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# Litter Strategy Monitoring Wave 50 – August 2010 Report

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On behalf of: KESAB Environmental Solutions  
Project No: 7239  
Date: August 2010

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For enquiries on this report please contact David O'Dea.

# *Section 1*

## *Introduction*

This document has been prepared by McGregor Tan Research to report on Wave 50 of the quarterly KESAB Litter Monitor. Surveys for the current Wave were conducted in South Australia during August 2010.

## **Background**

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.

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 was continued throughout 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009 and is planned to continue.

With the exception of August 2002, counts have been conducted quarterly, carried out in February, May, August and November of each year. Throughout the Monitor, care has been taken to maintain the data in a form compatible with KESAB's requirements.

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.

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.

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.

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 take away 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

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.

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.

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.

The auditors were an important part of the volume formulation process, and these persons 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.

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.

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 affect in May 2009.

This document reports on Wave 50 of the longitudinal study. The litter count was conducted during August 2010. 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 50*

### *Executive Summary*

The following Executive Summary covers the findings of the August 2010 (Wave 50) KESAB Litter Monitor. Where possible, results have been tracked against those derived from any previous Waves which incorporated revised sites. All 151 sites were counted during the August 2010 count.

### Items Counted

A total of 15,694 litter items were counted across the 151 South Australian sites during Wave 50. These figures are above those from the previous monitor in May 2010 (14,159), February 2010 (13,124), November 2009 monitor (12,322) and those conducted at the same time last year in the August 2009 monitor (14,539).

Cigarette butts remained the main contributor (48%) to the litter count with 7,586 butts counted in Wave 50, up from 5,927 butts in Wave 49, 5,594 butts in Wave 48, 4,507 in Wave 47 and also above the 6,181 counted at the same time last year in August 2009 in Wave 46.

The decrease in items counted in Wave 50 is demonstrated most strongly amongst the following litter items:

- PAPER/PAPERBOARD - Other paper (including tissues) - 2,155 items, down from 2,335 items in Wave 49 (8% decrease)
- PAPER/PAPERBOARD - Packages & boxes - 110 items, down from 242 items in Wave 49 (55% decrease)
- PLASTIC - Styrene foam boxes, sheets, etc. – 101 items, down from 174 items in Wave 49 (42% decrease)
- MISCELLANEOUS - Other miscellaneous – 28 items, down from 82 items in Wave 49 (66% decrease)
- PAPER/PAPERBOARD - Cups/take away containers – 247 items, down from 289 items in Wave 49 (15% decrease)
- MISCELLANEOUS - Rubber pieces (not tyres) – 111 items, down from 152 items in Wave 49 (27% decrease)
- MISCELLANEOUS - Clothing & materials - 142 items, down from 182 items in Wave 49 (22% decrease)
- MISCELLANEOUS - Construction materials - 84 items, down from 119 items (29% decrease)

- PAPER/PAPERBOARD - Paper bags – 103 items, down from 138 items in Wave 49 (25% decrease)
- PLASTIC - Snack bags & confectionery wrappers – 412 items, down from 444 items in Wave 49 (7% decrease)
- PLASTIC - Packing tape & straps – 106 items, down from 130 items in Wave 49 (18% decrease)
- PLASTIC - Bread bag tags – 18 items, down from 41 items in Wave 49 (56% decrease)
- PLASTIC - Bags - supermarket type light weight carry bags - 75 items, down from 97 items in Wave 49 (23% decrease)
- PLASTIC - Containers, domestic type – 16 items, down from 36 items in Wave 49 (56% decrease)

Conversely, there was an increase in several litter items, these included:

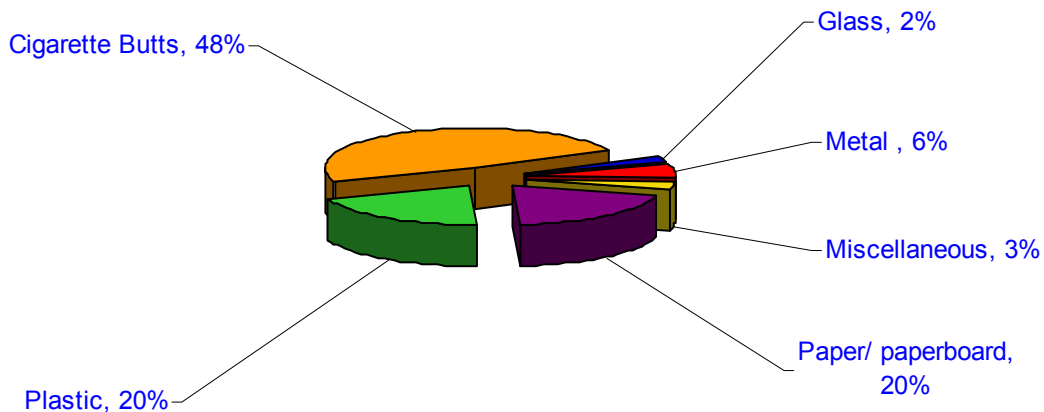
- CIGARETTE BUTTS – 7,586 items, up from 5,927 items in Wave 49 (28% increase)
- PLASTIC - Other plastic – 1,185 items, up from 1,108 items in Wave 49 (7% increase)
- PLASTIC - Spoons/cutlery – 123 items, up from 55 items in Wave 49 (124% increase)
- PLASTIC - Plastic bottle tops – 300 items, up from 233 items in Wave 49 (29% increase)
- METAL - Metal pieces – 212 items, up from 145 items in Wave 49 (46% increase)
- PLASTIC - Take away & cups – 235 items, up from 177 items in Wave 49 (33% increase)
- MISCELLANEOUS - Ice cream sticks – 92 items, up from 44 items in Wave 49 (109% increase)
- GLASS - Beer, all colours of glass, <750ml – 101 items, up from 55 items in Wave 49 (84% increase)
- PLASTIC – Straws – 322 items, up from 277 items in Wave 49 (16% increase)
- GLASS - Other glass – 249 items, up from 208 items in Wave 49 (20% increase)

- PAPER/PAPERBOARD - Junk mail/free circulars – 98 items, up from 72 items in Wave 49 (36% increase)
- METAL - Beer, aluminium, all types, all sizes – 36 items, up from 15 items in Wave 49 (140% increase)

Cigarette butts accounted for the largest proportion of all litter items counted (48%, up from 42% in Wave 49, 43% in Wave 48, 37% in Wave 47 and 43% in Wave 46). Other material types represented the following proportions of the litter items counted:

- Plastic items (20%, down from 21% in Wave 49)
- Paper/ paperboard (20%, down from 25% in Wave 49)
- Metal items (6%, unchanged from Wave 49)
- Miscellaneous items (3%, down from 4% in Wave 49)
- Glass items (2%, unchanged from Wave 49)

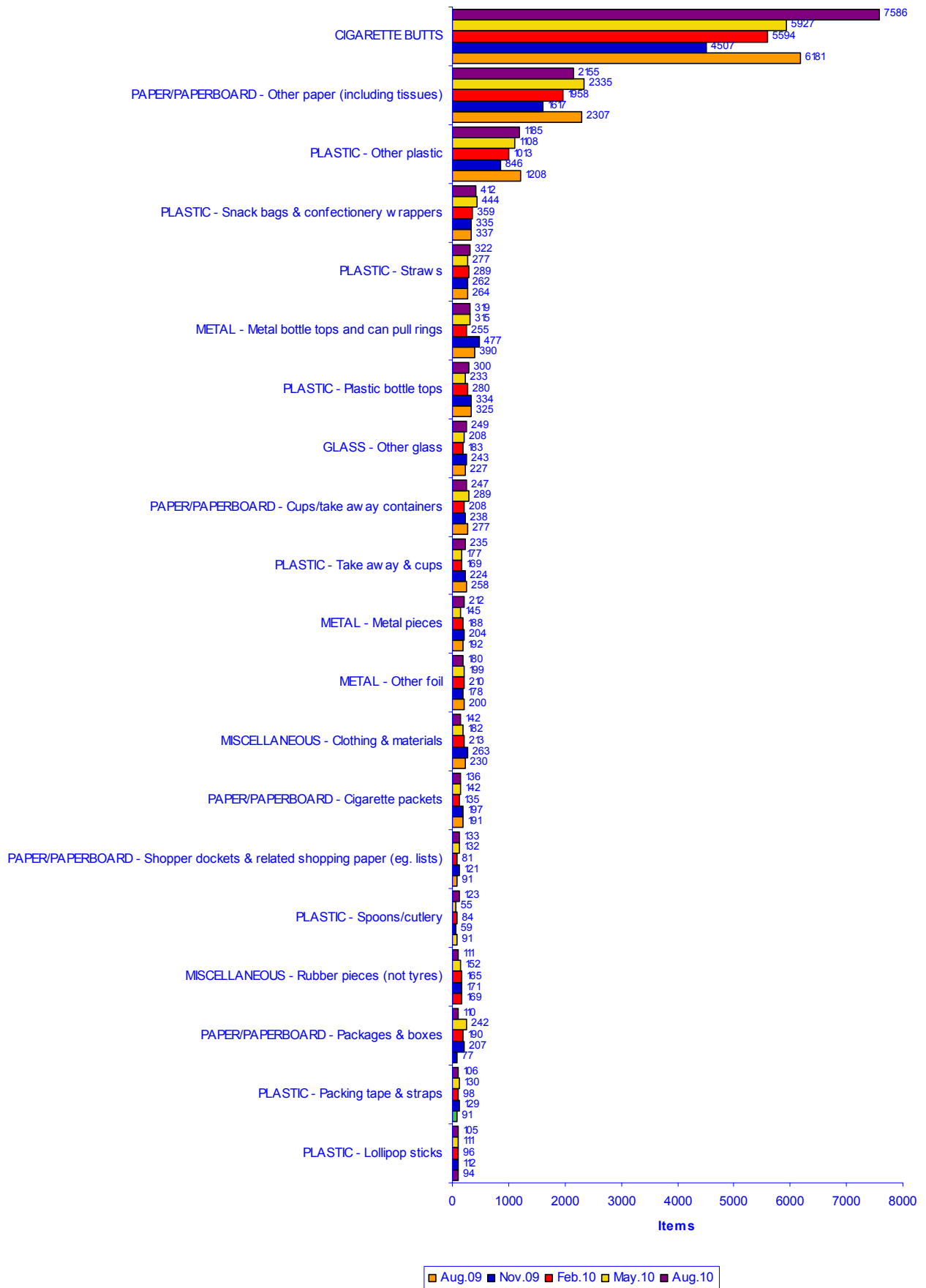
### Items as Proportions of Total by Material Type



The top 20 ranking of litter items for August 2010 also included PLASTIC – Lollipop sticks and PLASTIC – Spoons/ cutlery not present previously in Wave 49.

The items that exited the top 20 as a result of the new entrants were PAPER/PAPERBOARD - Paper bags and PLASTIC - Styrene foam boxes, sheets, etc.

**TOP 20 CATEGORIES - HIGHEST COUNTS**



## Litter Volume

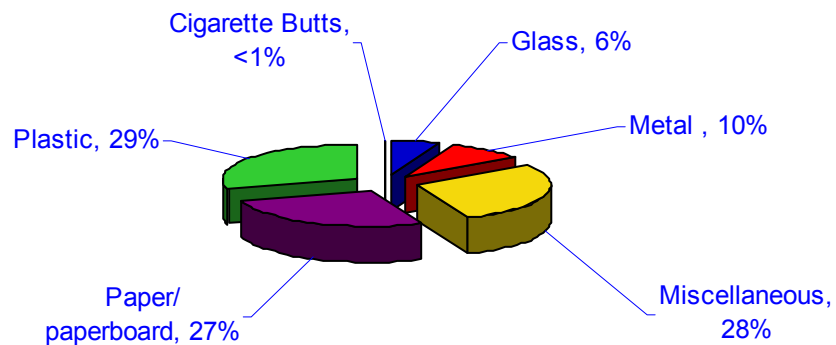
The total volume of litter recorded in August 2010 amounted to 1.177 cubic metres, 33% lower than the estimated litter volume established in the May 2010 Monitor (1.761m<sup>3</sup>). This total litter volume is also 9% lower than the estimated litter volume established during the volume recorded at the same time in August 2009 (1.294m<sup>3</sup>).

The largest proportion of litter volume for Wave 50 was contributed by plastic item (29%, down from 30% in Wave 49), miscellaneous items (28%, down from 42% in Wave 49) and paper/ paperboard items (27%, up from 20% in Wave 49).

Other material types represented the following proportions of the total volume of litter items counted:

- Metal (10%, up from 5% in Wave 49)
- Glass (6%, up from 2% in Wave 49)
- Cigarette butts (<1%, unchanged from Wave 49)

### Litter Volume as a Proportion of Total Volume



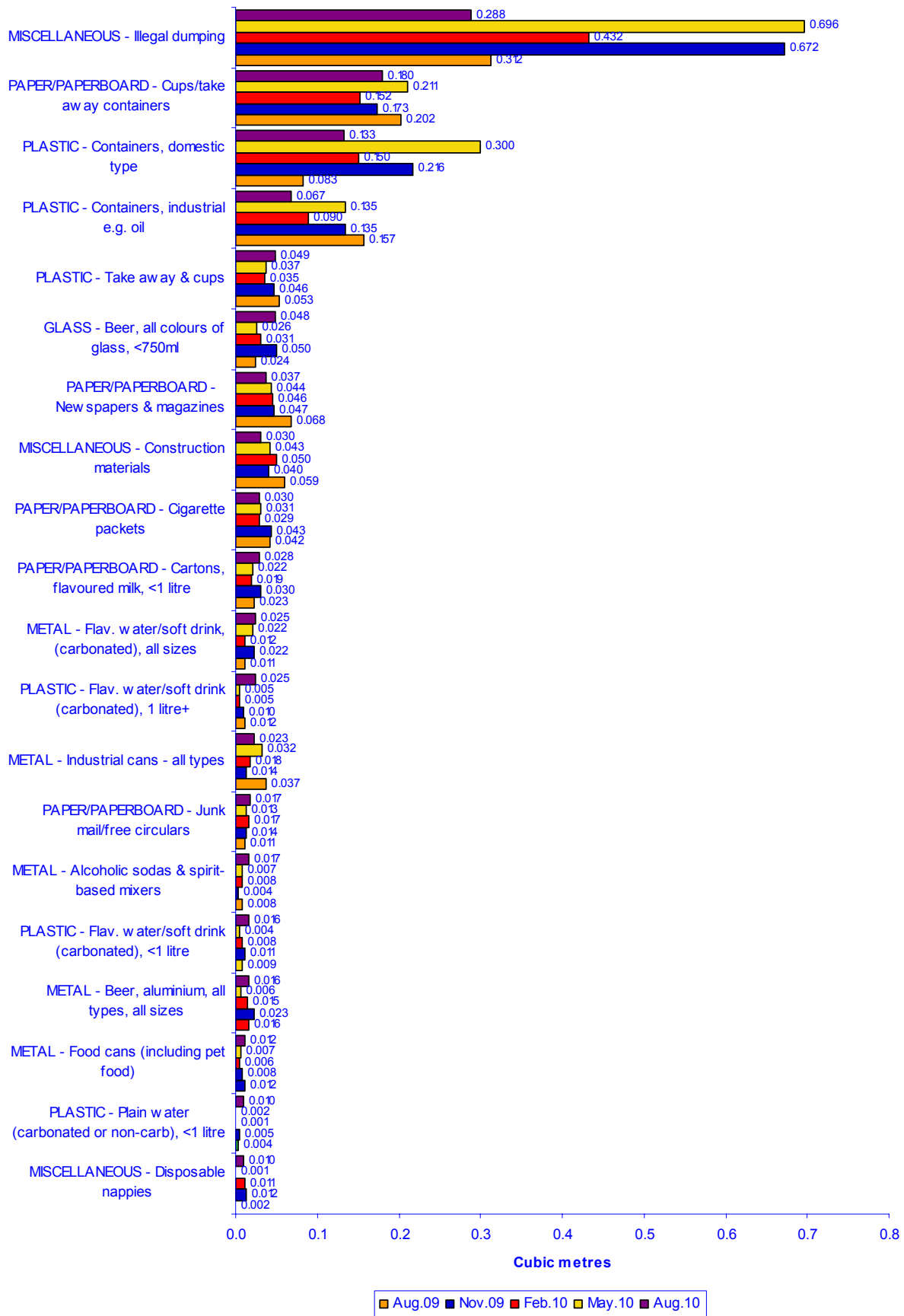
The items associated with the largest estimated litter volumes in Wave 50 included:

- MISCELLANEOUS - Illegal dumping (0.288m<sup>3</sup>, down from 0.696m<sup>3</sup> in Wave 49)
- PAPER/PAPERBOARD - Cups/take away containers 0.180m<sup>3</sup>, down from 0.211m<sup>3</sup> in Wave 49)
- PLASTIC - Containers, domestic type 0.133m<sup>3</sup>, down from 0.300m<sup>3</sup> in Wave 49)
- PLASTIC - Containers, industrial e.g. oil 0.067m<sup>3</sup>, down from 0.135m<sup>3</sup> in Wave 49)
- PLASTIC - Take away & cups 0.049m<sup>3</sup>, up from 0.037m<sup>3</sup> in Wave 49)
- GLASS - Beer, all colours of glass, <750ml 0.048m<sup>3</sup>, up from 0.026m<sup>3</sup> in Wave 49)
- PAPER/PAPERBOARD - Newspapers & magazines 0.037m<sup>3</sup>, down from 0.044m<sup>3</sup> in Wave 49)
- MISCELLANEOUS - Construction materials 0.030m<sup>3</sup>, down from 0.043m<sup>3</sup> in Wave 49)
- PAPER/PAPERBOARD - Cigarette packets 0.030m<sup>3</sup>, down from 0.031m<sup>3</sup> in Wave 49)
- PAPER/PAPERBOARD - Cartons, flavoured milk, <1 litre 0.028m<sup>3</sup>, up from 0.022m<sup>3</sup> in Wave 49)

The top 20 ranking of litter items by volume was similar to the results for previous waves, new items entering the top 20 however, were METAL - Beer, aluminium, all types, all sizes, MISCELLANEOUS - Disposable nappies, PLASTIC - Flavoured water/ soft drink (carbonated), <1 litre, PLASTIC – Flavoured water/soft drink (carbonated), 1 litre+ and PLASTIC - Plain water (carbonated or non-carbonated), <1 litre.

With new entrants there are always those items that exit from the top 20 volume list, in Wave 50 they were METAL - Foil take away, PAPER/PAPERBOARD - Other paper (including tissues), PAPER/PAPERBOARD - Packages & boxes, PLASTIC - Styrene foam boxes, sheets, etc and PLASTIC - White milk, all sizes.

### TOP 20 CATEGORIES - LARGEST VOLUMES

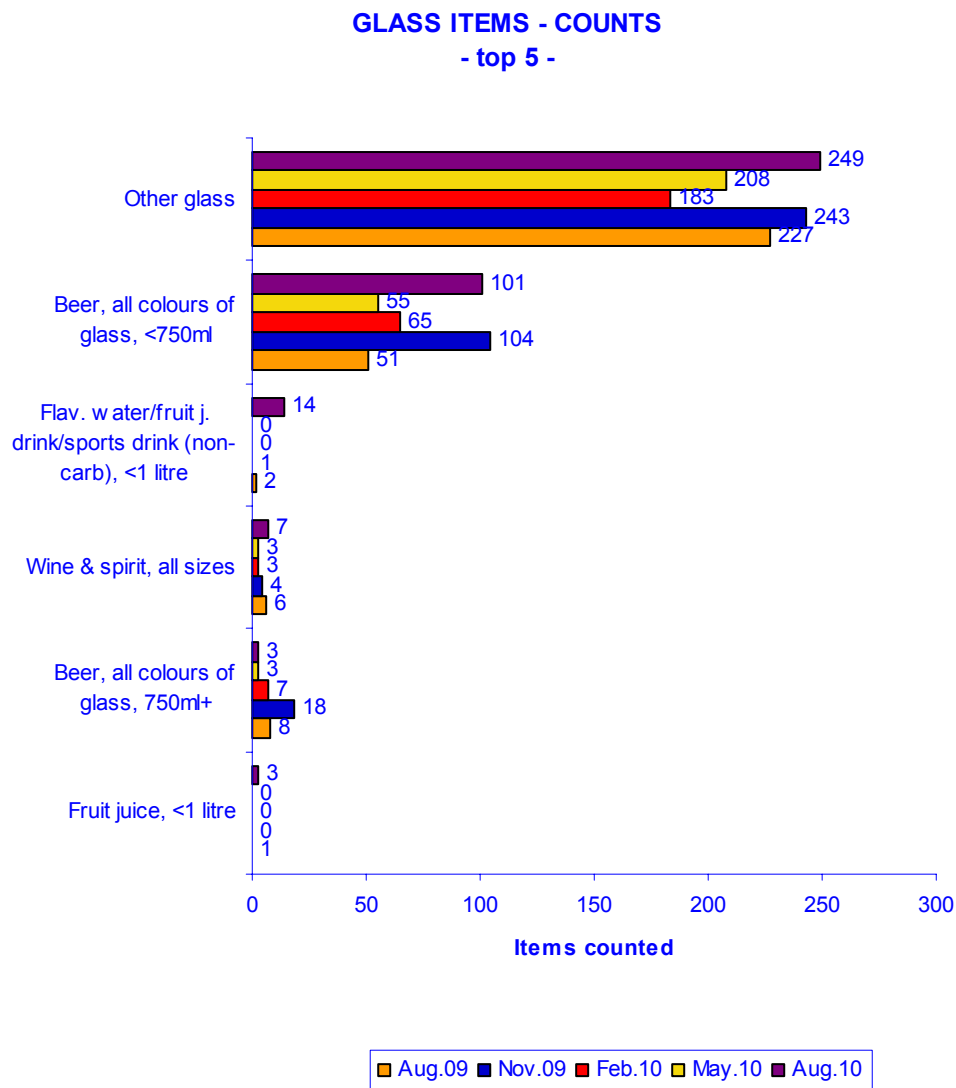


### 3.1 Glass

#### Items

A total of 382 items (up from 276 items in Wave 49) glass litter items were counted during Wave 50. The most frequently recorded glass items included:

- Other glass (249 items, up from 208 items in Wave 49)
- Beer, all colours of glass <750ml (101 items, up from 55 items in Wave 49)
- Flavoured water/ fruit juice/ sports drink (non-carbonated) <1 litre (14 items, up from nil items in Wave 49)
- Wine and spirits, all sizes (7 items, up from 3 items in Wave 49)
- Beer, all colours of glass 750ml+ (3 items, unchanged from Wave 49)
- Fruit juice, <1 litre (3 items, up from nil items in Wave 49)



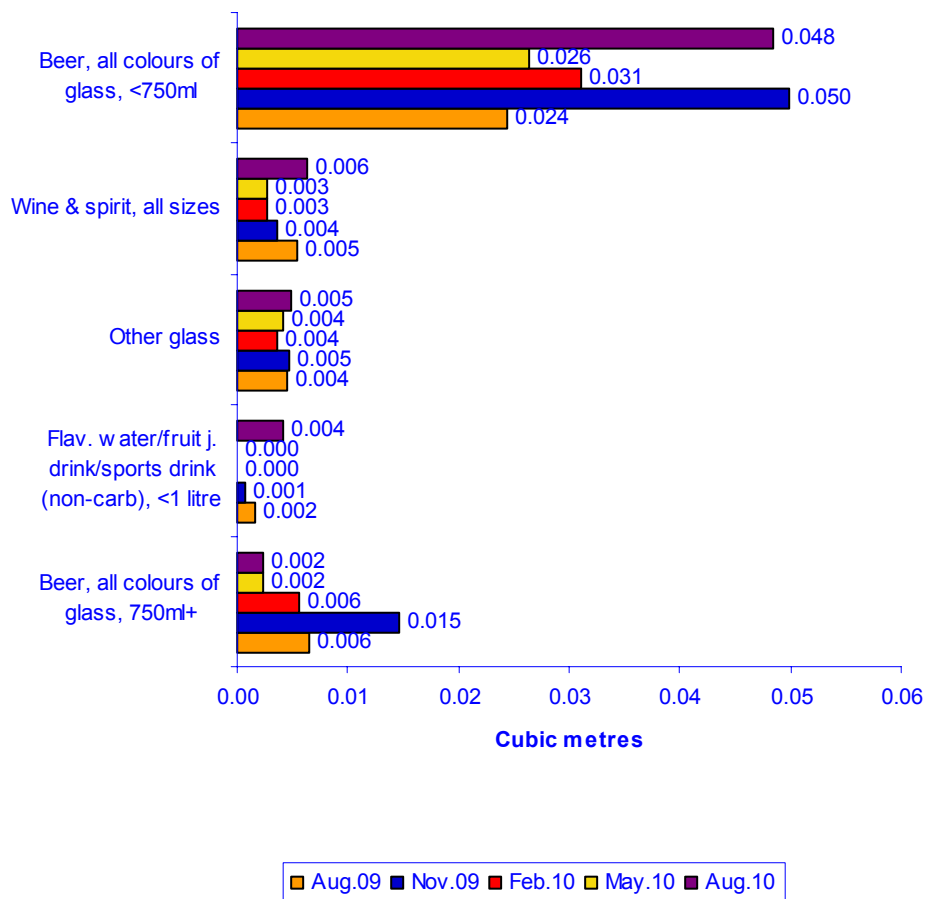
Volume

Glass litter items accounted for 0.069m<sup>3</sup> (up from 0.038m<sup>3</sup> in Wave 49) in estimated litter volume.

Glass items which contributed the largest volumes to the total included:

- Beer, all colours of glass, <750 ml (0.048m<sup>3</sup>, up from 0.026m<sup>3</sup> in Wave 49)
- Wine and spirits, all sizes (0.006m<sup>3</sup>, up from 0.003m<sup>3</sup> in Wave 49)
- Other glass (0.005m<sup>3</sup>, up from 0.004m<sup>3</sup> in Wave 49)
- Flavoured water/ fruit juice/ sports drink (non-carbonated) <1 litre (0.004m<sup>3</sup>, down from nil in Wave 49)
- Beer, all colours of glass, 750+ ml (0.002m<sup>3</sup>, unchanged from Wave 49)

**GLASS ITEMS - VOLUMES**  
- Top 5 -



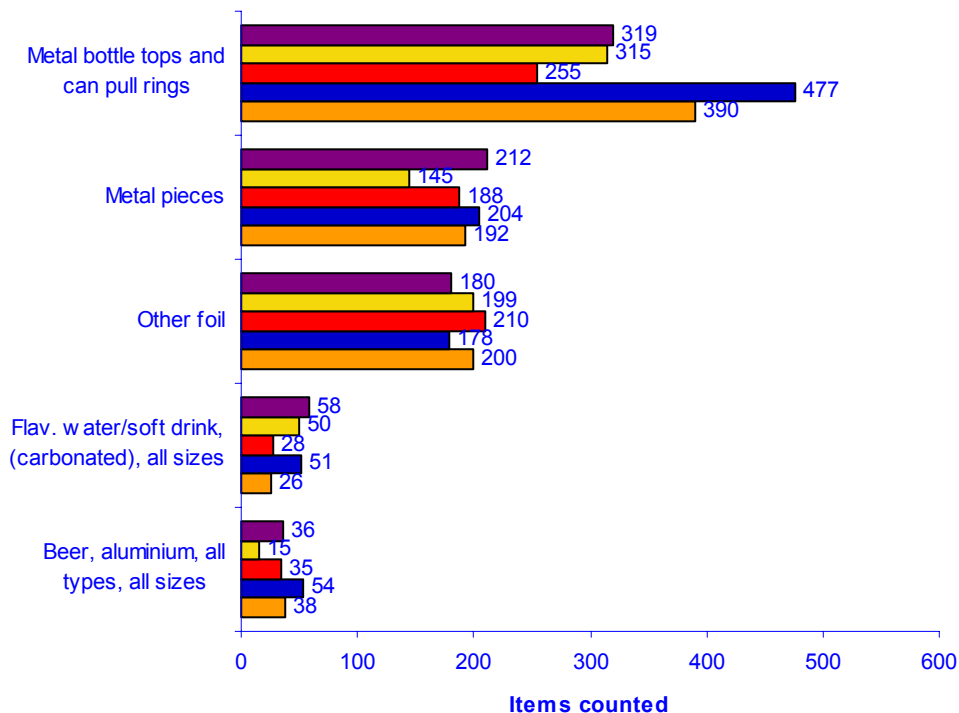
### 3.2 Metal

#### Items

A total of 898 (up from 787 in Wave 49) metal litter items were counted during August 2010. The most frequently counted metal litter items included:

- Metal bottle tops and can pull rings (319 items, up from 315 items in Wave 49)
- Metal pieces (212 items, up from 145 items in Wave 49)
- Other foil (180 items, down from 199 items in Wave 49)
- Flavoured water/soft drink, (carbonated), all sizes (58 items, up from 50 items in Wave 49)
- Beer aluminium, all types, all sizes (36 items, up from 15 items in Wave 49)

**METAL ITEMS - COUNTS - Top 5**



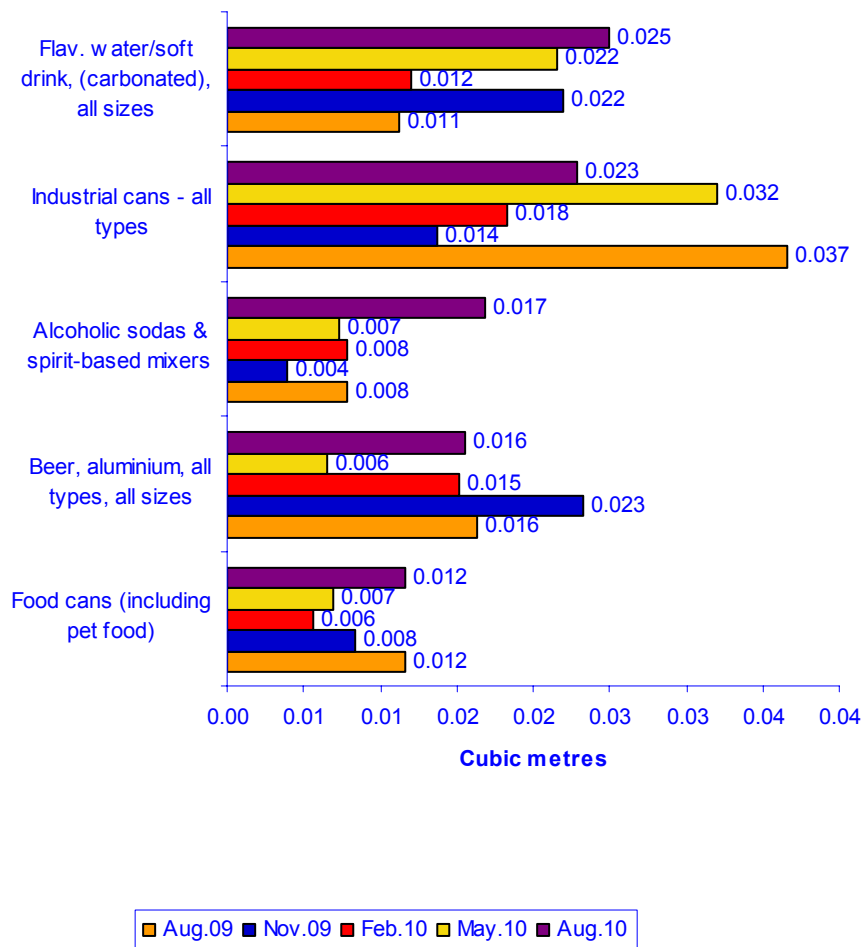
Aug.09 Nov.09 Feb.10 May.10 Aug.10

Volume

Metal litter items accounted for a total estimated litter volume of 0.113m<sup>3</sup> (up from 0.091m<sup>3</sup> in Wave 49). The metal items associated with the largest estimated volumes of litter during Wave 50 included:

- Flavoured water/ soft drink (carbonated), all sizes (0.025m<sup>3</sup>, up from 0.022m<sup>3</sup> in Wave 49)
- Industrial cans – all types (0.023m<sup>3</sup>, down from 0.032m<sup>3</sup> in Wave 49)
- Alcoholic sodas & spirit-based mixers (0.017m<sup>3</sup>, up from 0.007m<sup>3</sup> in Wave 49)
- Beer aluminium, all types, all sizes (0.016m<sup>3</sup>, up from 0.006m<sup>3</sup> in Wave 49)
- Food cans (including pet food) (0.012m<sup>3</sup>, up from 0.007m<sup>3</sup> in Wave 49)

**METAL ITEMS - VOLUMES - Top 5**



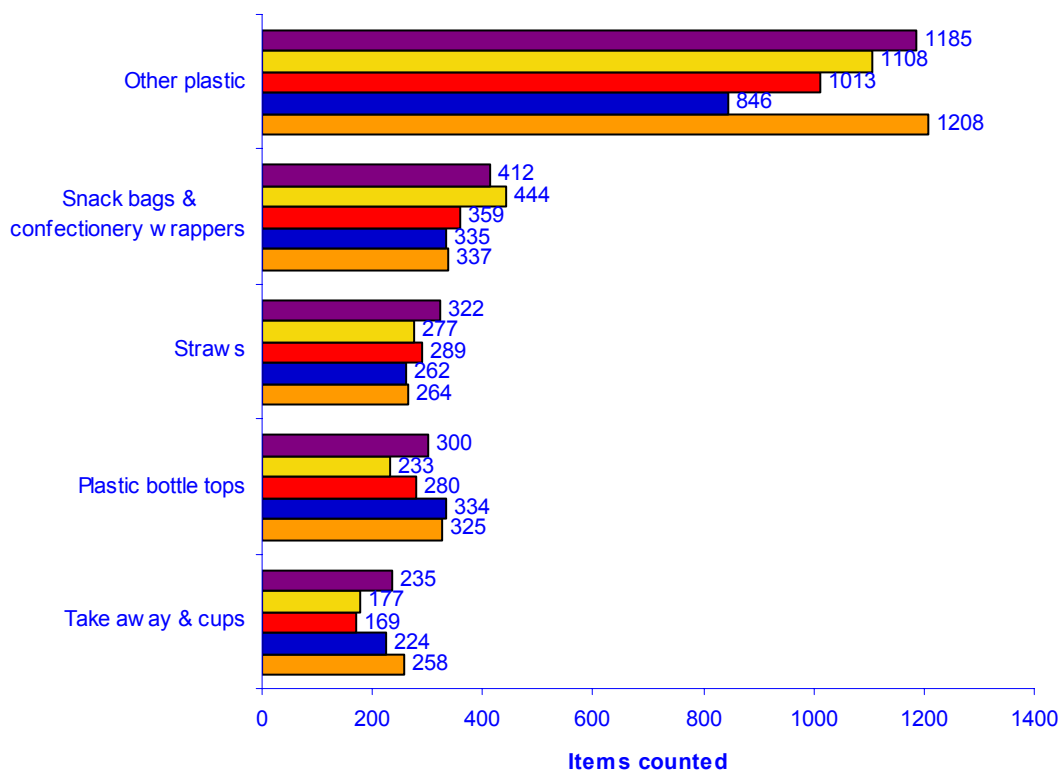
### 3.3 Plastic

#### Items

A total of 3,197 (up from 3,043 in Wave 49) plastic litter items were counted during Wave 50. The most frequently counted plastic litter items included:

- Other plastic (1,185 items, up from 1,108 in Wave 49)
- Snack bags & confectionery wrappers (412 items, up from 444 in Wave 49)
- Straws (322 items, up from 277 in Wave 49)
- Plastic bottle tops (300 items, up from 233 in Wave 49)
- Take away & cups (235 items, up from 177 in Wave 49)

**PLASTIC ITEMS - COUNTS - Top 5**

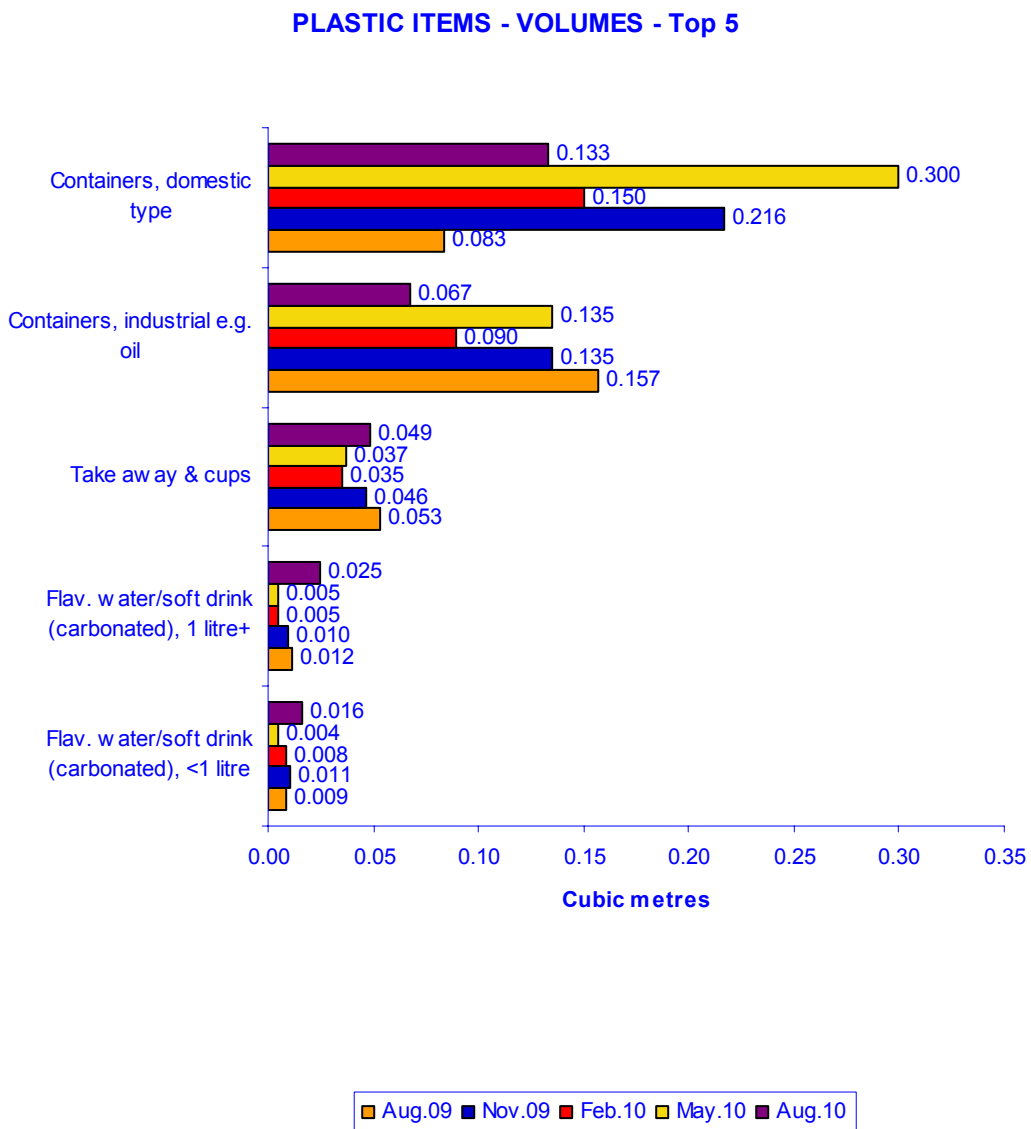


Aug.09 Nov.09 Feb.10 May.10 Aug.10

Volume

Plastic items were associated with an estimated litter volume of 0.344m<sup>3</sup> (down from 0.527m<sup>3</sup> in Wave 49). Items which represented the largest volumes within the Wave 50 litter count included:

- Containers, domestic type (0.133m<sup>3</sup>, down from 0.300m<sup>3</sup> in Wave 49)
- Containers, industrial e.g. oil (0.067m<sup>3</sup>, down from 0.135m<sup>3</sup> in Wave 49)
- Take away & cups (0.049m<sup>3</sup>, up from 0.037m<sup>3</sup> in Wave 49)
- Flavoured water/ soft drink (carbonated), 1 litre+ (0.025m<sup>3</sup>, up from 0.005m<sup>3</sup> in Wave 49)
- Flavoured water/ soft drink (carbonated), <1 litre (0.016m<sup>3</sup>, up from 0.004m<sup>3</sup> in Wave 49)



### 3.4 *Paper/ Paperboard*

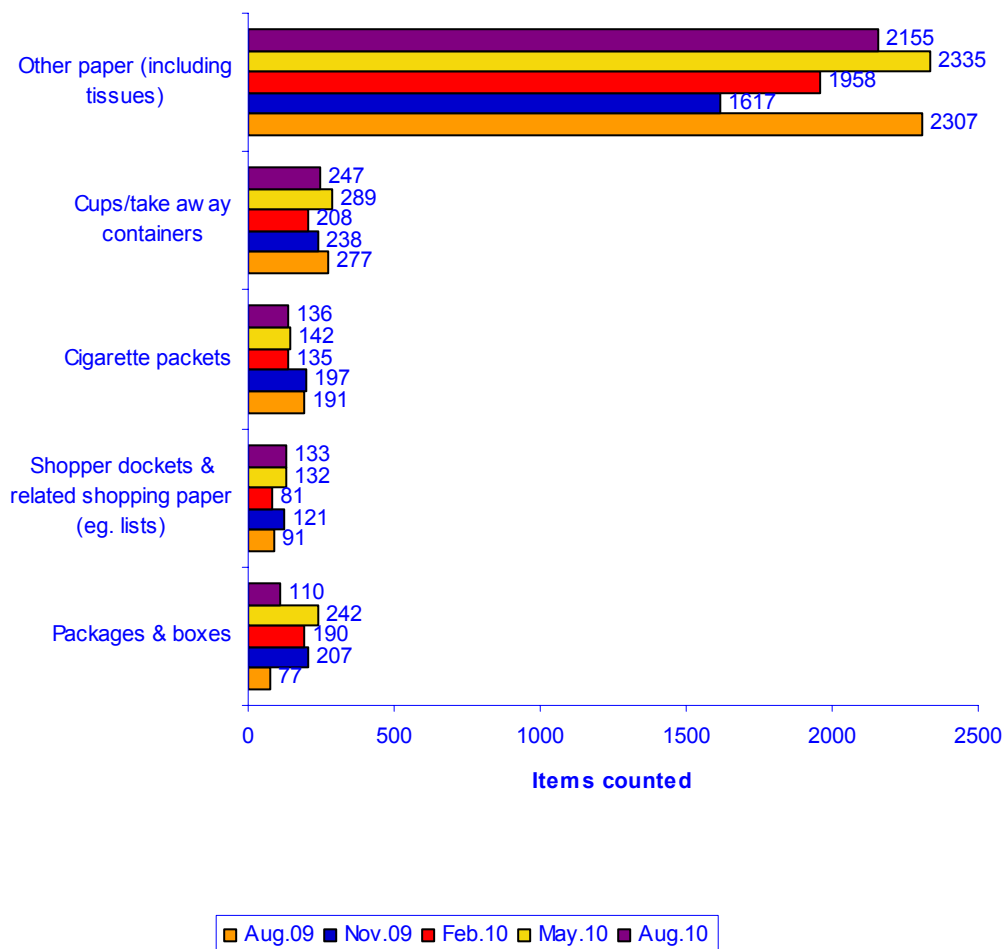
#### Items

A total of 3,133 (down from 3,501 in Wave 49) paper/ paperboard litter items were recorded during Wave 49.

The most frequently identified items within this material type were:

- Other paper – including tissues (2,155 items, down from 2,335 in Wave 49)
- Cups/ take away containers (247 items, down from 289 in Wave 49)
- Cigarette packets (136, down from 142 in Wave 49)
- Shopper docket & related shopping paper (e.g. lists) (133 items, up from 132 in Wave 49)
- Packages & boxes (110 items, down from 242 in Wave 49)

**PAPER/ PAPERBOARD ITEMS - COUNTS - Top 5**



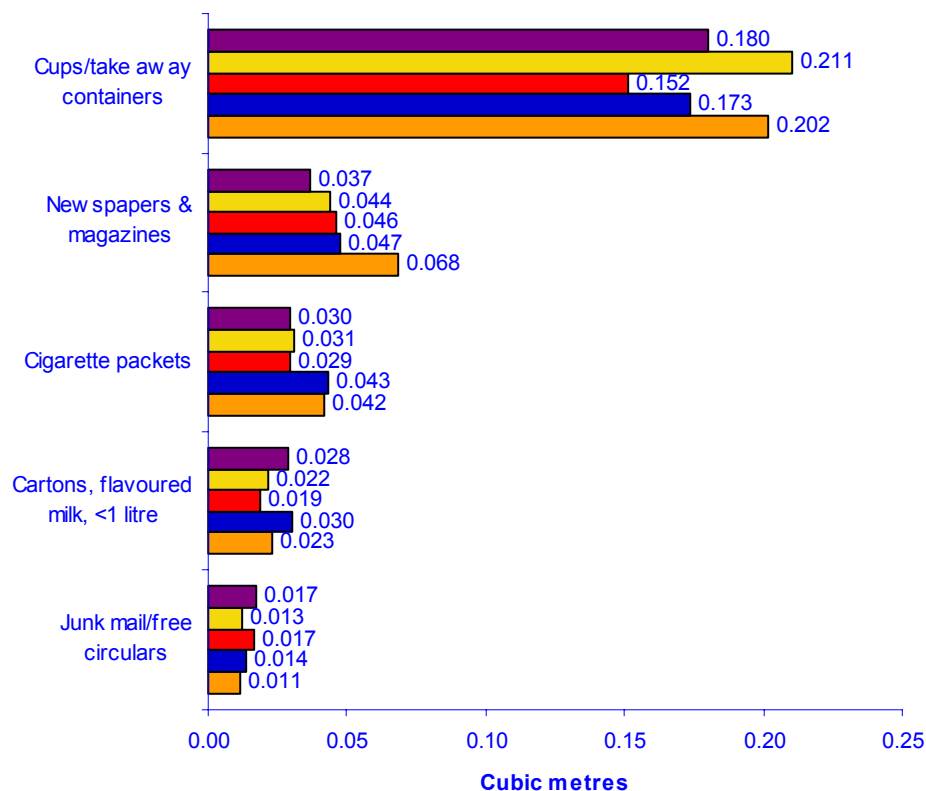
## Volume

Paper/ Paperboard items accounted for 0.316m<sup>3</sup> in estimated litter volume (down from 0.357m<sup>3</sup> in Wave 49).

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

- Cups/take away containers (0.180m<sup>3</sup>, down from 0.211m<sup>3</sup> in Wave 49)
- Newspapers & magazines (0.037m<sup>3</sup>, down from 0.044m<sup>3</sup> in Wave 49)
- Cigarette packets (0.030m<sup>3</sup>, down from 0.031m<sup>3</sup> in Wave 49)
- Cartons, flavoured milk, <1 litre (0.028m<sup>3</sup>, up from 0.022m<sup>3</sup> in Wave 49)
- Junk mail/ free circulars (0.017m<sup>3</sup>, up from 0.013m<sup>3</sup> in Wave 49)

### PAPER/ PAPERBOARD ITEMS - VOLUMES - Top 5



■ Aug.09 
 ■ Nov.09 
 ■ Feb.10 
 ■ May.10 
 ■ Aug.10

### 3.5 *Miscellaneous*

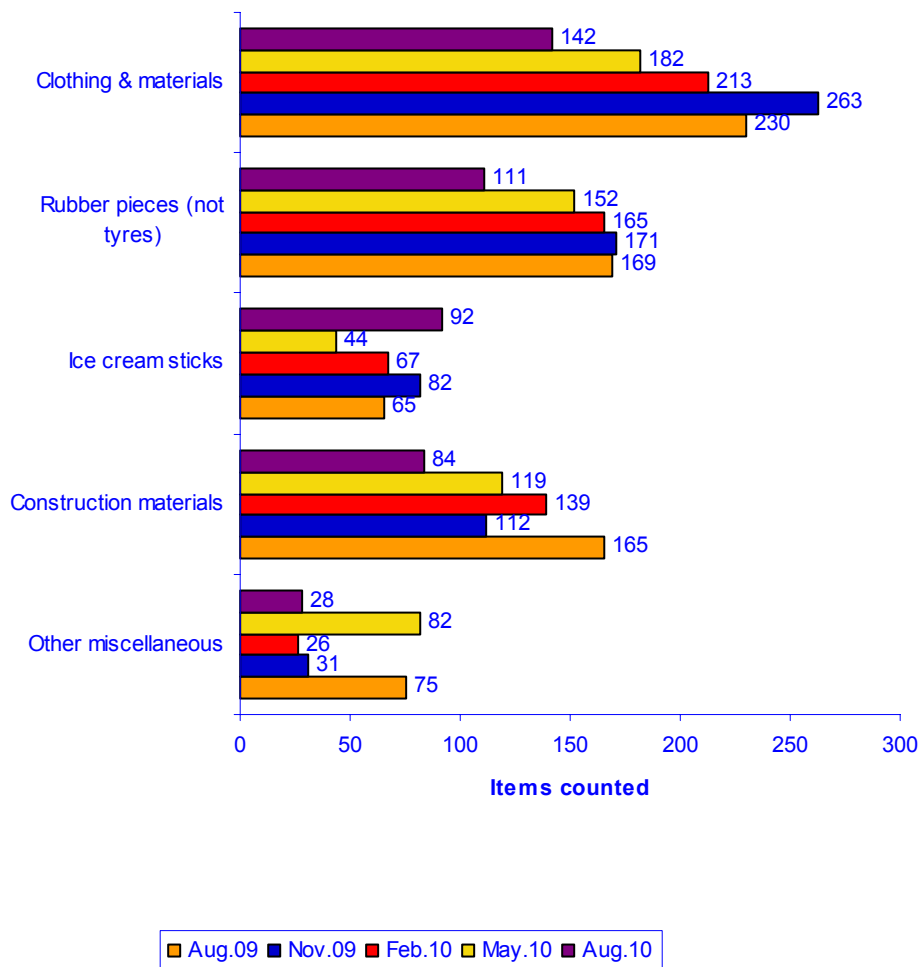
#### Items

A total of 498 (down from 625 in Wave 49) miscellaneous litter items were counted during Wave 50 in August 2010.

The most frequently recorded items included:

- Clothing & materials (142 items, down from 182 items in Wave 49)
- Rubber pieces – not tyres (111 items, down from 152 items in Wave 49).  
Rubber pieces in this category include vehicle rubber mouldings, hose pipes and tubing, bicycle handle bar grips and casings, pram mouldings and strips.
- Ice cream sticks (92 items, up from 44 items in Wave 49)
- Construction materials (84 items, down from 119 items in Wave 49)
- Uncategorized miscellaneous (28 items, down from 82 items in Wave 49)

**MISCELLANEOUS ITEMS - COUNTS - Top 5**



Volume

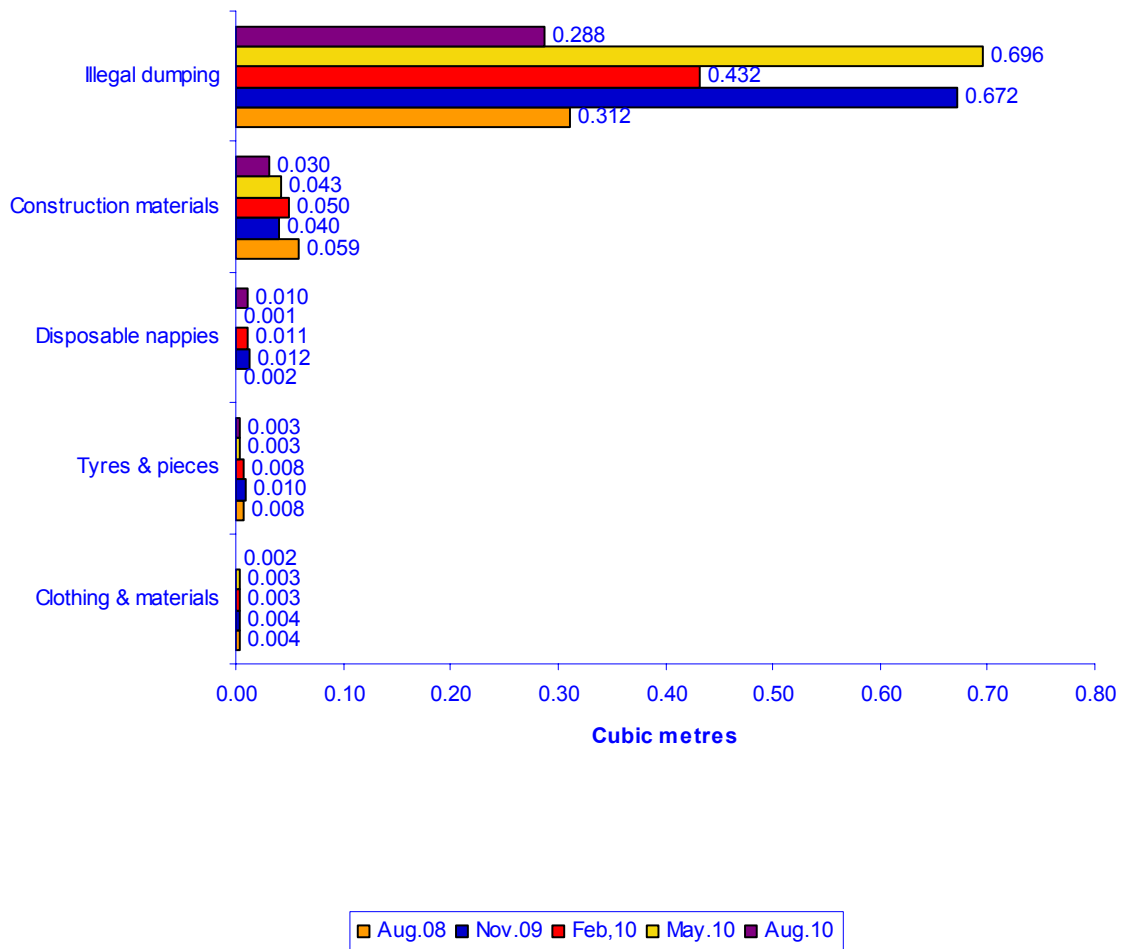
Miscellaneous litter was associated with an estimated litter volume of 0.334m<sup>3</sup> (down from 0.747m<sup>3</sup> in Wave 49).

Illegal dumping remained the major contributor to the total volume of miscellaneous items, with an estimated total volume of 0.288m<sup>3</sup> (up from 0.696m<sup>3</sup> in Wave 49).

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

- Construction materials (0.030m<sup>3</sup>, down from 0.043m<sup>3</sup> in Wave 49)
- Disposable nappies (0.010m<sup>3</sup>, up from 0.001m<sup>3</sup>, in Wave 49)
- Tyres & pieces (0.003m<sup>3</sup>, unchanged from Wave 49)
- Clothing and materials (0.002m<sup>3</sup>, down from 0.003m<sup>3</sup> in Wave 49)

**MISCELLANEOUS ITEMS - VOLUMES - Top 5**



### 3.6 *Cigarette Butts*

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#### Items

The total number of butts recorded during Wave 50 amounted to 7,586 (up from 5,927 in Wave 49). The number of butts counted in Wave 50 was also up from the number counted in Wave 46 at the same time last year (6,181 butts).

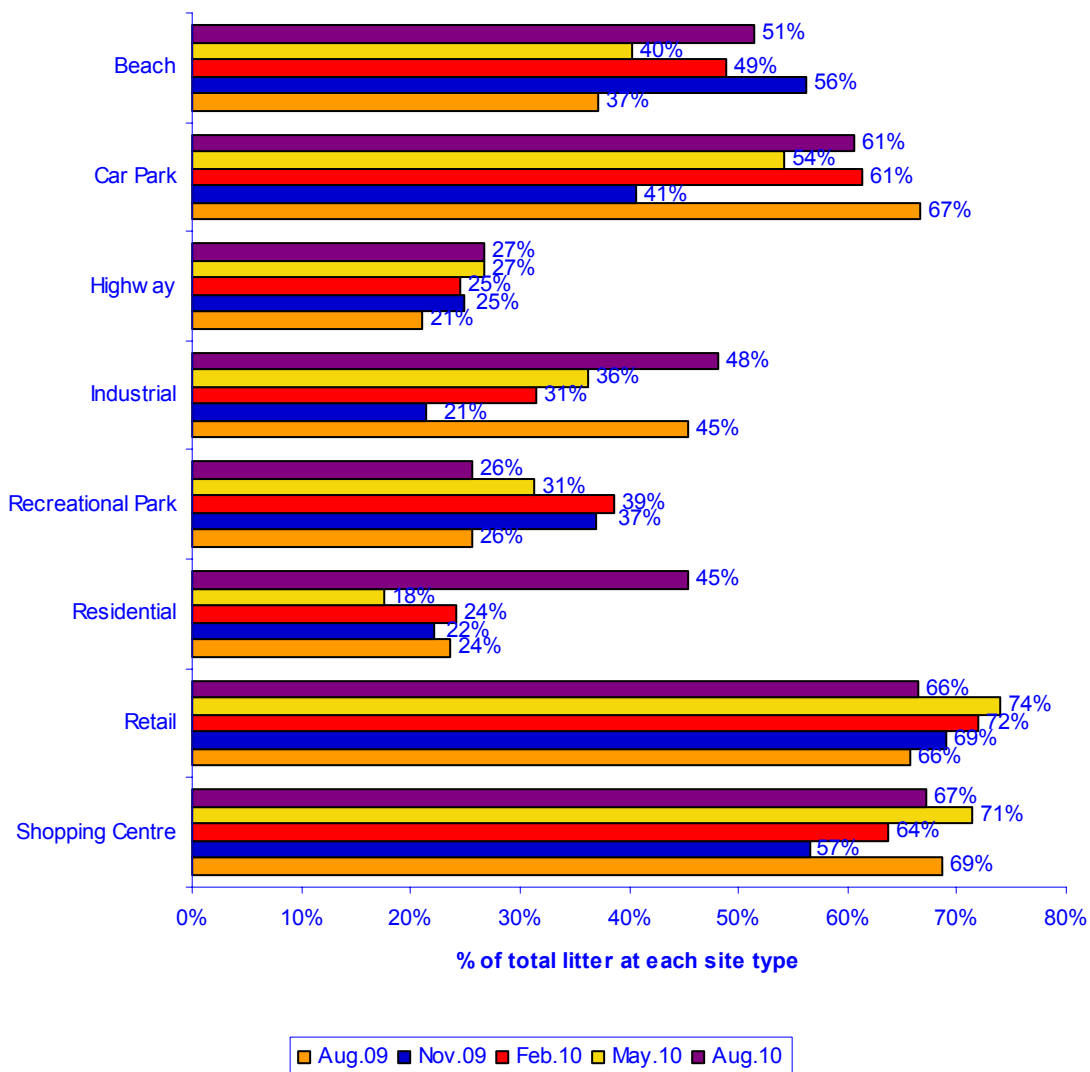
The proportion of cigarette butts of the total litter items counted was highest among shopping centres (67%), retail sites (66%) and at car parks (61%).

The proportion of cigarette butts of the total litter items counted increased at car parks (61%, up from 54% in Wave 49), beaches (51%, up from 40% in Wave 49), industrial sites (48%, up from 36% in Wave 49) and residential sites (45%, up from 18% in Wave 49).

There was a decrease, however, in the proportion of cigarette butts of the total litter items counted at shopping centres (67%, down from 71% in Wave 49), retail sites (66%, down from 74% in Wave 49) and recreational parks (26%, down from 31% in Wave 49).

The proportion of cigarette butts remained unchanged at highway sites (27%, unchanged from Wave 49).

**CIGARETTE BUTT COUNTS AS PROPORTIONS OF TOTAL LITTER COUNT AT EACH SITE TYPE**



**Volume**

Despite cigarette butts being the most numerous 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

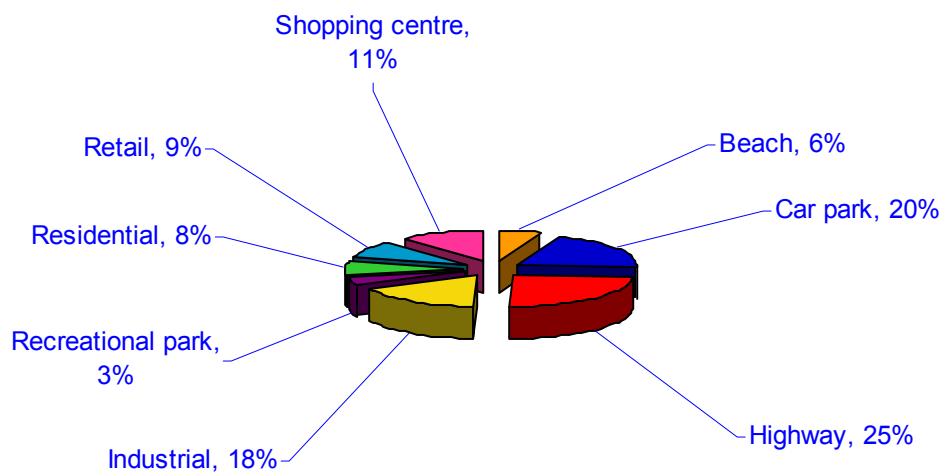
#### Items

Highways remained the most significant contributor to the total number of items counted during August 2010 with one quarter (25%, down from 34% in Wave 49) 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 50:

- Car Park (20%, up from 17% in Wave 49)
- Industrial (18%, unchanged from Wave 49)
- Shopping Centre (11%, up from 9% in Wave 49)
- Retail (9%, down from 10% in Wave 49)
- Residential (8%, up from 5% in Wave 49)
- Beach (6%, up from 3% in Wave 49)
- Recreational Park (3%, down from 4% in Wave 49)

#### PROPORTION OF TOTAL LITTER ITEMS COUNTED WITHIN SITE TYPE

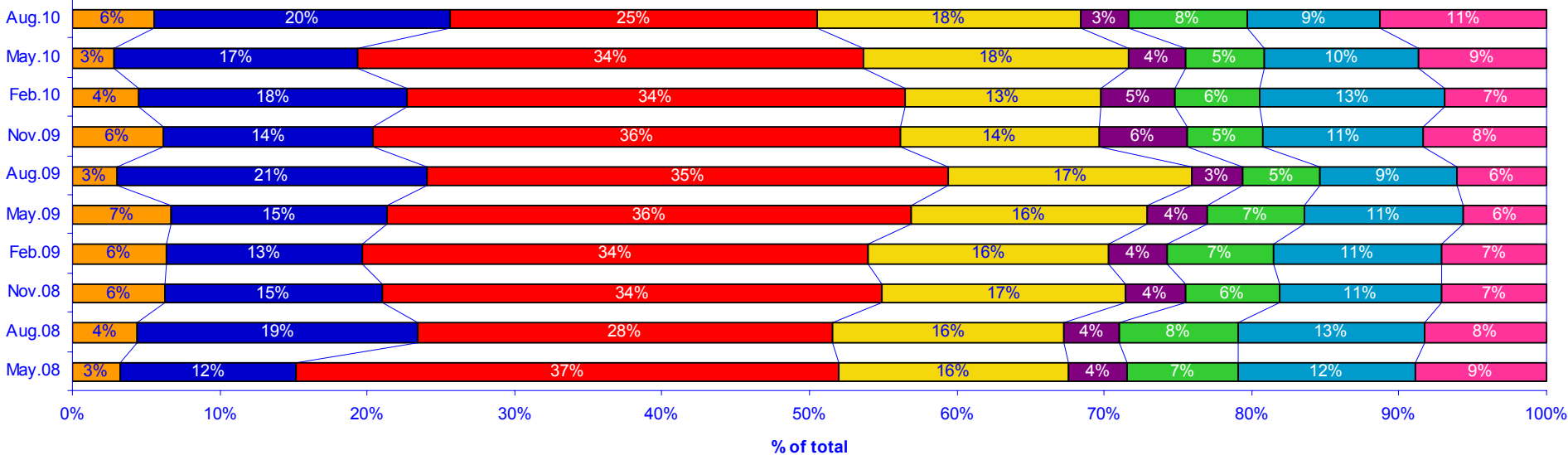


A comparison of the proportions of litter items found at each site type revealed that highway locations contributed large amounts to the total number of litter items counted in the August 2010 Monitor. Although highway sites represented only 18% of the total number of sites surveyed, the sites contributed one quarter (25%, down from 34% in Wave 49) of the total litter items counted during Wave 50.

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 outlined below:

- Residential areas - incorporated 17% of the sites surveyed, but contributed only 8% (up from 5% in Wave 49) of the total litter items counted in Wave 50
- Beaches – represented 11% of the sites surveyed, but contributed 6% (up from 3% in Wave 49) of the total litter counted in Wave 50
- Recreational parks – represented 9% of sites surveyed, but contributed 3% (down from 4% in Wave 49) of the total litter counted in Wave 50

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



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

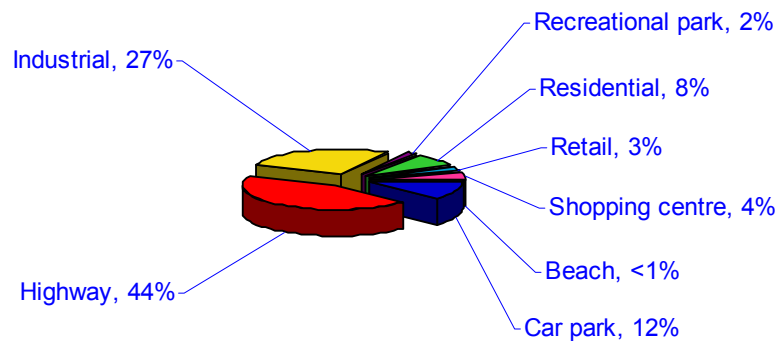
Volume

More than two fifths (44%, down from 49% in Wave 49) of the total volume of litter estimated during Wave 50 was associated with litter items at highway locations.

Industrial sites (27%, up from 33% in Wave 49) also contributed just over one quarter of the total litter volume, while car park sites (12%, up from 4% in Wave 49) residential sites (8%, down from 11% in Wave 49) added moderate volumes of litter to the overall litter volume.

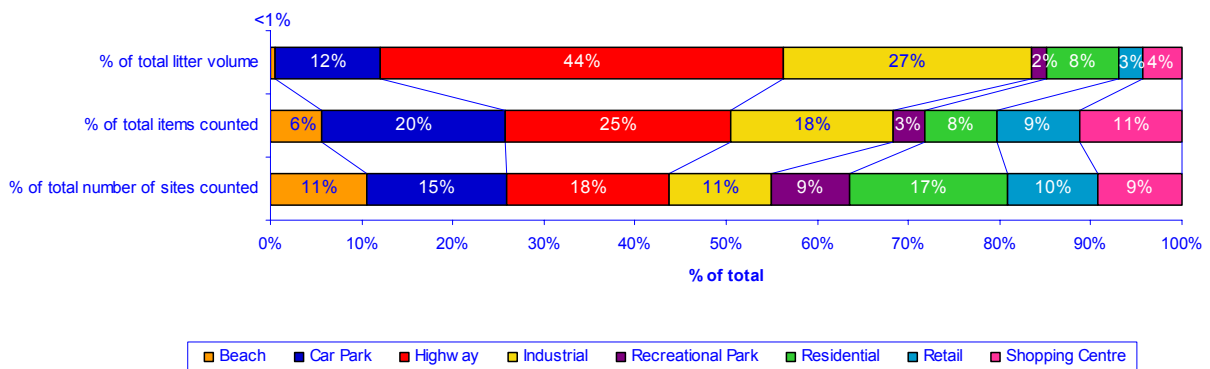
Lower volumes of litter were estimated at shopping centres (4%, up from 1% in Wave 49), retail sites (3%, up from 1% in Wave 49), recreational parks (2%, unchanged from Wave 49) and beaches (<1%, unchanged from Wave 49) to the total volume of litter recorded during May 2010.

**PROPORTION OF TOTAL LITTER VOLUME BY SITE TYPE**



A comparison of the litter volume, number of litter items and proportion of sites represented within location types shows that highways and industrial locations 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*

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The overwhelming majority (98%, unchanged from 98% in Wave 49) of litter items counted in August 2010 were non-beverage items.

The total number of CDL beverage containers counted increased by 82% to 366 items (up from 201 in Wave 49).

CDL beverage containers accounted for 94% (up from 92% in Wave 49) of all beverage containers counted during Wave 50.

## *Data Summary - Items*

KESAB - Litter Strategy Monitoring - Wave 50 - August 2010			Items										
			BEACH	CAR PARK	HIGHWAY	INDUSTRIAL	RECREATIONAL PARK	RESIDENTIAL	RETAIL	SHOPPING CENTRE	METROPOLITAN	REGIONAL	TOTAL ITEMS
<b>CIGARETTE BUTTS</b>		NBEV	447	1915	1042	1346	134	570	942	1190	6610	976	7586
<b>GLASS</b>	Alcoholic sodas/spirit-based mixers, all sizes	CDL				1		1			1	1	2
	Beer, all colours of glass, <750ml	CDL		12	25	47		11	6		86	15	101
	Beer, all colours of glass, 750ml+	CDL			1	2					2	1	3
	Cider/fruit based etc.	CDL											0
	Flav. water/fruit j. drink/sports drink (non-carb), <1 litre	CDL	1	6	2			1	2	2	12	2	14
	Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+	CDL											0
	Flav. water/soft drink (carbonated), <1 litre	CDL											0
	Flav. water/soft drink (carbonated), 1 litre+	CDL											0
	Fruit juice, <1 litre	CDL		1				1		1	3		3
	Fruit juice, 1 litre+	BEV											0
	Other glass	NBEV	3	23	91	75	1	31	19	6	219	30	249
	Plain water (carbonated or non-carb), <1 litre	CDL						2			2		2
	Plain water (carbonated or non-carb), 1 litre+	CDL											0
	Wine & spirit, all sizes	BEV			6	1					6	1	7
Wine cooler, all sizes	CDL			1							1	1	
<b>TOTAL</b>			<b>4</b>	<b>42</b>	<b>126</b>	<b>126</b>	<b>1</b>	<b>47</b>	<b>27</b>	<b>9</b>	<b>331</b>	<b>51</b>	<b>382</b>
<b>METAL</b>	Aerosols - pressure packs	NBEV		3	5	2				1	8	3	11
	Alcoholic sodas & spirit-based mixers	CDL		5	14	7		4			22	8	30
	Beer, aluminium, all types, all sizes	CDL		8	17	9			1	1	29	7	36
	Cider/fruit based etc.	CDL											0
	Flav. water/soft drink, (carbonated), all sizes	CDL		7	37	8	1	1		4	57	1	58
	Flav. water/soft drink, (non-carb), all sizes	CDL		2	1						3		3
	Foil take away	NBEV	1	3	9	2	1	2		1	11	8	19
	Food cans (including pet food)	NBEV		2	7	10		2	4		22	3	25
	Industrial cans - all types	NBEV			5							5	5
	Metal bottle tops and can pull rings	NBEV	3	48	80	76	14	43	21	34	256	63	319
	Metal pieces	NBEV		12	105	61	3	19	8	4	185	27	212
	Other foil	NBEV	12	29	52	35	12	12	15	13	143	37	180
<b>TOTAL</b>			<b>16</b>	<b>119</b>	<b>332</b>	<b>210</b>	<b>31</b>	<b>83</b>	<b>49</b>	<b>58</b>	<b>736</b>	<b>162</b>	<b>898</b>

KESAB - Litter Strategy Monitoring - Wave 50 - August 2010			Items										
			BEACH	CAR PARK	HIGHWAY	INDUSTRIAL	RECREATIONAL PARK	RESIDENTIAL	RETAIL	SHOPPING CENTRE	METROPOLITAN	REGIONAL	TOTAL ITEMS
MISCELLANEOUS	Clothing & materials	NBEV	5	24	59	17	11	12	7	7	113	29	142
	Condoms	NBEV											0
	Construction materials	NBEV	1	7	43	24	4	3	1	1	78	6	84
	Disposable nappies	NBEV		3	1	3				2	9		9
	Ice cream sticks	NBEV	2	21	22	11	3	8	9	16	84	8	92
	Illegal dumping	NBEV		1	4	6		1			12		12
	Other miscellaneous	NBEV	2	1	4	10	1	6	2	2	14	14	28
	Rubber pieces (not tyres)	NBEV	5	7	66	16		8	9		88	23	111
	Syringes	NBEV		3		1				1	5		5
	Tyres & pieces	NBEV			12	3					9	6	15
<b>TOTAL</b>			<b>15</b>	<b>67</b>	<b>211</b>	<b>91</b>	<b>19</b>	<b>38</b>	<b>28</b>	<b>29</b>	<b>412</b>	<b>86</b>	<b>498</b>
PAPER/PAPERBOARD	Cartons, flavoured milk, <1 litre	CDL		7	24	5			2		32	6	38
	Cartons, flavoured milk, 1 litre+	BEV			1		1				1	1	2
	Cartons, fruit juice, <1 litre	CDL											0
	Cartons, fruit juice, 1 litre+	BEV											0
	Cartons, milk, plain (white), all sizes	BEV			1	1		1	1		3	1	4
	Cigarette packets	NBEV		33	46	21	6	15	7	8	115	21	136
	Cups/take away containers	NBEV	2	34	131	28	7	14	9	22	218	29	247
	Flav. water/fruit j. drink/sports drink (non-carb), <1 litre	CDL				1					1		1
	Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+	CDL											0
	Ice cream wrappers	NBEV	5		11	1		1			9	9	18
	Junk mail/free circulars	NBEV	1	13	30	16	1	24	9	4	86	12	98
	Newspapers & magazines	NBEV		2	8	8	1	10	2		28	3	31
	Other paper (including tissues)	NBEV	51	396	695	347	146	199	163	158	1841	314	2155
	Packages & boxes	NBEV		7	72	21		7	2	1	102	8	110
	Paper bags	NBEV	3	10	38	25	8	9	3	7	78	25	103
Shopper docketts & related shopping paper (eg. lists)	NBEV	1	26	11	5	4	7	17	62	108	25	133	
Tickets, e.g. bus, ATM, vending machine etc.	NBEV		16	19	5	1	3	8	5	43	14	57	
<b>TOTAL</b>			<b>63</b>	<b>544</b>	<b>1087</b>	<b>484</b>	<b>175</b>	<b>290</b>	<b>223</b>	<b>267</b>	<b>2665</b>	<b>468</b>	<b>3133</b>

KESAB - Litter Strategy Monitoring - Wave 50 - August 2010			Items									TOTAL ITEMS			
			BEACH	CAR PARK	HIGHWAY	INDUSTRIAL	RECREATIONAL PARK	RESIDENTIAL	RETAIL	SHOPPING CENTRE	METROPOLITAN		REGIONAL		
PLASTIC	6 ring can holders	NBEV		1	1							2	1	3	
	Bags - heavier glossy typically branded carry bags	NBEV		1	24	4	1					27	3	30	
	Bags - supermarket type light weight carry bags	NBEV	5	15	29	5	6	9	5	1		67	8	75	
	Bread bag tags	NBEV		2	5		5	2	3	1		7	11	18	
	Containers, domestic type	NBEV		2	5	4		2	1	2		12	4	16	
	Containers, industrial e.g. oil	NBEV			3								3	3	
	Drink pouches	CDL													0
	Flav. water/fruit j. drink/sports drink (non-carb), <1 litre	CDL		1	1		1						3		3
	Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+	CDL		1	1	1							3		3
	Flav. water/soft drink (carbonated), <1 litre	CDL		9	11	3	1			2			24	2	26
	Flav. water/soft drink (carbonated), 1 litre+	CDL		1	4	8		1		1			14	1	15
	Flavoured milk, <1 litre	CDL		1	6	2		1					7	3	10
	Flavoured milk, 1 litre+	BEV													0
	Fruit juice, <1 litre	CDL		1			3						4		4
	Fruit juice, 1 litre+	BEV				1							1		1
	Lollipop sticks	NBEV	13	23	15	5	16	10	12	11			75	30	105
	Other plastic	NBEV	218	133	392	184	38	85	65	70			983	202	1185
	Packing tape & straps	NBEV	1	10	47	36	1	7	2	2			83	23	106
	Plain water (carbonated or non-carb), <1 litre	CDL		3	4	4	1	1					13		13
	Plain water (carbonated or non-carb), 1 litre+	CDL													0
	Plastic bottle tops	NBEV	30	44	113	46	13	18	6	30			263	37	300
	Sacks - sheeting - other bags	NBEV		2	51	22	1	3		1			75	5	80
	Snack bags & confectionery wrappers	NBEV	26	100	89	62	25	38	31	41			347	65	412
Spoons/cutlery	NBEV	3	28	37	26	9	7	5	8			101	22	123	
Straws	NBEV	19	64	106	37	28	23	16	29			275	47	322	
Styrene foam boxes, sheets, etc.	NBEV		2	51	41		4		3			92	9	101	
Take away & cups	NBEV	9	28	109	43	15	14	2	15			181	54	235	
White milk, all sizes	BEV			2	1							2	1	3	
Wine cask bladders	BEV		1	4								2	3	5	
<b>TOTAL</b>		<b>324</b>	<b>473</b>	<b>1110</b>	<b>535</b>	<b>164</b>	<b>225</b>	<b>149</b>	<b>217</b>			<b>2663</b>	<b>534</b>	<b>3197</b>	
<b>GRAND TOTAL</b>		<b>869</b>	<b>3160</b>	<b>3908</b>	<b>2792</b>	<b>524</b>	<b>1253</b>	<b>1418</b>	<b>1770</b>			<b>13417</b>	<b>2277</b>	<b>15694</b>	

## *Data Summary - Volumes*

KESAB - Litter Strategy Monitoring - Wave 50 - August 2010			Volume - Cubic Metres										
			BEACH	CAR PARK	HIGHWAY	INDUSTRIAL	RECREATIONAL PARK	RESIDENTIAL	RETAIL	SHOPPING CENTRE	METROPOLITAN	REGIONAL	TOTAL VOLUME
<b>CIGARETTE BUTTS</b>		NBEV	<b>0.000051</b>	<b>0.000220</b>	<b>0.000120</b>	<b>0.000155</b>	<b>0.000015</b>	<b>0.000066</b>	<b>0.000108</b>	<b>0.000137</b>	<b>0.000760</b>	<b>0.000112</b>	<b>0.000872</b>
<b>GLASS</b>	Alcoholic sodas/spirit-based mixers, all sizes	CDL				0.000374		0.000374			0.000374	0.000374	<b>0.000749</b>
	Beer, all colours of glass, <750ml	CDL		0.005754	0.011988	0.022537		0.005275	0.002877		0.041237	0.007193	<b>0.048430</b>
	Beer, all colours of glass, 750ml+	CDL			0.000810	0.001621					0.001621	0.000810	<b>0.002431</b>
	Cider/fruit based etc.	CDL											<b>0.000000</b>
	Flav. water/fruit j. drink/sports drink (non-carb), <1 litre	CDL	0.000301	0.001807	0.000602			0.000301	0.000602	0.000602	0.003613	0.000602	<b>0.004215</b>
	Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+	CDL											<b>0.000000</b>
	Flav. water/soft drink (carbonated), <1 litre	CDL											<b>0.000000</b>
	Flav. water/soft drink (carbonated), 1 litre+	CDL											<b>0.000000</b>
	Fruit juice, <1 litre	CDL		0.000284				0.000284		0.000284	0.000851		<b>0.000851</b>
	Fruit juice, 1 litre+	BEV											<b>0.000000</b>
	Other glass	NBEV	0.000059	0.000452	0.001787	0.001473	0.000020	0.000609	0.000373	0.000118	0.004301	0.000589	<b>0.004890</b>
	Plain water (carbonated or non-carb), <1 litre	CDL						0.000830			0.000830		<b>0.000830</b>
	Plain water (carbonated or non-carb), 1 litre+	CDL											<b>0.000000</b>
	Wine & spirit, all sizes	BEV			0.005348	0.000891					0.005348	0.000891	<b>0.006240</b>
Wine cooler, all sizes	CDL			0.000374							0.000374	<b>0.000374</b>	
<b>TOTAL</b>			<b>0.000360</b>	<b>0.008296</b>	<b>0.020910</b>	<b>0.026896</b>	<b>0.000020</b>	<b>0.007672</b>	<b>0.003852</b>	<b>0.001004</b>	<b>0.058175</b>	<b>0.010834</b>	<b>0.069009</b>
<b>METAL</b>	Aerosols - pressure packs	NBEV		0.002053	0.003421	0.001368				0.000684	0.005474	0.002053	<b>0.007527</b>
	Alcoholic sodas & spirit-based mixers	CDL		0.002810	0.007867	0.003933		0.002248			0.012362	0.004495	<b>0.016857</b>
	Beer, aluminium, all types, all sizes	CDL		0.003451	0.007334	0.003883			0.000431	0.000431	0.012511	0.003020	<b>0.015530</b>
	Cider/fruit based etc.	CDL											<b>0.000000</b>
	Flav. water/soft drink, (carbonated), all sizes	CDL		0.003020	0.015962	0.003451	0.000431	0.000431		0.001726	0.024590	0.000431	<b>0.025021</b>
	Flav. water/soft drink, (non-carb), all sizes	CDL		0.000763	0.000382						0.001145		<b>0.001145</b>
	Foil take away	NBEV	0.000462	0.001387	0.004161	0.000925	0.000462	0.000925		0.000462	0.005086	0.003699	<b>0.008785</b>
	Food cans (including pet food)	NBEV		0.000928	0.003247	0.004638		0.000928	0.001855		0.010204	0.001391	<b>0.011595</b>
	Industrial cans - all types	NBEV			0.022850							0.022850	<b>0.022850</b>
	Metal bottle tops and can pull rings	NBEV	0.000012	0.000192	0.000320	0.000304	0.000056	0.000172	0.000084	0.000136	0.001024	0.000252	<b>0.001276</b>
	Metal pieces	NBEV		0.000127	0.001113	0.000647	0.000032	0.000201	0.000085	0.000042	0.001961	0.000286	<b>0.002247</b>
Other foil	NBEV	0.000019	0.000045	0.000081	0.000055	0.000019	0.000019	0.000023	0.000020	0.000223	0.000058	<b>0.000281</b>	
<b>TOTAL</b>			<b>0.000493</b>	<b>0.014776</b>	<b>0.066737</b>	<b>0.019204</b>	<b>0.001000</b>	<b>0.004923</b>	<b>0.002479</b>	<b>0.003502</b>	<b>0.074579</b>	<b>0.038536</b>	<b>0.113114</b>

KESAB - Litter Strategy Monitoring - Wave 50 - August 2010			Volume - Cubic Metres										
			BEACH	CAR PARK	HIGHWAY	INDUSTRIAL	RECREATIONAL PARK	RESIDENTIAL	RETAIL	SHOPPING CENTRE	METROPOLITAN	REGIONAL	TOTAL VOLUME
MISCELLANEOUS	Clothing & materials	NBEV	0.000077	0.000367	0.000903	0.000260	0.000168	0.000184	0.000107	0.000107	0.001729	0.000444	0.002173
	Condoms	NBEV											0.000000
	Construction materials	NBEV	0.000360	0.002520	0.015480	0.008640	0.001440	0.001080	0.000360	0.000360	0.028080	0.002160	0.030240
	Disposable nappies	NBEV		0.003375	0.001125	0.003375				0.002250	0.010125		0.010125
	Ice cream sticks	NBEV	0.000002	0.000019	0.000020	0.000010	0.000003	0.000007	0.000008	0.000015	0.000077	0.000007	0.000085
	Illegal dumping	NBEV		0.024000	0.096000	0.144000					0.288000		0.288000
	Other miscellaneous	NBEV	0.000027	0.000014	0.000054	0.000135	0.000014	0.000081	0.000027	0.000027	0.000189	0.000189	0.000378
	Rubber pieces (not tyres)	NBEV	0.000001	0.000001	0.000011	0.000003		0.000001	0.000001		0.000014	0.000004	0.000018
	Syringes	NBEV		0.000007		0.000002				0.000002	0.000011		0.000011
	Tyres & pieces	NBEV			0.002700	0.000675					0.002025	0.001350	0.003375
	<b>TOTAL</b>		<b>0.000466</b>	<b>0.030303</b>	<b>0.116293</b>	<b>0.157100</b>	<b>0.001625</b>	<b>0.025353</b>	<b>0.000504</b>	<b>0.002761</b>	<b>0.330251</b>	<b>0.004154</b>	<b>0.334405</b>
PAPER/PAPERBOARD	Cartons, flavoured milk, <1 litre	CDL		0.005248	0.017993	0.003749			0.001499		0.023990	0.004498	0.028489
	Cartons, flavoured milk, 1 litre+	BEV			0.001013		0.001013				0.001013	0.001013	0.002025
	Cartons, fruit juice, <1 litre	CDL											0.000000
	Cartons, fruit juice, 1 litre+	BEV											0.000000
	Cartons, milk, plain (white), all sizes	BEV			0.001013	0.001013		0.001013	0.001013		0.003038	0.001013	0.004051
	Cigarette packets	NBEV		0.007190	0.010022	0.004575	0.001307	0.003268	0.001525	0.001743	0.025055	0.004575	0.029630
	Cups/take away containers	NBEV	0.001458	0.024784	0.095492	0.020411	0.005103	0.010205	0.006561	0.016037	0.158911	0.021140	0.180051
	Flav. water/fruit j. drink/sports drink (non-carb), <1 litre	CDL				0.000262					0.000262		0.000262
	Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+	CDL											0.000000
	Ice cream wrappers	NBEV	0.000012		0.000026	0.000002		0.000002			0.000022	0.000022	0.000043
	Junk mail/free circulars	NBEV	0.000174	0.002262	0.005220	0.002784	0.000174	0.004176	0.001566	0.000696	0.014964	0.002088	0.017052
	Newspapers & magazines	NBEV		0.002360	0.009440	0.009440	0.001180	0.011800	0.002360		0.033040	0.003540	0.036580
	Other paper (including tissues)	NBEV	0.000172	0.001338	0.002349	0.001173	0.000493	0.000673	0.000551	0.000534	0.006223	0.001061	0.007284
	Packages & boxes	NBEV		0.000560	0.005760	0.001680		0.000560	0.000160	0.000080	0.008160	0.000640	0.008800
	Paper bags	NBEV	0.000032	0.000106	0.000402	0.000265	0.000085	0.000095	0.000032	0.000074	0.000825	0.000265	0.001090
	Shopper docketts & related shopping paper (eg. lists)	NBEV	0.000002	0.000053	0.000022	0.000010	0.000008	0.000014	0.000035	0.000126	0.000219	0.000051	0.000270
Tickets, e.g. bus, ATM, vending machine etc.	NBEV		0.000014	0.000017	0.000004	0.000001	0.000003	0.000007	0.000004	0.000038	0.000012	0.000050	
	<b>TOTAL</b>		<b>0.001850</b>	<b>0.043915</b>	<b>0.148769</b>	<b>0.045367</b>	<b>0.009364</b>	<b>0.031809</b>	<b>0.015308</b>	<b>0.019294</b>	<b>0.275760</b>	<b>0.039917</b>	<b>0.315677</b>

KESAB - Litter Strategy Monitoring - Wave 50 - August 2010			Volume - Cubic Metres													
			BEACH	CAR PARK	HIGHWAY	INDUSTRIAL	RECREATIONAL PARK	RESIDENTIAL	RETAIL	SHOPPING CENTRE	METROPOLITAN	REGIONAL	TOTAL VOLUME			
PLASTIC	6 ring can holders	NBEV		0.000002	0.000002					0.000002			0.000003	0.000002	<b>0.000005</b>	
	Bags - heavier glossy typically branded carry bags	NBEV		0.000088	0.002102	0.000350	0.000088						0.002365	0.000263	<b>0.002628</b>	
	Bags - supermarket type light weight carry bags	NBEV	0.000170	0.000509	0.000984	0.000170	0.000204	0.000305	0.000170	0.000034			0.002274	0.000272	<b>0.002546</b>	
	Bread bag tags	NBEV		0.000000	0.000001		0.000001	0.000000	0.000001	0.000000			0.000002	0.000003	<b>0.000004</b>	
	Containers, domestic type	NBEV		0.016648	0.041620	0.033296		0.016648	0.008324	0.016648			0.099888	0.033296	<b>0.133184</b>	
	Containers, industrial e.g. oil	NBEV			0.067374									0.067374	<b>0.067374</b>	
	Drink pouches	CDL													<b>0.000000</b>	
	Flav. water/fruit j. drink/sports drink (non-carb), <1 litre	CDL		0.000556	0.000556		0.000556							0.001668		<b>0.001668</b>
	Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+	CDL		0.001654	0.001654	0.001654								0.004962		<b>0.004962</b>
	Flav. water/soft drink (carbonated), <1 litre	CDL		0.005599	0.006843	0.001866	0.000622			0.001244			0.014931	0.001244	<b>0.016175</b>	
	Flav. water/soft drink (carbonated), 1 litre+	CDL		0.001654	0.006616	0.013232		0.001654		0.001654			0.023156	0.001654	<b>0.024810</b>	
	Flavoured milk, <1 litre	CDL		0.000533	0.003196	0.001085		0.000533					0.003729	0.001598	<b>0.005327</b>	
	Flavoured milk, 1 litre+	BEV													<b>0.000000</b>	
	Fruit juice, <1 litre	CDL		0.000533			0.001598							0.002131		<b>0.002131</b>
	Fruit juice, 1 litre+	BEV				0.002137								0.002137		<b>0.002137</b>
	Lollipop sticks	NBEV	0.000007	0.000012	0.000008	0.000003	0.000008	0.000005	0.000006	0.000006			0.000040	0.000016	<b>0.000056</b>	
	Other plastic	NBEV	0.000273	0.000166	0.000490	0.000230	0.000048	0.000106	0.000081	0.000088			0.001229	0.000253	<b>0.001481</b>	
	Packing tape & straps	NBEV	0.000000	0.000003	0.000013	0.000010	0.000000	0.000002	0.000001	0.000001			0.000022	0.000006	<b>0.000029</b>	
	Plain water (carbonated or non-carb), <1 litre	CDL		0.002364	0.003152	0.003152	0.000788	0.000788					0.010243		<b>0.010243</b>	
	Plain water (carbonated or non-carb), 1 litre+	CDL													<b>0.000000</b>	
	Plastic bottle tops	NBEV	0.000240	0.000352	0.000905	0.000368	0.000104	0.000144	0.000048	0.000240			0.002105	0.000296	<b>0.002402</b>	
	Sacks - sheeting - other bags	NBEV		0.000001	0.000016	0.000007	0.000000	0.000001		0.000000			0.000024	0.000002	<b>0.000025</b>	
	Snack bags & confectionery wrappers	NBEV	0.000204	0.000783	0.000697	0.000485	0.000196	0.000298	0.000243	0.000321			0.002717	0.000509	<b>0.003226</b>	
	Spoons/cutlery	NBEV	0.000029	0.000269	0.000355	0.000250	0.000086	0.000067	0.000048	0.000077			0.000970	0.000211	<b>0.001181</b>	
	Straws	NBEV	0.000078	0.000264	0.000437	0.000153	0.000116	0.000095	0.000066	0.000120			0.001134	0.000194	<b>0.001328</b>	
	Styrene foam boxes, sheets, etc.	NBEV		0.000075	0.001913	0.001538		0.000150		0.000113			0.003450	0.000338	<b>0.003788</b>	
	Take away & cups	NBEV	0.001863	0.005797	0.022565	0.008902	0.003105	0.002898	0.000414	0.003105			0.037471	0.011179	<b>0.048650</b>	
	White milk, all sizes	BEV			0.004273	0.002137							0.004273	0.002137	<b>0.006410</b>	
Wine cask bladders	BEV		0.000460	0.001840								0.000920	0.001380	<b>0.002300</b>		
<b>TOTAL</b>			<b>0.002863</b>	<b>0.038320</b>	<b>0.167612</b>	<b>0.071003</b>	<b>0.007520</b>	<b>0.023695</b>	<b>0.009403</b>	<b>0.023650</b>		<b>0.221843</b>	<b>0.122224</b>	<b>0.344067</b>		
<b>GRAND TOTAL</b>			<b>0.006084</b>	<b>0.135830</b>	<b>0.520441</b>	<b>0.319725</b>	<b>0.019544</b>	<b>0.093518</b>	<b>0.031654</b>	<b>0.050348</b>		<b>0.961367</b>	<b>0.215777</b>	<b>1.177145</b>		

# *Appendix 1: Tracking Graphs*

### Weighting of Previous Results

Since February 2006 (Wave 32), 11 revised sites have been surveyed concurrently with the 151 original sites included within the litter monitor program since its inception in February 1998. The new and old sites were surveyed simultaneously across four Waves of the monitor.

These 11 revised sites have previously been surveyed concurrently with the 151 original sites to replace 11 of the original sites that were found to be unusual in nature, and analyses have typically focused on results for the 151 sites including the 11 *new* sites and the 151 sites including the 11 *old* sites separately.

However, in counts since the February 2007 Monitor only the 151 revised sites (incorporating the 11 new locations) have been surveyed. In order to facilitate tracking comparisons, figures prior to February 2007 have been weighted based upon the variations between results corresponding to the 151 sites including the 11 new sites and the 151 sites including the 11 old sites.

Weighting techniques were based upon comparisons of figures for items and volumes recorded during Waves 32, 33, 34 and 35 across all sites incorporating either the 11 original or 11 revised sites. Differences between such figures provided indices of the degree of consistent variation between original and revised site litter data, and reliable weightings were thereby established.

Figures which have been weighted included:

- **Absolute values (counts and volumes) within material categories and site types**, since the inclusion of the revised sites resulted in differences in nearly all absolute values of counted litter.
  
- **Comparisons between proportional representation of litter across site types**, due to the fact that site revision altered the proportions of litter contributed to the total litter stream within certain site categories whilst others remained unchanged.

However, preliminary investigations demonstrated that proportional contribution to the total litter stream within material types was consistently similar between the original and revised site sets. This finding supports the assumption that whilst the quantities of litter recorded differed between old and new sites, the types of materials present within such litter were relatively consistent. For this reason, proportional figures within material types did not require weighting.

Items within material categories across all 151 sites including either 11 original or 11 revised sites	Wave 32				Wave 33				Wave 34				Wave 35			
	Old	New	Diff	New as % of Old	Old	New	Diff	New as % of Old	Old	New	Diff	New as % of Old	Old	New	Diff	New as % of Old
Glass	419	311	108	<b>0.74224344</b>	349	293	56	<b>0.83954155</b>	321	281	40	<b>0.87538941</b>	305	249	56	<b>0.81639344</b>
Metal	1505	1218	287	<b>0.80930233</b>	1450	1099	351	<b>0.75793103</b>	1440	1086	354	<b>0.75416667</b>	1517	1183	334	<b>0.77982861</b>
Plastic	5447	3819	1628	<b>0.70111988</b>	5261	3866	1395	<b>0.73484128</b>	5057	3575	1482	<b>0.70694087</b>	5332	3827	1505	<b>0.71774194</b>
Paper/ paperboard	4299	2969	1330	<b>0.69062573</b>	3820	3003	817	<b>0.78612565</b>	4017	2961	1056	<b>0.73711725</b>	3616	2752	864	<b>0.76106195</b>
Miscellaneous	1286	975	311	<b>0.75816485</b>	1057	814	243	<b>0.77010407</b>	1025	815	210	<b>0.79512195</b>	1150	944	206	<b>0.82086957</b>
Cigarette Butts	7600	5744	1856	<b>0.75578947</b>	9606	6814	2792	<b>0.70934832</b>	10950	6959	3991	<b>0.63552511</b>	10875	6474	4401	<b>0.59531034</b>
<b>TOTAL</b>	<b>20556</b>	<b>15036</b>	<b>5520</b>	<b>0.73146527</b>	<b>21543</b>	<b>15889</b>	<b>5654</b>	<b>0.73754816</b>	<b>22810</b>	<b>15677</b>	<b>7133</b>	<b>0.68728628</b>	<b>22795</b>	<b>15429</b>	<b>7366</b>	<b>0.67685896</b>
<b>AVERAGE New as % of Old</b>				<b>0.74124442</b>				<b>0.76220572</b>				<b>0.74164965</b>				<b>0.73829497</b>
<b>OVERALL Mean New as % of Old</b>	<b>0.7458</b>															

Items within site type across all 151 sites including either 11 original or 11 revised sites		Residential	Beach	Industrial	Car Park	Shopping Centre	Retail	Recreational Park	Highway	Metropolitan	Regional	TOTAL
		Old	New	Diff	New as % of Old	Old	New	Diff	New as % of Old	Old	New	Diff
<b>Wave 32</b>	Old	1187	1016	2395	2194	1261	1517	617	10369	17020	3536	20556
	New	1187	1016	2196	2064	1292	1517	617	5147	11500	3536	15036
	Diff	0	0	199	130	-31	0	0	5222	5520	0	5520
	<b>New as % of Old</b>	1	1	0.92	0.94	1.02	1	1	0.50	0.68	1	7.3786248
<b>Wave 33</b>	Old	1227	737	2573	3142	2323	1659	590	9292	17788	3755	21543
	New	1227	737	2428	2722	1919	1659	590	4607	12134	3755	15889
	Diff	0	0	145	420	404	0	0	4685	5654	0	5654
	<b>New as % of Old</b>	1	1	0.94	0.87	0.83	1	1	0.50	0.68	1	7.1318625
<b>Wave 34</b>	Old	1185	721	2498	3365	1853	1670	479	11039	18749	4061	22810
	New	1185	721	2077	2724	1155	1670	479	5666	11616	4061	15677
	Diff	0	0	421	641	698	0	0	5373	7133	0	7133
	<b>New as % of Old</b>	1	1	0.83	0.81	0.62	1	1	0.51	0.62	1	6.7775595
<b>Wave 35</b>	Old	1134	728	2705	2601	2232	1801	729	10865	18640	4155	22795
	New	1134	728	2399	2156	1157	1801	729	5325	11274	4155	15429
	Diff	0	0	306	445	1075	0	0	5540	7366	0	7366
	<b>New as % of Old</b>	1	1	0.89	0.83	0.52	1	1	0.49	0.60	1	6.7242631
<b>Average New as % of Old</b>		<b>1</b>	<b>1</b>	<b>0.89</b>	<b>0.86</b>	<b>0.75</b>	<b>1</b>	<b>1</b>	<b>0.50</b>	<b>0.65</b>	<b>1</b>	<b>7.0030775</b>

Proportions of total items within site type across all 151 sites including either 11 original or 11 revised sites		Residential	Beach	Industrial	Car Park	Shopping Centre	Retail	Recreational Park	Highway	Metropolitan	Regional	TOTAL
<b>Wave 32</b>	Old	1187	1016	2395	2194	1261	1517	617	10369	17020	3536	<b>20556</b>
	New	1187	1016	2196	2064	1292	1517	617	5147	11500	3536	<b>15036</b>
	Old % of total items	5.8%	4.9%	11.7%	10.7%	6.1%	7.4%	3.0%	50.4%	82.8%	17.2%	
	New % of total items	7.9%	6.8%	14.6%	13.7%	8.6%	10.1%	4.1%	34.2%	76.5%	23.5%	
	<b>% change from Old to New</b>	<b>2.1%</b>	<b>1.8%</b>	<b>3.0%</b>	<b>3.1%</b>	<b>2.5%</b>	<b>2.7%</b>	<b>1.1%</b>	<b>-16.2%</b>	<b>-6.3%</b>	<b>6.3%</b>	
<b>Wave 33</b>	Old	1227	737	2573	3142	2323	1659	590	9292	17788	3755	<b>21543</b>
	New	1227	737	2428	2722	1919	1659	590	4607	12134	3755	<b>15889</b>
	Old % of total items	5.7%	3.4%	11.9%	14.6%	10.8%	7.7%	2.7%	43.1%	82.6%	17.4%	
	New % of total items	7.7%	4.6%	15.3%	17.1%	12.1%	10.4%	3.7%	29.0%	76.4%	23.6%	
	<b>% change from Old to New</b>	<b>2.0%</b>	<b>1.2%</b>	<b>3.3%</b>	<b>2.5%</b>	<b>1.3%</b>	<b>2.7%</b>	<b>1.0%</b>	<b>-14.1%</b>	<b>-6.2%</b>	<b>6.2%</b>	
<b>Wave 34</b>	Old	1185	721	2498	3365	1853	1670	479	11039	18749	4061	<b>22810</b>
	New	1185	721	2077	2724	1155	1670	479	5666	11616	4061	<b>15677</b>
	Old % of total items	5.2%	3.2%	11.0%	14.8%	8.1%	7.3%	2.1%	48.4%	82.2%	17.8%	
	New % of total items	7.6%	4.6%	13.2%	17.4%	7.4%	10.7%	3.1%	36.1%	74.1%	25.9%	
	<b>% change from Old to New</b>	<b>2.4%</b>	<b>1.4%</b>	<b>2.3%</b>	<b>2.6%</b>	<b>-0.8%</b>	<b>3.3%</b>	<b>1.0%</b>	<b>-12.3%</b>	<b>-8.1%</b>	<b>8.1%</b>	
<b>Wave 35</b>	Old	1134	728	2705	2601	2232	1801	729	10865	18640	4155	<b>22795</b>
	New	1134	728	2399	2156	1157	1801	729	5325	11274	4155	<b>15429</b>
	Old % of total items	5.0%	3.2%	11.9%	11.4%	9.8%	7.9%	3.2%	47.7%	81.8%	18.2%	
	New % of total items	7.3%	4.7%	15.5%	14.0%	7.5%	11.7%	4.7%	34.5%	73.1%	26.9%	
	<b>% change from Old to New</b>	<b>2.4%</b>	<b>1.5%</b>	<b>3.7%</b>	<b>2.6%</b>	<b>-2.3%</b>	<b>3.8%</b>	<b>1.5%</b>	<b>-13.2%</b>	<b>-8.7%</b>	<b>8.7%</b>	
<b>Average % difference from Old to New</b>		<b>2%</b>	<b>1%</b>	<b>3%</b>	<b>3%</b>	<b>0%</b>	<b>3%</b>	<b>1%</b>	<b>-14%</b>	<b>-7%</b>	<b>7%</b>	

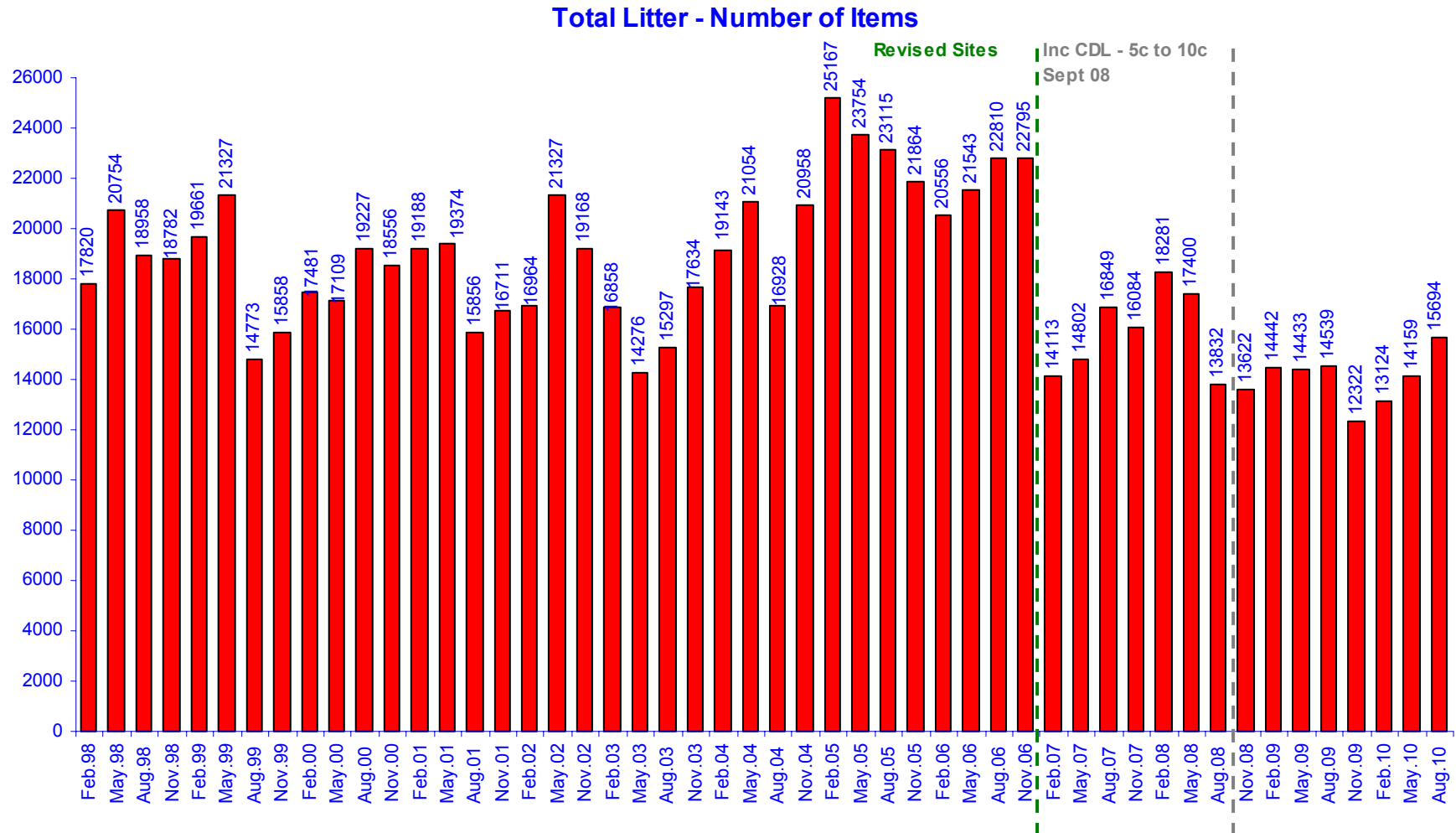
Volumes within material categories across all 151 sites including either 11 original or 11 revised sites	Wave 32				Wave 33				Wave 34				Wave 35			
	Old	New	Diff	New as % of Old	Old	New	Diff	New as % of Old	Old	New	Diff	New as % of Old	Old	New	Diff	New as % of Old
Glass	0.11965	0.09027	0.02939	<b>0.75438</b>	0.08663	0.06859	0.01804	<b>0.79173</b>	0.08559	0.07086	0.01473	<b>0.82789</b>	0.06907	0.05316	0.01591	<b>0.76962</b>
Metal	0.22261	0.19846	0.02415	<b>0.8915</b>	0.15196	0.13181	0.02015	<b>0.86741</b>	0.15085	0.10952	0.04132	<b>0.72605</b>	0.17499	0.15130	0.02369	<b>0.86463</b>
Plastic	1.16278	0.72042	0.44235	<b>0.61957</b>	0.90407	0.71848	0.18559	<b>0.79472</b>	0.93411	0.63312	0.30099	<b>0.67778</b>	0.88814	0.67589	0.21225	<b>0.76102</b>
Paper/ paperboard	0.71375	0.41932	0.29443	<b>0.58749</b>	0.47904	0.36017	0.11888	<b>0.75184</b>	0.54568	0.35535	0.19033	<b>0.6512</b>	0.50410	0.35413	0.14998	<b>0.70249</b>
Miscellaneous	1.11014	0.83415	0.27599	<b>0.75139</b>	0.84900	0.61172	0.23727	<b>0.72052</b>	0.78143	0.71261	0.06882	<b>0.91194</b>	2.14021	1.97182	0.16839	<b>0.92132</b>
Cigarette Butts	0.00009	0.00007	0.00002	<b>0.75515</b>	0.00011	0.00008	0.00003	<b>0.70935</b>	0.00013	0.00008	0.00005	<b>0.63553</b>	0.00013	0.00007	0.00005	<b>0.59531</b>
<b>TOTAL</b>	<b>3.32902</b>	<b>2.26269</b>	<b>1.06633</b>	<b>0.67969</b>	<b>2.47082</b>	<b>1.89085</b>	<b>0.57996</b>	<b>0.76528</b>	<b>2.49778</b>	<b>1.88155</b>	<b>0.61624</b>	<b>0.75329</b>	<b>3.77664</b>	<b>3.20638</b>	<b>0.57026</b>	<b>0.849</b>
<b>AVERAGE New as % of Old</b>				<b>0.71988</b>				<b>0.77155</b>				<b>0.74052</b>				<b>0.78049</b>
<b>OVERALL MEAN DIFFERENCE</b>	<b>0.7531</b>															

Volumes within site type across all 151 sites including either 11 original or 11 revised sites		Residential	Beach	Industrial	Car Park	Shopping Centre	Retail	Recreational Park	Highway	Metropolitan	Regional	TOTAL
Wave 32	Old	0.05441	0.02998	0.57970	0.13090	0.01177	0.01877	0.02922	2.47428	2.54585	0.78318	3.32902
	New	0.05441	0.02998	0.57922	0.17275	0.00965	0.01877	0.02922	1.36868	1.47951	0.78318	2.26269
	Diff			0.00048	-0.04186	0.00212			1.10559	1.06633		
	<b>New as % of Old</b>	1	1	0.99917	1.31979	0.82005	1	1	0.55317	0.58115	1	
Wave 33	Old	0.06600	0.03600	0.54200	0.07100	0.03000	0.02100	0.04100	1.66400	1.85500	0.61500	2.47100
	New	0.06600	0.03600	0.53900	0.07000	0.01000	0.02100	0.04100	1.10700	1.27500	0.61500	1.89000
	Diff			0.00300	0.00100	0.02000			0.55700	0.58000		
	<b>New as % of Old</b>	1	1	0.99446	0.98592	0.33333	1	1	0.66526	0.68733	1	
Wave 34	Old	0.07800	0.06500	0.41100	0.14100	0.05000	0.01200	0.00600	1.73400	1.87300	0.62500	2.49700
	New	0.07800	0.06500	0.40000	0.14000	0.00900	0.01200	0.00600	1.17100	1.25700	0.62500	1.88100
	Diff			0.01100	0.00100	0.04100			0.56300	0.61600		
	<b>New as % of Old</b>	1	1	0.97324	0.99291	0.18000	1	1	0.67532	0.67112	1	
Wave 35	Old	0.17400	0.01700	0.58800	0.13000	0.05300	0.05900	0.01700	2.73700	2.12500	1.65200	3.77500
	New	0.17400	0.01700	0.58600	0.14600	0.03700	0.05900	0.01700	2.16900	1.55500	1.65200	3.20500
	Diff			0.00200	-0.01600	0.01600			0.56800	0.57000		
	<b>New as % of Old</b>	1	1	1.00	1.12	0.70	1	1	0.79	0.73	1	
<b>Average New as % of Old</b>		<b>1</b>	<b>1</b>	<b>0.99</b>	<b>1.11</b>	<b>0.51</b>	<b>1</b>	<b>1</b>	<b>0.67</b>	<b>0.67</b>	<b>1</b>	

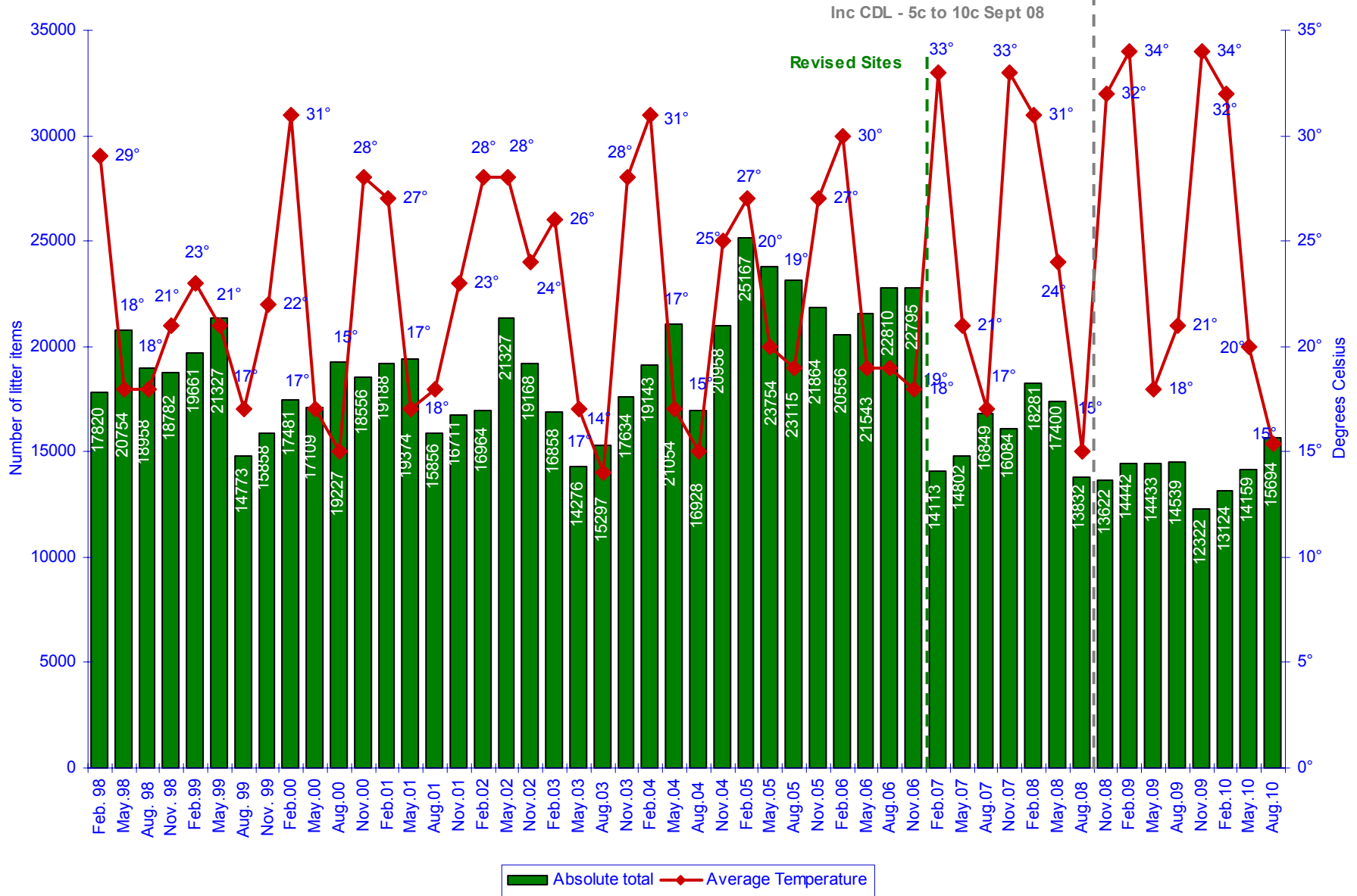
Proportions of total volume within site type across all 151 sites including either 11 original or 11 revised sites		Residential	Beach	Industrial	Car Park	Shopping Centre	Retail	Recreational Park	Highway	Metropolitan	Regional	TOTAL
<b>Wave 32</b>	Old	0.05441	0.02998	0.57970	0.13090	0.01177	0.01877	0.02922	2.47428	2.54585	0.78318	<b>3.32902</b>
	New	0.05441	0.02998	0.57922	0.17275	0.00965	0.01877	0.02922	1.36868	1.47951	0.78318	<b>2.26269</b>
	Old % of total volume	1.6%	0.9%	17.4%	3.9%	0.4%	0.6%	0.9%	74.3%	76.5%	23.5%	
	New % of total volume	2.4%	1.3%	25.6%	7.6%	0.4%	0.8%	1.3%	60.5%	65.4%	34.6%	
	<b>% change from Old to New</b>	<b>0.8%</b>	<b>0.4%</b>	<b>8.2%</b>	<b>3.7%</b>	<b>0.1%</b>	<b>0.3%</b>	<b>0.4%</b>	<b>-13.8%</b>	<b>-11.1%</b>	<b>11.1%</b>	
<b>Wave 33</b>	Old	0.06600	0.03600	0.54200	0.07100	0.03000	0.02100	0.04100	1.66400	1.85500	0.61500	<b>2.47100</b>
	New	0.06600	0.03600	0.53900	0.07000	0.01000	0.02100	0.04100	1.10700	1.27500	0.61500	<b>1.89000</b>
	Old % of total volume	2.7%	1.5%	21.9%	2.9%	1.2%	0.8%	1.7%	67.3%	75.1%	24.9%	
	New % of total volume	3.5%	1.9%	28.5%	3.7%	0.5%	1.1%	2.2%	58.6%	67.5%	32.5%	
	<b>% change from Old to New</b>	<b>0.8%</b>	<b>0.4%</b>	<b>6.6%</b>	<b>0.8%</b>	<b>-0.7%</b>	<b>0.3%</b>	<b>0.5%</b>	<b>-8.8%</b>	<b>-7.6%</b>	<b>7.7%</b>	
<b>Wave 34</b>	Old	0.07800	0.06500	0.41100	0.14100	0.05000	0.01200	0.00600	1.73400	1.87300	0.62500	<b>2.49700</b>
	New	0.07800	0.06500	0.40000	0.14000	0.00900	0.01200	0.00600	1.17100	1.25700	0.62500	<b>1.88100</b>
	Old % of total volume	3.1%	2.6%	16.5%	5.6%	2.0%	0.5%	0.2%	69.4%	75.0%	25.0%	
	New % of total volume	4.1%	3.5%	21.3%	7.4%	0.5%	0.6%	0.3%	62.3%	66.8%	33.2%	
	<b>% change from Old to New</b>	<b>1.0%</b>	<b>0.9%</b>	<b>4.8%</b>	<b>1.8%</b>	<b>-1.5%</b>	<b>0.2%</b>	<b>0.1%</b>	<b>-7.2%</b>	<b>-8.2%</b>	<b>8.2%</b>	
<b>Wave 35</b>	Old	0.17400	0.01700	0.58800	0.13000	0.05300	0.05900	0.01700	2.73700	2.12500	1.65200	<b>3.77500</b>
	New	0.17400	0.01700	0.58600	0.14600	0.03700	0.05900	0.01700	2.16900	1.55500	1.65200	<b>3.20500</b>
	Old % of total volume	4.6%	0.5%	15.6%	3.4%	1.4%	1.6%	0.5%	72.5%	56.3%	43.8%	
	New % of total volume	5.4%	0.5%	18.3%	4.6%	1.2%	1.8%	0.5%	67.7%	48.5%	51.5%	
	<b>% change from Old to New</b>	<b>0.8%</b>	<b>0.1%</b>	<b>2.7%</b>	<b>1.1%</b>	<b>-0.2%</b>	<b>0.3%</b>	<b>0.1%</b>	<b>-4.8%</b>	<b>-7.8%</b>	<b>7.8%</b>	
<b>Average % difference from Old to New</b>		<b>1%</b>	<b>0%</b>	<b>6%</b>	<b>2%</b>	<b>-1%</b>	<b>0%</b>	<b>0%</b>	<b>-9%</b>	<b>-9%</b>	<b>9%</b>	

# *Unweighted Tracking Graphs*

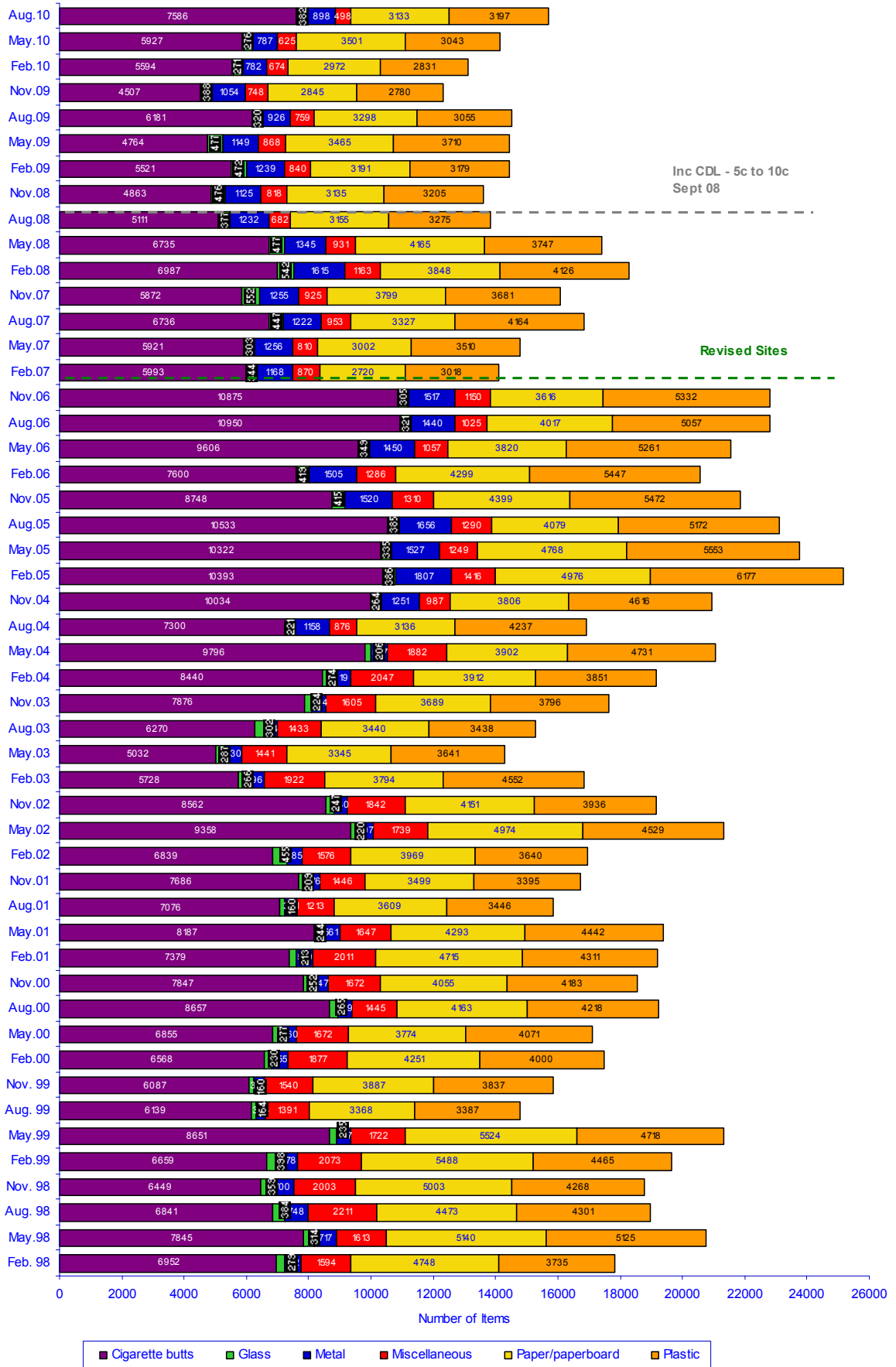
## *- Items*



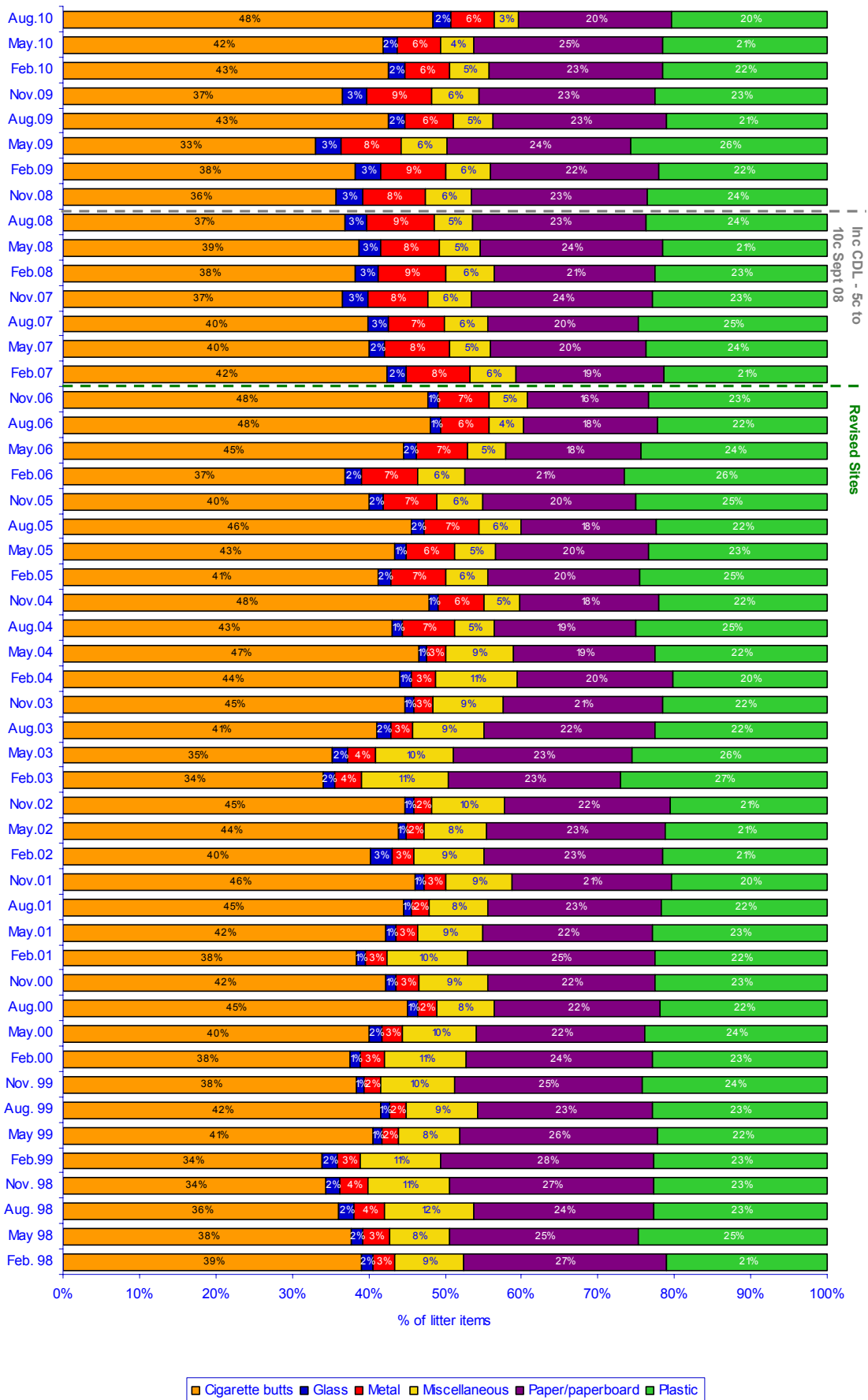
### Weather Temperature and Total Number of Litter Items



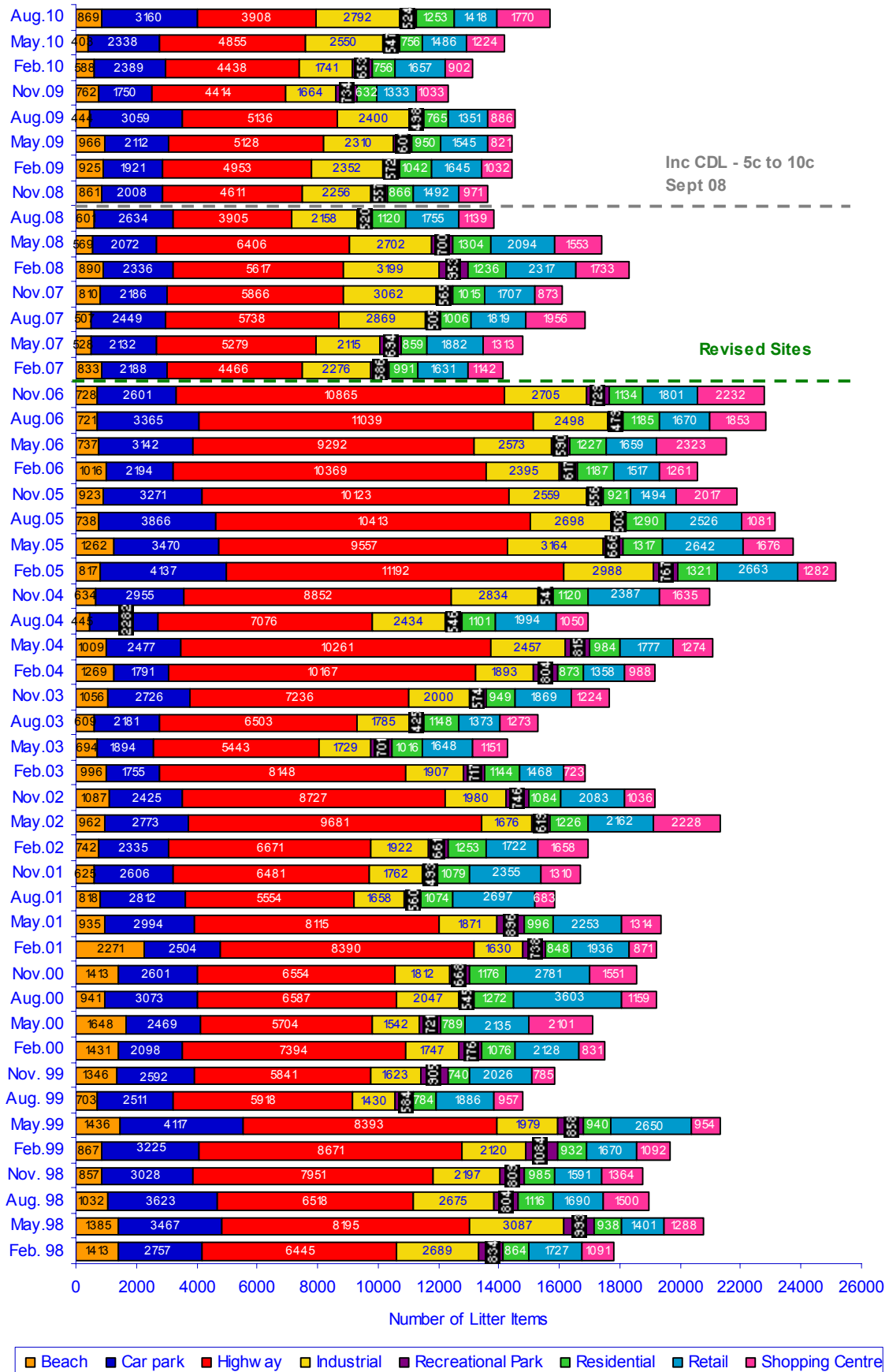
### Number of Litter Items by Material Type



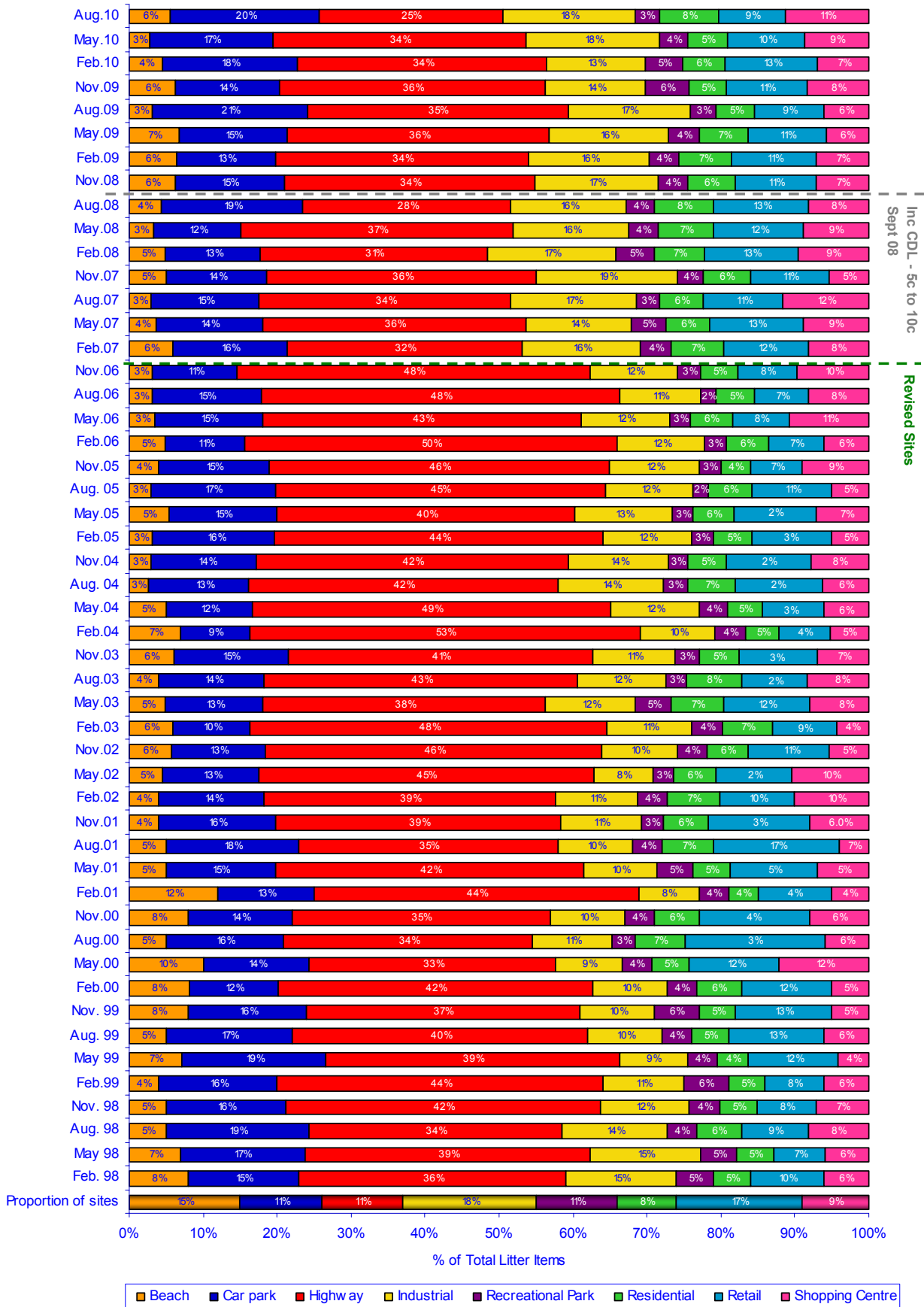
### Proportion of Total Litter Stream by Material Type



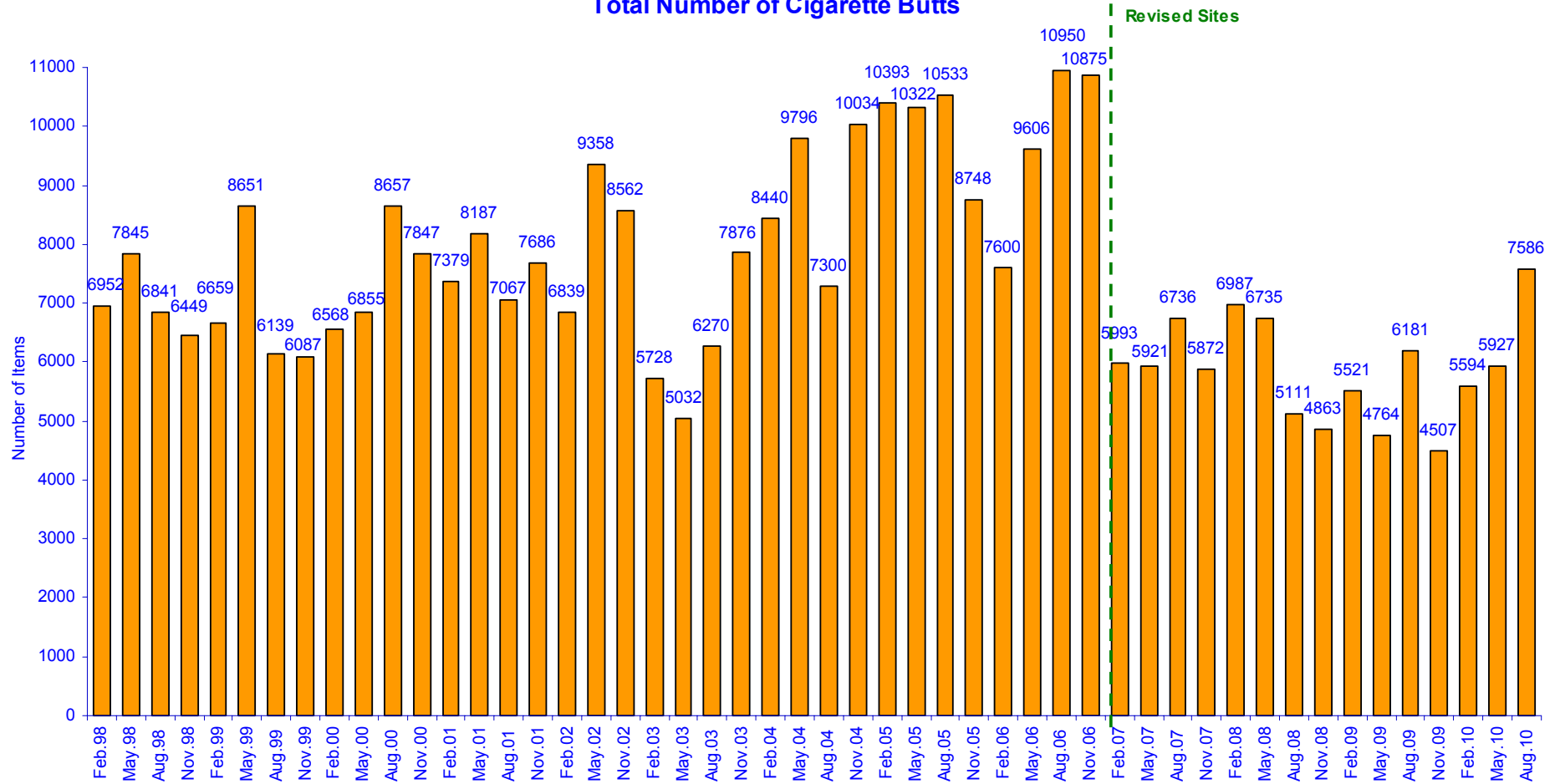
### Number of Litter Items by Site Type



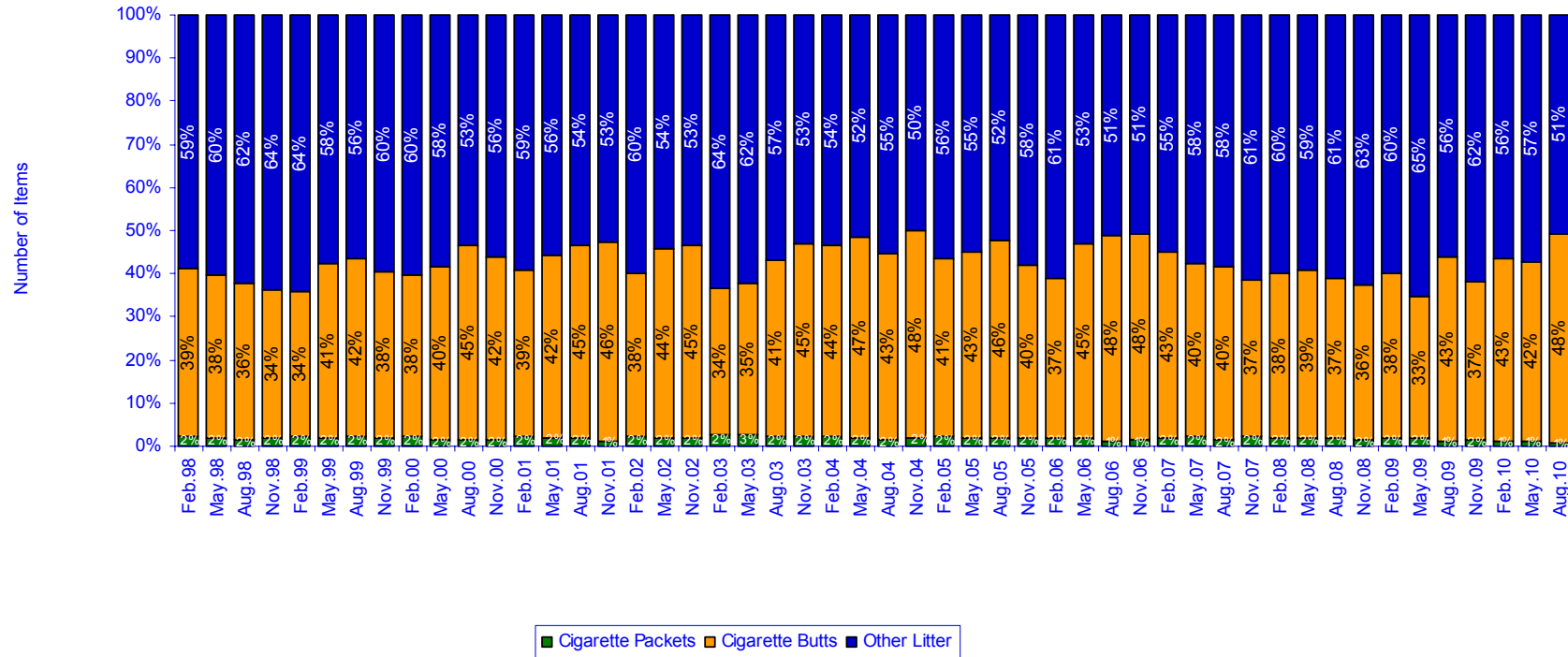
### Proportion of Total Litter by Site Type



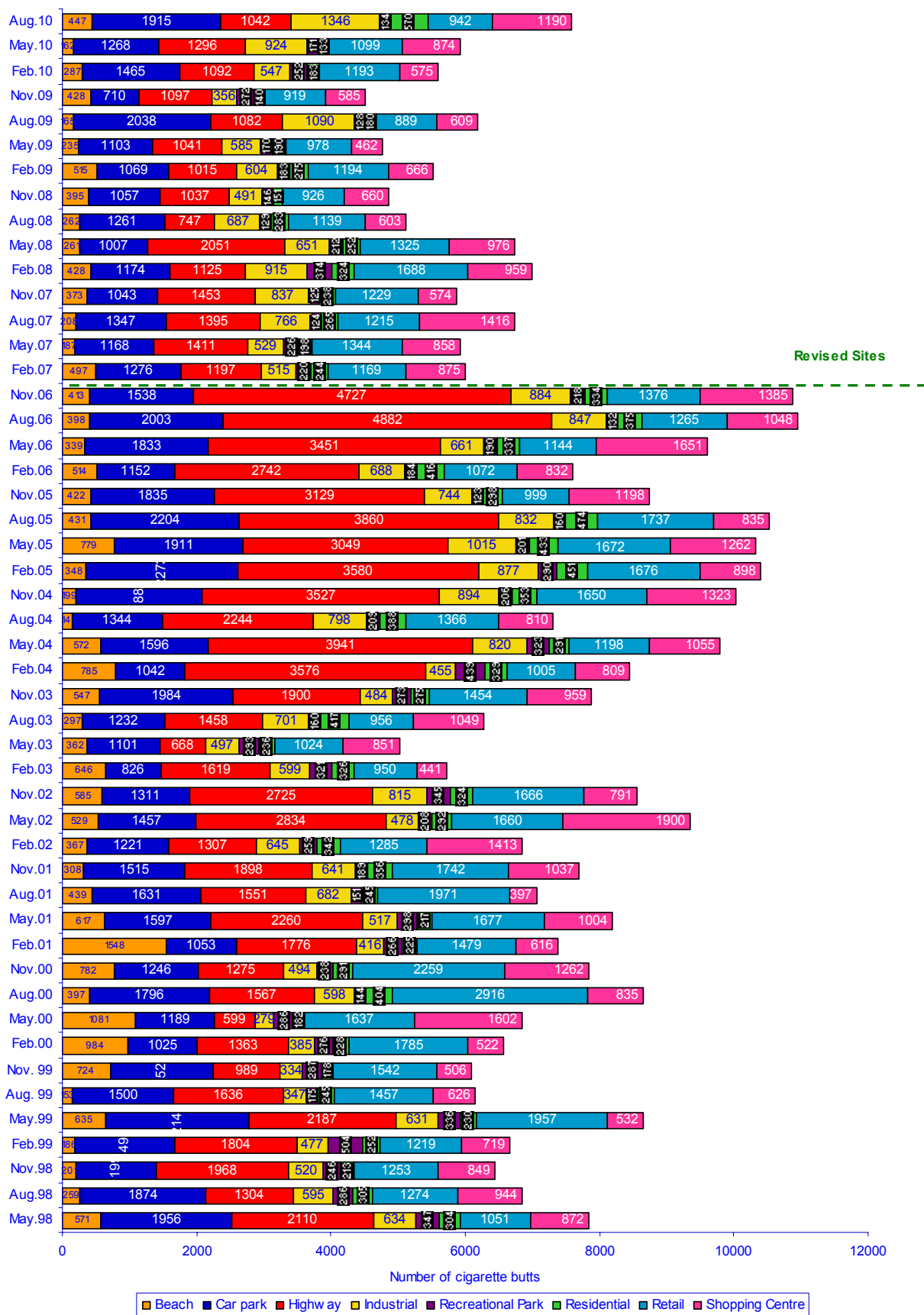
Total Number of Cigarette Butts



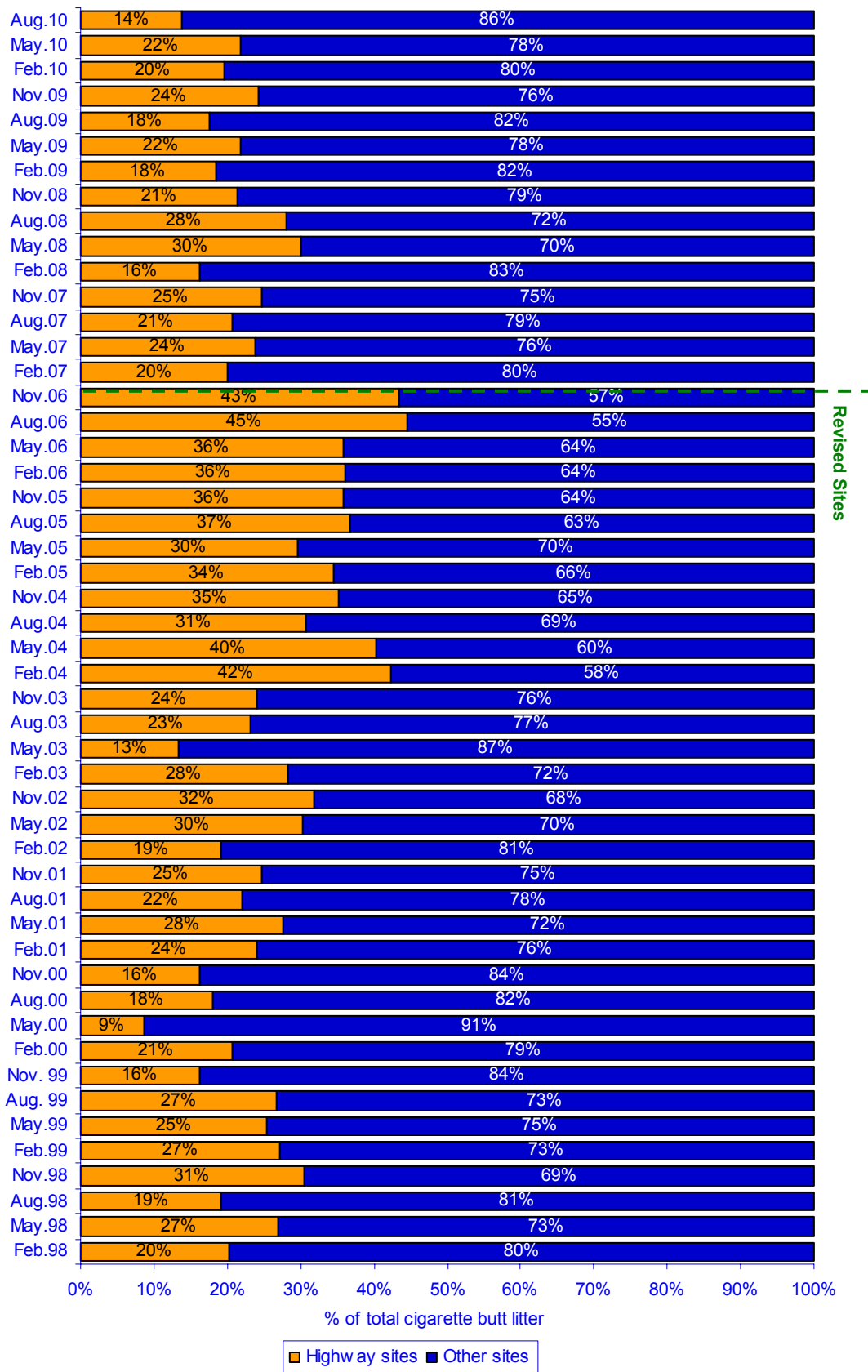
### Proportion of Cigarette Related Litter Items in Total Litter Stream

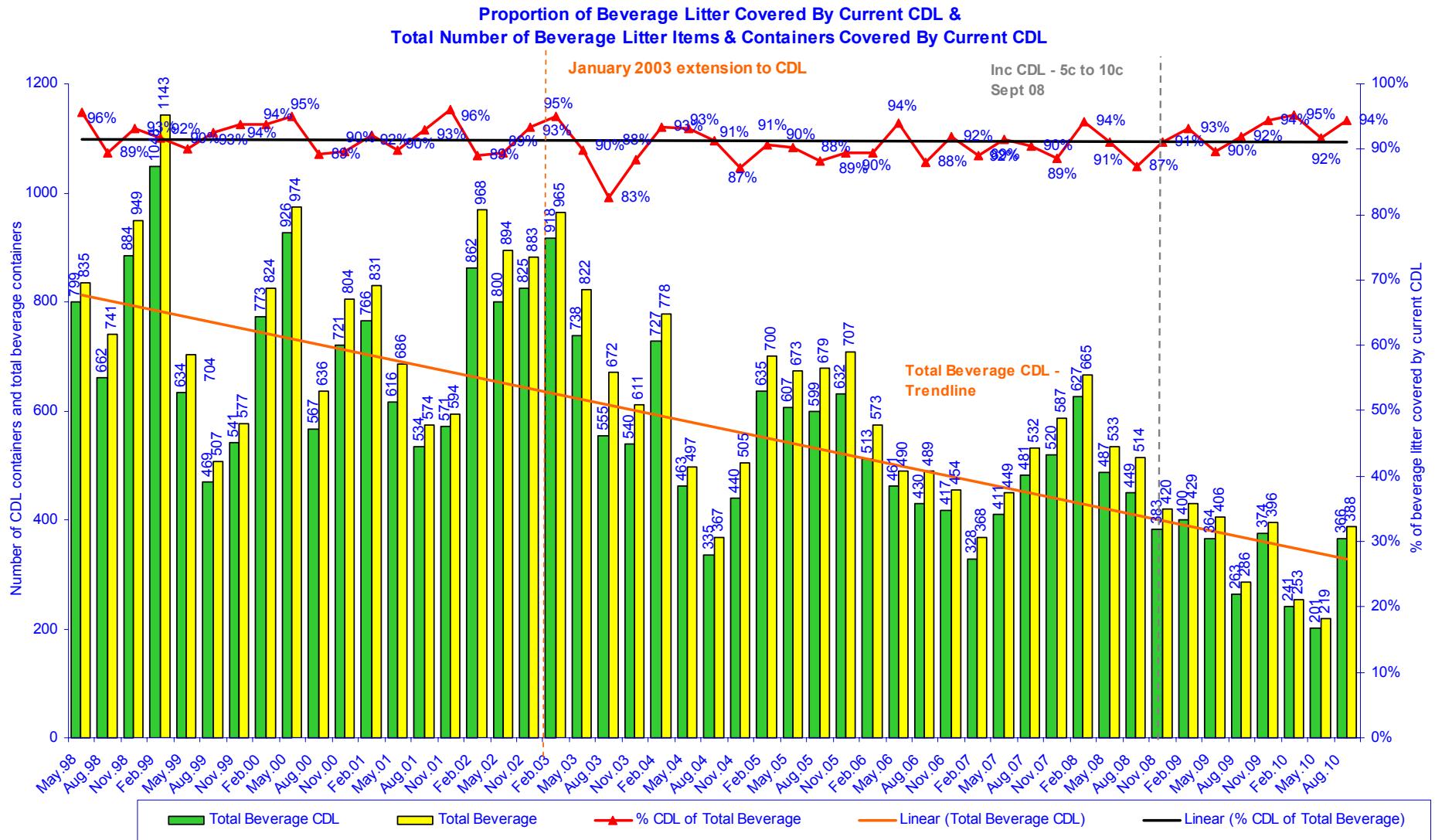


Number of Cigarette Butts by Site Type

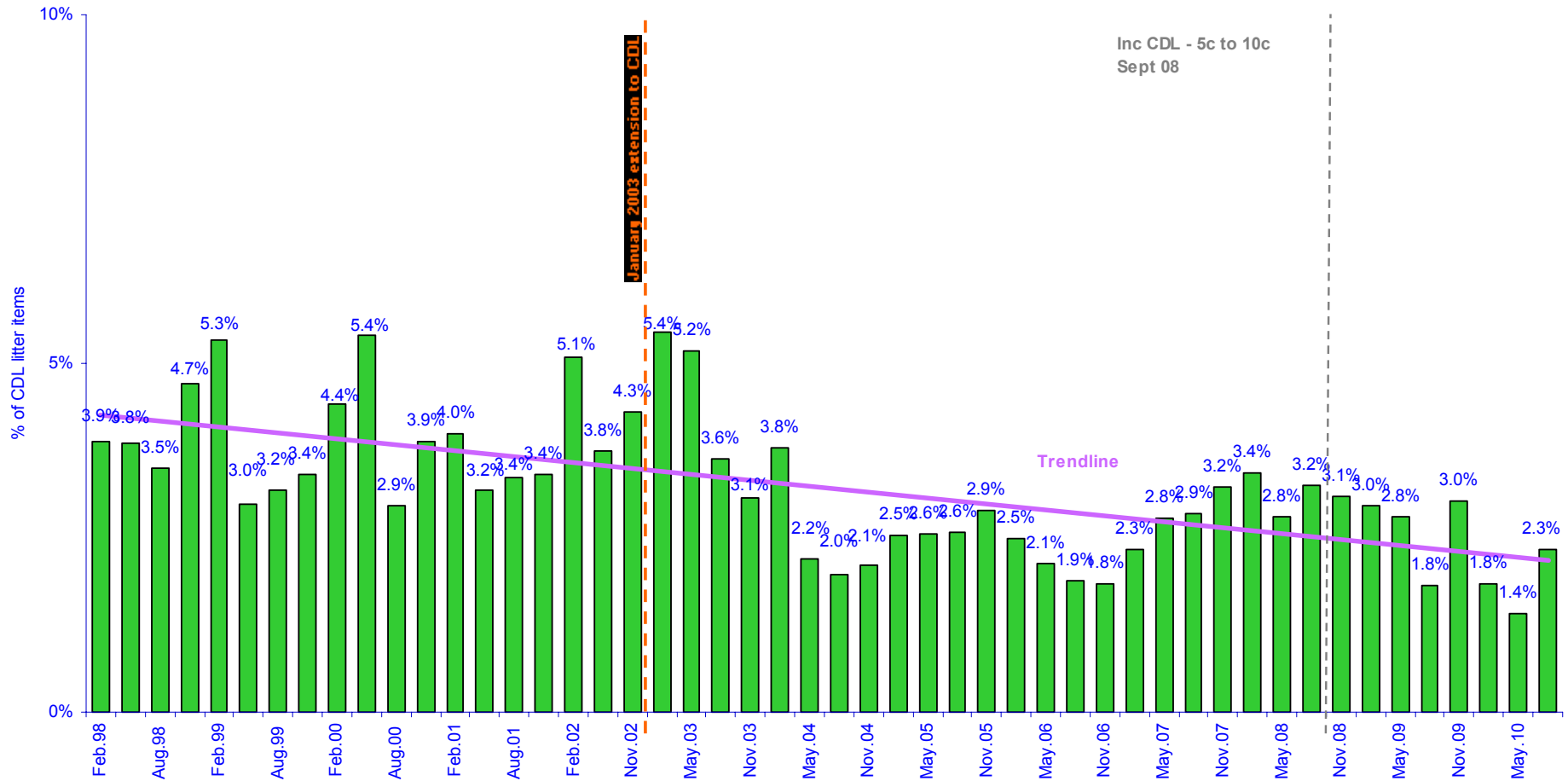


### Proportion of Total Cigarette Butt Litter at Highway sites & Other sites

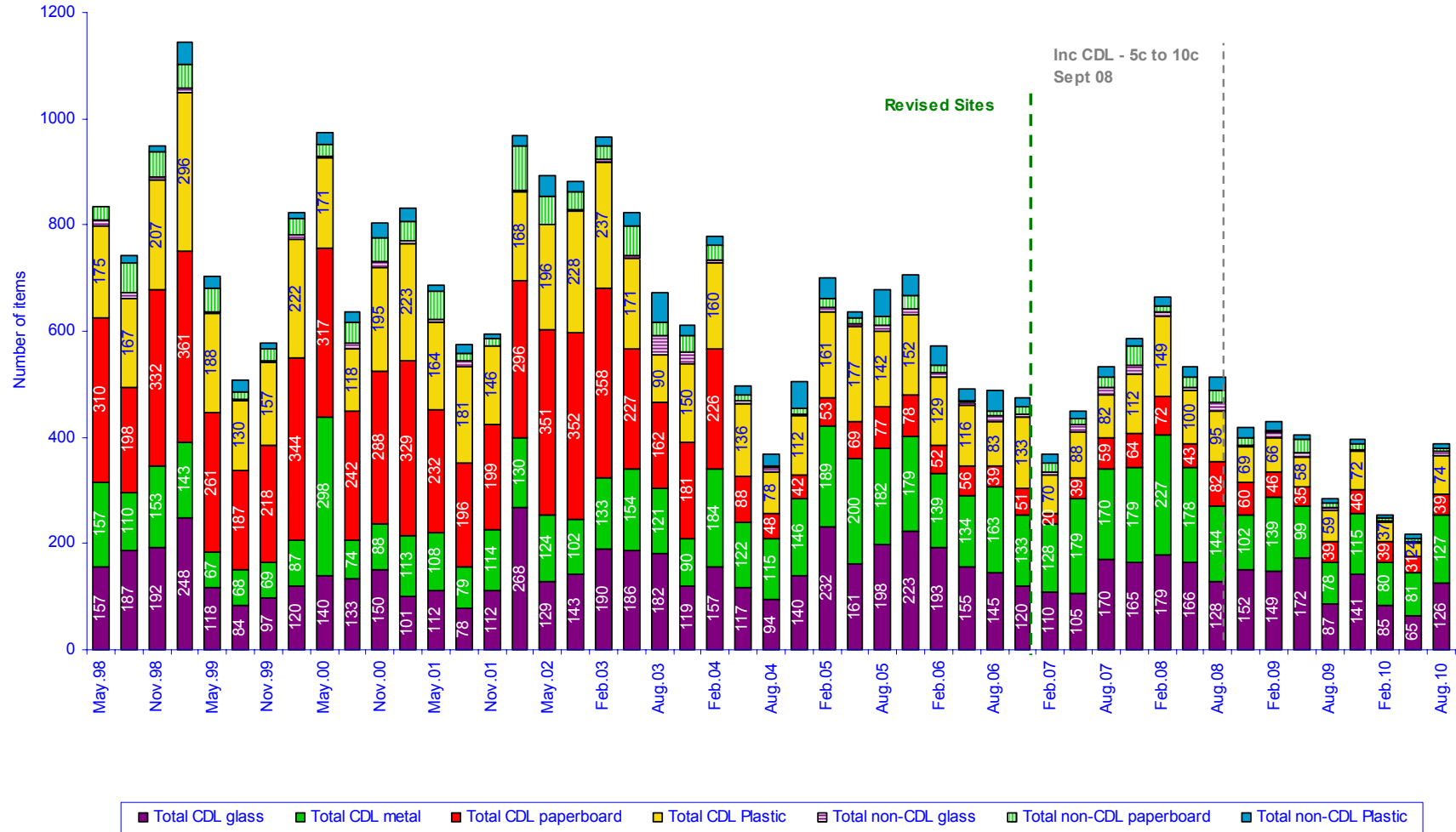




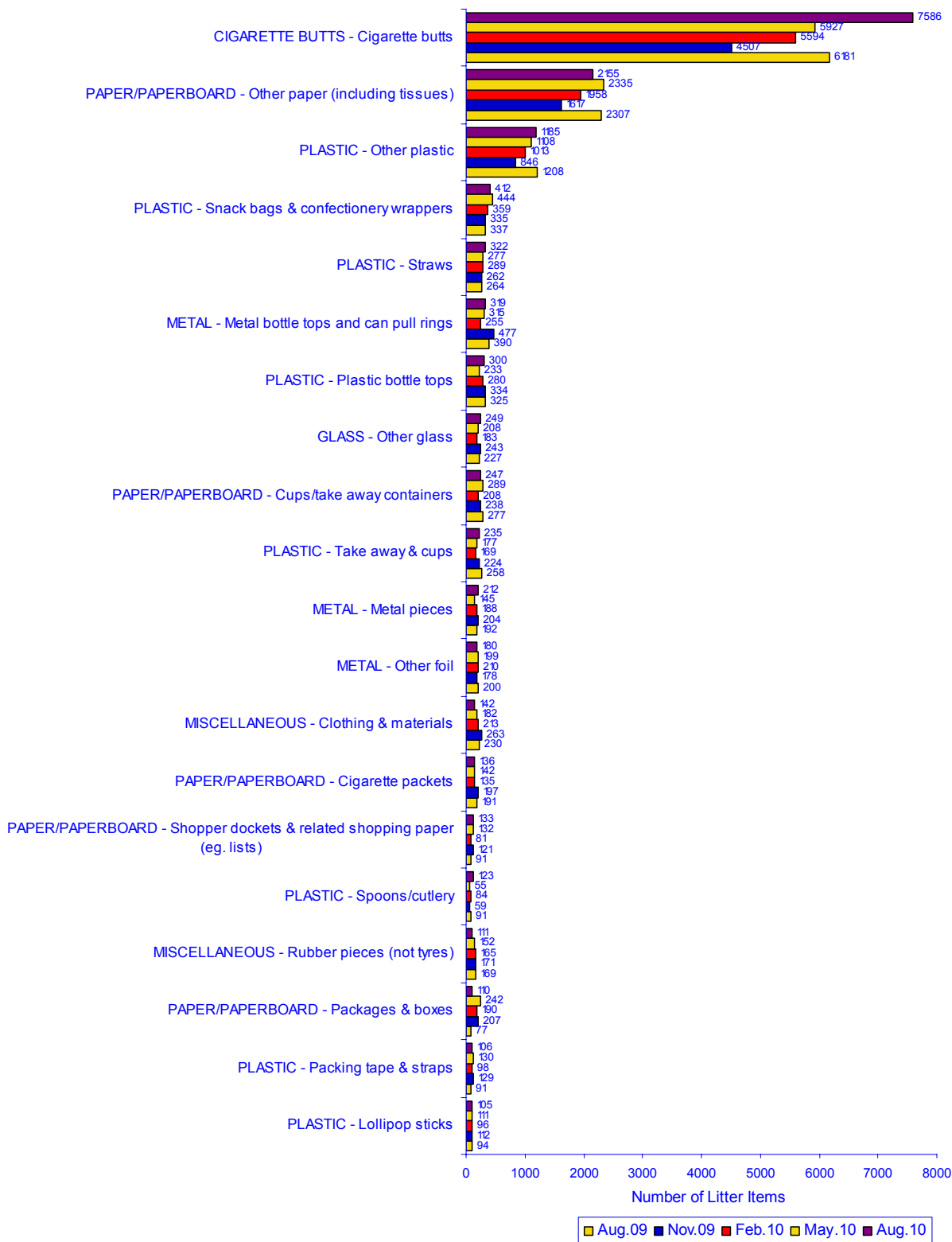
Proportion of Current CDL Litter Items in Total Litter Stream



CDL and Non-CDL Beverage Items Within Material Categories

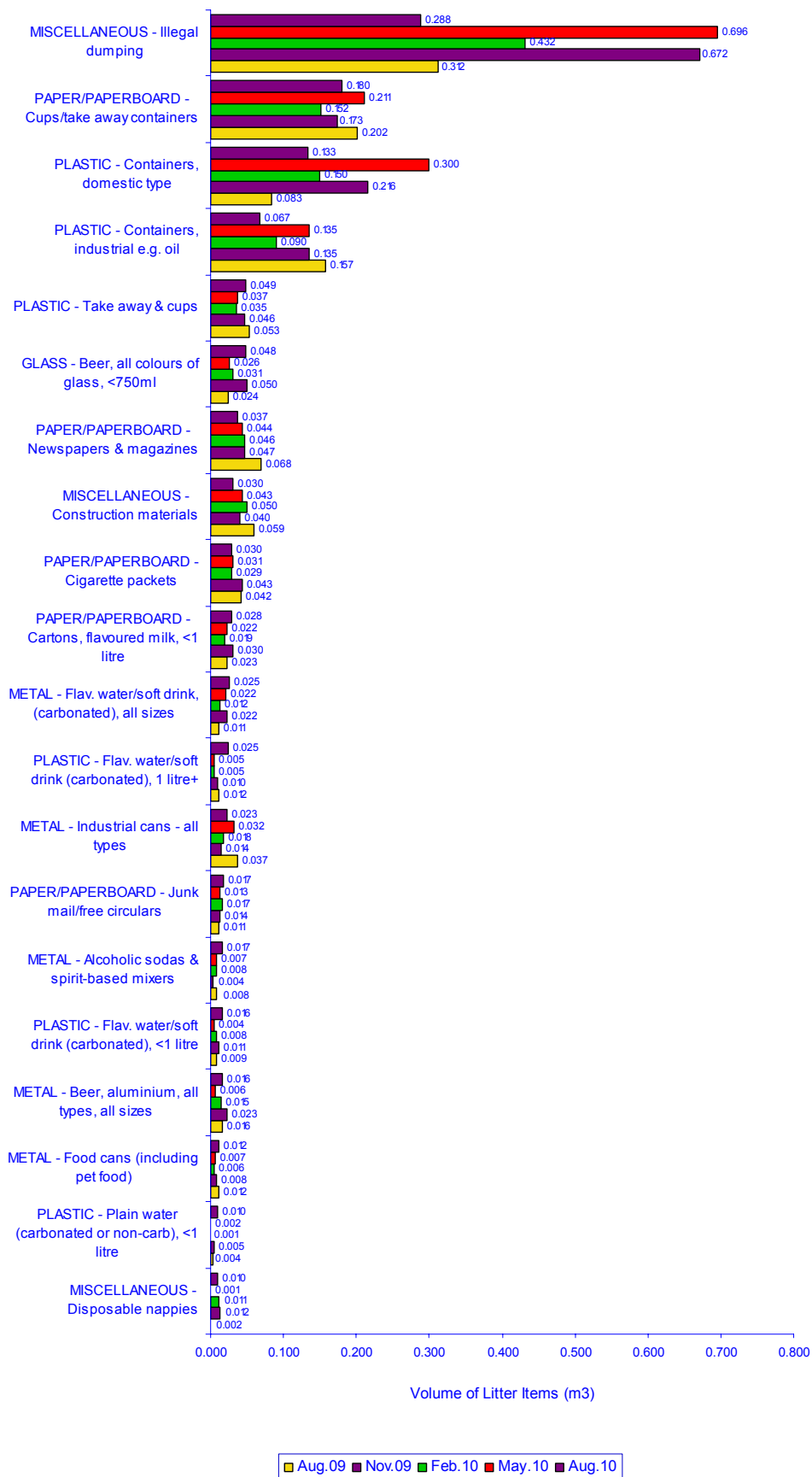


### Top 20 Litter Items - Highest Counts

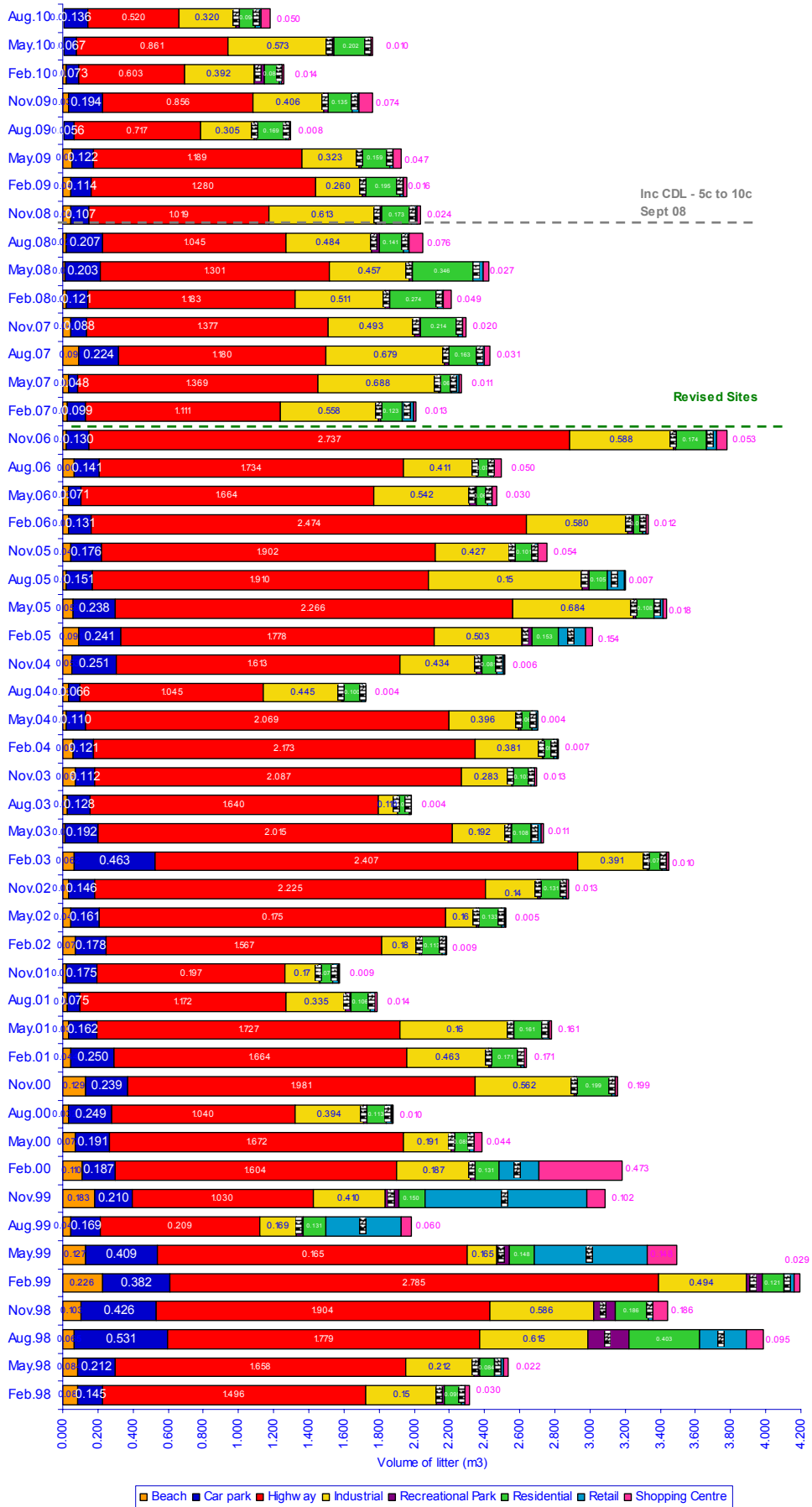


*Unweighted Tracking Graphs*  
*- Volume*

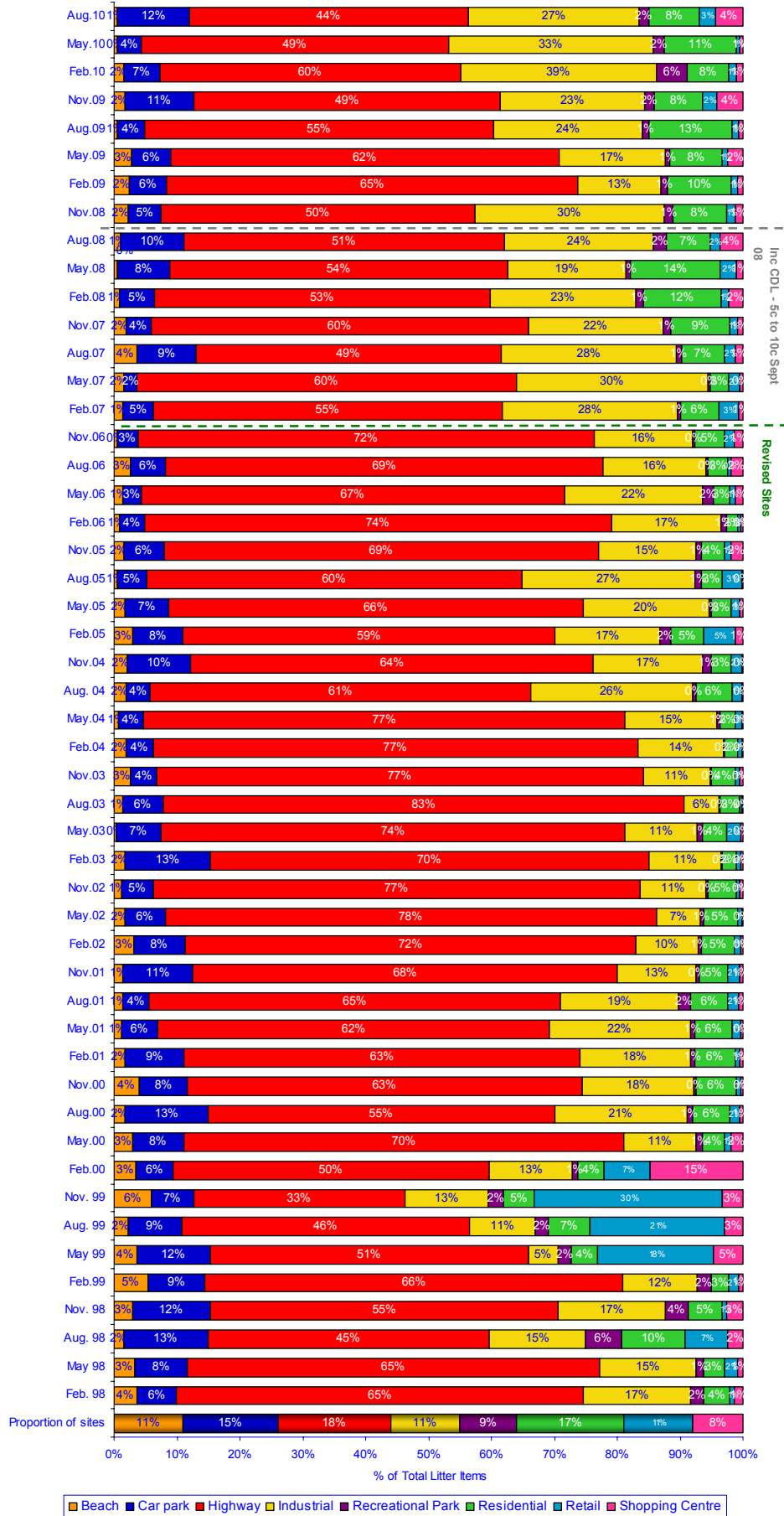
### Top 20 Litter Items by Volume



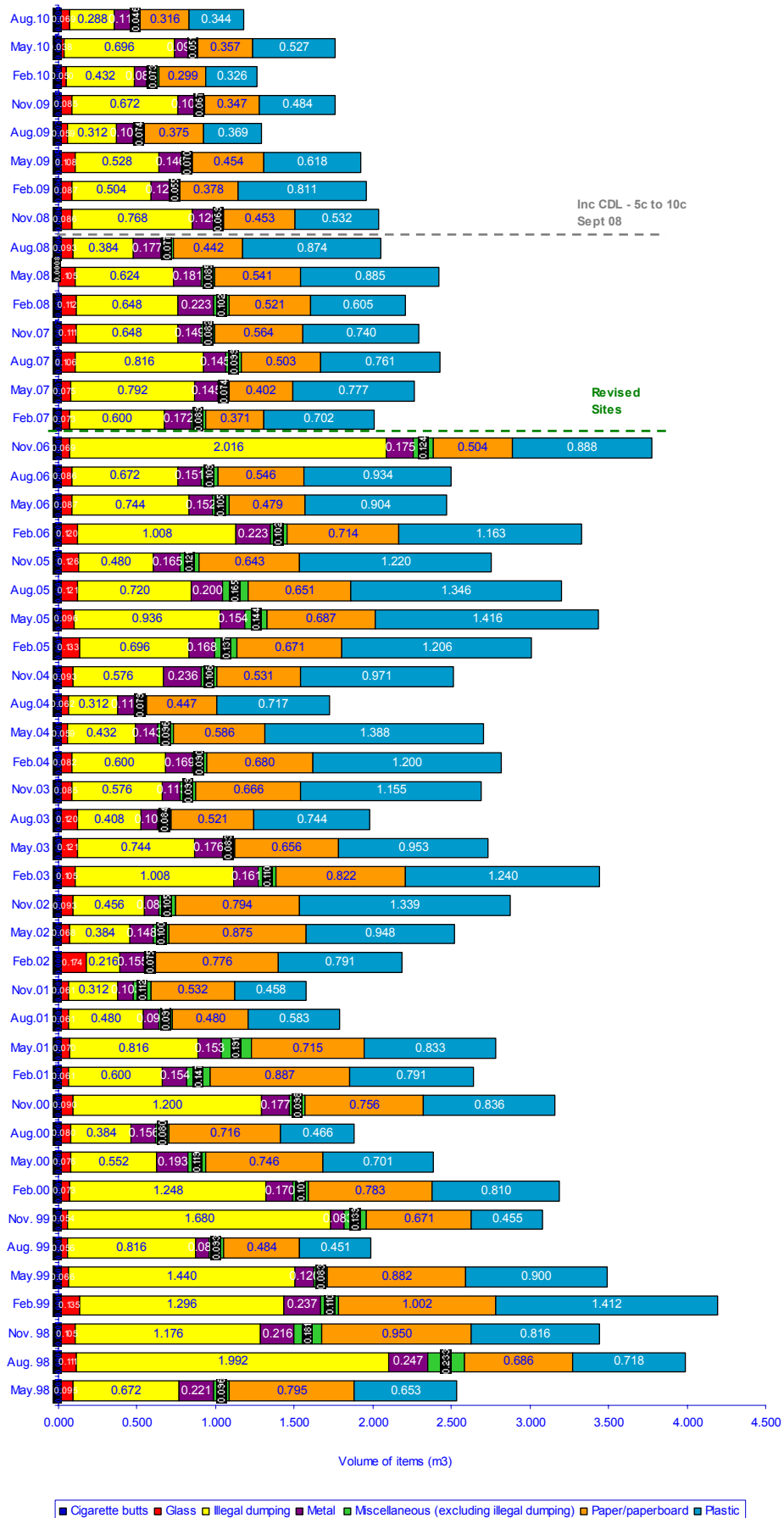
Volume of Litter by Site Type



Proportion of Litter Volume in Total Litter Stream by Site Type

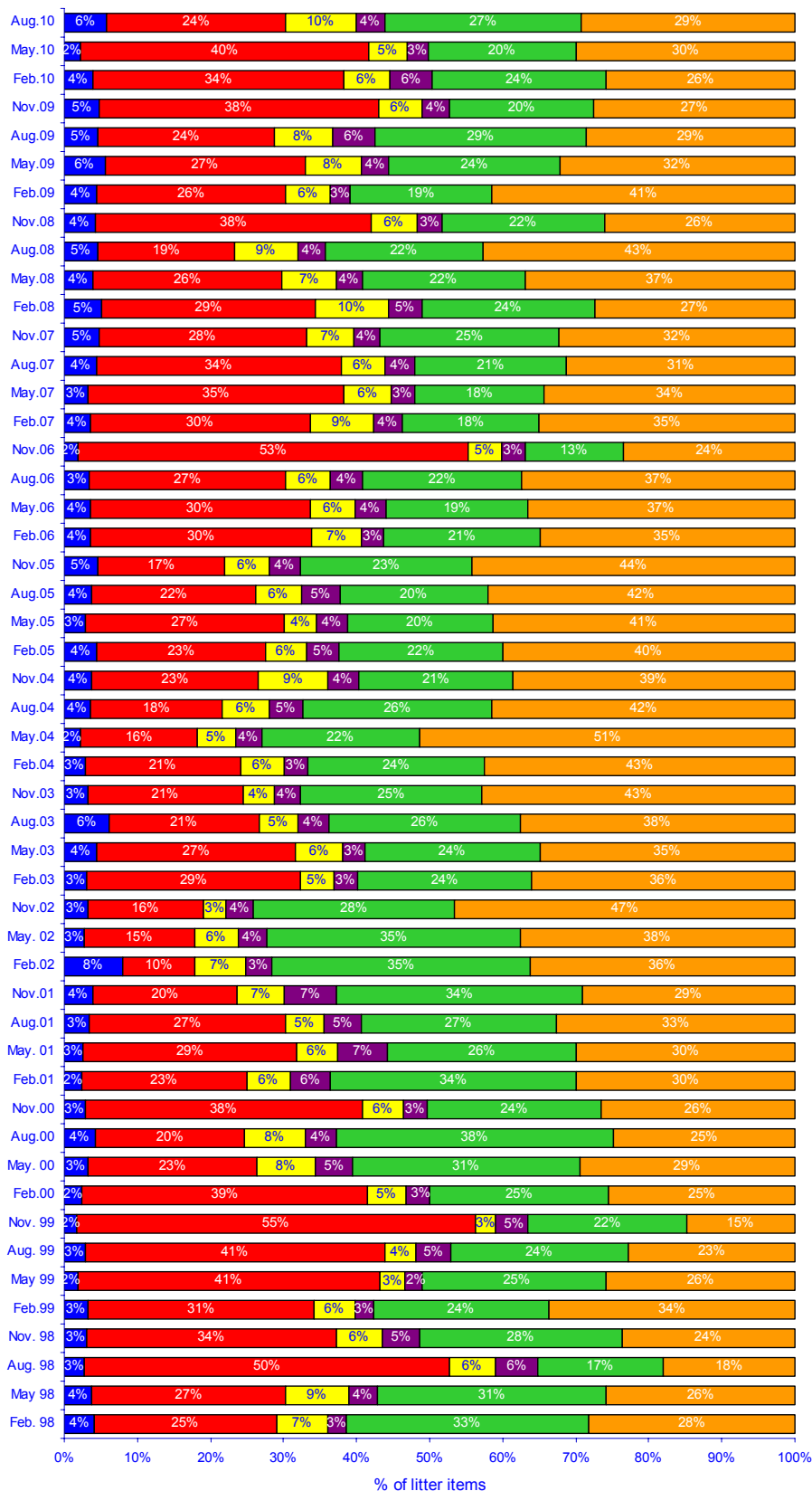


### Volume of Litter Items by Material Type

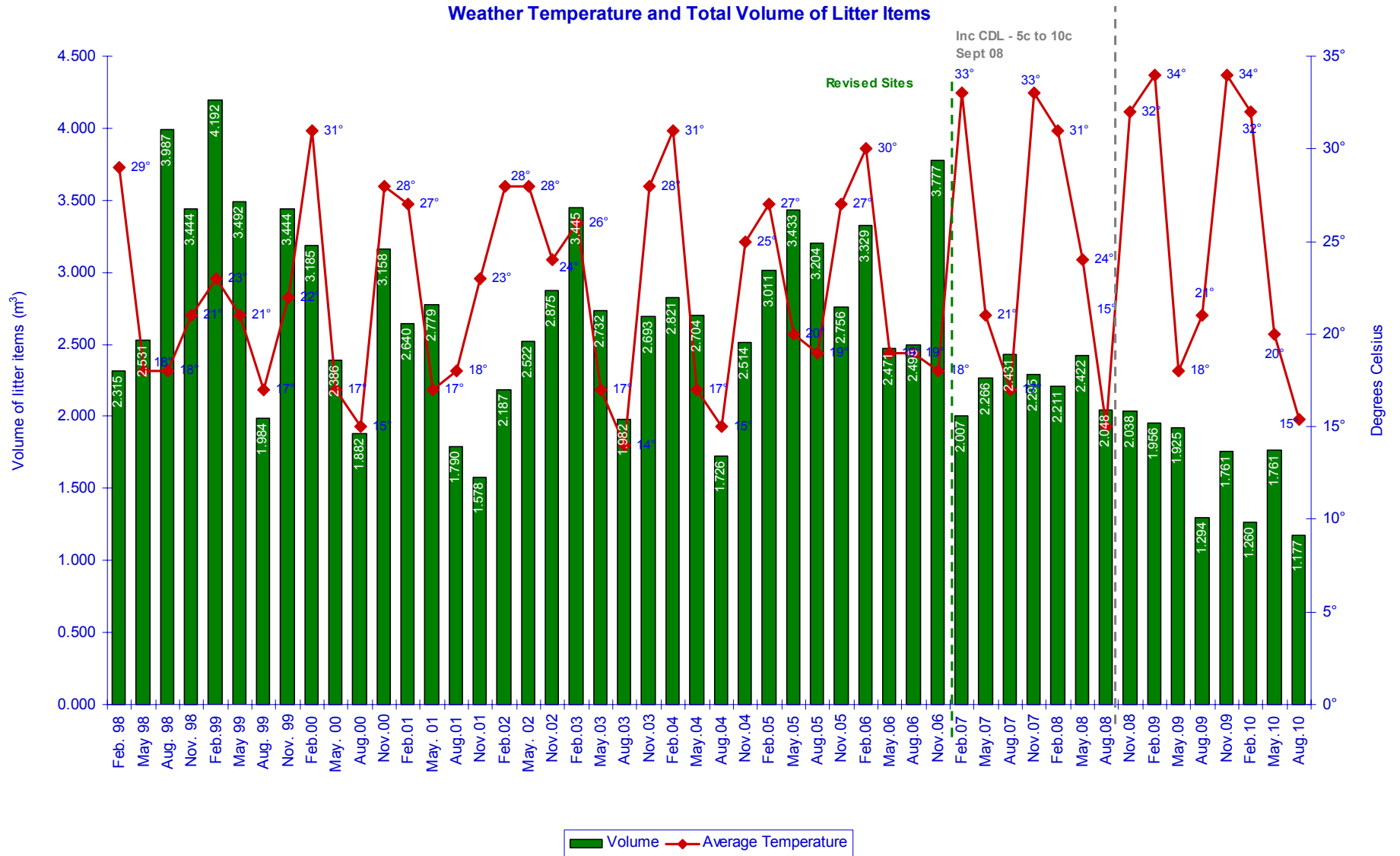


Proportion of Total Litter Volume by Material Type

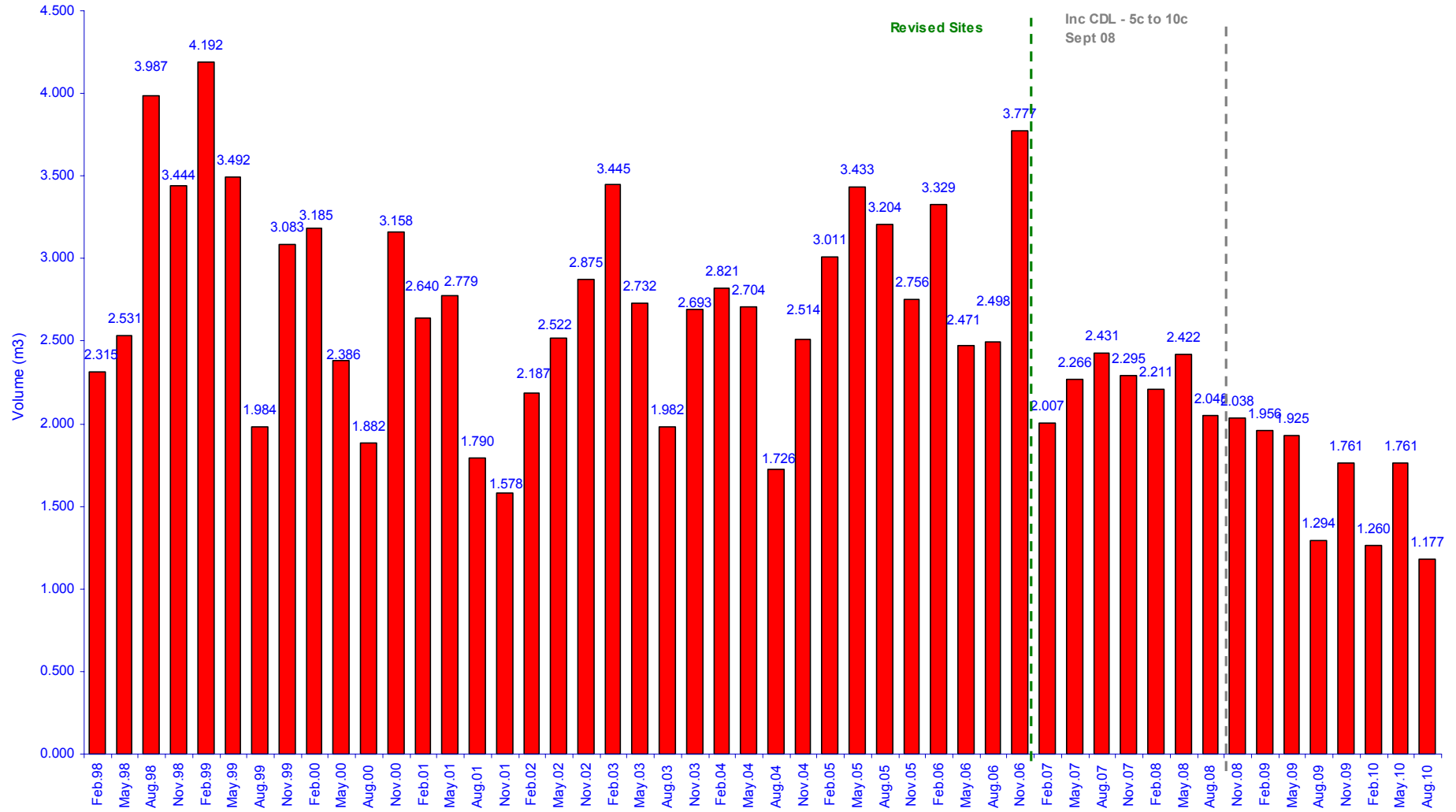
- Please note that cigarette butts are not included as the volumes of such are consistently negligible -



■ Glass ■ Illegal dumping ■ Metal ■ Miscellaneous (excluding illegal dumping) ■ Paper/paperboard ■ Plastic



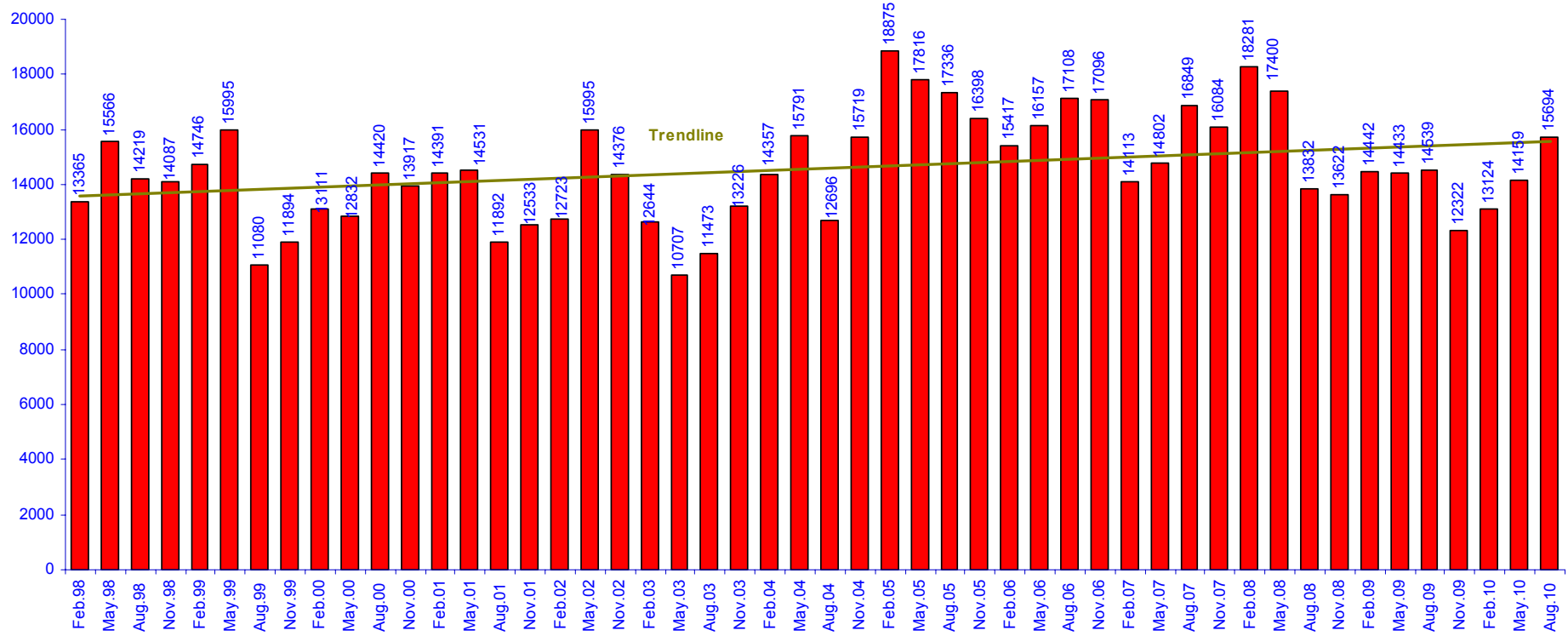
Total Volume (Cubic Metres) of Litter



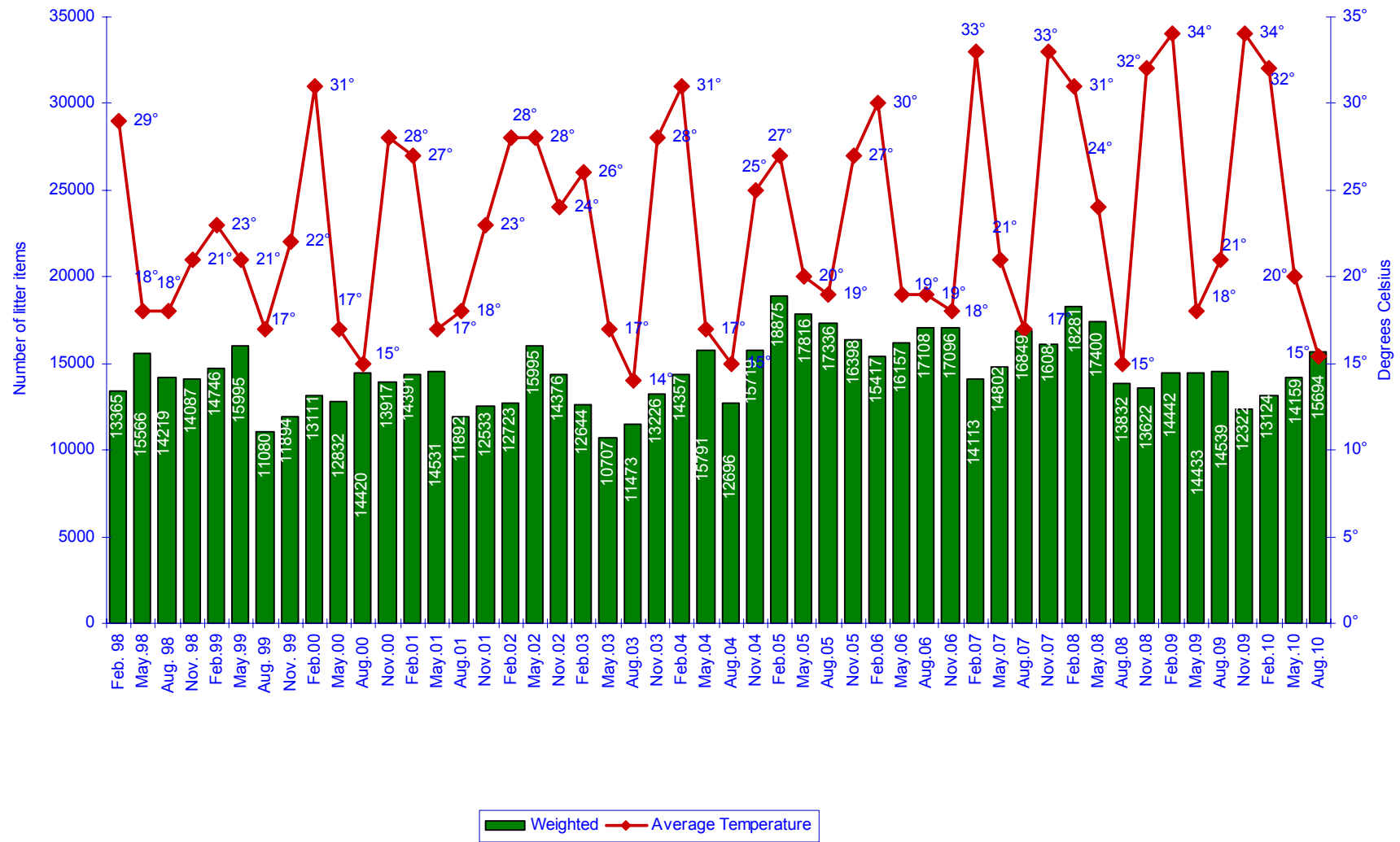
# *Weighted Tracking Graphs*

## *- Items*

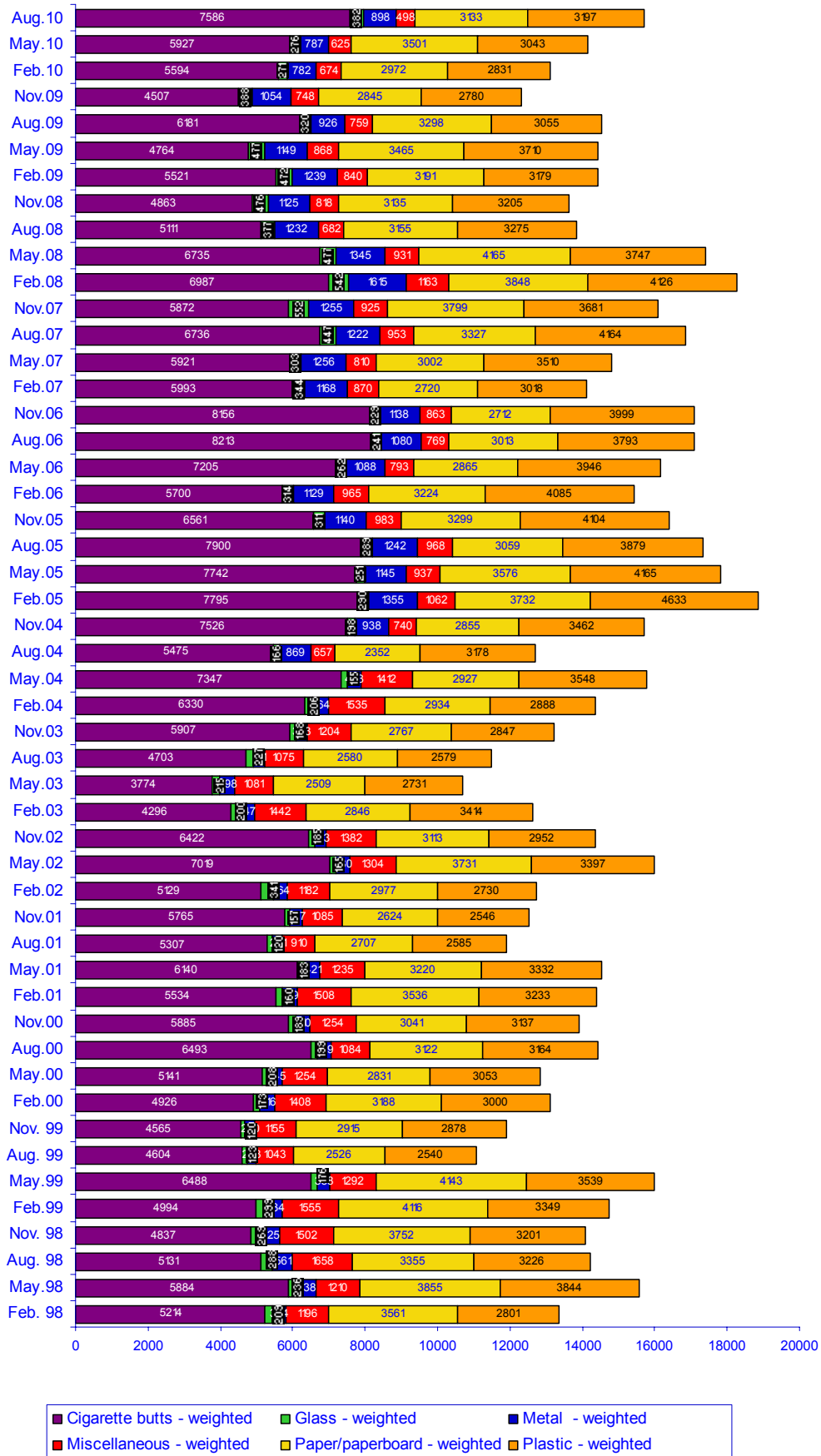
Total Litter - Number of Items - Weighted



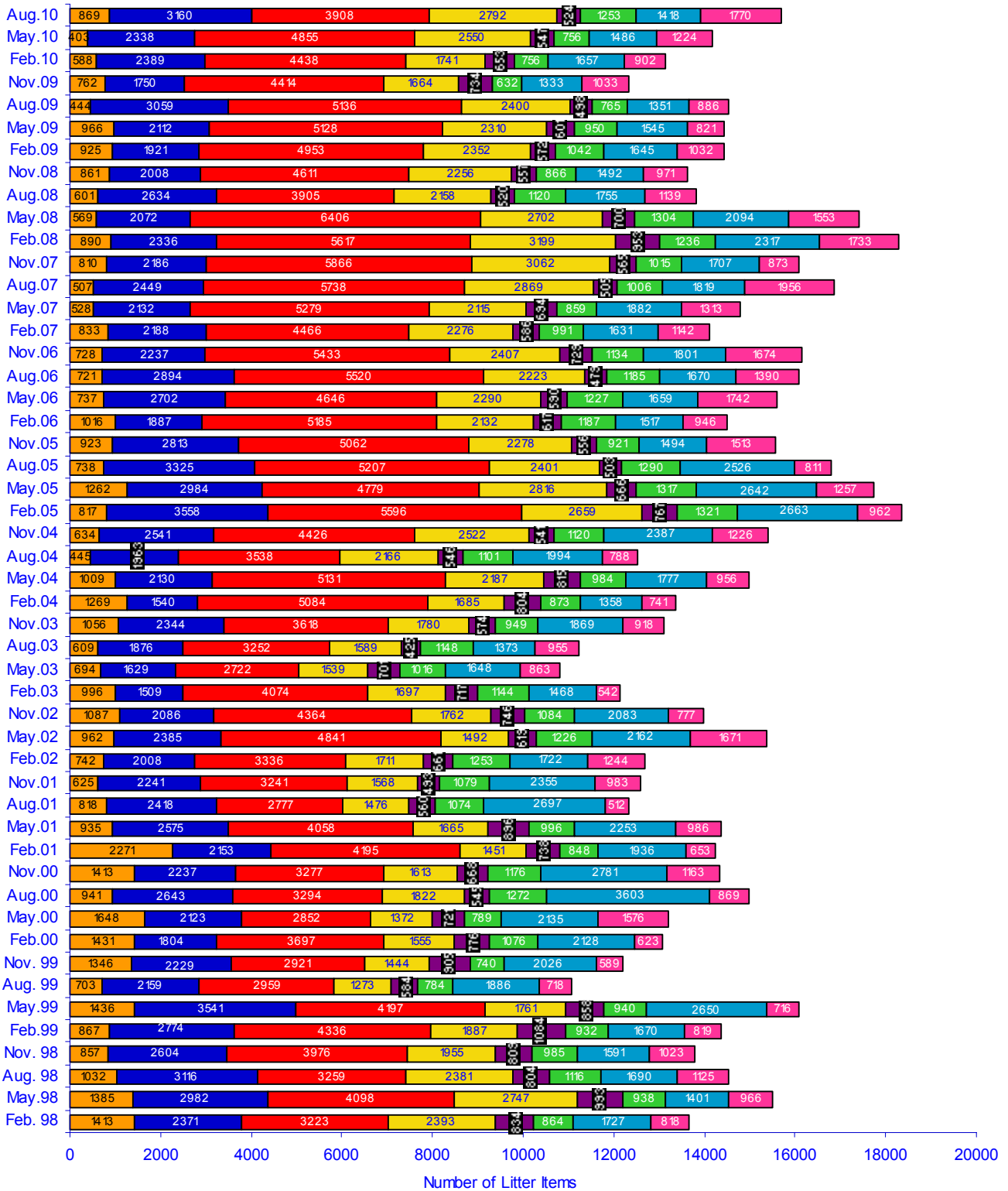
### Weather Temperature and Total Number of Litter Items - Weighted



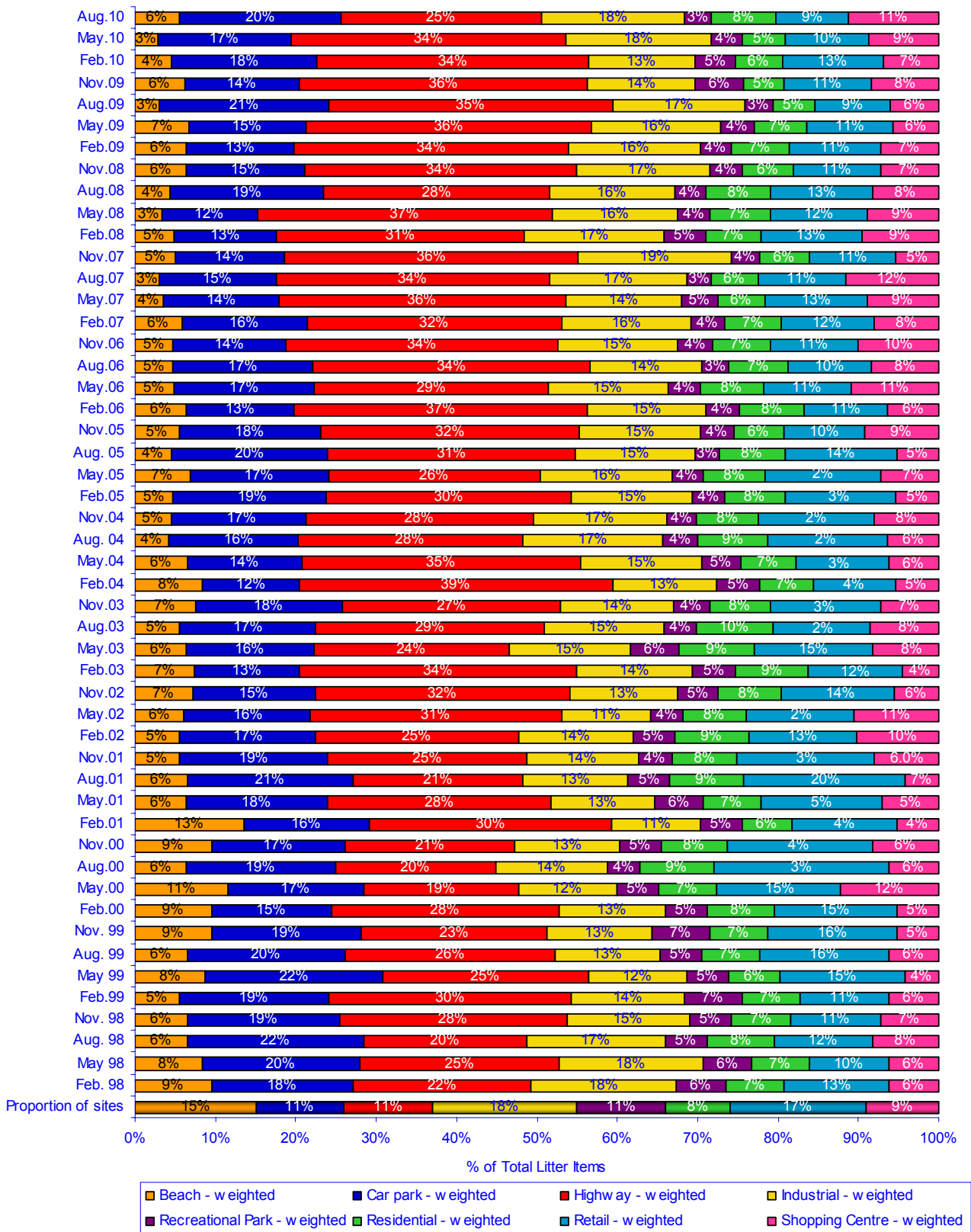
### Number of Litter Items by Material Type - Weighted



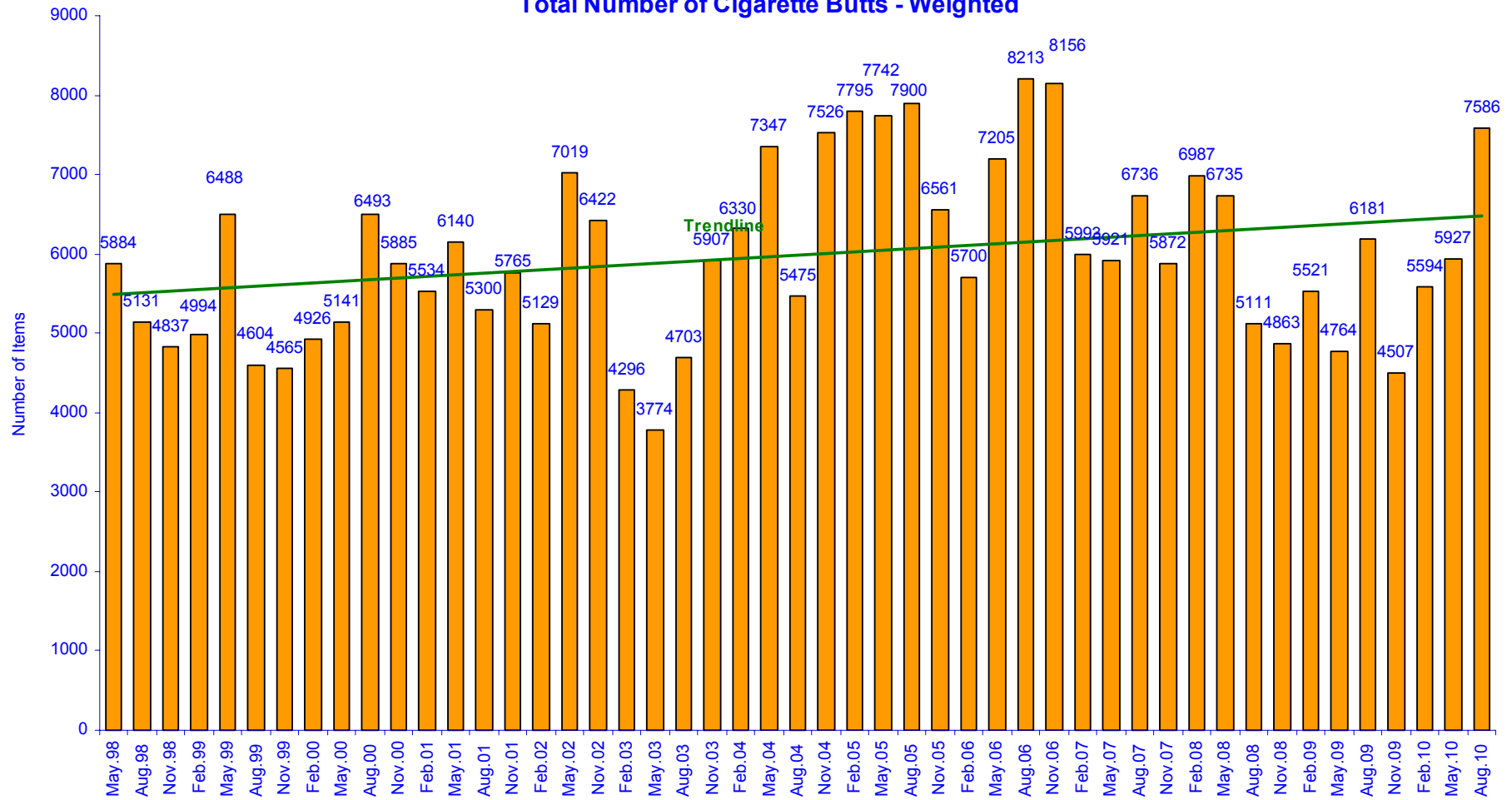
### Number of Litter Items by Site Type - Weighted



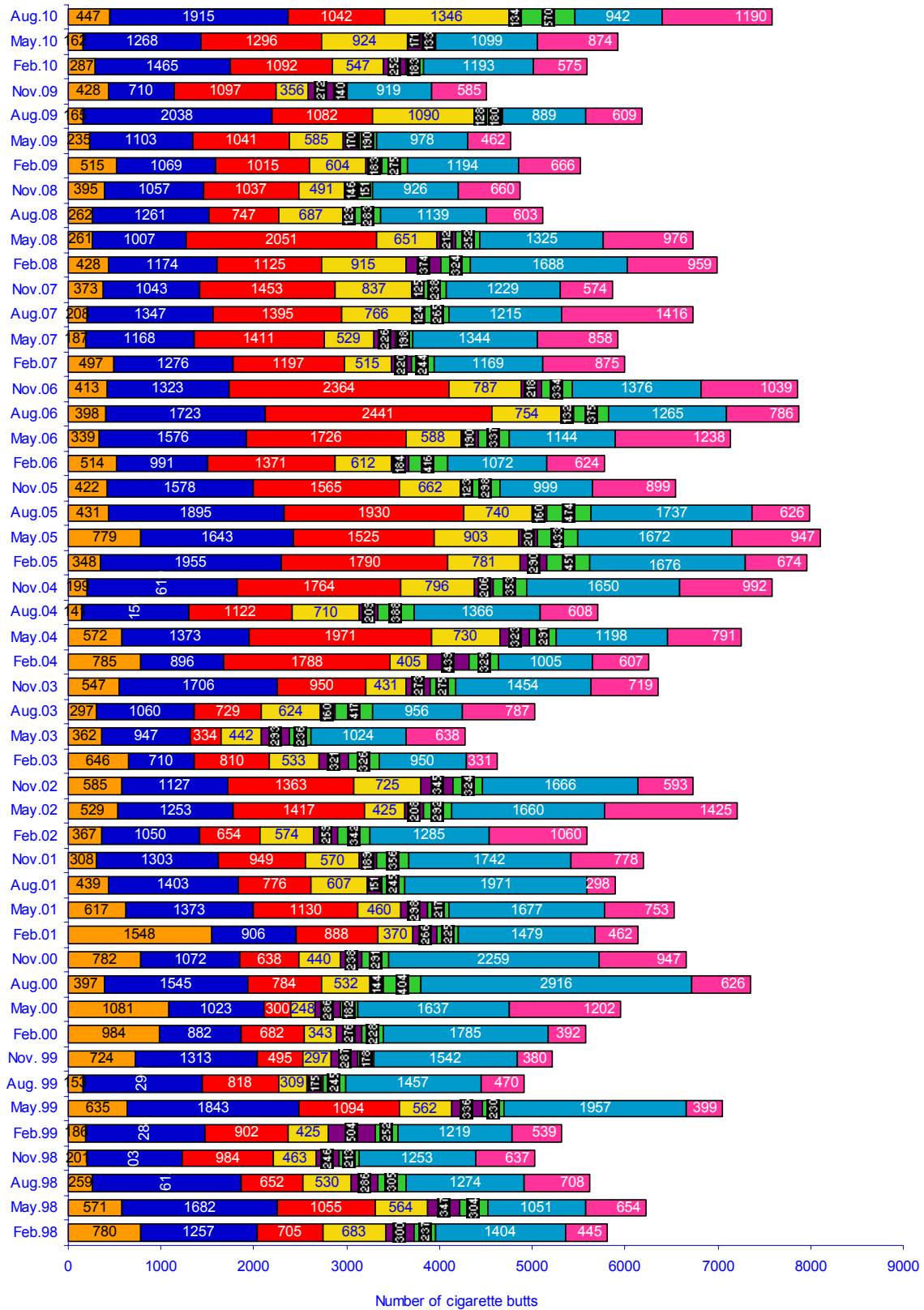
Proportion of Total Litter by Site Type - Weighted



### Total Number of Cigarette Butts - Weighted

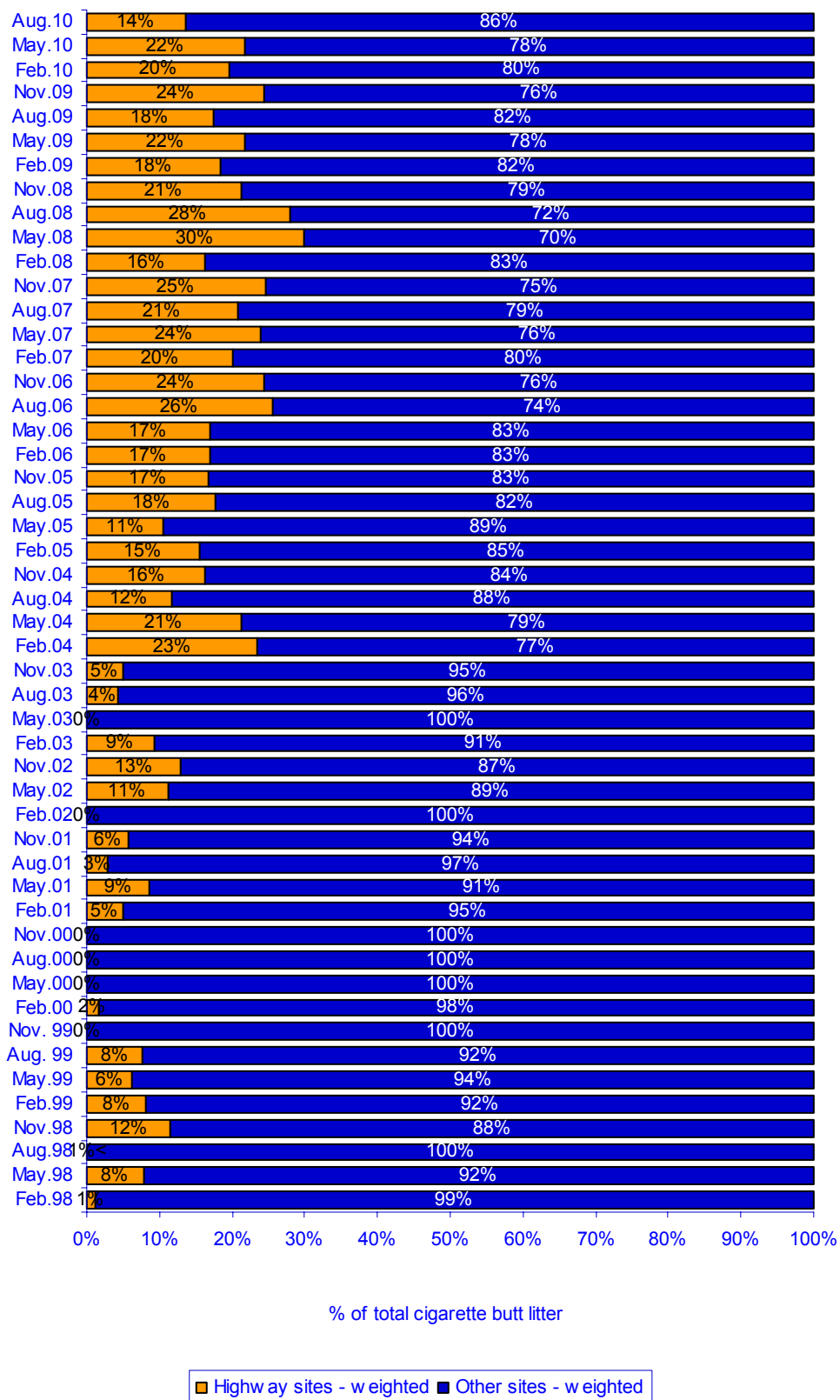


### Number of Cigarette Butts by Site Type - Weighted

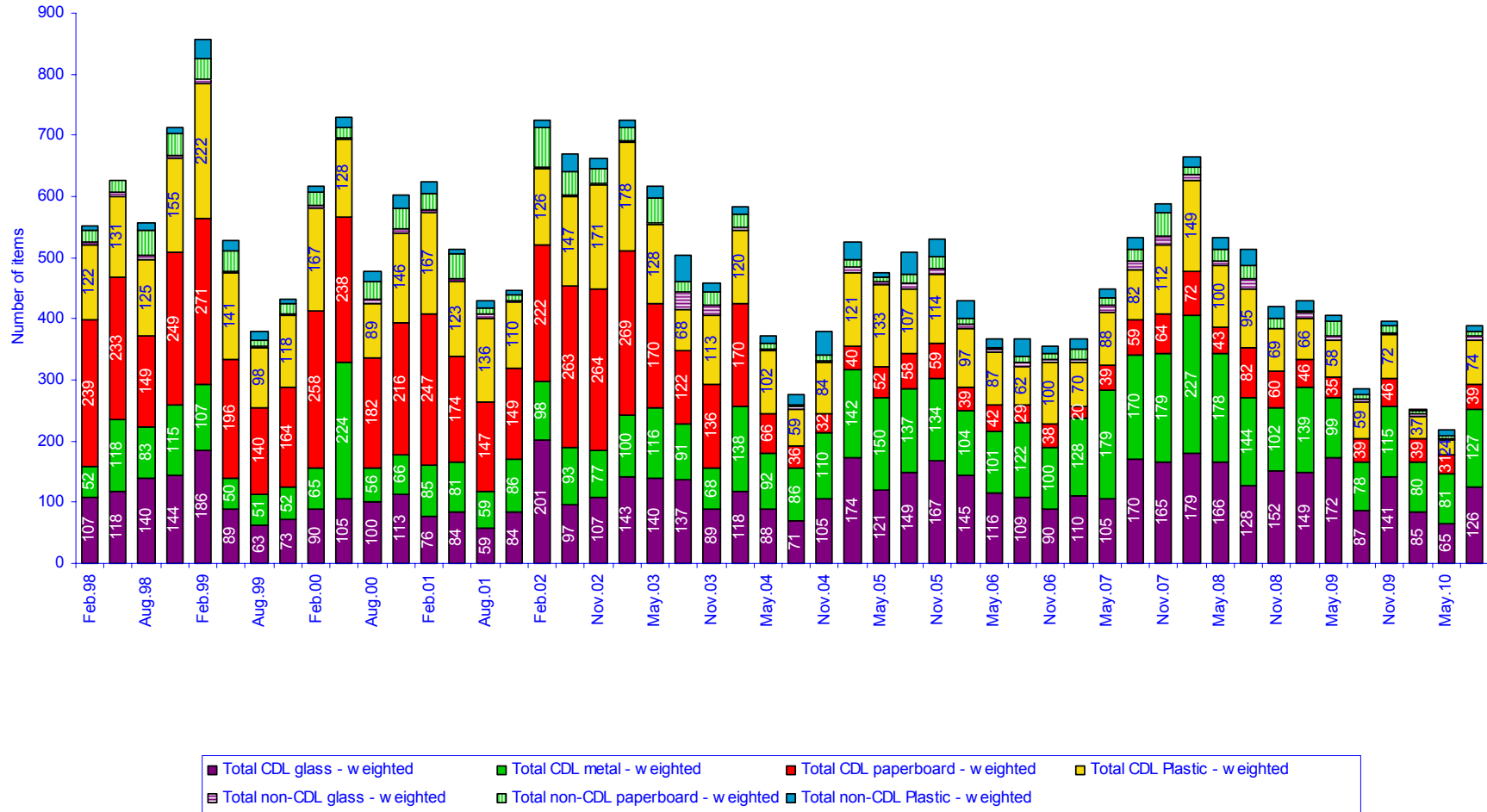


■ Beach 
 ■ Car park - w eighted 
 ■ Highway - w eighted 
 ■ Industrial - w eighted 
 ■ Recreational Park 
 ■ Residential 
 ■ Retail 
 ■ Shopping Centre - w eighted

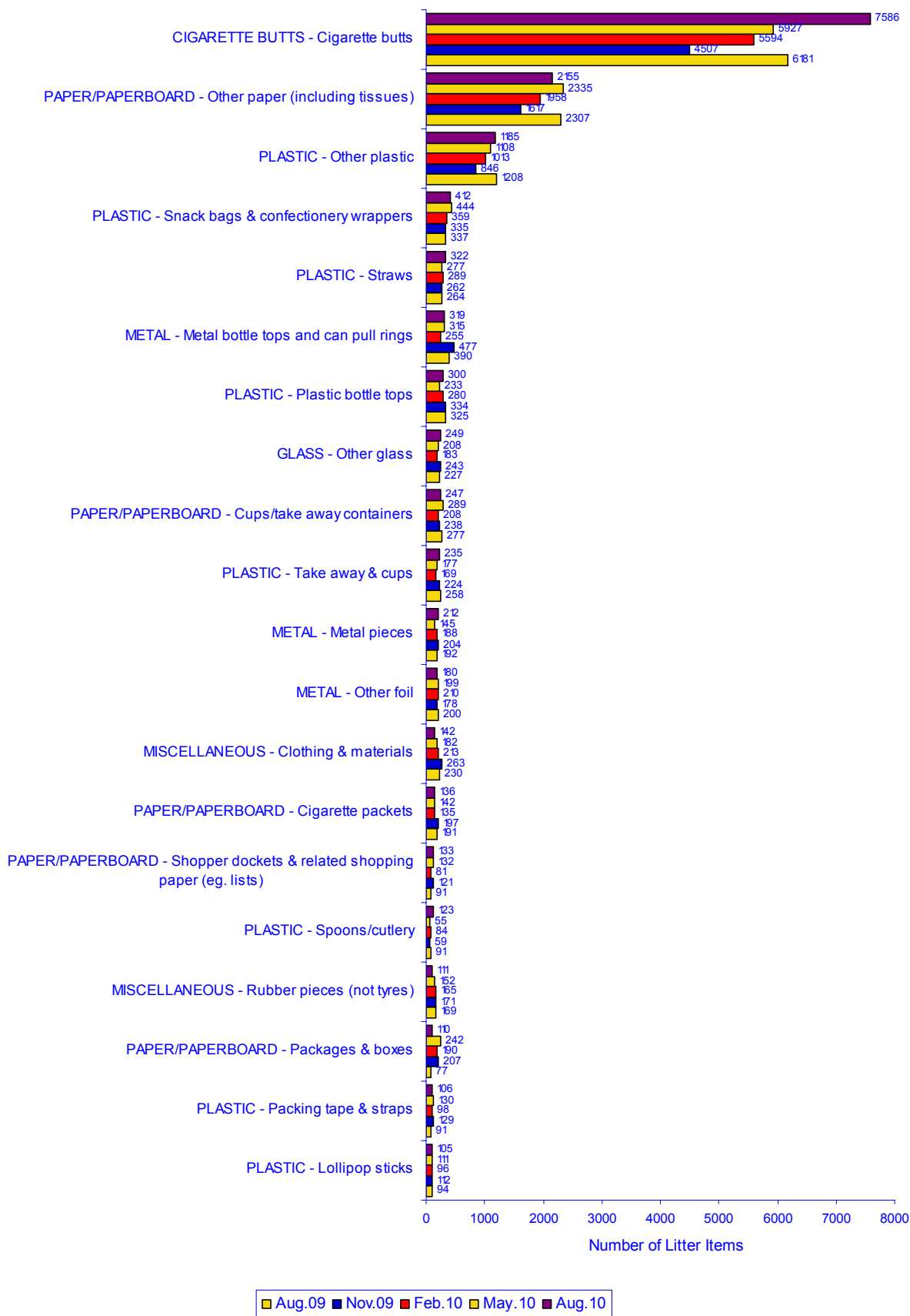
### Proportion of Total Cigarette Butt Litter at Highway sites & Other sites - Weighted



CDL and Non-CDL Beverage Items Within Material Categories - Weighted

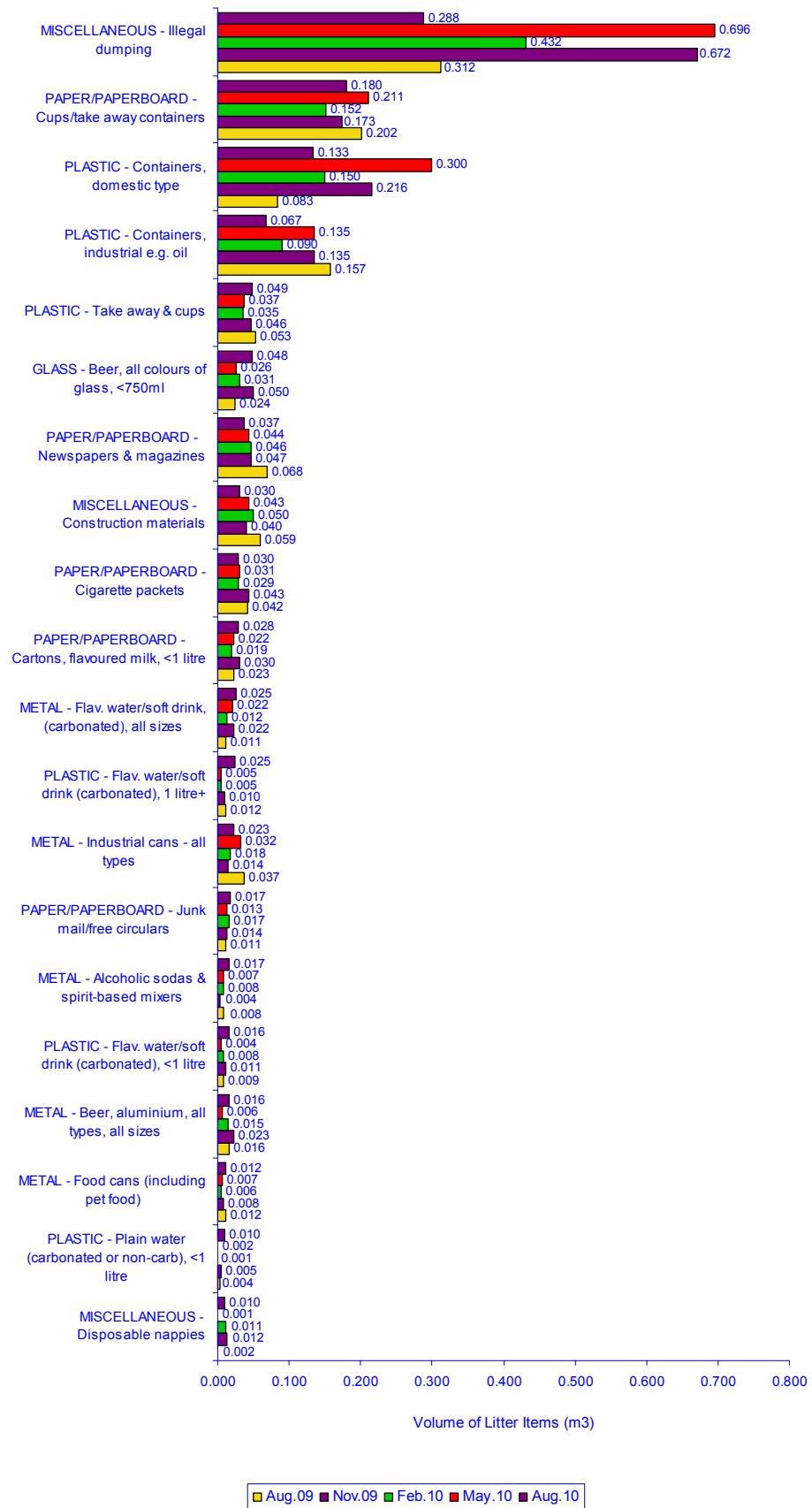


### Top 20 Litter Items - Highest Counts - Weighted

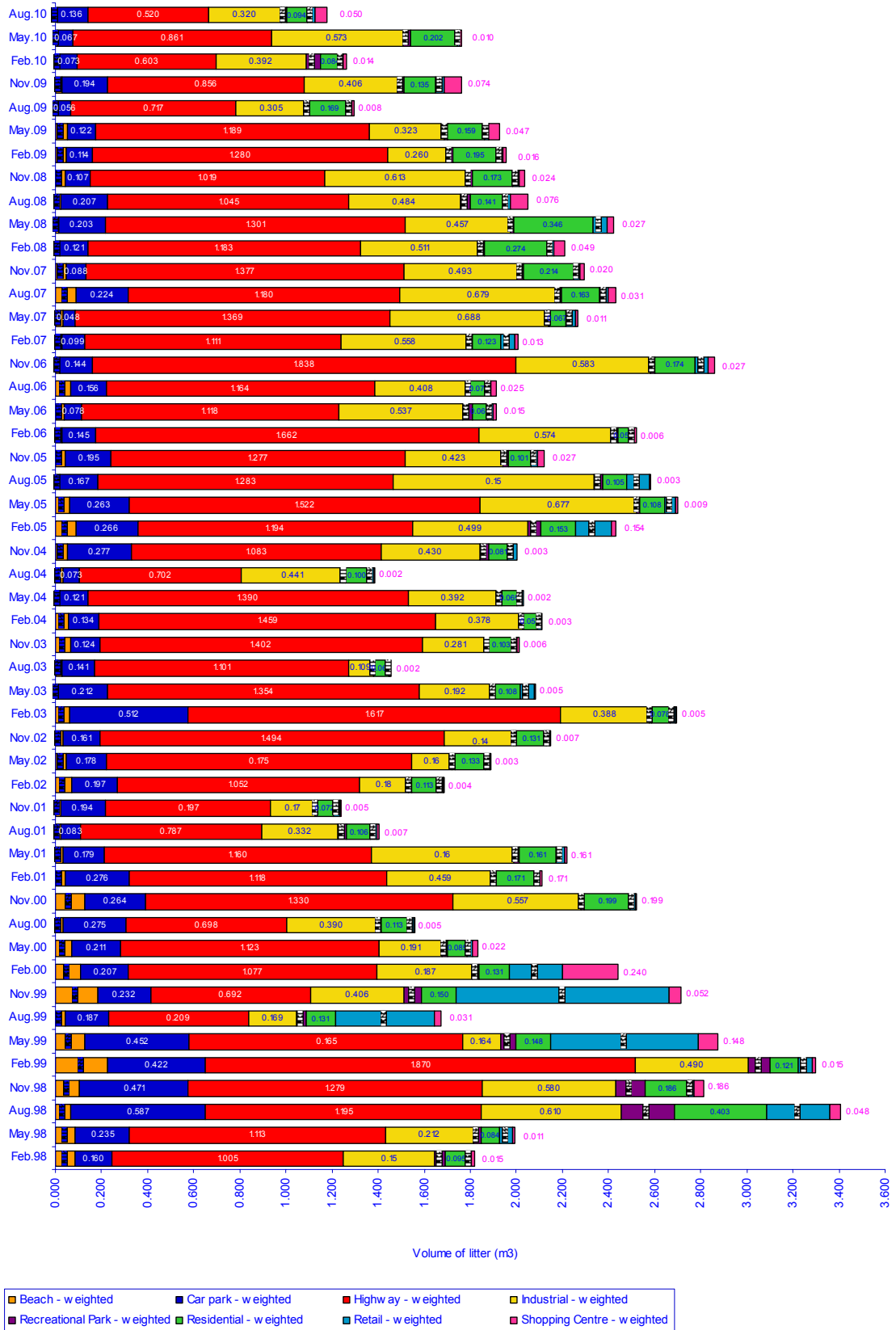


***Weighted Tracking Graphs  
- Volumes***

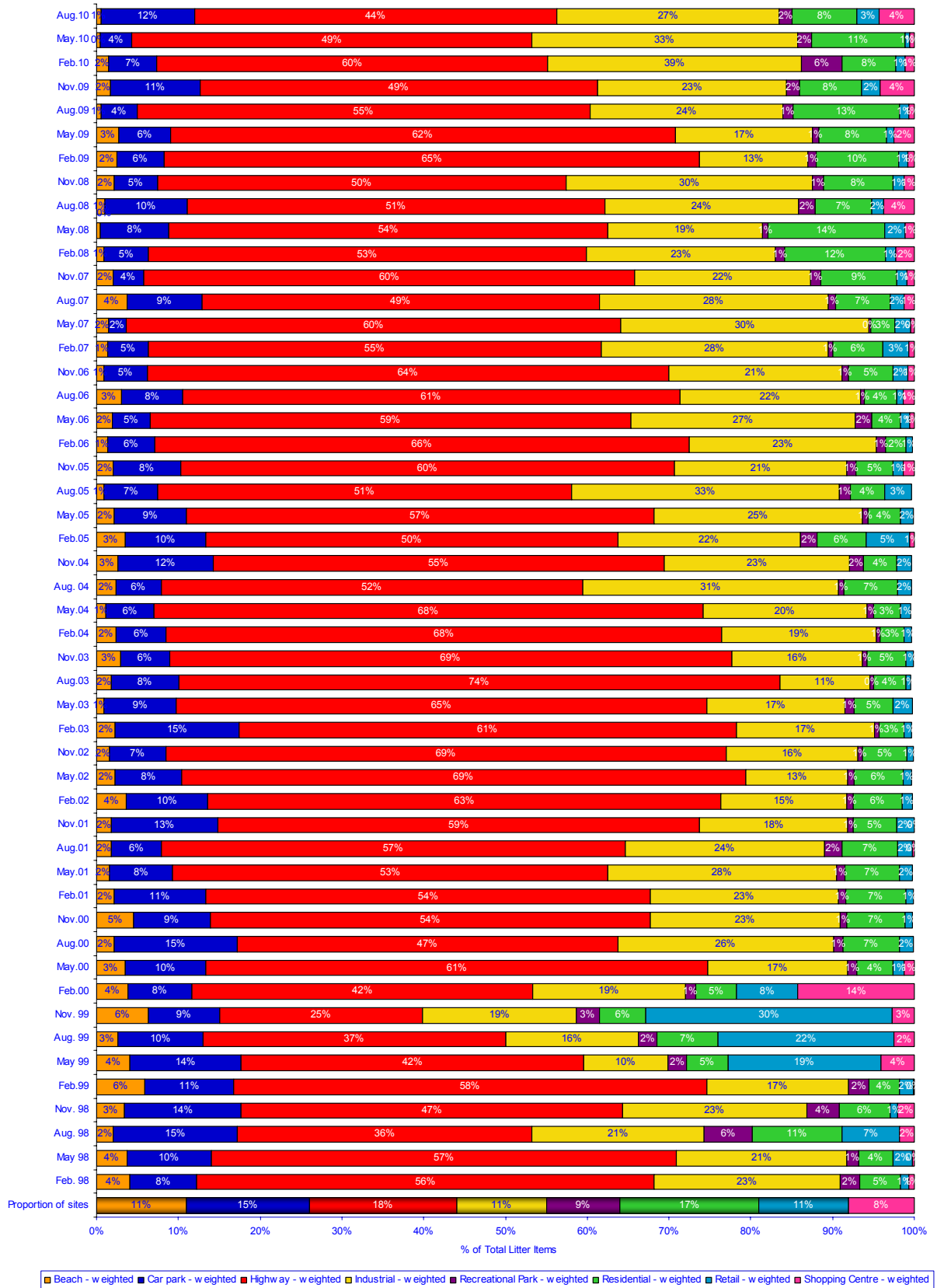
### Top 20 Litter Items by Volume - Weighted



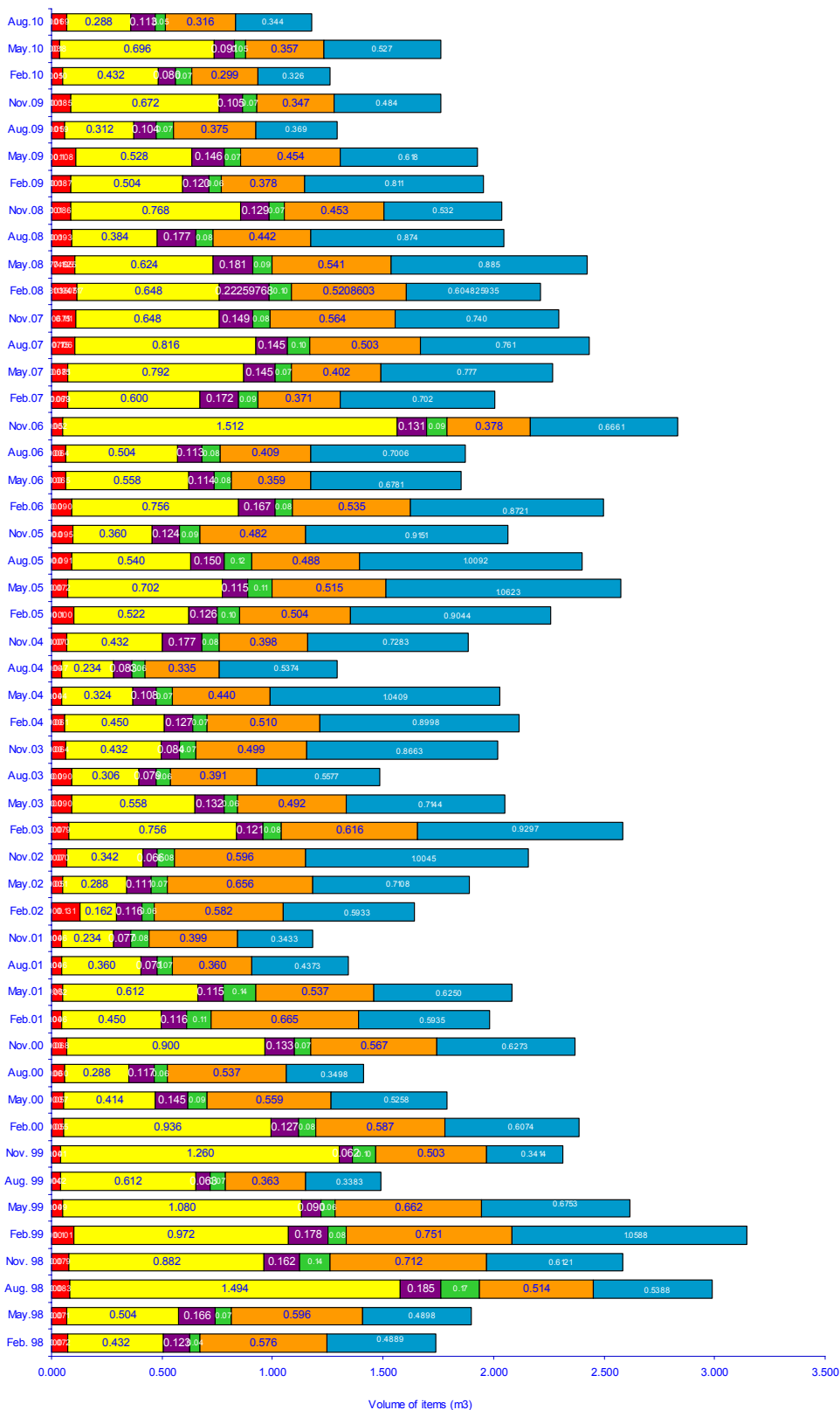
### Volume of Litter by Site Type - Weighted



**Proportion of Litter Volume in Total Litter Stream by Site Type - Weighted**

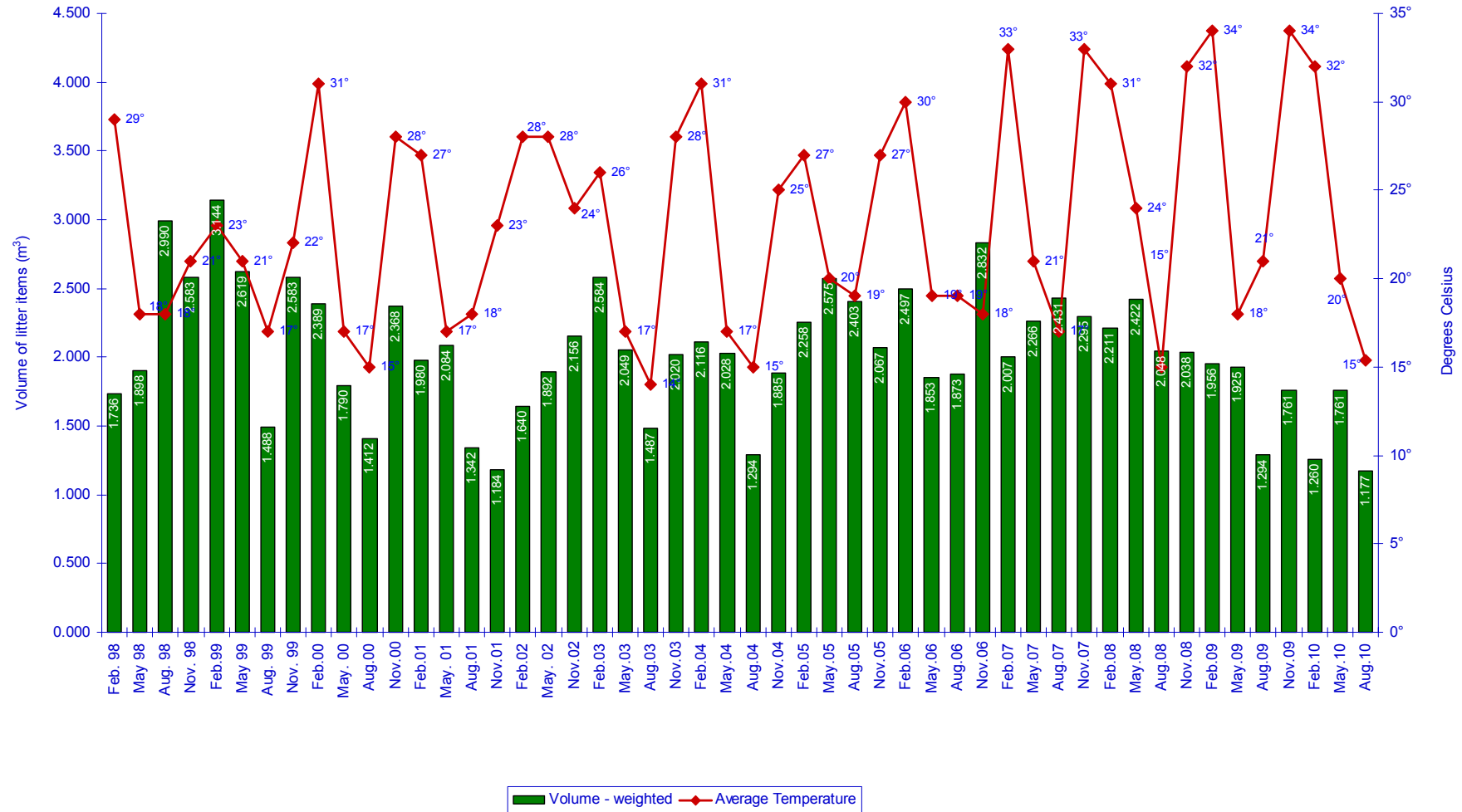


### Volume of Litter Items by Material Type - Weighted

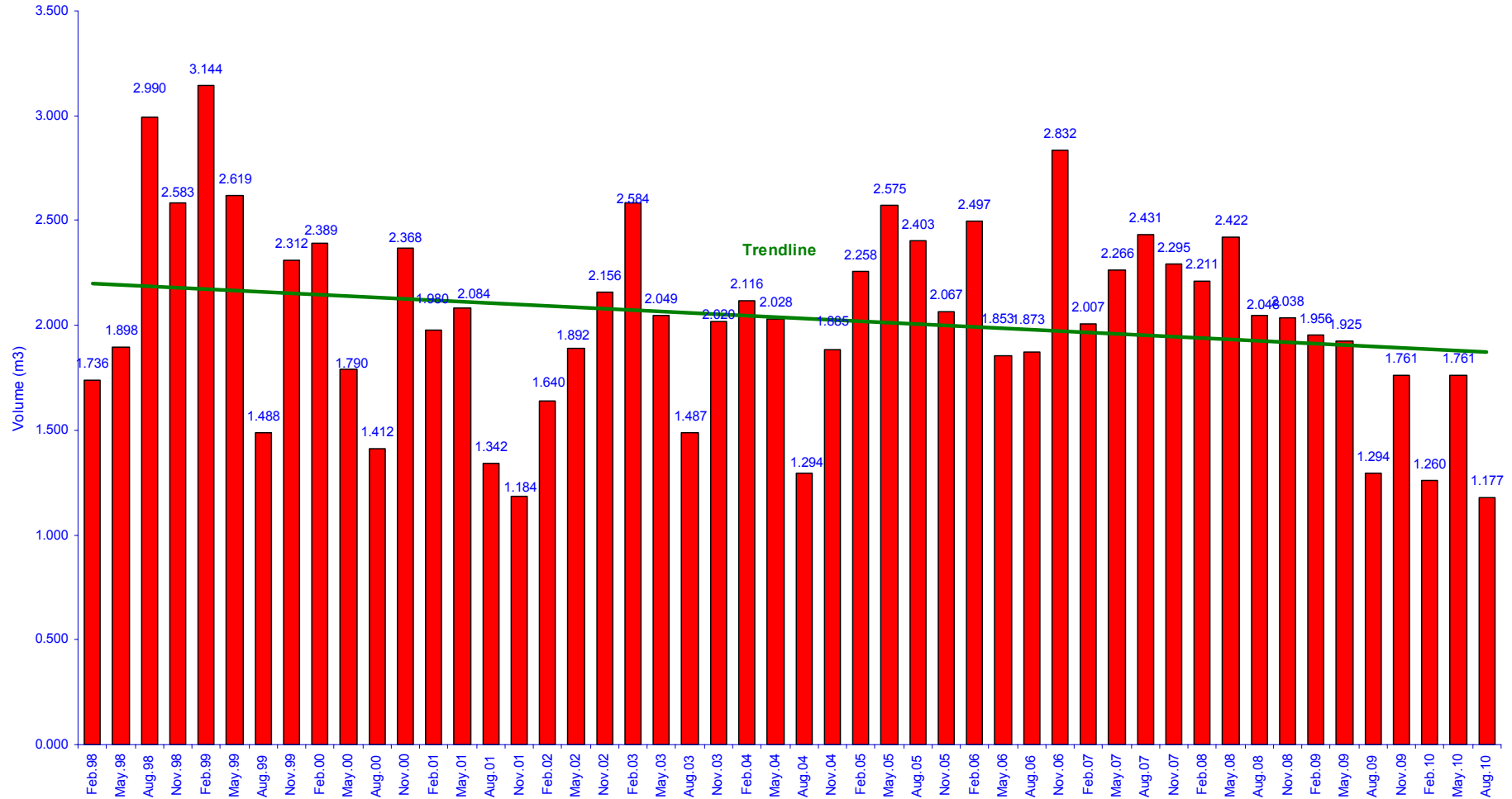


■ Cigarette butts - w eighted ■ Glass - w eighted ■ Illegal dumping - w eighted ■ Metal - w eighted ■ Miscellaneous (excluding illegal dumping) - w eighted ■ Paper/paperboard - w eighted ■ Plastic - w eighted

Weather Temperature and Total Volume of Litter Items - Weighted



Total Volume (Cubic Metres) of Litter - Weighted



***Appendix 2:  
Data Collection Form***

# KESAB - LITTER COUNT COVER SHEET

(REF: 7239)

**SITE CODE:**

PLEASE ENSURE THAT A COPY OF THIS COVER SHEET IS FILLED OUT AND ATTACHED TO THE COMPLETED LITTER COUNT FORM FOR EVERY SITE.

Date of count: \_\_\_ / \_\_\_ / \_\_\_

Site description: \_\_\_\_\_

Site responsible person: \_\_\_\_\_

Wet? (Y/N)

Windy? (Y/N)

Temp? °C

## Conditions: (Circle appropriate numbers)

1. Area appeared to be cleaned before count
2. Deliberate dumping of rubbish
3. Area was mowed before count causing proliferation
4. Very recent storm/flood damage litter build-up
5. Very recent or current high winds causing build-up
6. Recent public event held in area – **specify:**
7. Uncovered load spilled in area causing litter

## Please record number and type of bins in site area

No. of litter bins:

No. of butt bins:

No. and type of other bins: \_\_\_\_\_



PAPER / PAPERBOARD					PLASTIC				
Item Type	Brand	Work Area	Total	Item Type	Brand	Work Area	Total		
Ka Packages & boxes	NONE			Pf Plain water (carbonated or non-carb) 1 litre+	NONE				
Kb Cigarette packets	NONE			Pg Plain water (carbonated or non-carb) <1 litre	NONE				
Kc Cartons, milk, plain (white), all sizes	NONE			Ph Flavoured water/soft drink (carbonated) 1 litre+	NONE				
Kd Cartons, flavoured milk 1 litre or more	NONE			Pi Flavoured water/soft drink (carbonated) <1 litre	NONE				
Ke Cartons, flavoured milk < 1 litre	NONE			Pj Flavoured water/fruit juice drinks, sports drinks etc. (non-carb) 1 litre+	NONE				
Kf Cartons, flav. water / fruit juice drink/ sports drink, (non carb), 1 litre+	NONE			Pk Flavoured water/fruit juice drinks, sports drinks etc. (non-carb) <1 litre	NONE				
Kg Cartons, flav. water / fruit juice drink/ sports drink, (non carb), <1 litre	NONE			Pl Containers, industrial e.g. oil	NONE				
Kh Cartons, fruit juice, 1 litre or more	NONE			Pm Containers, domestic type	NONE				
Ki Cartons, fruit juice, < 1 litre	NONE			Pn Bags - light weight plastic shopping type carry bags	NONE				
Kj Newspapers & magazines	NONE			Po Bags - heavier glossy typically branded carry bags	NONE				
Kk Junk mail / free circulars	NONE			Pp Sacks - sheeting - other bags	NONE				
Kl Cup/take away containers	NONE			Pq Wine cask bladders	NONE				
Km Tickets, e.g. bus, ATM, vending machine etc.	NONE			Pr Straws	NONE				
Kn Ice cream wrappers	NONE			Ps 6 ring can holders	NONE				
Ko Paper bags	NONE			Pt Snack bags and confectionery wrappers	NONE				
Kp Shopper dockets & related shopping paper (eg, lists)	NONE			Pu Styrene foam boxes, sheets, etc	NONE				
Kq Other paper (including tissues)	NONE			Pv Packing tape & straps	NONE				
Pa White milk, all sizes	NONE			Pw Take away & cups	NONE				
Pb Flavoured milk, 1 litre or more	NONE			Px Plastic bottle tops	NONE				
Pc Flavoured milk, < 1 litre	NONE			Py Bread bag tags	NONE				
Pd Fruit juice, 1 litre or more	NONE			Pz Lollipop sticks	NONE				
Pe Fruit juice < 1 litre	NONE			P1 Spoons/ cutlery	NONE				
	NONE			P2 Drink pouches	NONE				
	NONE			P3 All other plastic	NONE				