% in Wave 82)
- Industrial sites (23%, up from 21% in Wave 82)
- Residential sites (16%, unchanged from 16% in Wave 82)
- Recreational parks (15%, down from 18% in Wave 82)
- Highway sites (6%, down from 11% in Wave 82)

Cigarette butts as a proportion of total litter at each site type



Volume

Despite cigarette butts being the most numerous type of litter item, they accounted for less than 1% of the total volume of litter recorded during the current Wave.

3.7 Dispersion of Litter by Site Type

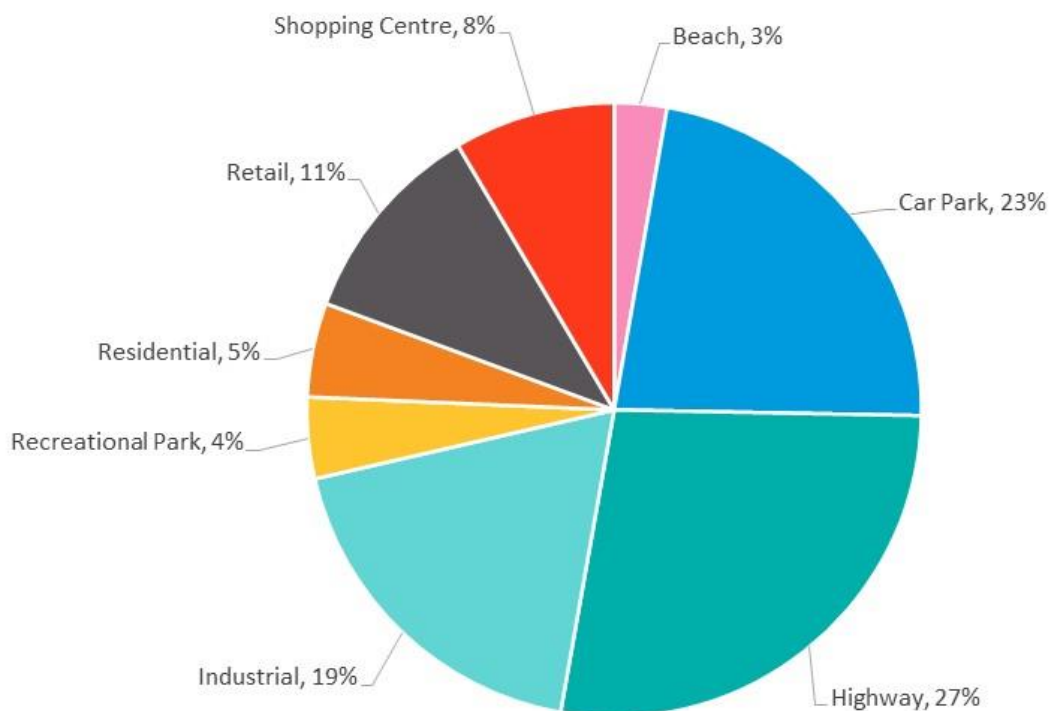
Items

Highways remained the most significant contributor to the total number of litter items counted in May 2022 with 27% (up from 26% in Wave 82) of the total litter items counted at highway locations.

Other sites contributed the following proportions of the total number of litter items counted during Wave 83:

- Car Park (23%, up from 20% in Wave 82)
- Industrial (19%, up from 18% in Wave 82)
- Retail (11%, up from 9% in from Wave 82)
- Shopping Centre (8%, down from 11% in Wave 82)
- Residential (5%, up from 8% in Wave 82)
- Recreational Park (4%, unchanged from 5% in Wave 82)
- Beach (3%, unchanged from 3% from Wave 82)

Proportion of total litter items counted within site type



A comparison of the proportions of litter items found at each site type revealed that highway, car park and industrial locations contributed large amounts to the total number of litter items in the May Monitor, based on the proportion of the number of these sites as outlined below:

- Highway sites represented only 18% of the total number of sites surveyed and contributed 27% (up from 26% in Wave 82) of the total litter items counted in Wave 83.
- Car parks incorporated 15% of the sites surveyed and contributed 23% (up from 20% in Wave 82) of the litter items counted in Wave 83.
- Industrial sites incorporated 11% of the sites surveyed and contributed 19% (up from 18% in Wave 82) of the total litter items counted in Wave 83.

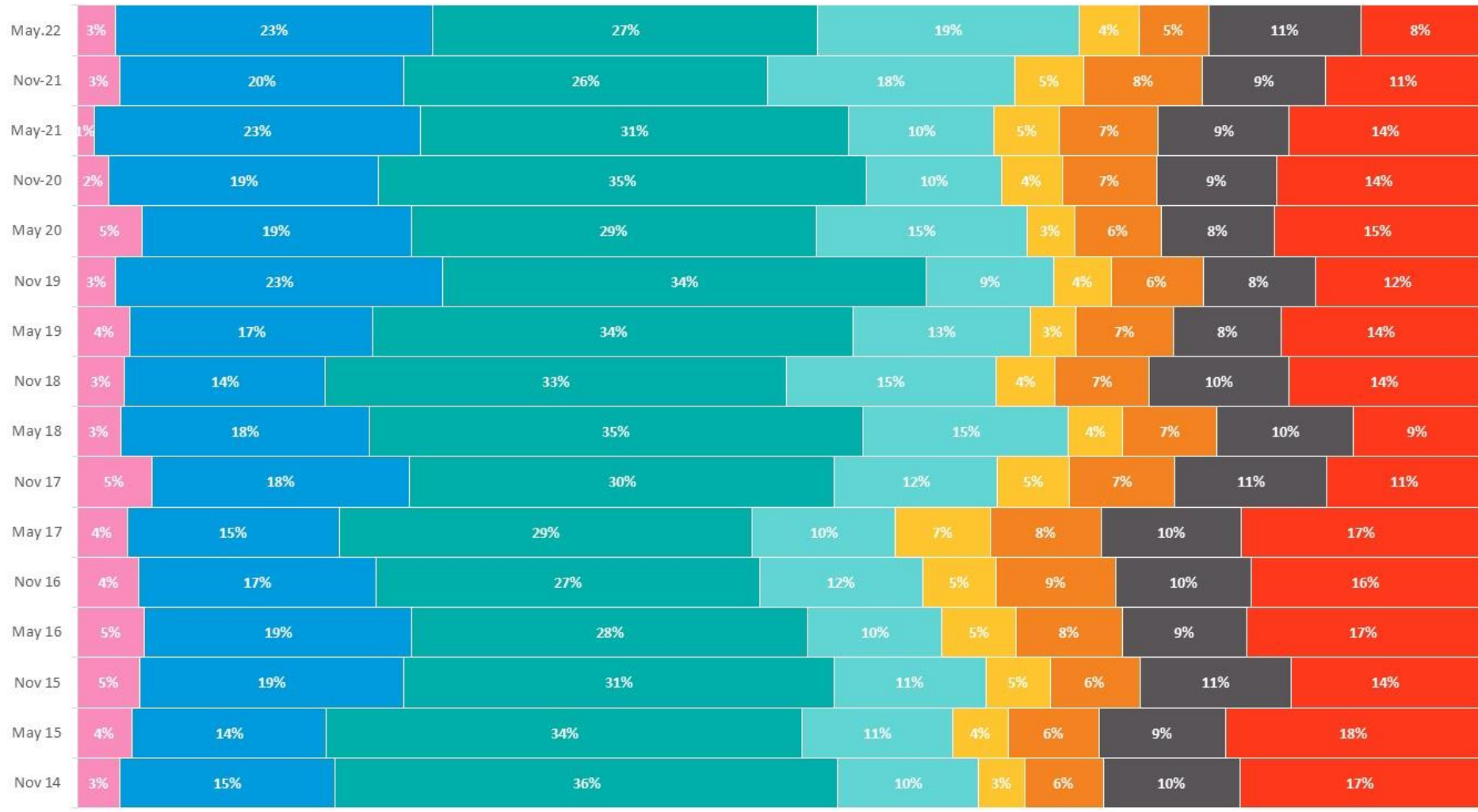
Conversely, residential locations, beaches and recreational parks contributed smaller proportions of litter items to the total litter count than anticipated based upon the proportion of these sites within the overall sample of locations as detailed below:

- Residential areas incorporated 17% of the sites surveyed but contributed only 5% (down from 8% in Wave 82) of the litter items counted in Wave 83.
- Beaches represented 11% of the sites surveyed but contributed only 3% (unchanged from 3% in Wave 82) of the litter counted in Wave 83.
- Recreational Parks represented 9% of sites surveyed and contributed 4% (down from 5% in Wave 82) of the litter counted in Wave 83.

The remaining sites contributed around the expected proportions of litter based on the proportion of these sites among the overall number of sites counted during May 2022, the proportions were:

- Retail areas - incorporated 10% of the sites surveyed and contributed 11% (up from 9% in Wave 82) of the litter items counted in Wave 83.
- Shopping centres - incorporated 9% of the sites surveyed and contributed 8% (down from 11% in Wave 82) of the litter items counted in Wave 83.

PROPORTION OF TOTAL LITTER ITEMS COUNTED WITHIN SITE TYPE
- tracking -

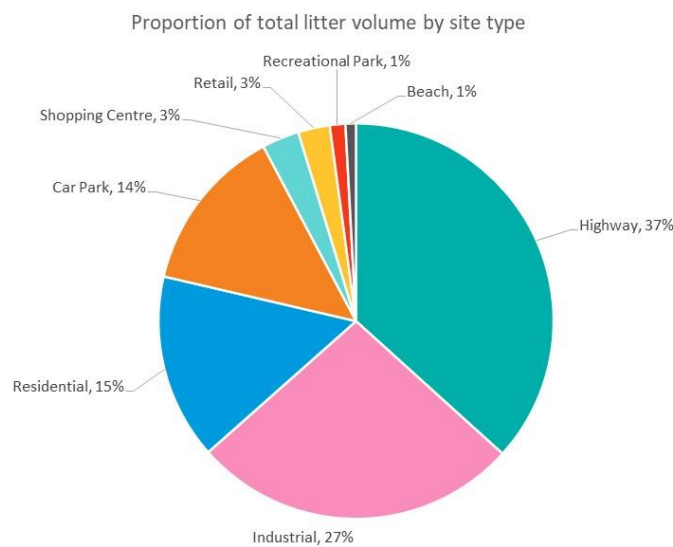


■ Beach ■ Car Park ■ Highway ■ Shopping Centre ■ Recreational Park ■ Residential ■ Retail ■ Industrial

Volume

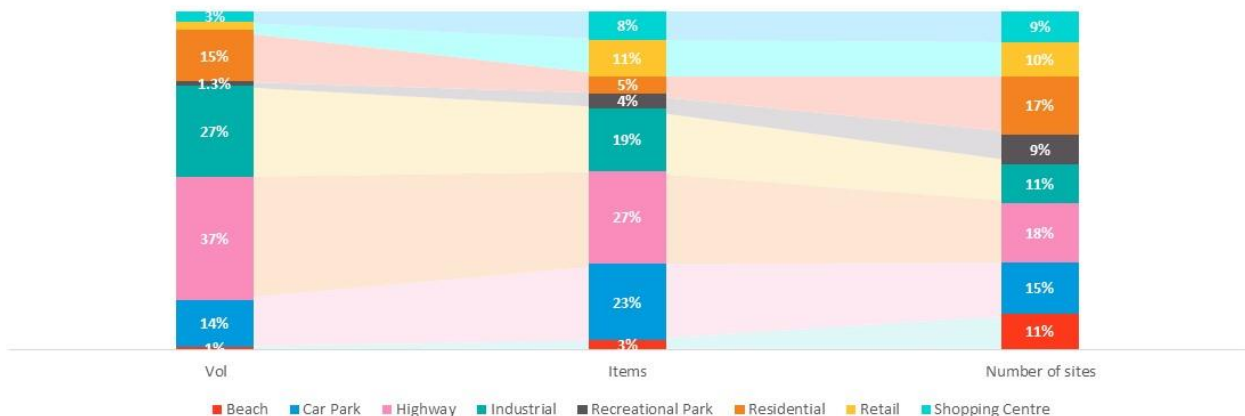
More than one third of the total volume of litter estimated during Wave 83 (37%, down from 44% in Wave 82) was associated with litter items at highway sites. While more than one quarter (27%, up from 23% in Wave 82) was associated with litter items at industrial sites.

Lower volumes of litter were contributed by residential sites (15%, up from 14% in Wave 82), car park sites (14%, up from 8% in Wave 82), shopping centres (3%, up from 2% in Wave 82), retail sites (3%, up from 1% in Wave 82), recreational parks (1%, down from 5% in Wave 82) and beaches (1%, unchanged from 1% in Wave 82) during Wave 83.



A comparison of the litter volume, number of litter items and proportion of sites represented within location types shows that highway locations and industrial sites contributed a larger number and volume of litter items than would be expected given their representations within the sample.

NUMBER AND VOLUME OF LITTER BY SITE TYPE AS PROPORTIONS OF TOTALS



3.8 CDL Beverage Containers

The majority (97%, unchanged from 97% in Wave 82) of litter items counted in May 2021 were non-beverage items.

The total number of CDL beverage containers counted was 211 items, down from 229 items in Wave 82.

CDL beverage containers accounted for 92% (down from 96% in Wave 82) of all beverage containers counted during Wave 83.

Data Summary - Items

KESAB - Litter Strategy Monitoring Wave 83 - May 2022			Items										
			BEACH	CAR PARK	HIGHWAY	INDUSTRIAL	RECREATIONAL PARK	RESIDENTIAL	RETAIL	SHOPPING CENTRE	METROPOLITAN	REGIONAL	TOTAL ITEMS
CIGARETTE BUTTS		NBEV	91	725	124	351	53	65	534	407	1961	389	2350
GLASS	Alcoholic sodas/spirit-based mixers, all sizes	CDL	0	0	1	2	0	0	0	0	3	0	3
	Beer, all colours of glass, <750ml	CDL	0	1	4	4	0	0	0	0	4	5	9
	Beer, all colours of glass, 750ml+	CDL	0	0	4	0	0	0	0	0	4	0	4
	Cider/fruit based etc.	CDL	0	0	0	0	0	0	0	0	0	0	0
	Flav. water/fruit j. drink/sports drink (non-carb), <1 litre	CDL	0	1	1	0	0	0	0	0	0	2	2
	Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+	CDL	0	0	0	0	0	0	0	0	0	0	0
	Flav. water/soft drink (carbonated), <1 litre	CDL	0	0	7	0	0	0	0	0	6	1	7
	Flav. water/soft drink (carbonated), 1 litre+	CDL	0	0	0	0	0	0	0	0	0	0	0
	Fruit juice, <1 litre	CDL	0	0	1	0	0	0	0	0	1	0	1
	Fruit juice, 1 litre+	BEV	0	0	0	0	0	0	0	0	0	0	0
	Other glass	NBEV	0	7	140	24	2	6	6	1	65	121	186
	Plain water (carbonated or non-carb), <1 litre	CDL	0	1	0	0	0	0	0	0	1	0	1
	Plain water (carbonated or non-carb), 1 litre+	CDL	0	1	0	0	0	0	0	0	0	1	1
	Wine & spirit, all sizes	BEV	0	1	2	0	0	0	0	0	3	0	3
Wine cooler, all sizes	CDL	0	0	0	0	0	0	0	0	0	0	0	
TOTAL			0	12	160	30	2	6	6	1	87	130	217
METAL	Aerosols - pressure packs	NBEV	0	4	2	0	0	0	0	0	5	1	6
	Alcoholic sodas & spirit-based mixers	CDL	0	3	13	2	0	0	0	0	16	2	18
	Beer, aluminium, all types, all sizes	CDL	1	4	11	1	0	0	0	0	12	5	17
	Cider/fruit based etc.	CDL	0	0	0	0	0	0	0	0	0	0	0
	Flav. water/soft drink, (carbonated), all sizes	CDL	1	0	36	1	1	0	1	0	25	15	40
	Flav. water/soft drink, (non-carb), all sizes	CDL	0	0	0	0	0	0	0	0	0	0	0
	Foil take away	NBEV	0	1	18	4	0	0	1	1	20	5	25
	Food cans (including pet food)	NBEV	0	0	3	1	0	0	0	0	4	0	4
	Industrial cans - all types	NBEV	0	0	0	0	0	0	0	0	0	0	0
	Metal bottle tops and can pull rings	NBEV	4	46	136	33	5	14	9	4	227	24	251
	Metal pieces	NBEV	0	34	36	38	0	4	1	0	110	3	113
	Other foil	NBEV	4	30	25	64	24	7	4	5	145	18	163
TOTAL			10	122	280	144	30	25	16	10	564	73	637

KESAB - Litter Strategy Monitoring Wave 83 - May 2022			Items										
			BEACH	CAR PARK	HIGHWAY	INDUSTRIAL	RECREATIONAL PARK	RESIDENTIAL	RETAIL	SHOPPING CENTRE	METROPOLITAN	REGIONAL	TOTAL ITEMS
MISCELLANEOUS	Clothing & materials	NBEV	3	15	50	30	3	10	5	1	93	24	117
	Condoms	NBEV	0	0	0	3	0	0	0	0	3	0	3
	Construction materials	NBEV	0	8	17	14	0	3	0	0	32	10	42
	Disposable nappies	NBEV	0	3	1	1	0	0	0	0	3	2	5
	Ice cream sticks	NBEV	2	2	4	1	0	1	1	1	9	3	12
	Illegal dumping	NBEV	0	2	3	6	0	5	0	0	15	1	16
	Other miscellaneous	NBEV	6	4	0	6	3	6	3	1	24	5	29
	Rubber pieces (not tyres)	NBEV	2	12	37	16	2	3	5	3	71	9	80
	Syringes	NBEV	0	0	0	1	0	0	0	0	1	0	1
	Tyres & pieces	NBEV	0	0	15	4	0	1	0	0	14	6	20
TOTAL			13	46	127	82	8	29	14	6	265	60	325
PAPER/PAPERBOARD	Cartons, flavoured milk, <1 litre	CDL	1	2	13	0	0	0	1	0	12	5	17
	Cartons, flavoured milk, 1 litre+	BEV	0	0	0	0	0	0	0	0	0	0	0
	Cartons, fruit juice, <1 litre	CDL	0	7	0	0	0	0	2	0	9	0	9
	Cartons, fruit juice, 1 litre+	BEV	0	0	0	0	0	0	0	1	1	0	1
	Cartons, milk, plain (white), all sizes	BEV	0	0	0	0	0	0	0	0	0	0	0
	Cigarette packets	NBEV	0	8	23	8	1	1	2	4	32	15	47
	Cups/take away containers	NBEV	2	18	55	14	2	2	2	7	88	14	102
	Coffee cups	NBEV	2	24	91	37	7	1	13	6	143	38	181
	Flav. water/fruit j. drink/sports drink (non-carb), <1 litre	CDL	0	0	0	0	0	0	0	0	0	0	0
	Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+	CDL	0	0	1	0	0	0	0	0	0	1	1
	Ice cream wrappers	NBEV	1	1	1	0	1	1	0	0	3	2	5
	Junk mail/free circulars	NBEV	1	1	8	10	1	10	6	3	19	21	40
	Newspapers & magazines	NBEV	0	6	5	9	0	4	3	0	10	17	27
	Masks	NBEV	0	30	19	17	3	13	12	11	76	29	105
	Other paper (including tissues)	NBEV	38	305	428	263	85	96	135	101	1315	136	1451
	Straws	NBEV	5	19	18	10	4	6	6	6	66	8	74
	Packages & boxes	NBEV	1	11	28	38	3	6	2	1	69	21	90
	Paper bags	NBEV	2	6	47	8	1	1	4	9	57	21	78
	Shopper dockets & related shopping paper (eg. lists)	NBEV	1	21	13	9	2	0	16	19	42	39	81
Tickets, e.g. bus, ATM, vending machine etc.	NBEV	1	5	1	1	0	0	1	3	12	0	12	
TOTAL			55	464	751	424	110	141	205	171	1954	367	2321

KESAB - Litter Strategy Monitoring Wave 83 - May 2022			Items										
			BEACH	CAR PARK	HIGHWAY	INDUSTRIAL	RECREATIONAL PARK	RESIDENTIAL	RETAIL	SHOPPING CENTRE	METROPOLITAN	REGIONAL	TOTAL ITEMS
PLASTIC	6 ring can holders	NBEV	0	0	0	0	0	0	0	0	0	0	0
	Bags - heavier glossy typically branded carry bags	NBEV	0	2	3	3	0	0	0	0	6	2	8
	Bags - supermarket type light weight carry bags	NBEV	2	6	3	2	1	4	2	2	19	3	22
	Bread bag tags	NBEV	0	2	0	1	2	2	0	0	2	5	7
	Containers, domestic type	NBEV	0	0	2	0	0	0	0	1	3	0	3
	Containers, industrial e.g. oil	NBEV	0	0	0	1	0	0	0	0	1	0	1
	Drink pouches	CDL	0	0	0	0	0	1	0	0	1	0	1
	Flav. water/fruit j. drink/sports drink (non-carb), <1 litre	CDL	0	3	6	0	0	0	0	0	5	4	9
	Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+	CDL	0	0	0	0	0	0	0	0	0	0	0
	Flav. water/soft drink (carbonated), <1 litre	CDL	0	2	5	0	0	0	0	0	3	4	7
	Flav. water/soft drink (carbonated), 1 litre+	CDL	0	0	2	0	1	0	0	0	3	0	3
	Flavoured milk, <1 litre	CDL	0	0	16	1	0	1	0	2	15	5	20
	Flavoured milk, 1 litre+	BEV	0	1	1	1	0	1	0	0	4	0	4
	Fruit juice, <1 litre	CDL	0	0	1	0	5	1	0	1	5	3	8
	Fruit juice, 1 litre+	BEV	0	0	0	1	0	0	0	0	1	0	1
	Lollipop sticks	NBEV	1	13	8	5	25	1	5	7	30	35	65
	Other plastic	NBEV	29	207	434	243	35	74	61	30	1065	48	1113
	Packing tape & straps	NBEV	1	3	30	31	0	4	4	0	65	8	73
	Plain water (carbonated or non-carb), <1 litre	CDL	1	2	24	3	0	0	1	0	31	0	31
	Plain water (carbonated or non-carb), 1 litre+	CDL	1	0	1	0	0	0	0	0	2	0	2
	Plastic bottle tops	NBEV	9	74	58	110	22	14	12	5	274	30	304
	Sacks - sheeting - other bags	NBEV	0	4	9	4	0	0	2	0	17	2	19
	Snack bags & confectionery wrappers	NBEV	6	85	67	31	36	23	15	18	222	59	281
	Spoons/cutlery	NBEV	0	1	2	0	3	0	2	2	8	2	10
	Straws	NBEV	2	8	8	3	4	0	2	9	31	5	36
	Styrene foam boxes, sheets, etc.	NBEV	0	9	24	26	2	3	0	0	58	6	64
	Take away & cups	NBEV	3	30	70	15	3	9	6	18	129	25	154
	White milk, all sizes	BEV	0	0	3	0	0	0	2	0	5	0	5
Wine cask bladders	BEV	0	0	2	0	0	0	0	2	2	2	4	
Wipes	NBEV	2	22	27	9	8	1	1	2	52	20	72	
TOTAL			57	474	806	490	147	139	115	99	2059	268	2327
GRAND TOTAL			226	1843	2248	1521	350	405	890	694	6890	1287	8177

Data Summary - Volumes

KESAB - Litter Strategy Monitoring Wave 83 - May 2022			Volume - Cubic Metres										
			BEACH	CAR PARK	HIGHWAY	INDUSTRIAL	RECREATIONAL PARK	RESIDENTIAL	RETAIL	SHOPPING CENTRE	METROPOLITAN	REGIONAL	TOTAL VOLUME
CIGARETTE BUTTS		NBEV	0.000010	0.000083	0.000014	0.000040	0.000006	0.000007	0.000061	0.000047	0.000226	0.000045	0.000270
GLASS	Alcoholic sodas/spirit-based mixers, all sizes	CDL	0.000000	0.000000	0.000374	0.000749	0.000000	0.000000	0.000000	0.000000	0.001123	0.000000	0.001123
	Beer, all colours of glass, <750ml	CDL	0.000000	0.000463	0.001852	0.001852	0.000000	0.000000	0.000000	0.000000	0.001852	0.002315	0.004166
	Beer, all colours of glass, 750ml+	CDL	0.000000	0.000000	0.003629	0.000000	0.000000	0.000000	0.000000	0.000000	0.003629	0.000000	0.003629
	Cider/fruit based etc.	CDL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	Flav. water/fruit j. drink/sports drink (non-carb), <1 litre	CDL	0.000000	0.000554	0.000554	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001109	0.001109
	Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+	CDL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	Flav. water/soft drink (carbonated), <1 litre	CDL	0.000000	0.000000	0.002771	0.000000	0.000000	0.000000	0.000000	0.000000	0.002375	0.000396	0.002771
	Flav. water/soft drink (carbonated), 1 litre+	CDL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	Fruit juice, <1 litre	CDL	0.000000	0.000000	0.000424	0.000000	0.000000	0.000000	0.000000	0.000000	0.000424	0.000000	0.000424
	Fruit juice, 1 litre+	BEV	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	Other glass	NBEV	0.000000	0.000137	0.002750	0.000471	0.000039	0.000118	0.000118	0.000020	0.001277	0.002376	0.003653
	Plain water (carbonated or non-carb), <1 litre	CDL	0.000000	0.000581	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000581	0.000000	0.000581
	Plain water (carbonated or non-carb), 1 litre+	CDL	0.000000	0.001059	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001059	0.001059
	Wine & spirit, all sizes	BEV	0.000000	0.000891	0.001783	0.000000	0.000000	0.000000	0.000000	0.000000	0.002674	0.000000	0.002674
Wine cooler, all sizes	CDL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	
TOTAL			0.000000	0.003686	0.014137	0.003072	0.000039	0.000118	0.000118	0.000020	0.013935	0.007255	0.021190
METAL	Aerosols - pressure packs	NBEV	0.000000	0.002737	0.001368	0.000000	0.000000	0.000000	0.000000	0.000000	0.003421	0.000684	0.004105
	Alcoholic sodas & spirit-based mixers	CDL	0.000000	0.001294	0.005608	0.000863	0.000000	0.000000	0.000000	0.000000	0.006902	0.000863	0.007765
	Beer, aluminium, all types, all sizes	CDL	0.000431	0.001726	0.004745	0.000431	0.000000	0.000000	0.000000	0.000000	0.005177	0.002157	0.007334
	Cider/fruit based etc.	CDL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	Flav. water/soft drink, (carbonated), all sizes	CDL	0.000426	0.000000	0.015319	0.000426	0.000426	0.000000	0.000426	0.000000	0.010638	0.006383	0.017021
	Flav. water/soft drink, (non-carb), all sizes	CDL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	Foil take away	NBEV	0.000000	0.000462	0.008323	0.001850	0.000000	0.000000	0.000462	0.000462	0.009248	0.002312	0.011560
	Food cans (including pet food)	NBEV	0.000000	0.000000	0.001391	0.000464	0.000000	0.000000	0.000000	0.000000	0.001855	0.000000	0.001855
	Industrial cans - all types	NBEV	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	Metal bottle tops and can pull rings	NBEV	0.000016	0.000184	0.000544	0.000132	0.000020	0.000056	0.000036	0.000016	0.000908	0.000096	0.001004
	Metal pieces	NBEV	0.000000	0.000360	0.000382	0.000403	0.000000	0.000042	0.000011	0.000000	0.001166	0.000032	0.001198
	Other foil	NBEV	0.000006	0.000047	0.000039	0.000100	0.000037	0.000011	0.000006	0.000008	0.000226	0.000028	0.000254
TOTAL			0.000879	0.006810	0.037720	0.004668	0.000483	0.000109	0.000941	0.000486	0.039542	0.012555	0.052097

KESAB - Litter Strategy Monitoring Wave 83 - May 2022			Volume - Cubic Metres										
			BEACH	CAR PARK	HIGHWAY	INDUSTRIAL	RECREATIONAL PARK	RESIDENTIAL	RETAIL	SHOPPING CENTRE	METROPOLITAN	REGIONAL	TOTAL VOLUME
MISCELLANEOUS	Clothing & materials	NBEV	0.000046	0.000230	0.000765	0.000459	0.000046	0.000153	0.000077	0.000015	0.001423	0.000367	0.001790
	Condoms	NBEV	0.000000	0.000000	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000	0.000001
	Construction materials	NBEV	0.000000	0.002880	0.006120	0.005040	0.000000	0.001080	0.000000	0.000000	0.011520	0.003600	0.015120
	Disposable nappies	NBEV	0.000000	0.003375	0.001125	0.001125	0.000000	0.000000	0.000000	0.000000	0.003375	0.002250	0.005625
	Ice cream sticks	NBEV	0.000002	0.000002	0.000004	0.000001	0.000000	0.000001	0.000001	0.000001	0.000008	0.000003	0.000011
	Illegal dumping	NBEV	0.000000	0.048000	0.072000	0.144000	0.000000	0.120000	0.000000	0.000000	0.360000	0.024000	0.384000
	Other miscellaneous	NBEV	0.000081	0.000054	0.000000	0.000081	0.000041	0.000081	0.000041	0.000014	0.000324	0.000068	0.000392
	Rubber pieces (not tyres)	NBEV	0.000000	0.000002	0.000006	0.000003	0.000000	0.000000	0.000001	0.000000	0.000012	0.000001	0.000013
	Syringes	NBEV	0.000000	0.000000	0.000000	0.000002	0.000000	0.000000	0.000000	0.000000	0.000002	0.000000	0.000002
	Tyres & pieces	NBEV	0.000000	0.000000	0.003375	0.000900	0.000000	0.000225	0.000000	0.000000	0.003150	0.001350	0.004500
TOTAL			0.000129	0.054542	0.083395	0.151612	0.000087	0.121540	0.000119	0.000030	0.379815	0.031639	0.411454
PAPER/PAPERBOARD	Cartons, flavoured milk, <1 litre	CDL	0.000672	0.001345	0.008742	0.000000	0.000000	0.000000	0.000672	0.000000	0.008070	0.003362	0.011432
	Cartons, flavoured milk, 1 litre+	BEV	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	Cartons, fruit juice, <1 litre	CDL	0.000000	0.004373	0.000000	0.000000	0.000000	0.000000	0.001250	0.000000	0.005623	0.000000	0.005623
	Cartons, fruit juice, 1 litre+	BEV	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002070	0.002070	0.000000	0.000000	0.002070
	Cartons, milk, plain (white), all sizes	BEV	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	Cigarette packets	NBEV	0.000000	0.001743	0.005011	0.001743	0.000218	0.000218	0.000436	0.000871	0.006972	0.003268	0.010240
	Cups/take away containers	NBEV	0.001458	0.013121	0.040092	0.010205	0.001458	0.001458	0.001458	0.005103	0.064148	0.010205	0.074353
	Coffee cups	NBEV	0.000980	0.011761	0.044592	0.018131	0.003430	0.000490	0.006370	0.002940	0.070074	0.018621	0.088695
	Flav. water/fruit j. drink/sports drink (non-carb), <1 litre	CDL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+	CDL	0.000000	0.000000	0.002070	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002070	0.002070
	Ice cream wrappers	NBEV	0.000002	0.000002	0.000002	0.000000	0.000002	0.000002	0.000000	0.000000	0.000007	0.000005	0.000012
	Junk mail/free circulars	NBEV	0.000174	0.000174	0.001392	0.001740	0.000174	0.001740	0.001044	0.000522	0.003306	0.003654	0.006960
	Newspapers & magazines	NBEV	0.000000	0.007080	0.005900	0.010620	0.000000	0.004720	0.003540	0.000000	0.011800	0.020060	0.031860
	Masks	NBEV	0.000000	0.000101	0.000064	0.000057	0.000010	0.000044	0.000041	0.000037	0.000257	0.000098	0.000355
	Other paper (including tissues)	NBEV	0.000128	0.001031	0.001447	0.000889	0.000287	0.000324	0.000456	0.000341	0.004445	0.000460	0.004904
	Straws	NBEV	0.000021	0.000078	0.000074	0.000041	0.000017	0.000025	0.000025	0.000025	0.000272	0.000033	0.000305
	Packages & boxes	NBEV	0.000080	0.000880	0.002240	0.003040	0.000240	0.000480	0.000160	0.000080	0.005520	0.001680	0.007200
	Paper bags	NBEV	0.000021	0.000063	0.000497	0.000085	0.000011	0.000011	0.000042	0.000095	0.000603	0.000222	0.000825
	Shopper dockets & related shopping paper (eg. lists)	NBEV	0.000002	0.000043	0.000026	0.000018	0.000004	0.000000	0.000032	0.000039	0.000085	0.000079	0.000164
	Tickets, e.g. bus, ATM, vending machine etc.	NBEV	0.000001	0.000004	0.000001	0.000001	0.000000	0.000000	0.000001	0.000003	0.000011	0.000000	0.000011
TOTAL			0.003540	0.041800	0.112152	0.046571	0.005851	0.009512	0.015527	0.012126	0.183262	0.063818	0.247079

KESAB - Litter Strategy Monitoring Wave 83 - May 2022			Volume - Cubic Metres											
			BEACH	CAR PARK	HIGHWAY	INDUSTRIAL	RECREATIONAL PARK	RESIDENTIAL	RETAIL	SHOPPING CENTRE	METROPOLITAN	REGIONAL	TOTAL VOLUME	
PLASTIC	6 ring can holders	NBEV	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	
	Bags - heavier glossy typically branded carry bags	NBEV	0.000000	0.000175	0.000263	0.000263	0.000000	0.000000	0.000000	0.000000	0.000526	0.000175	0.000701	
	Bags - supermarket type light weight carry bags	NBEV	0.000068	0.000204	0.000102	0.000068	0.000034	0.000136	0.000068	0.000068	0.000645	0.000102	0.000747	
	Bread bag tags	NBEV	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000002	
	Containers, domestic type	NBEV	0.000000	0.000000	0.016648	0.000000	0.000000	0.000000	0.000000	0.008324	0.024972	0.000000	0.024972	
	Containers, industrial e.g. oil	NBEV	0.000000	0.000000	0.000000	0.022458	0.000000	0.000000	0.000000	0.000000	0.022458	0.000000	0.022458	
	Drink pouches	CDL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000086	0.000000	0.000000	0.000086	0.000000	0.000086	
	Flav. water/fruit j. drink/sports drink (non-carb), <1 litre	CDL	0.000000	0.002213	0.004426	0.000000	0.000000	0.000000	0.000000	0.000000	0.003688	0.002950	0.006639	
	Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+	CDL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	
	Flav. water/soft drink (carbonated), <1 litre	CDL	0.000000	0.001244	0.003111	0.000000	0.000000	0.000000	0.000000	0.000000	0.001866	0.002488	0.004355	
	Flav. water/soft drink (carbonated), 1 litre+	CDL	0.000000	0.000000	0.003308	0.000000	0.001654	0.000000	0.000000	0.000000	0.004962	0.000000	0.004962	
	Flavoured milk, <1 litre	CDL	0.000000	0.000000	0.008523	0.000533	0.000000	0.000533	0.000000	0.001065	0.007991	0.002664	0.010654	
	Flavoured milk, 1 litre+	BEV	0.000000	0.002137	0.002137	0.002137	0.000000	0.002137	0.000000	0.000000	0.008547	0.000000	0.008547	
	Fruit juice, <1 litre	CDL	0.000000	0.000000	0.000400	0.000000	0.002000	0.000400	0.000000	0.000400	0.002000	0.001200	0.003200	
	Fruit juice, 1 litre+	BEV	0.000000	0.000000	0.000000	0.002137	0.000000	0.000000	0.000000	0.000000	0.002137	0.000000	0.002137	
	Lollipop sticks	NBEV	0.000001	0.000007	0.000004	0.000003	0.000013	0.000001	0.000003	0.000004	0.000016	0.000019	0.000034	
	Other plastic	NBEV	0.000036	0.000259	0.000543	0.000304	0.000044	0.000093	0.000076	0.000038	0.001331	0.000060	0.001391	
	Packing tape & straps	NBEV	0.000000	0.000001	0.000008	0.000008	0.000000	0.000001	0.000001	0.000000	0.000018	0.000002	0.000020	
	Plain water (carbonated or non-carb), <1 litre	CDL	0.000788	0.001576	0.018910	0.002364	0.000000	0.000000	0.000788	0.000000	0.024425	0.000000	0.024425	
	Plain water (carbonated or non-carb), 1 litre+	CDL	0.001542	0.000000	0.001542	0.000000	0.000000	0.000000	0.000000	0.000000	0.003083	0.000000	0.003083	
	Plastic bottle tops	NBEV	0.000072	0.000592	0.000464	0.000881	0.000176	0.000112	0.000096	0.000040	0.002193	0.000240	0.002434	
	Sacks - sheeting - other bags	NBEV	0.000000	0.000001	0.000003	0.000001	0.000000	0.000000	0.000001	0.000000	0.000005	0.000001	0.000006	
	Snack bags & confectionery wrappers	NBEV	0.000047	0.000666	0.000525	0.000243	0.000282	0.000180	0.000117	0.000141	0.001738	0.000462	0.002200	
	Spoons/cutlery	NBEV	0.000000	0.000010	0.000019	0.000000	0.000029	0.000000	0.000019	0.000019	0.000077	0.000019	0.000096	
	Straws	NBEV	0.000008	0.000033	0.000033	0.000012	0.000017	0.000000	0.000008	0.000037	0.000128	0.000021	0.000149	
	Styrene foam boxes, sheets, etc.	NBEV	0.000000	0.000338	0.000900	0.000975	0.000075	0.000113	0.000000	0.000000	0.002175	0.000225	0.002400	
	Take away & cups	NBEV	0.000621	0.006211	0.014491	0.003105	0.000621	0.001863	0.001242	0.003726	0.026706	0.005176	0.031881	
	White milk, all sizes	BEV	0.000000	0.000000	0.006410	0.000000	0.000000	0.000000	0.004273	0.000000	0.010683	0.000000	0.010683	
	Wine cask bladders	BEV	0.000000	0.000000	0.000920	0.000000	0.000000	0.000000	0.000000	0.000920	0.000920	0.000920	0.001840	
	Wipes	NBEV	0.000007	0.000074	0.000091	0.000030	0.000027	0.000003	0.000003	0.000007	0.000176	0.000068	0.000243	
	TOTAL			0.003189	0.015740	0.083780	0.035521	0.004972	0.005657	0.006696	0.014789	0.153552	0.016792	0.170344
	GRAND TOTAL			0.007748	0.122662	0.331197	0.241483	0.011438	0.136944	0.023462	0.027498	0.770331	0.132103	0.902434