



Litter Strategy Monitoring Wave 48 – February 2010 Report

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Section 1

Introduction

This document has been prepared by McGregor Tan Research to report on Wave 48 of the quarterly KESAB Litter Monitor. Surveys for the current Wave were conducted in South Australia during February 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 48 of the longitudinal study. The litter count was conducted during February 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 48

Executive Summary

The following Executive Summary covers the findings of the February 2010 (Wave 48) 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 February 2010 count.

Items Counted

A total of 13,124 litter items were counted across the 151 South Australian sites during Wave 48. These figures are just above those from the previous Monitor in November 2009 (12,322) but below those from the two Monitors in August 2009 (14,539) and May 2009 (14,433), and also below the February 2009 Monitor (14,422) conducted at the same time last year.

Cigarette butts was the main contributor (43%) to the litter count up from 4,507 in Wave 47 to 5594 in wave 48, but down from 6,181 in Wave 46. The count of most other litter items decreased in February 2010.

The decrease in items from Wave 48 is demonstrated most strongly amongst the following litter items:

- METAL - Metal bottle tops and can pull rings – 255 items, down from 477 items in Wave 47 (47% decrease)
- PAPER/ PAPERBOARD - Paper bags – 127 items, down from 192 items in Wave 47 (34% decrease)
- PAPER/ PAPERBOARD – Cigarette packets – 135 items, down from 197 items in Wave 47 (31% decrease)
- GLASS – Other glass - 183 items, down from 243 items in Wave 47 (25% decrease)
- PLASTIC - Take away & cups - 169 items, down from 224 items in Wave 47 (25% decrease)
- PLASTIC – Bottle tops - 280 items, down from 334 items in Wave 47 (16% decrease)
- MISCELLANEOUS - Clothing & materials – 213 items, down from 263 items in Wave 47 (19% decrease)
- PAPER/ PAPERBOARD - Shopper docket & related shopping paper (eg. lists) – 81 items, down from 121 items in Wave 47 (33% decrease)

- GLASS - Beer, all colours of glass, <750ml - 65 items, down from 104 items in Wave 47 (38% decrease)
- PLASTIC - Packing tape & straps - 98 items, down from 129 items in Wave 47 (24% decrease)
- PAPER/ PAPERBOARD - Cups/take away containers - 208 items, down from 238 items in Wave 47 (13% decrease)
- METAL - Foil take away – 27 items, down from 55 items in Wave 47 (51% decrease)
- METAL– Flavoured water/soft drink, (carbonated), all sizes – 28 items, down from 51 items in Wave 47 (45% decrease)

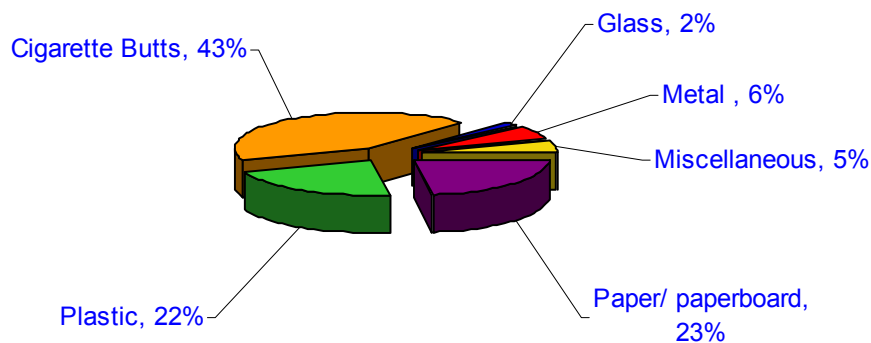
Conversely, there was an increase in several litter items, these included:

- CIGARETTE BUTTS – 5,594 items, up from 4,507 items in Wave 47 (24% increase)
- PAPER/ PAPERBOARD - Other paper (including tissues) – 1,958 items, up from 1,617 items in Wave 47 (21% increase)
- PLASTIC - Other plastic – 1,013 items, up from 846 in Wave 46 (20% increase)
- METAL - Other foil – 210 items, up from 178 items in Wave 47 (18% increase)
- MISCELLANEOUS - Construction materials – 139 items, up from 112 items in Wave 47 (24% increase)
- PLASTIC – Straws - 289 items, up from 262 items in Wave 47 (10% increase)

Cigarette butts accounted for the largest proportion of all litter items counted (43%, up from 37% in Wave 47, the same as the 43% in Wave 46, up from 33% in Wave 45, and up from 38% in Wave 44). Other material types represented the following proportions of the litter items counted:

- Plastic items (22%, down from 23% in Wave 47)
- Paper/ paperboard (22%, down from 22% in Wave 47)
- Metal items (6%, down from 9% in Wave 47)
- Miscellaneous items (5%, down from 6% in Wave 47)
- Glass items (2%, down from 3% in Wave 47)

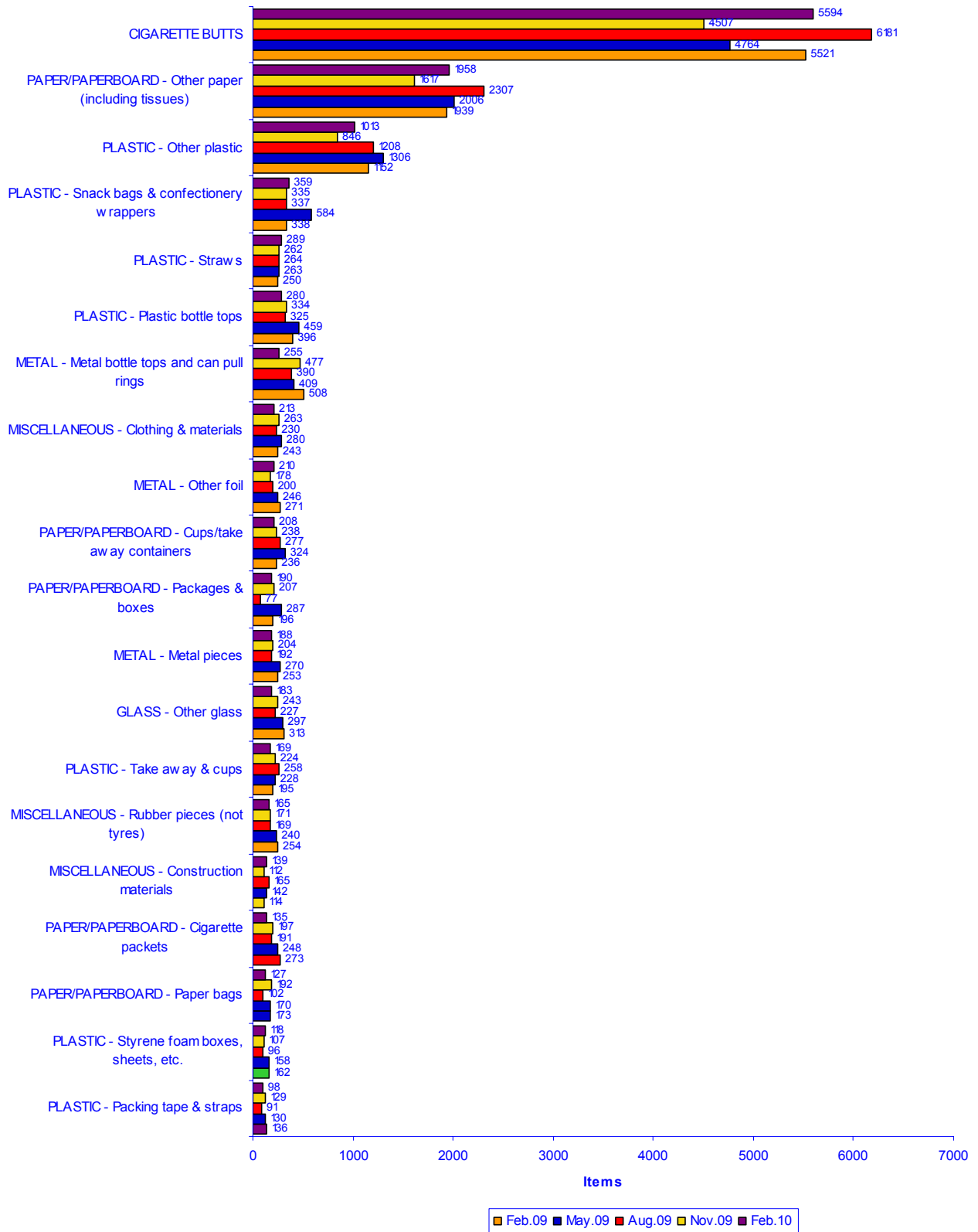
Items as Proportions of Total by Material Type



The top 20 ranking of litter items for February 2010 also included MISCELLANEOUS - Construction materials and PASTIC – Styrene foam boxes, sheets, etc., not present previously in Wave 47.

The items that exited the top 20 as a result of the new entrants were PAPER/ PAPERBOARD – Shopper docket & related shopping paper (eg. lists) and PLASTIC - Sacks - sheeting - other bags.

TOP 20 CATEGORIES - HIGHEST COUNTS



Litter Volume

The total volume of litter recorded in February 2010 amounted to 1.261 cubic metres, 28% lower than the estimated litter volume established in the November 2009 Monitor (1.761m³). This total litter volume is also, 35% lower than the estimated litter volume established during the volume recorded at the same time in February 2009 (1.951m³).

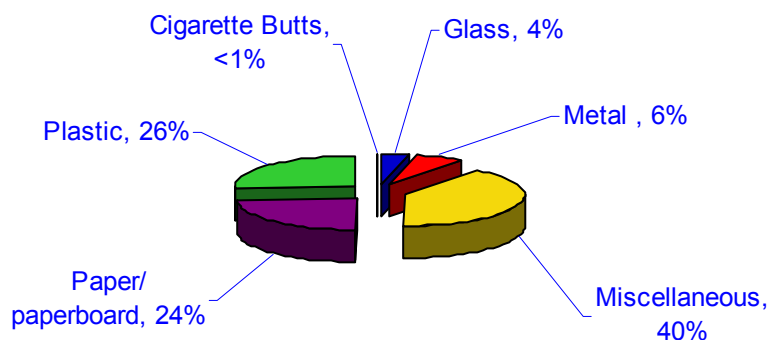
Miscellaneous items contributed the largest proportion of litter volume for Wave 48 (40%, down from 42% in Wave 47). Illegally dumped items formed the majority (86%) of the miscellaneous litter volume and represented the largest decrease in the volume of litter (0.432, down from 0.672m³ in Wave 47).

Plastic litter items (26%, down from 27% in Wave 47) and paper/ paperboard items (24%, up from 20% in Wave 47) accounted for the second and third largest proportions of litter volume in February 2010.

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

- Metal (6%, unchanged from Wave 47)
- Glass (4%, down from 5% in Wave 47)
- Cigarette butts (<1%, unchanged from Wave 47)

Litter Volume as a Proportion of Total Volume



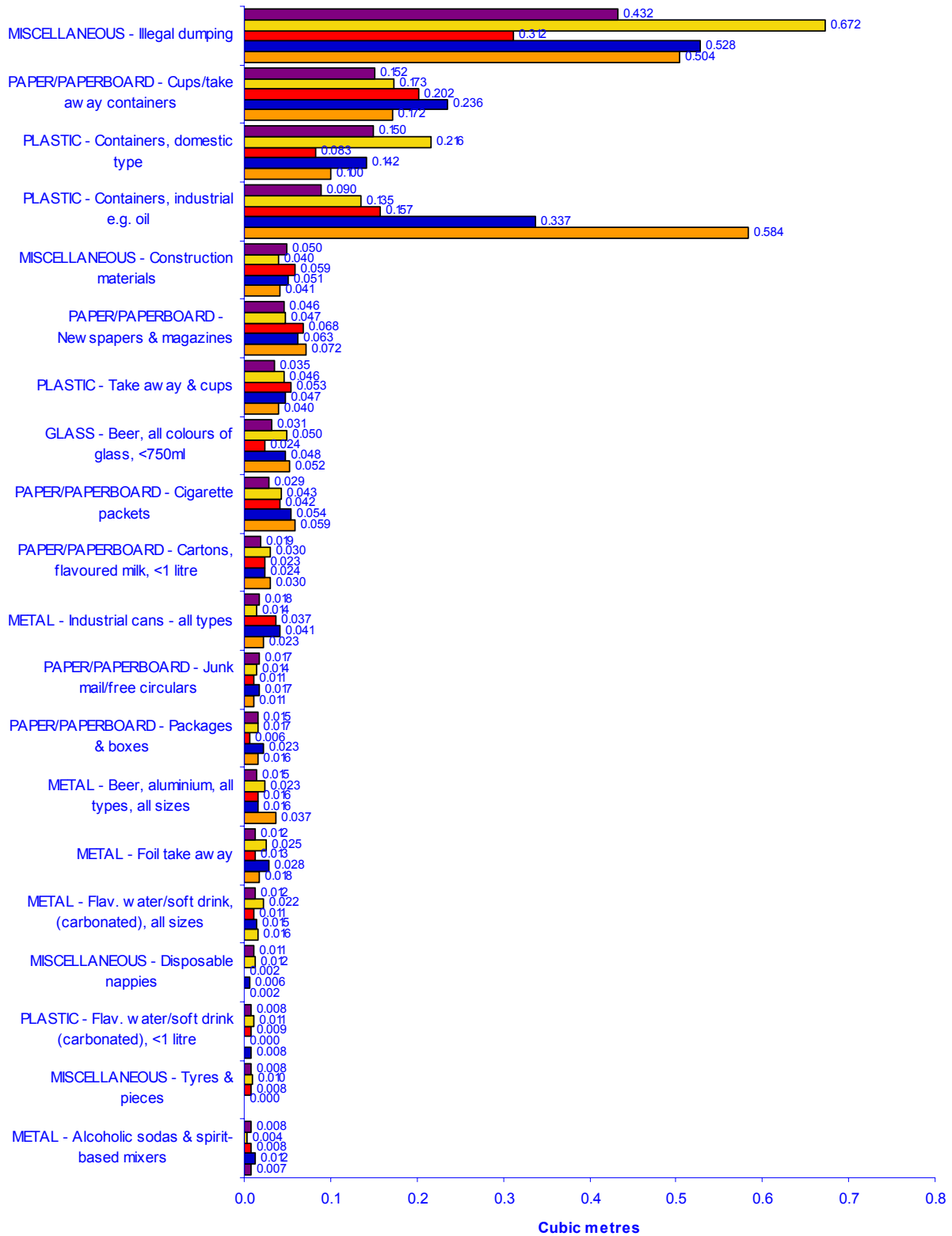
The items associated with the largest estimated litter volumes in Wave 48 included:

- MISCELLANEOUS - Illegal dumping (0.432m³, down from 0.672m³ in Wave 47)
- PAPER/PAPERBOARD - Cups/take away containers (0.152m³, down from 0.173m³ in Wave 47)
- PLASTIC - Containers, domestic type (0.150m³, down from 0.216m³ in Wave 47)
- PLASTIC - Containers, industrial e.g. oil (0.090m³, down from 0.135m³ in Wave 47)
- MISCELLANEOUS – Construction material (0.050m³, up from 0.040m³ in Wave 47)
- PAPER/PAPERBOARD – Newspapers & magazines (0.046m³, down from 0.047m³ in Wave 47)
- PLASTIC - Take away & cups (0.035m³, down from 0.046m³ in Wave 47)
- GLASS - Beer, all colours of glass, <750ml (0.031m³, up from 0.050m³ in Wave 47)

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 MISCELLANEOUS – Tyres & pieces and METAL - Alcoholic sodas & spirit-based mixers.

With new entrants there are always those items that exit from the top 20 volume list, in Wave 47 they were PLASTIC - Flavoured water/ fruit juice drink/sports drink (non-carbonated), 1 litre+ and GLASS - Beer, all colours of glass, 750ml+.

TOP 20 CATEGORIES - LARGEST VOLUMES



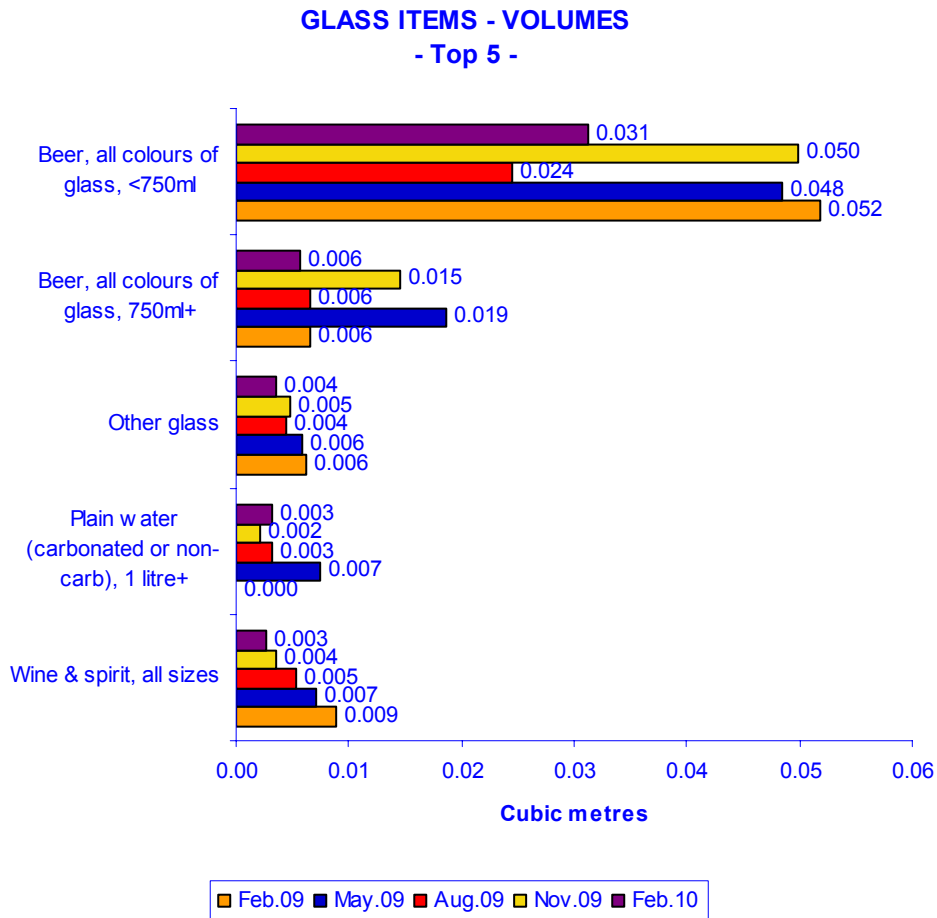
Feb.09 May.09 Aug.09 Nov.09 Feb.10

3.1 Glass

Items

A total of 271 (down from 388 in Wave 47) glass litter items were counted during Wave 48. The most frequently recorded glass items included:

- Other glass (183, down from 243 items in Wave 47)
- Beer, all colours of glass <750ml (65, down from 104 items in Wave 47)
- Beer, all colours of glass 750ml+ (7, down from 18 items in Wave 47)
- Alcoholic sodas/spirit-based mixers, all sizes (5 items, up from nil items in Wave 47)
- Wine cooler, all sizes (3 items, up from 1 in Wave 47)
- Wine and spirits, all sizes (3 items, down from 4 in Wave 47)
- Plain water (carbonated or non-carbonated), 1 litre+ (3 items, up from 2 in Wave 47)



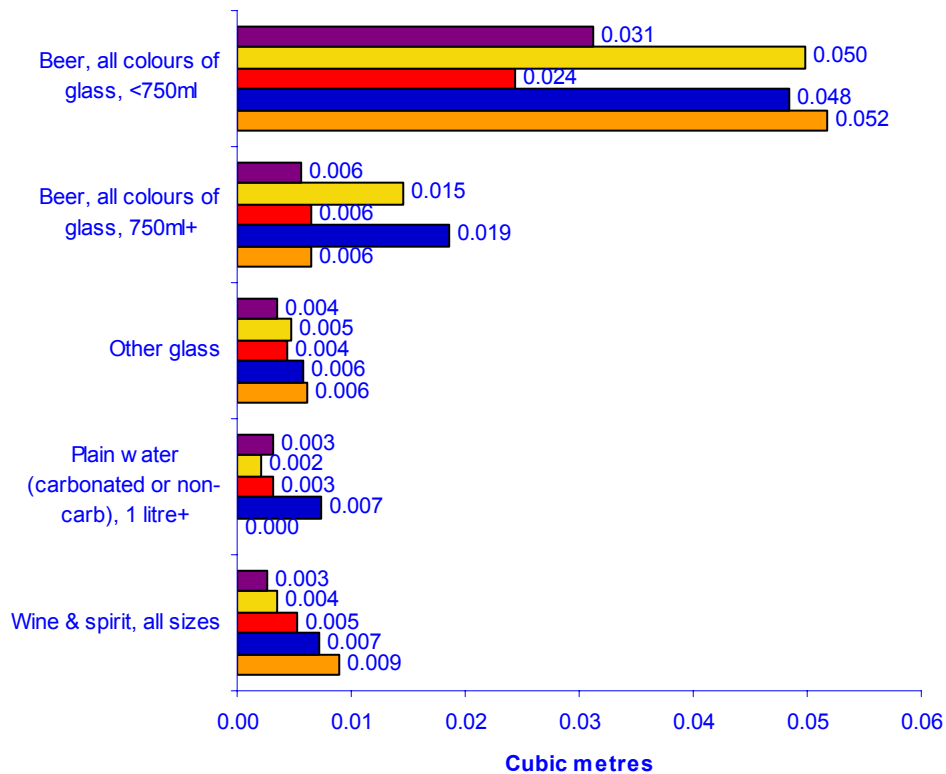
Volume

Glass litter items accounted for 0.050m³ (down from 0.085m³ in Wave 47) in estimated litter volume.

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

- Beer, all colours of glass, <750 ml (0.031m³, down from 0.050m³ in Wave 47)
- Beer, all colours of glass, 750+ ml (0.006m³, down from 0.015m³ in Wave 47)
- Other glass (0.004m³, down from the 0.005m³ in Wave 47)
- Plain water (carbonated or non-carbonated), 1 litre+ (0.003m³, up from the 0.002m³ in Wave 47)
- Wine and spirits, all sizes (0.003m³, down from 0.004m³ in Wave 47)

GLASS ITEMS - VOLUMES
- Top 5 -



Legend: Feb.09 (orange), May.09 (dark blue), Aug.09 (red), Nov.09 (yellow), Feb.10 (purple)

3.2 Metal

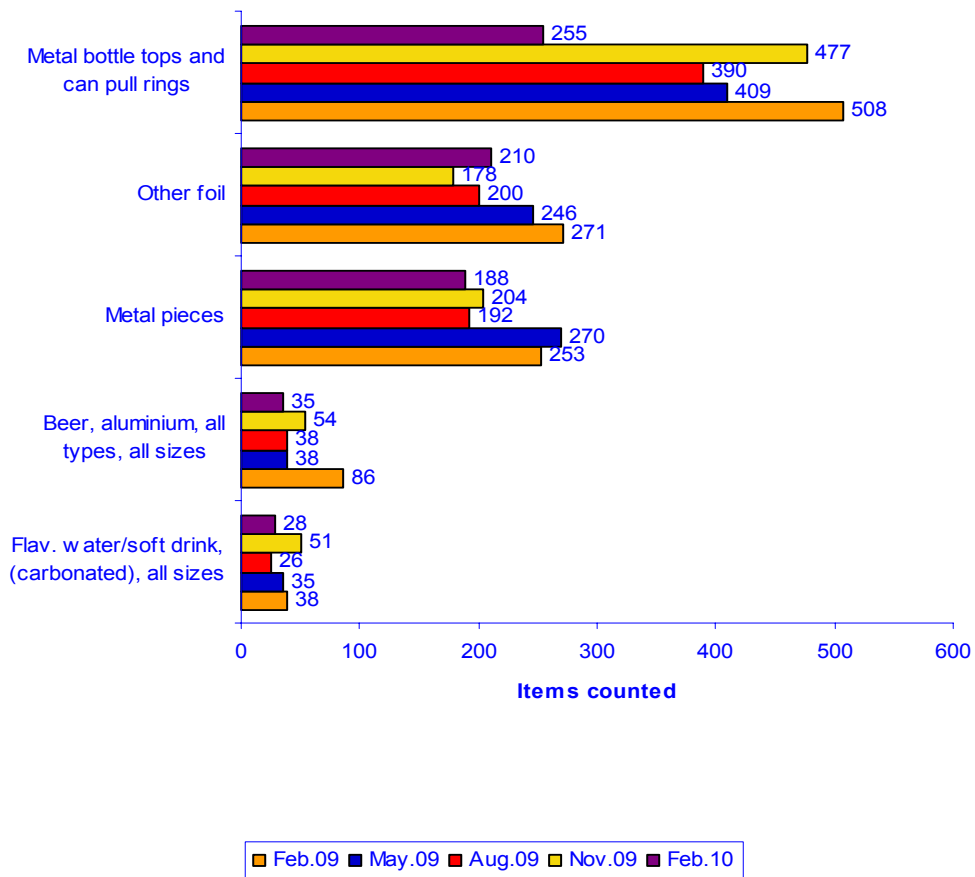
Items

A total of 782 (down from 1054 in Wave 47) metal litter items were counted during February 2010.

The most frequently counted metal litter items included:

- Metal bottle tops and can pull rings (255 items, down from 477 in Wave 47)
- Other foil (210 items, up from 178 in Wave 47)
- Metal pieces (188 items, down from 204 in Wave 47)
- Beer, aluminium, all types, all sizes (35 items, down from 54 in Wave 47)
- Flavoured water/soft drink, (carbonated), all sizes (28 items, down from 51 in Wave 46)

METAL ITEMS - COUNTS - Top 5

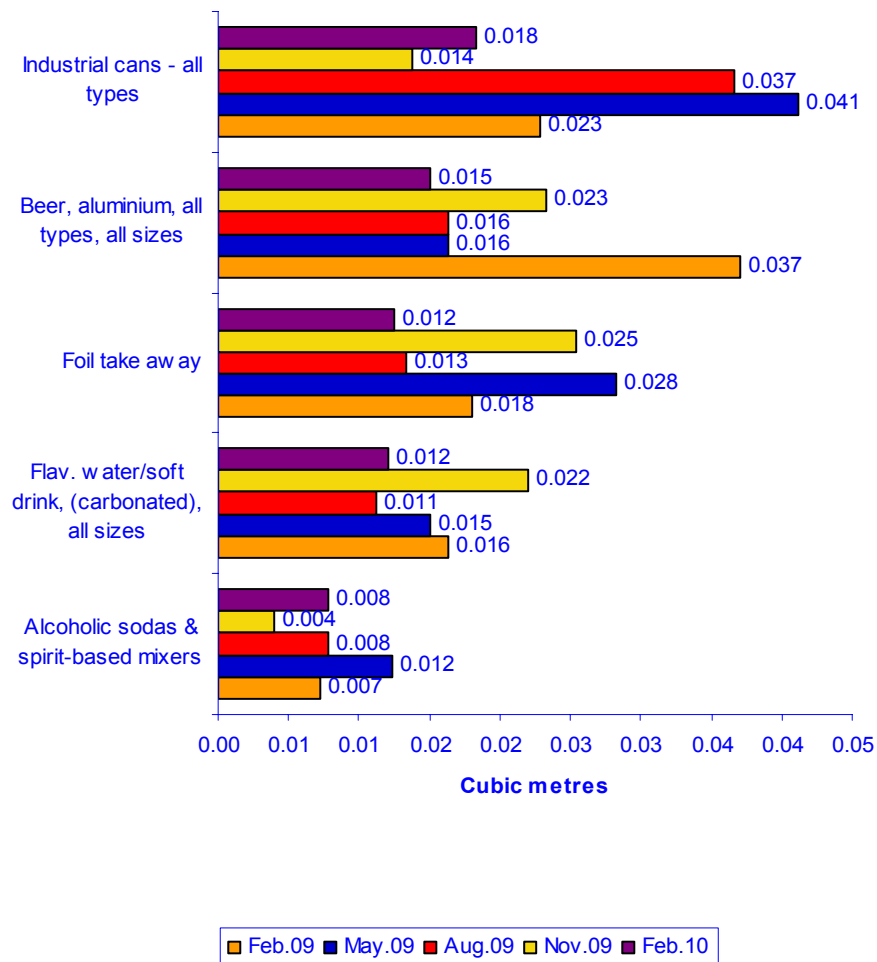


Volume

Metal litter items accounted for a total estimated litter volume of 0.080m³ (down from 0.105m³ in Wave 47). The metal items associated with the largest estimated volumes of litter during Wave 48 included:

- Industrial cans – all types (0.018m³, up from 0.014m³ in Wave 47)
- Beer, aluminium, all types, all sizes (0.015m³, down from 0.023m³ in Wave 47)
- Foil/ take away (0.012m³, down from 0.025m³ in Wave 47)
- Flavoured water/ soft drink (carbonated), all sizes (0.012m³, down from 0.022m³ in Wave 47)
- Alcoholic sodas & spirit-based mixers (0.008m³, up from 0.004m³ in Wave 47)

METAL ITEMS - VOLUMES - Top 5



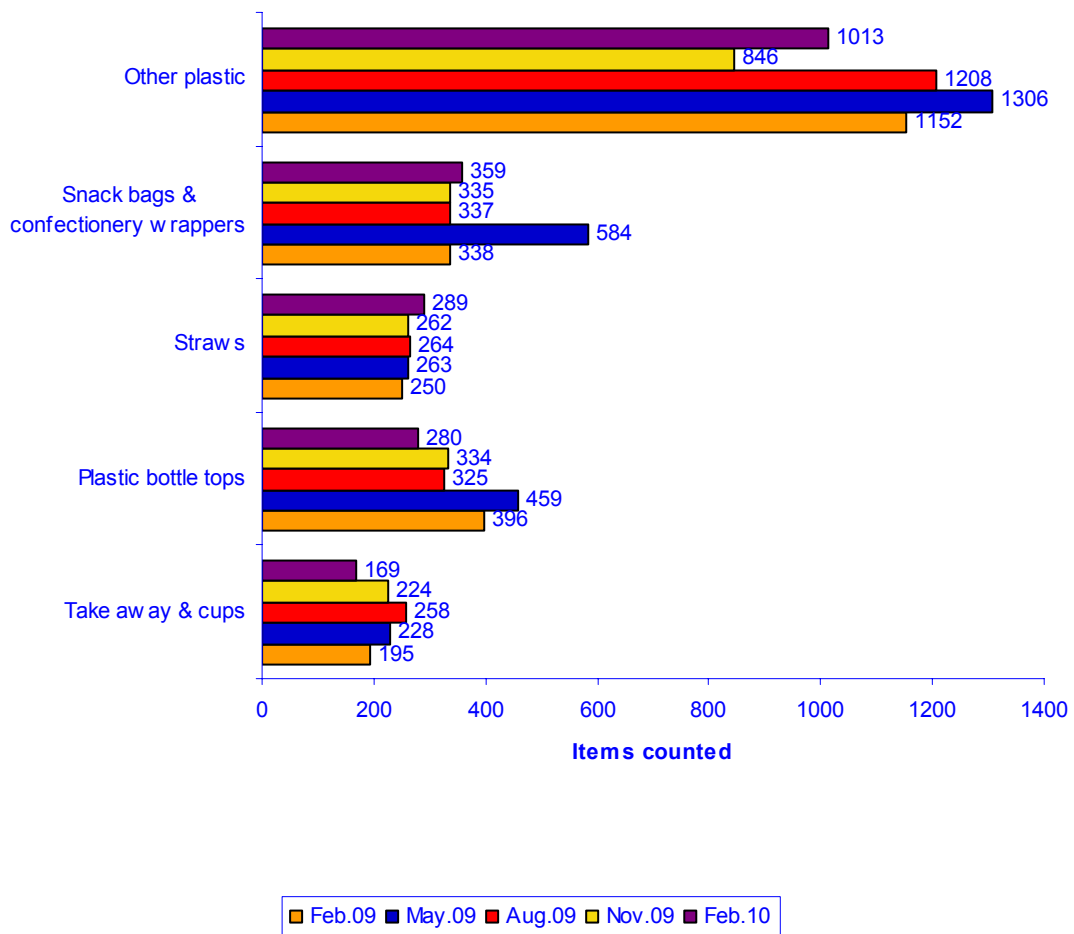
3.3 Plastic

Items

A total of 2,831 (up from 2,780 in Wave 47) plastic litter items were counted during Wave 48. The most frequently counted plastic litter items included:

- Other plastic (1,013 items, up from 846 in Wave 47)
- Snack bags & confectionery wrappers (359 items, up from 335 in Wave 47)
- Straws (289 items, up from 262 in Wave 47)
- Plastic bottle tops (280 items, down from 334 in Wave 47)
- Take away & cups (169 items, down from 224 in Wave 47)

PLASTIC ITEMS - COUNTS - Top 5

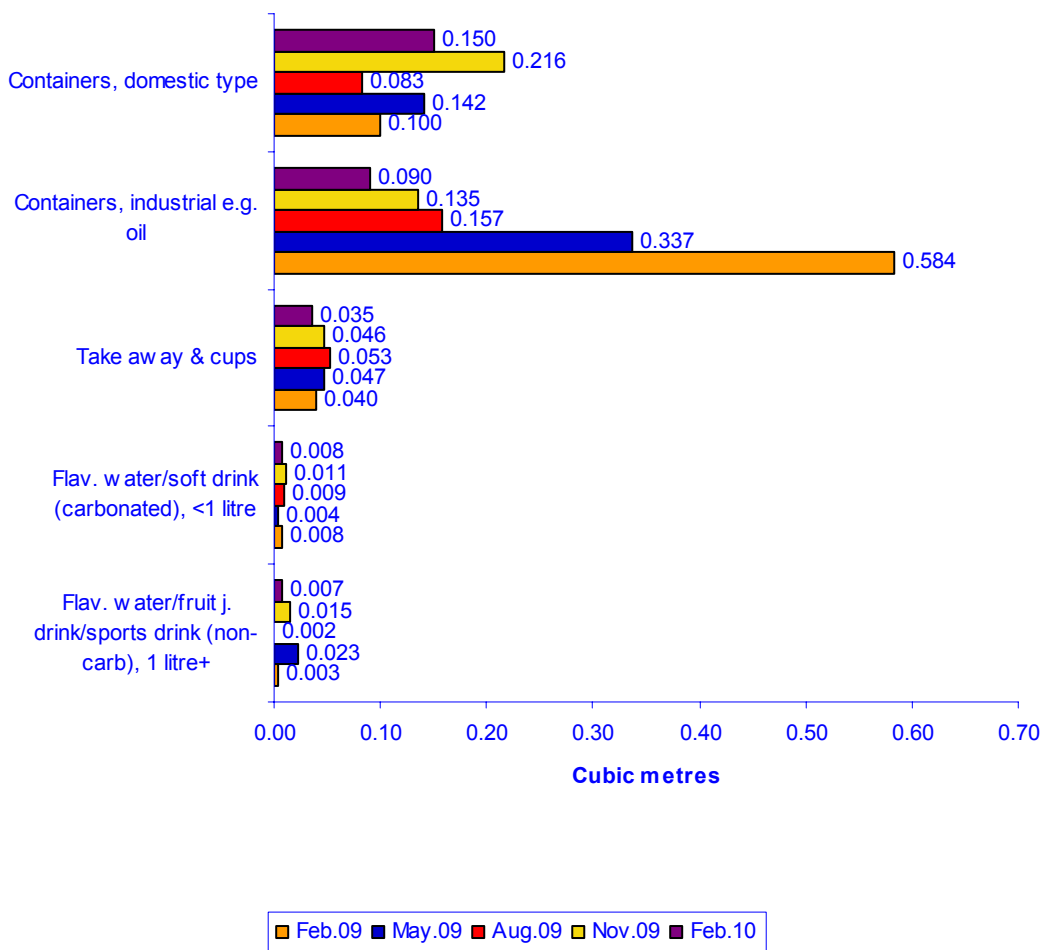


Volume

Plastic items were associated with an estimated litter volume of 0.326m³ (down from 0.484m³ in Wave 47). Items which represented the largest volumes within the Wave 48 litter count included:

- Containers, domestic type (0.150m³, down from 0.216m³ in Wave 47)
- Containers, industrial e.g. oil (0.090m³, down from 0.135m³ in Wave 47)
- Take away & cups (0.035m³, down from 0.046m³ in Wave 47)
- Flavoured water/ soft drink (carbonated), <1 litre (0.008m³, down from 0.011m³ in Wave 47)
- Flavoured water/ fruit juice drink/ sports drink (non-carbonated), 1 litre+ (0.007m³, up from 0.015m³ in Wave 47)

PLASTIC ITEMS - VOLUMES - Top 5



3.4 Paper/ Paperboard

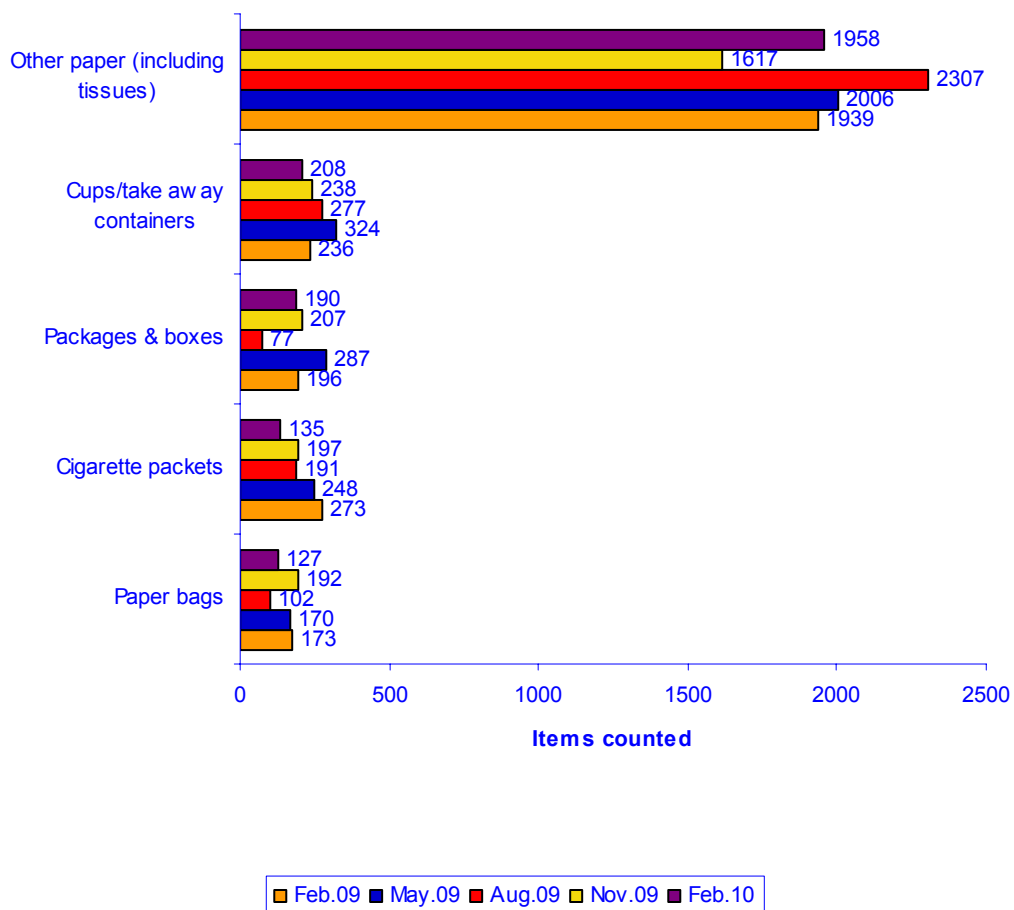
Items

A total of 2,972 (up from 2,845 in Wave 47) paper/ paperboard litter items were recorded during Wave 48.

The most frequently identified items within this material type were:

- Other paper – including tissues (1,958 items, up from 1,617 in Wave 47)
- Cups/ take away containers (208 items, down from 238 in Wave 47)
- Packages & boxes (190 items, down from 207 in Wave 47)
- Cigarette packets (135, down from 197 in Wave 47)
- Paper bags (127 items, down from 192 in Wave 47)

PAPER/ PAPERBOARD ITEMS - COUNTS - Top 5



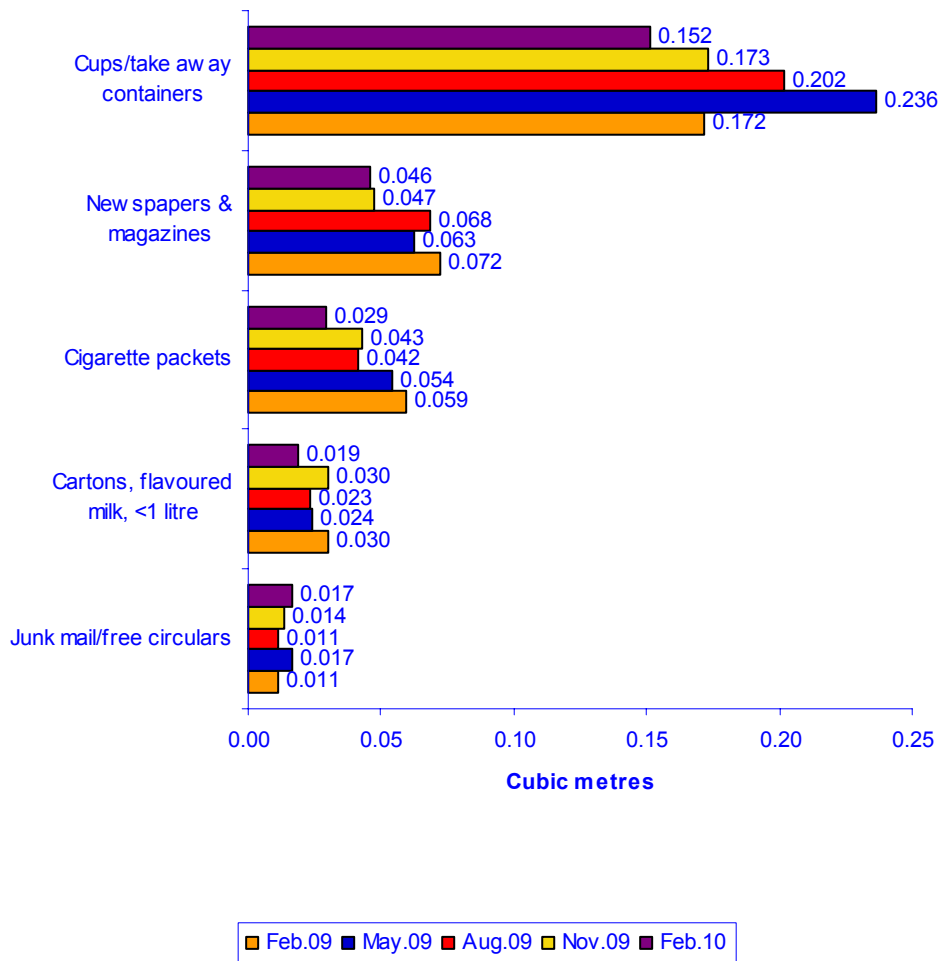
Volume

Paper/ Paperboard items accounted for 0.299m³ in estimated litter volume (down from 0.347m³ in Wave 47).

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

- Cups/take away containers (0.152m³, down from 0.173m³ in Wave 47)
- Newspapers & magazines (0.046m³, down from 0.047m³ in Wave 47)
- Cigarette packets (0.029m³, down from 0.043m³ in Wave 47)
- Cartons, flavoured milk, <1 litre (0.019m³, down from 0.030m³ in Wave 47)
- Junk mail/ free circulars (0.017m³, up from 0.014m³ in Wave 47)

PAPER/ PAPERBOARD ITEMS - VOLUMES - Top 5



3.5 *Miscellaneous*

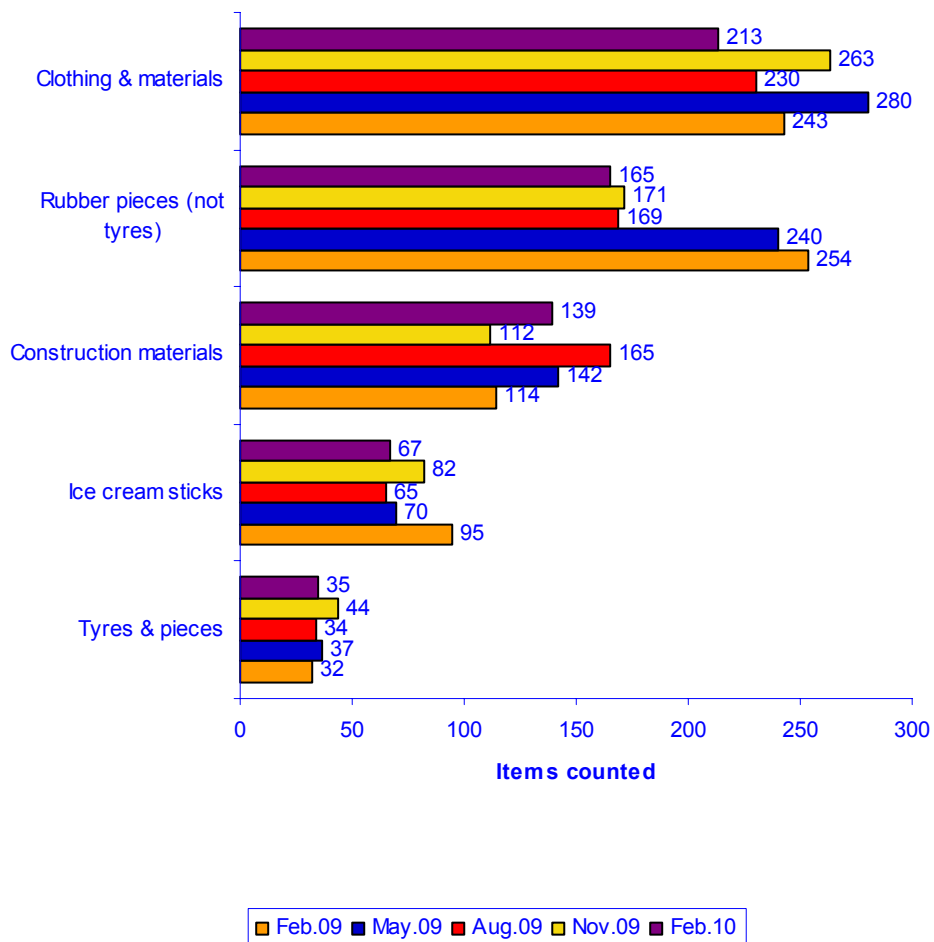
Items

A total of 674 (down from 748 in Wave 47) miscellaneous litter items were counted during Wave 48 in February 2010.

The most frequently recorded items included:

- Clothing & materials (213 items, down from 263 in Wave 47)
- Rubber pieces – not tyres (165 items, down from 171 in Wave 47).
Rubber pieces in this category include vehicle rubber mouldings, hose pipes and tubing, bicycle handle bar grips and casings, pram mouldings and strips.
- Construction materials (139 items, up from 112 in Wave 47)
- Ice cream sticks (67 items, down from 82 in Wave 47)
- Tyres & pieces (35 items, down from 44 in Wave 47)

MISCELLANEOUS ITEMS - COUNTS - Top 5



Volume

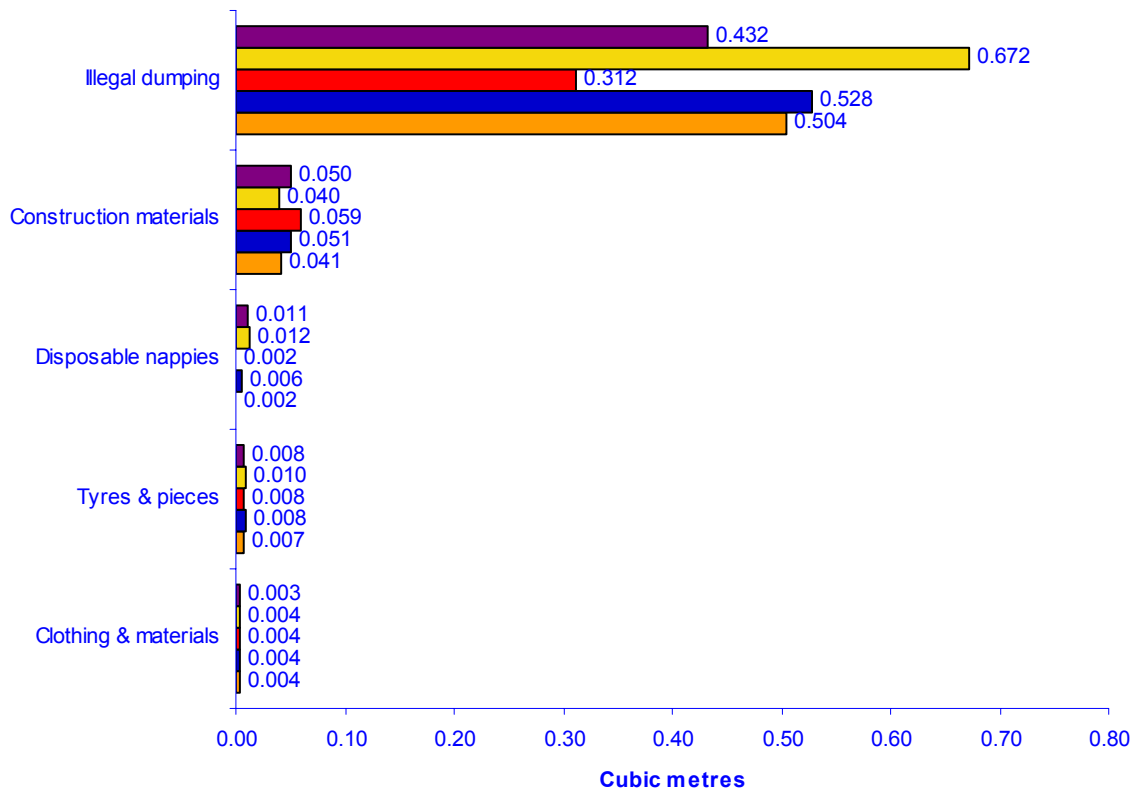
Miscellaneous litter was associated with an estimated litter volume of 0.505m³ (down from 0.739m³ in Wave 47).

Illegal dumping remained the major contributor to the total volume of miscellaneous items, with an estimated total volume of 0.432m³ (up from 0.672m³ in Wave 47).

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

- Construction materials (0.050m³, up from 0.040m³ in Wave 47)
- Disposable nappies (0.011 m³, down from 0.012 m³, in Wave 47)
- Tyres & pieces (0.008 m³, down from 0.010m³ in Wave 47)
- Clothing and materials (0.003m³, down from 0.004m³ in Wave 47)

MISCELLANEOUS ITEMS - VOLUMES - Top 5



3.6 *Cigarette Butts*

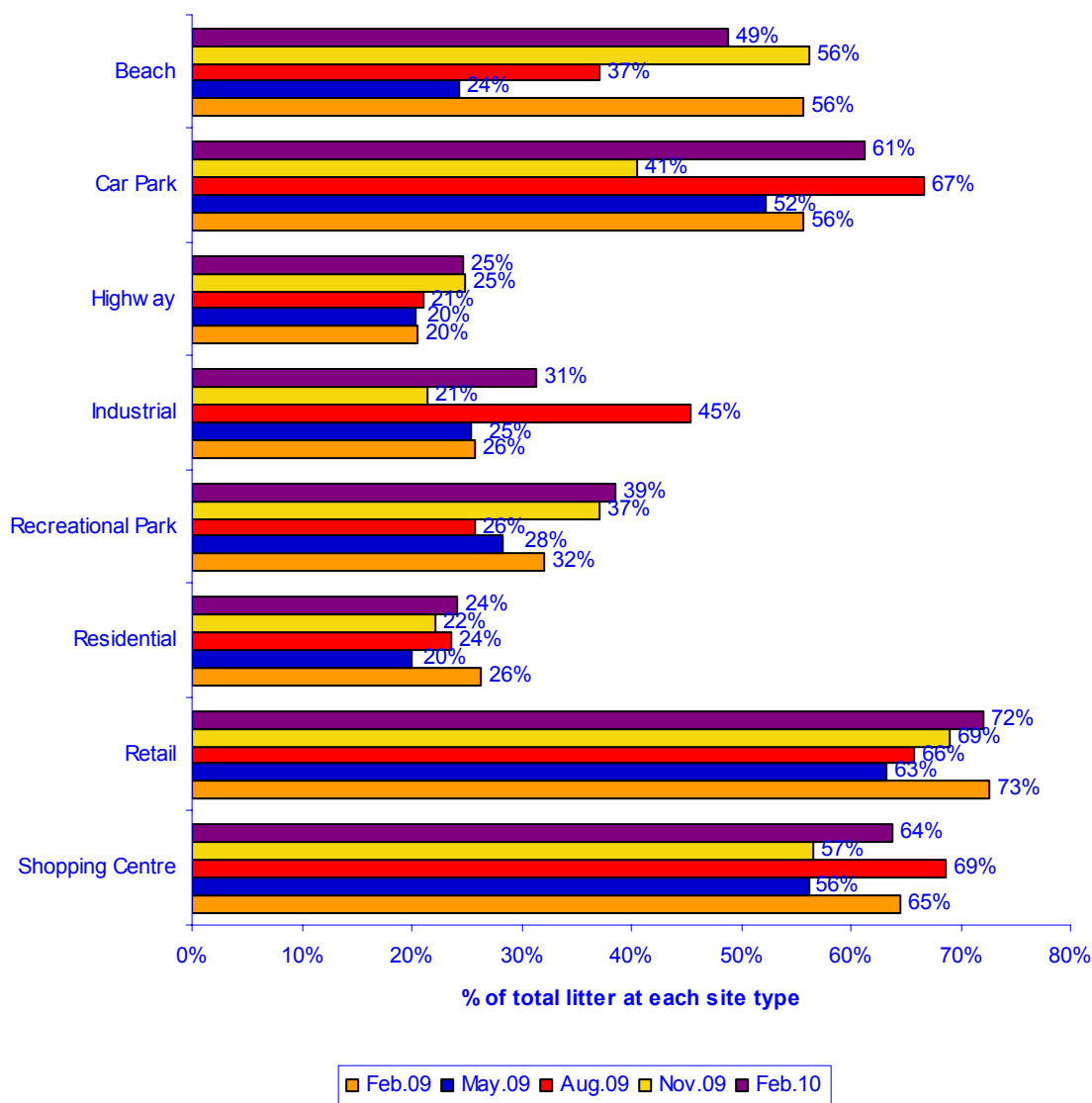
Items

The total number of butts recorded during Wave 48 amounted to 5,594 (up from 4,507 in Wave 47 but down from 6,181 in Wave 46). The number of butts counted in Wave 48 was similar to the number counted in Wave 44 at the same time last year (5,521 butts).

Just under three quarters (72%, up from 69% in Wave 47) of the litter items counted at retail sites were cigarette butts, they also contributed to almost two thirds of the litter items counted at shopping centres (64%, up from 57% in Wave 47) and car parks (61%, up from 41% in Wave 47).

The proportion of cigarette butts of the total litter items counted also increased at recreational parks (39%, up from 37% in Wave 47), industrial sites (31%, up from 21% in Wave 47) and residential sites (24%, up from 22% in Wave 47). There was a decrease however, in the proportion of cigarette butts counted at beaches (49%, down from 56% in Wave 47), while the count remained the same at highway sites (25%, unchanged from Wave 47).

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

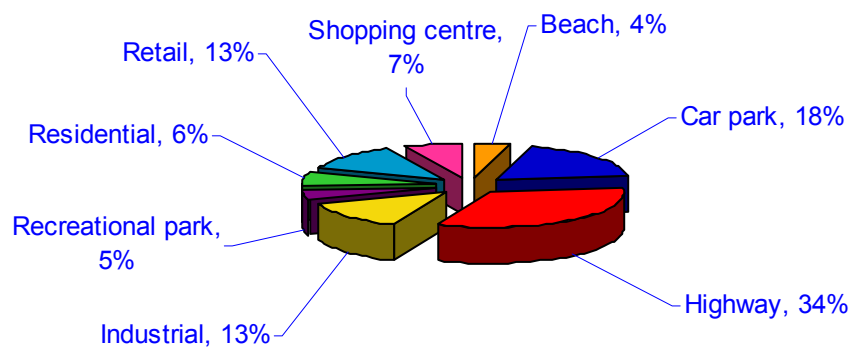
Items

Highways remained the most significant contributor to the total number of items counted during Wave 48 with more than one third (34%, down from 36% in Wave 47) of the total litter items counted at highway locations.

Other sites contributed the following proportions of the total number of litter items counted during February 2010:

- Car Park (18%, up from 14% in Wave 47)
- Industrial (13%, down from 14% in Wave 47)
- Retail (13%, up from 11% in Wave 47)
- Shopping Centre (7%, down from 8% in Wave 47)
- Residential (6%, up from 5% in Wave 47)
- Recreational Park (5%, down from 5% in Wave 47)
- Beach (4%, down from 6% in Wave 47)

PROPORTION OF TOTAL LITTER ITEMS COUNTED WITHIN SITE TYPE

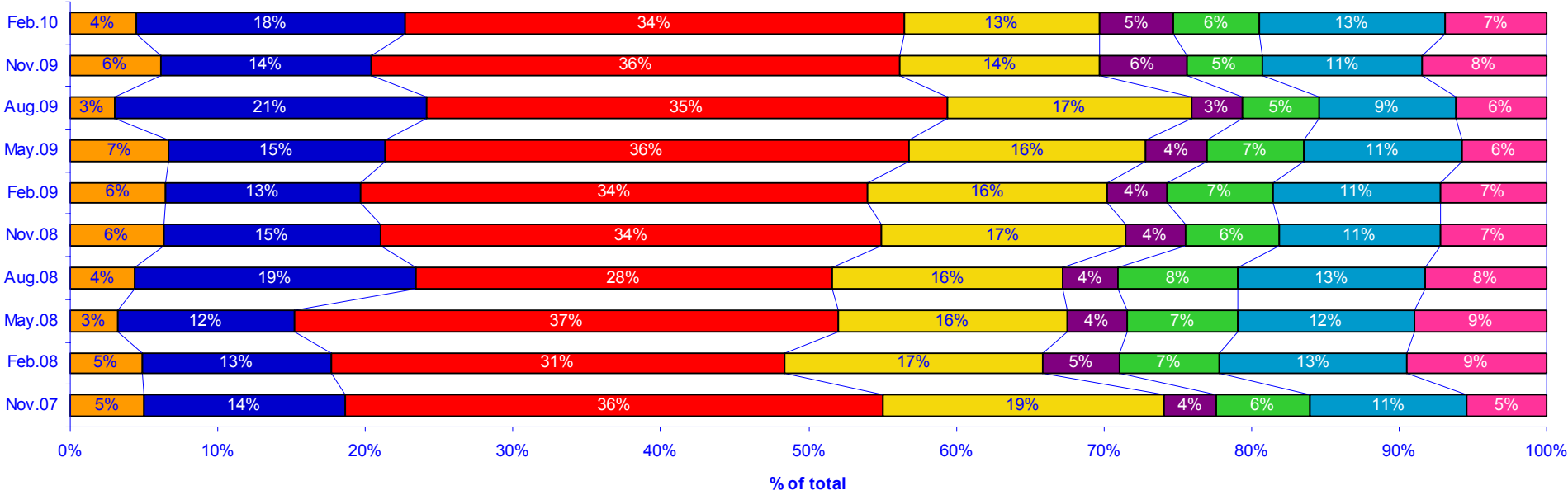


A comparison of the proportions of litter items found at each site type revealed that highway locations contributed large amounts to the total number of litter items counted in the February 2010 Monitor. Although highway sites represented only 18% of the total number of sites surveyed, the sites contributed more than one third (34%, down from 36% in Wave 47) of the total litter items counted during Wave 48.

Conversely, residential locations, beaches, shopping centres 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 6% (up from 5% in Wave 47) of the total litter items counted in Wave 48
- Beaches – represented 11% of the sites surveyed, but contributed 4% (down from 6% in Wave 47) of the total litter counted in Wave 48
- Shopping centres – incorporated 9% of the sites surveyed, but contributed 7% (down from 8% in Wave 47) of the total litter counted in Wave 48
- Recreational parks – represented 9% of sites surveyed, but contributed 5% (down from 6% in Wave 47) of the total litter counted in Wave 48

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



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

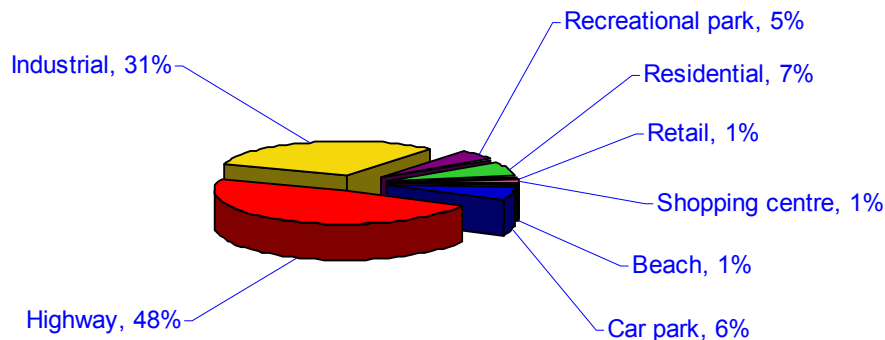
Volume

Almost half (48%, down from 49% in Wave 47) of the total volume of litter estimated during Wave 48 was associated with litter items at highway locations.

Industrial sites (31%, up from 23% in Wave 47) also contributed just under one third of the total litter volume, while residential sites (7%, down from 8% in Wave 47), car park sites (6%, down from 11% in Wave 47) and recreational parks (5%, up from 2% in Wave 47) added moderate volumes of litter to the overall litter volume.

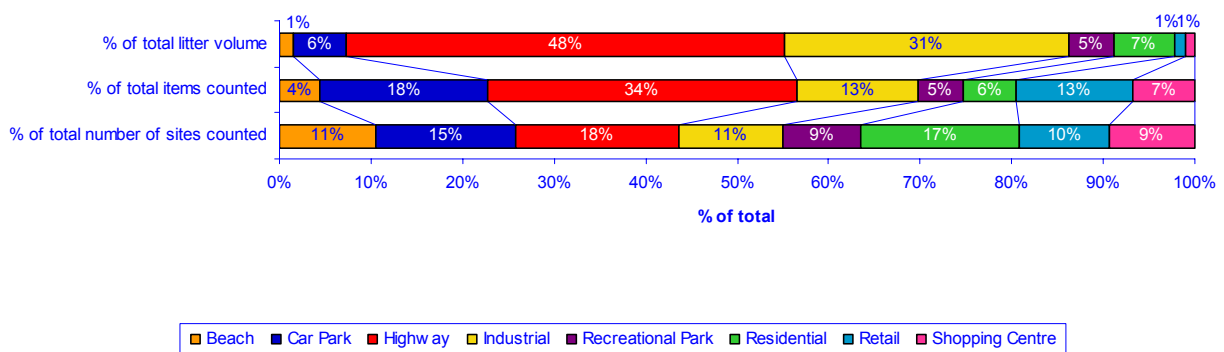
Lower volumes of litter were estimated at shopping centres (1%, down from 4% in Wave 47), beaches (1%, down from 2% in Wave 47), retail sites (1%, down from 2% in Wave 46) to the total volume of litter recorded during February 2010.

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***

The overwhelming majority (98%, up from 97% in Wave 47) of litter items counted in November 2009 were non-beverage items.

The total number of CDL beverage containers counted decreased by just over one third (36%) to 241 (down from 374 in Wave 47).

CDL beverage containers accounted for 95% (up from 94% in Wave 47) of all beverage containers counted during Wave 48.

Data Summary - Items

| KESAB - Litter Strategy Monitoring - Wave 48 - February 2010 | | | Items | | | | | | | | | | |
|---|--|------|-----------|-----------|------------|------------|-------------------|-------------|-----------|-----------------|--------------|------------|-------------|
| | | | BEACH | CAR PARK | HIGHWAY | INDUSTRIAL | RECREATIONAL PARK | RESIDENTIAL | RETAIL | SHOPPING CENTRE | METROPOLITAN | REGIONAL | TOTAL ITEMS |
| CIGARETTE BUTTS | | NBEV | 287 | 1465 | 1092 | 547 | 252 | 183 | 1193 | 575 | 4067 | 1527 | 5594 |
| GLASS | Alcoholic sodas/spirit-based mixers, all sizes | CDL | | 1 | 4 | | | | | | 3 | 2 | 5 |
| | Beer, all colours of glass, <750ml | CDL | 1 | 2 | 26 | 32 | | 3 | 1 | | 41 | 24 | 65 |
| | Beer, all colours of glass, 750ml+ | CDL | | | 2 | 5 | | | | | 1 | 6 | 7 |
| | Cider/fruit based etc. | CDL | | | | | | | | | | | 0 |
| | Flav. water/fruit j. drink/sports drink (non-carb), <1 litre | CDL | | | | | | | | | | | 0 |
| | 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 | | | | | | | | | | | 0 |
| | Fruit juice, 1 litre+ | BEV | | | | | | | | | | | 0 |
| | Other glass | NBEV | 6 | 19 | 79 | 46 | 4 | 16 | 11 | 2 | 140 | 43 | 183 |
| | Plain water (carbonated or non-carb), <1 litre | CDL | | | | | | | 2 | | | 2 | 2 |
| | Plain water (carbonated or non-carb), 1 litre+ | CDL | | | 2 | | | 1 | | | 3 | | 3 |
| | Wine & spirit, all sizes | BEV | | | 2 | | | 1 | | | 1 | 2 | 3 |
| Wine cooler, all sizes | CDL | | | 3 | | | | | | | 3 | 3 | |
| TOTAL | | | 7 | 22 | 118 | 83 | 4 | 21 | 14 | 2 | 189 | 82 | 271 |
| METAL | Aerosols - pressure packs | NBEV | | | 3 | | | 2 | | 1 | 4 | 2 | 6 |
| | Alcoholic sodas & spirit-based mixers | CDL | | 1 | 13 | | | | | | 6 | 8 | 14 |
| | Beer, aluminium, all types, all sizes | CDL | | 1 | 28 | 5 | 1 | | | | 25 | 10 | 35 |
| | Cider/fruit based etc. | CDL | | | 2 | | | | | | 2 | | 2 |
| | Flav. water/soft drink, (carbonated), all sizes | CDL | 1 | | 20 | 3 | 2 | | 1 | 1 | 26 | 2 | 28 |
| | Flav. water/soft drink, (non-carb), all sizes | CDL | | | 1 | | | | | | 1 | | 1 |
| | Foil take away | NBEV | 1 | 4 | 12 | 3 | 2 | 2 | 2 | 1 | 16 | 11 | 27 |
| | Food cans (including pet food) | NBEV | | | 5 | 7 | | | | | 9 | 3 | 12 |
| | Industrial cans - all types | NBEV | | | 4 | | | | | | | 4 | 4 |
| | Metal bottle tops and can pull rings | NBEV | 20 | 44 | 71 | 45 | 31 | 21 | 14 | 9 | 154 | 101 | 255 |
| | Metal pieces | NBEV | 3 | 12 | 99 | 34 | 8 | 14 | 11 | 7 | 127 | 61 | 188 |
| Other foil | NBEV | 5 | 27 | 81 | 39 | 21 | 8 | 21 | 8 | 136 | 74 | 210 | |
| TOTAL | | | 30 | 89 | 339 | 136 | 65 | 47 | 49 | 27 | 506 | 276 | 782 |

| KESAB - Litter Strategy Monitoring - Wave 48 - February 2010 | | | Items | | | | | | | | | | |
|---|--|-----------|------------|-------------|------------|------------|-------------------|-------------|------------|-----------------|--------------|-------------|-------------|
| | | | BEACH | CAR PARK | HIGHWAY | INDUSTRIAL | RECREATIONAL PARK | RESIDENTIAL | RETAIL | SHOPPING CENTRE | METROPOLITAN | REGIONAL | TOTAL ITEMS |
| MISCELLANEOUS | Clothing & materials | NBEV | 13 | 15 | 122 | 27 | 7 | 20 | 4 | 5 | 170 | 43 | 213 |
| | Condoms | NBEV | | | | | | | | | | | 0 |
| | Construction materials | NBEV | 1 | 10 | 54 | 54 | | 20 | | | 131 | 8 | 139 |
| | Disposable nappies | NBEV | 1 | | 7 | | | 1 | | 1 | 4 | 6 | 10 |
| | Ice cream sticks | NBEV | 9 | 12 | 24 | 1 | 2 | 2 | 11 | 6 | 48 | 19 | 67 |
| | Illegal dumping | NBEV | | 1 | 2 | 12 | 2 | 1 | | | 17 | 1 | 18 |
| | Other miscellaneous | NBEV | | 5 | 9 | 3 | 1 | 4 | 3 | 1 | 21 | 5 | 26 |
| | Rubber pieces (not tyres) | NBEV | 5 | 11 | 96 | 23 | 7 | 13 | 5 | 5 | 136 | 29 | 165 |
| | Syringes | NBEV | | | | 1 | | | | | 1 | | 1 |
| | Tyres & pieces | NBEV | | | 31 | 3 | | 1 | | | 10 | 25 | 35 |
| TOTAL | | 29 | 54 | 345 | 124 | 19 | 62 | 23 | 18 | 538 | 136 | 674 | |
| PAPER/PAPERBOARD | Cartons, flavoured milk, <1 litre | CDL | | | 22 | 1 | | 2 | | | 14 | 11 | 25 |
| | Cartons, flavoured milk, 1 litre+ | BEV | | | 1 | | | | | | | 1 | 1 |
| | Cartons, fruit juice, <1 litre | CDL | | | 8 | | 2 | | | 2 | 11 | 1 | 12 |
| | Cartons, fruit juice, 1 litre+ | BEV | | | | | | | | | | | 0 |
| | Cartons, milk, plain (white), all sizes | BEV | | | 3 | | | | 1 | | 3 | 1 | 4 |
| | Cigarette packets | NBEV | 3 | 21 | 67 | 24 | 2 | 14 | 1 | 3 | 100 | 35 | 135 |
| | Cups/take away containers | NBEV | 4 | 28 | 124 | 21 | 5 | 10 | 7 | 9 | 192 | 16 | 208 |
| | Flav. water/fruit j. drink/sports drink (non-carb), <1 litre | CDL | | | 2 | | | | | | 2 | | 2 |
| | Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+ | CDL | | | | | | | | | | | 0 |
| | Ice cream wrappers | NBEV | 1 | 1 | 20 | | 2 | 1 | 7 | | 16 | 16 | 32 |
| | Junk mail/free circulars | NBEV | | 17 | 20 | 13 | 1 | 36 | 5 | 4 | 71 | 25 | 96 |
| | Newspapers & magazines | NBEV | | 2 | 20 | 7 | | 10 | | | 34 | 5 | 39 |
| | Other paper (including tissues) | NBEV | 60 | 260 | 829 | 314 | 105 | 134 | 158 | 98 | 1691 | 267 | 1958 |
| | Packages & boxes | NBEV | | 17 | 115 | 35 | 2 | 11 | 8 | 2 | 168 | 22 | 190 |
| | Paper bags | NBEV | 5 | 15 | 68 | 19 | 2 | 12 | 4 | 2 | 97 | 30 | 127 |
| Shopper dockets & related shopping paper (eg. lists) | NBEV | | 18 | 21 | 6 | 2 | 4 | 11 | 19 | 59 | 22 | 81 | |
| Tickets, e.g. bus, ATM, vending machine etc. | NBEV | 1 | 13 | 19 | 2 | 1 | 2 | 15 | 9 | 53 | 9 | 62 | |
| TOTAL | | 74 | 392 | 1339 | 442 | 124 | 236 | 217 | 148 | 2511 | 461 | 2972 | |

| KESAB - Litter Strategy Monitoring - Wave 48 - February 2010 | | | Items | | | | | | | | | | |
|---|--|------------|-------------|-------------|-------------|------------|-------------------|-------------|------------|-----------------|--------------|--------------|-------------|
| | | | BEACH | CAR PARK | HIGHWAY | INDUSTRIAL | RECREATIONAL PARK | RESIDENTIAL | RETAIL | SHOPPING CENTRE | METROPOLITAN | REGIONAL | TOTAL ITEMS |
| PLASTIC | 6 ring can holders | NBEV | | | 6 | | | | | | | 7 | 7 |
| | Bags - heavier glossy typically branded carry bags | NBEV | 3 | | 39 | 2 | | 1 | | | 40 | 5 | 45 |
| | Bags - supermarket type light weight carry bags | NBEV | | 6 | 54 | 10 | | 3 | | | 56 | 19 | 75 |
| | Bread bag tags | NBEV | 1 | 5 | 16 | 3 | 9 | 3 | 1 | 2 | 21 | 19 | 40 |
| | Containers, domestic type | NBEV | 1 | | 15 | 1 | | 1 | | | 13 | 5 | 18 |
| | Containers, industrial e.g. oil | NBEV | | | 4 | | | | | | 1 | 3 | 4 |
| | Drink pouches | CDL | | | 1 | | | 1 | 2 | | | 4 | 4 |
| | Flav. water/fruit j. drink/sports drink (non-carb), <1 litre | CDL | | | 2 | | | | | | 2 | | 2 |
| | Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+ | CDL | | | 3 | | | 1 | | | 4 | | 4 |
| | Flav. water/soft drink (carbonated), <1 litre | CDL | | | 10 | 2 | | 1 | | | 13 | | 13 |
| | Flav. water/soft drink (carbonated), 1 litre+ | CDL | | | 2 | 1 | | | | | 3 | | 3 |
| | Flavoured milk, <1 litre | CDL | | | 8 | 1 | | | | | 4 | 5 | 9 |
| | Flavoured milk, 1 litre+ | BEV | | | | | | | | | | | 0 |
| | Fruit juice, <1 litre | CDL | | | | | | | | | | | 0 |
| | Fruit juice, 1 litre+ | BEV | | 1 | | | | | | | 1 | | 1 |
| | Lollipop sticks | NBEV | 9 | 14 | 29 | 6 | 15 | 2 | 15 | 6 | 69 | 27 | 96 |
| | Other plastic | NBEV | 58 | 107 | 446 | 158 | 41 | 93 | 59 | 51 | 824 | 189 | 1013 |
| | Packing tape & straps | NBEV | 1 | 4 | 52 | 22 | 2 | 11 | 5 | 1 | 85 | 13 | 98 |
| | Plain water (carbonated or non-carb), <1 litre | CDL | 1 | | | | | | | | | 1 | 1 |
| | Plain water (carbonated or non-carb), 1 litre+ | CDL | | | 1 | | | | | | 1 | | 1 |
| | Plastic bottle tops | NBEV | 31 | 46 | 70 | 51 | 18 | 23 | 20 | 21 | 225 | 55 | 280 |
| | Sacks - sheeting - other bags | NBEV | 4 | 8 | 53 | 22 | | 5 | 2 | 1 | 87 | 8 | 95 |
| | Snack bags & confectionery wrappers | NBEV | 21 | 86 | 122 | 32 | 35 | 33 | 18 | 12 | 265 | 94 | 359 |
| | Spoons/cutlery | NBEV | 3 | 13 | 26 | 13 | 13 | 5 | 3 | 8 | 67 | 17 | 84 |
| | Straws | NBEV | 19 | 55 | 97 | 16 | 36 | 15 | 24 | 27 | 209 | 80 | 289 |
| | Styrene foam boxes, sheets, etc. | NBEV | 2 | 4 | 54 | 54 | | 2 | 2 | | 109 | 9 | 118 |
| | Take away & cups | NBEV | 7 | 18 | 93 | 15 | 20 | 6 | 7 | 3 | 105 | 64 | 169 |
| White milk, all sizes | BEV | | | | | | | | | | | 0 | |
| Wine cask bladders | BEV | | | 2 | | | 1 | | | | 3 | 3 | |
| TOTAL | | 161 | 367 | 1205 | 409 | 189 | 207 | 161 | 132 | 2204 | 627 | 2831 | |
| GRAND TOTAL | | 588 | 2389 | 4438 | 1741 | 653 | 756 | 1657 | 902 | 10015 | 3109 | 13124 | |

Data Summary - Volumes

| KESAB - Litter Strategy Monitoring - Wave 48 - February 2010 | | | Volume - Cubic Metres | | | | | | | | | | |
|---|--|-----------------|-----------------------|-----------------|-----------------|-----------------|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | | BEACH | CAR PARK | HIGHWAY | INDUSTRIAL | RECREATIONAL PARK | RESIDENTIAL | RETAIL | SHOPPING CENTRE | METROPOLITAN | REGIONAL | TOTAL VOLUME |
| CIGARETTE BUTTS | | NBEV | 0.000033 | 0.000168 | 0.000126 | 0.000063 | 0.000029 | 0.000021 | 0.000137 | 0.000066 | 0.000468 | 0.000176 | 0.000643 |
| GLASS | Alcoholic sodas/spirit-based mixers, all sizes | CDL | | 0.000374 | 0.001497 | | | | | | 0.001123 | 0.000749 | 0.001872 |
| | Beer, all colours of glass, <750ml | CDL | 0.000480 | 0.000959 | 0.012467 | 0.015344 | | 0.001439 | 0.000480 | | 0.019660 | 0.011508 | 0.031168 |
| | Beer, all colours of glass, 750ml+ | CDL | | | 0.001621 | 0.004052 | | | | | 0.000810 | 0.004862 | 0.005672 |
| | Cider/fruit based etc. | CDL | | | | | | | | | | | 0.000000 |
| | Flav. water/fruit j. drink/sports drink (non-carb), <1 litre | CDL | | | | | | | | | | | 0.000000 |
| | Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+ | CDL | | | | | | | | | | | 0.000000 |
| | Flav. water/soft drink (carbonated), <1 litre | CDL | | | | | | | | | | | 0.000000 |
| | Flav. water/soft drink (carbonated), 1 litre+ | CDL | | | | | | | | | | | 0.000000 |
| | Fruit juice, <1 litre | CDL | | | | | | | | | | | 0.000000 |
| | Fruit juice, 1 litre+ | BEV | | | | | | | | | | | 0.000000 |
| | Other glass | NBEV | 0.000118 | 0.000373 | 0.001552 | 0.000903 | 0.000079 | 0.000314 | 0.000216 | 0.000039 | 0.002750 | 0.000845 | 0.003594 |
| | Plain water (carbonated or non-carb), <1 litre | CDL | | | | | | | 0.000830 | | | 0.000830 | 0.000830 |
| | Plain water (carbonated or non-carb), 1 litre+ | CDL | | | 0.002119 | | | 0.001059 | | | 0.003178 | | 0.003178 |
| | Wine & spirit, all sizes | BEV | | | 0.001783 | | | 0.000891 | | | 0.000891 | 0.001783 | 0.002674 |
| Wine cooler, all sizes | CDL | | | 0.001123 | | | | | | | 0.001123 | 0.001123 | |
| TOTAL | | 0.000597 | 0.001706 | 0.022161 | 0.020299 | 0.000079 | 0.003703 | 0.001525 | 0.000039 | 0.028411 | 0.021698 | 0.050110 | |
| METAL | Aerosols - pressure packs | NBEV | | | 0.002053 | | | 0.001368 | | 0.000684 | 0.002737 | 0.001368 | 0.004105 |
| | Alcoholic sodas & spirit-based mixers | CDL | | 0.000562 | 0.007305 | | | | | | 0.003371 | 0.004495 | 0.007867 |
| | Beer, aluminium, all types, all sizes | CDL | | 0.000431 | 0.012079 | 0.002157 | 0.000431 | | | | 0.010785 | 0.004314 | 0.015099 |
| | Cider/fruit based etc. | CDL | | | 0.000863 | | | | | | 0.000863 | | 0.000863 |
| | Flav. water/soft drink, (carbonated), all sizes | CDL | 0.000431 | | 0.008628 | 0.001294 | 0.000863 | | 0.000431 | 0.000431 | 0.011216 | 0.000863 | 0.012079 |
| | Flav. water/soft drink, (non-carb), all sizes | CDL | | | 0.000382 | | | | | | 0.000382 | | 0.000382 |
| | Foil take away | NBEV | 0.000462 | 0.001850 | 0.005549 | 0.001387 | 0.000925 | 0.000925 | 0.000925 | 0.000462 | 0.007398 | 0.005086 | 0.012484 |
| | Food cans (including pet food) | NBEV | | | 0.002319 | 0.003247 | | | | | 0.004174 | 0.001391 | 0.005566 |
| | Industrial cans - all types | NBEV | | | 0.018280 | | | | | | | 0.018280 | 0.018280 |
| | Metal bottle tops and can pull rings | NBEV | 0.000080 | 0.000176 | 0.000284 | 0.000180 | 0.000124 | 0.000084 | 0.000056 | 0.000036 | 0.000616 | 0.000404 | 0.001020 |
| | Metal pieces | NBEV | 0.000032 | 0.000127 | 0.001049 | 0.000360 | 0.000085 | 0.000148 | 0.000117 | 0.000074 | 0.001346 | 0.000647 | 0.001993 |
| | Other foil | NBEV | 0.000008 | 0.000042 | 0.000126 | 0.000061 | 0.000033 | 0.000012 | 0.000033 | 0.000012 | 0.000212 | 0.000115 | 0.000328 |
| | TOTAL | | 0.001013 | 0.003188 | 0.058917 | 0.008686 | 0.002461 | 0.002538 | 0.001562 | 0.001701 | 0.043101 | 0.036964 | 0.080065 |

| KESAB - Litter Strategy Monitoring - Wave 48 - February 2010 | | | Volume - Cubic Metres | | | | | | | | | | |
|---|--|------|-----------------------|-----------------|-----------------|-----------------|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | | BEACH | CAR PARK | HIGHWAY | INDUSTRIAL | RECREATIONAL PARK | RESIDENTIAL | RETAIL | SHOPPING CENTRE | METROPOLITAN | REGIONAL | TOTAL VOLUME |
| MISCELLANEOUS | Clothing & materials | NBEV | 0.000199 | 0.000230 | 0.001867 | 0.000413 | 0.000107 | 0.000306 | 0.000061 | 0.000077 | 0.002601 | 0.000658 | 0.003259 |
| | Condoms | NBEV | | | | | | | | | | | 0.000000 |
| | Construction materials | NBEV | 0.000360 | 0.003600 | 0.019440 | 0.019440 | | 0.007200 | | | 0.047160 | 0.002880 | 0.050040 |
| | Disposable nappies | NBEV | 0.001125 | | 0.007875 | | | 0.001125 | | 0.001125 | 0.004500 | 0.006750 | 0.011250 |
| | Ice cream sticks | NBEV | 0.000008 | 0.000011 | 0.000022 | 0.000001 | 0.000002 | 0.000002 | 0.000010 | 0.000006 | 0.000044 | 0.000017 | 0.000062 |
| | Illegal dumping | NBEV | | 0.024000 | 0.048000 | 0.288000 | 0.048000 | 0.024000 | | | 0.408000 | 0.024000 | 0.432000 |
| | Other miscellaneous | NBEV | | 0.000068 | 0.000122 | 0.000041 | 0.000014 | 0.000054 | 0.000041 | 0.000014 | 0.000284 | 0.000068 | 0.000351 |
| | Rubber pieces (not tyres) | NBEV | 0.000001 | 0.000002 | 0.000016 | 0.000004 | 0.000001 | 0.000002 | 0.000001 | 0.000001 | 0.000022 | 0.000005 | 0.000027 |
| | Syringes | NBEV | | | | 0.000002 | | | | | 0.000002 | | 0.000002 |
| | Tyres & pieces | NBEV | | | 0.006975 | 0.000675 | | 0.000225 | | | 0.002250 | 0.005625 | 0.007875 |
| | TOTAL | | 0.001693 | 0.027910 | 0.084316 | 0.308576 | 0.048124 | 0.032914 | 0.000113 | 0.001221 | 0.464863 | 0.040003 | 0.504866 |
| PAPER/PAPERBOARD | Cartons, flavoured milk, <1 litre | CDL | | | 0.016493 | 0.000750 | | 0.001499 | | | 0.010496 | 0.008247 | 0.018743 |
| | Cartons, flavoured milk, 1 litre+ | BEV | | | 0.001013 | | | | | | | 0.001013 | 0.001013 |
| | Cartons, fruit juice, <1 litre | CDL | | | 0.004998 | | 0.001250 | | | 0.001250 | 0.006872 | 0.000625 | 0.007497 |
| | Cartons, fruit juice, 1 litre+ | BEV | | | | | | | | | | | 0.000000 |
| | Cartons, milk, plain (white), all sizes | BEV | | | 0.003038 | | | | 0.001013 | | 0.003038 | 0.001013 | 0.004051 |
| | Cigarette packets | NBEV | 0.000654 | 0.004575 | 0.014597 | 0.005229 | 0.000436 | 0.003050 | 0.000218 | 0.000654 | 0.021787 | 0.007625 | 0.029412 |
| | Cups/take away containers | NBEV | 0.002916 | 0.020411 | 0.090390 | 0.015308 | 0.003645 | 0.007290 | 0.005103 | 0.006561 | 0.139958 | 0.011663 | 0.151622 |
| | Flav. water/fruit j. drink/sports drink (non-carb), <1 litre | CDL | | | 0.000524 | | | | | | 0.000524 | | 0.000524 |
| | Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+ | CDL | | | | | | | | | | | 0.000000 |
| | Ice cream wrappers | NBEV | 0.000002 | 0.000002 | 0.000048 | | 0.000005 | 0.000002 | 0.000017 | | 0.000038 | 0.000038 | 0.000077 |
| | Junk mail/free circulars | NBEV | | 0.002958 | 0.003480 | 0.002262 | 0.000174 | 0.006264 | 0.000870 | 0.000696 | 0.012354 | 0.004350 | 0.016704 |
| | Newspapers & magazines | NBEV | | 0.002360 | 0.023600 | 0.008260 | | 0.011800 | | | 0.040120 | 0.005900 | 0.046020 |
| | Other paper (including tissues) | NBEV | 0.000203 | 0.000879 | 0.002802 | 0.001061 | 0.000355 | 0.000453 | 0.000534 | 0.000331 | 0.005716 | 0.000902 | 0.006618 |
| | Packages & boxes | NBEV | | 0.001360 | 0.009200 | 0.002800 | 0.000160 | 0.000880 | 0.000640 | 0.000160 | 0.013440 | 0.001760 | 0.015200 |
| | Paper bags | NBEV | 0.000053 | 0.000159 | 0.000719 | 0.000201 | 0.000021 | 0.000127 | 0.000042 | 0.000021 | 0.001026 | 0.000317 | 0.001344 |
| | Shopper docketts & related shopping paper (eg. lists) | NBEV | | 0.000037 | 0.000043 | 0.000012 | 0.000004 | 0.000008 | 0.000022 | 0.000039 | 0.000120 | 0.000045 | 0.000164 |
| | Tickets, e.g. bus, ATM, vending machine etc. | NBEV | 0.000001 | 0.000011 | 0.000017 | 0.000002 | 0.000001 | 0.000002 | 0.000013 | 0.000008 | 0.000047 | 0.000008 | 0.000055 |
| | TOTAL | | 0.003828 | 0.032752 | 0.170962 | 0.035885 | 0.006050 | 0.031375 | 0.008472 | 0.009719 | 0.255536 | 0.043506 | 0.299043 |

| KESAB - Litter Strategy Monitoring - Wave 48 - February 2010 | | | Volume - Cubic Metres | | | | | | | | | TOTAL VOLUME | |
|---|--|-----------------|-----------------------|-----------------|-----------------|-----------------|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | | BEACH | CAR PARK | HIGHWAY | INDUSTRIAL | RECREATIONAL PARK | RESIDENTIAL | RETAIL | SHOPPING CENTRE | METROPOLITAN | | REGIONAL |
| PLASTIC | 6 ring can holders | NBEV | | | 0.000009 | | | | | | | 0.000011 | 0.000011 |
| | Bags - heavier glossy typically branded carry bags | NBEV | 0.000263 | | 0.003416 | 0.000175 | | 0.000088 | | | 0.003504 | 0.000438 | 0.003942 |
| | Bags - supermarket type light weight carry bags | NBEV | | 0.000204 | 0.001833 | 0.000339 | | 0.000102 | 0.000068 | | 0.001901 | 0.000645 | 0.002546 |
| | Bread bag tags | NBEV | 0.000000 | 0.000001 | 0.000004 | 0.000001 | 0.000002 | 0.000001 | 0.000000 | 0.000000 | 0.000005 | 0.000004 | 0.000009 |
| | Containers, domestic type | NBEV | 0.008324 | | 0.124860 | 0.008324 | | 0.008324 | | | 0.108212 | 0.041620 | 0.149832 |
| | Containers, industrial e.g. oil | NBEV | | | 0.089832 | | | | | | 0.022458 | 0.067374 | 0.089832 |
| | Drink pouches | CDL | | | 0.000086 | | | 0.000086 | 0.000173 | | | 0.000345 | 0.000345 |
| | Flav. water/fruit j. drink/sports drink (non-carb), <1 litre | CDL | | | 0.001112 | | | | | | 0.001112 | | 0.001112 |
| | Flav. water/fruit j. drink/sports drink (non-carb), 1 litre+ | CDL | | | 0.004962 | | | 0.001654 | | | 0.006616 | | 0.006616 |
| | Flav. water/soft drink (carbonated), <1 litre | CDL | | | 0.006221 | 0.001244 | | 0.000622 | | | 0.008087 | | 0.008087 |
| | Flav. water/soft drink (carbonated), 1 litre+ | CDL | | | 0.003308 | 0.001654 | | | | | 0.004962 | | 0.004962 |
| | Flavoured milk, <1 litre | CDL | | | 0.004262 | 0.000533 | | | | | 0.002131 | 0.002664 | 0.004794 |
| | Flavoured milk, 1 litre+ | BEV | | | | | | | | | | | 0.000000 |
| | Fruit juice, <1 litre | CDL | | | | | | | | | | | 0.000000 |
| | Fruit juice, 1 litre+ | BEV | | 0.002137 | | | | | | | 0.002137 | | 0.002137 |
| | Lollipop sticks | NBEV | 0.000005 | 0.000007 | 0.000015 | 0.000003 | 0.000008 | 0.000001 | 0.000008 | 0.000003 | 0.000037 | 0.000014 | 0.000051 |
| | Other plastic | NBEV | 0.000073 | 0.000134 | 0.000558 | 0.000198 | 0.000051 | 0.000116 | 0.000074 | 0.000064 | 0.001030 | 0.000236 | 0.001266 |
| | Packing tape & straps | NBEV | 0.000000 | 0.000001 | 0.000014 | 0.000006 | 0.000001 | 0.000003 | 0.000001 | 0.000000 | 0.000023 | 0.000004 | 0.000026 |
| | Plain water (carbonated or non-carb), <1 litre | CDL | 0.000788 | | | | | | | | | 0.000788 | 0.000788 |
| | Plain water (carbonated or non-carb), 1 litre+ | CDL | | | 0.001542 | | | | | | 0.001542 | | 0.001542 |
| | Plastic bottle tops | NBEV | 0.000248 | 0.000368 | 0.000560 | 0.000408 | 0.000144 | 0.000184 | 0.000160 | 0.000168 | 0.001801 | 0.000440 | 0.002241 |
| | Sacks - sheeting - other bags | NBEV | 0.000001 | 0.000003 | 0.000017 | 0.000007 | | 0.000002 | 0.000001 | 0.000000 | 0.000027 | 0.000003 | 0.000030 |
| | Snack bags & confectionery wrappers | NBEV | 0.000164 | 0.000673 | 0.000955 | 0.000251 | 0.000274 | 0.000258 | 0.000141 | 0.000094 | 0.002075 | 0.000736 | 0.002811 |
| | Spoons/cutlery | NBEV | 0.000029 | 0.000125 | 0.000250 | 0.000125 | 0.000125 | 0.000048 | 0.000029 | 0.000077 | 0.000643 | 0.000163 | 0.000806 |
| | Straws | NBEV | 0.000078 | 0.000227 | 0.000400 | 0.000066 | 0.000149 | 0.000062 | 0.000099 | 0.000111 | 0.000862 | 0.000330 | 0.001192 |
| | Styrene foam boxes, sheets, etc. | NBEV | 0.000075 | 0.000150 | 0.002025 | 0.002025 | | 0.000075 | 0.000075 | | 0.004088 | 0.000338 | 0.004425 |
| | Take away & cups | NBEV | 0.001449 | 0.003726 | 0.019253 | 0.003105 | 0.004140 | 0.001242 | 0.001449 | 0.000621 | 0.021737 | 0.013249 | 0.034986 |
| | White milk, all sizes | BEV | | | | | | | | | | | 0.000000 |
| | Wine cask bladders | BEV | | | 0.000920 | | | 0.000460 | | | | 0.001380 | 0.001380 |
| | TOTAL | | 0.011498 | 0.007756 | 0.266413 | 0.018464 | 0.004894 | 0.013328 | 0.002279 | 0.001139 | 0.194989 | 0.130781 | 0.325770 |
| GRAND TOTAL | | 0.018663 | 0.073481 | 0.602894 | 0.391972 | 0.061635 | 0.083880 | 0.014087 | 0.013885 | 0.987369 | 0.273128 | 1.260497 | |

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

| 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 |
| Wave 32 | 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 |
| | New as % of Old | 1 | 1 | 0.92 | 0.94 | 1.02 | 1 | 1 | 0.50 | 0.68 | 1 | 7.3786248 |
| Wave 33 | 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 |
| | New as % of Old | 1 | 1 | 0.94 | 0.87 | 0.83 | 1 | 1 | 0.50 | 0.68 | 1 | 7.1318625 |
| Wave 34 | 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 |
| | New as % of Old | 1 | 1 | 0.83 | 0.81 | 0.62 | 1 | 1 | 0.51 | 0.62 | 1 | 6.7775595 |
| Wave 35 | 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 |
| | New as % of Old | 1 | 1 | 0.89 | 0.83 | 0.52 | 1 | 1 | 0.49 | 0.60 | 1 | 6.7242631 |
| Average New as % of Old | | 1 | 1 | 0.89 | 0.86 | 0.75 | 1 | 1 | 0.50 | 0.65 | 1 | 7.0030775 |

| 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 |
|---|---------------------------------|-------------|-------------|-------------|-------------|-----------------|-------------|-------------------|---------------|--------------|-------------|--------------|
| Wave 32 | Old | 1187 | 1016 | 2395 | 2194 | 1261 | 1517 | 617 | 10369 | 17020 | 3536 | 20556 |
| | New | 1187 | 1016 | 2196 | 2064 | 1292 | 1517 | 617 | 5147 | 11500 | 3536 | 15036 |
| | 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% | |
| | % change from Old to New | 2.1% | 1.8% | 3.0% | 3.1% | 2.5% | 2.7% | 1.1% | -16.2% | -6.3% | 6.3% | |
| Wave 33 | Old | 1227 | 737 | 2573 | 3142 | 2323 | 1659 | 590 | 9292 | 17788 | 3755 | 21543 |
| | New | 1227 | 737 | 2428 | 2722 | 1919 | 1659 | 590 | 4607 | 12134 | 3755 | 15889 |
| | 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% | |
| | % change from Old to New | 2.0% | 1.2% | 3.3% | 2.5% | 1.3% | 2.7% | 1.0% | -14.1% | -6.2% | 6.2% | |
| Wave 34 | Old | 1185 | 721 | 2498 | 3365 | 1853 | 1670 | 479 | 11039 | 18749 | 4061 | 22810 |
| | New | 1185 | 721 | 2077 | 2724 | 1155 | 1670 | 479 | 5666 | 11616 | 4061 | 15677 |
| | 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% | |
| | % change from Old to New | 2.4% | 1.4% | 2.3% | 2.6% | -0.8% | 3.3% | 1.0% | -12.3% | -8.1% | 8.1% | |
| Wave 35 | Old | 1134 | 728 | 2705 | 2601 | 2232 | 1801 | 729 | 10865 | 18640 | 4155 | 22795 |
| | New | 1134 | 728 | 2399 | 2156 | 1157 | 1801 | 729 | 5325 | 11274 | 4155 | 15429 |
| | 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% | |
| | % change from Old to New | 2.4% | 1.5% | 3.7% | 2.6% | -2.3% | 3.8% | 1.5% | -13.2% | -8.7% | 8.7% | |
| Average % difference from Old to New | | 2% | 1% | 3% | 3% | 0% | 3% | 1% | -14% | -7% | 7% | |

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

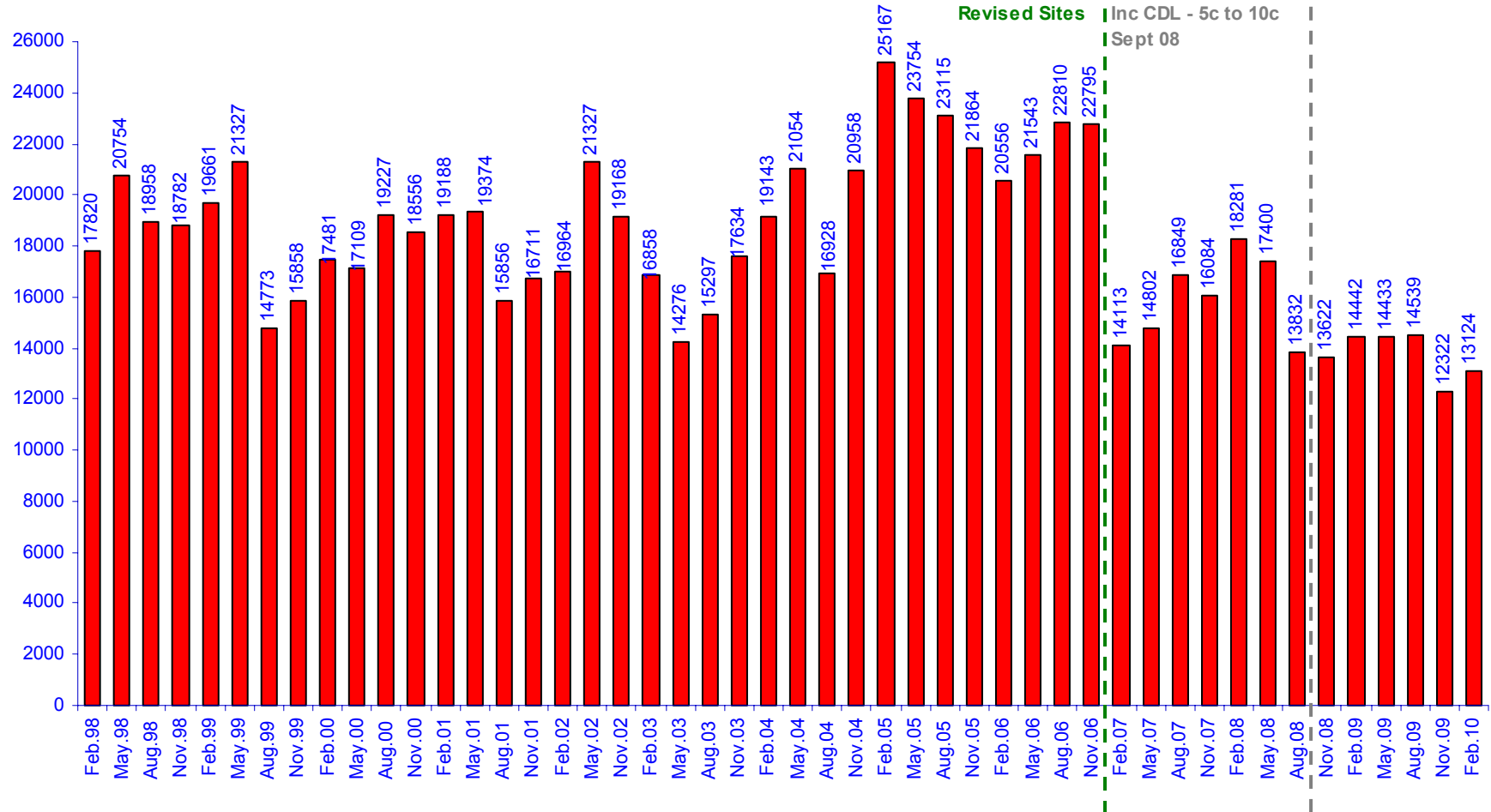
| Volumes within site type across all 151 sites including either 11 original or 11 revised sites | | Residential | Beach | Industrial | Car Park | Shopping Centre | Retail | Recreational Park | Highway | Metropolitan | Regional | TOTAL |
|--|------------------------|-------------|----------|-------------|-------------|-----------------|----------|-------------------|-------------|--------------|----------|---------|
| 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 | | |
| | New as % of Old | 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 | | |
| | New as % of Old | 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 | | |
| | New as % of Old | 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 | | |
| | New as % of Old | 1 | 1 | 1.00 | 1.12 | 0.70 | 1 | 1 | 0.79 | 0.73 | 1 | |
| Average New as % of Old | | 1 | 1 | 0.99 | 1.11 | 0.51 | 1 | 1 | 0.67 | 0.67 | 1 | |

| 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 |
|--|---------------------------------|-------------|-------------|-------------|-------------|-----------------|-------------|-------------------|---------------|---------------|--------------|----------------|
| 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 |
| | 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% | |
| | % change from Old to New | 0.8% | 0.4% | 8.2% | 3.7% | 0.1% | 0.3% | 0.4% | -13.8% | -11.1% | 11.1% | |
| 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 |
| | 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% | |
| | % change from Old to New | 0.8% | 0.4% | 6.6% | 0.8% | -0.7% | 0.3% | 0.5% | -8.8% | -7.6% | 7.7% | |
| 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 |
| | 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% | |
| | % change from Old to New | 1.0% | 0.9% | 4.8% | 1.8% | -1.5% | 0.2% | 0.1% | -7.2% | -8.2% | 8.2% | |
| 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 |
| | 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% | |
| | % change from Old to New | 0.8% | 0.1% | 2.7% | 1.1% | -0.2% | 0.3% | 0.1% | -4.8% | -7.8% | 7.8% | |
| Average % difference from Old to New | | 1% | 0% | 6% | 2% | -1% | 0% | 0% | -9% | -9% | 9% | |

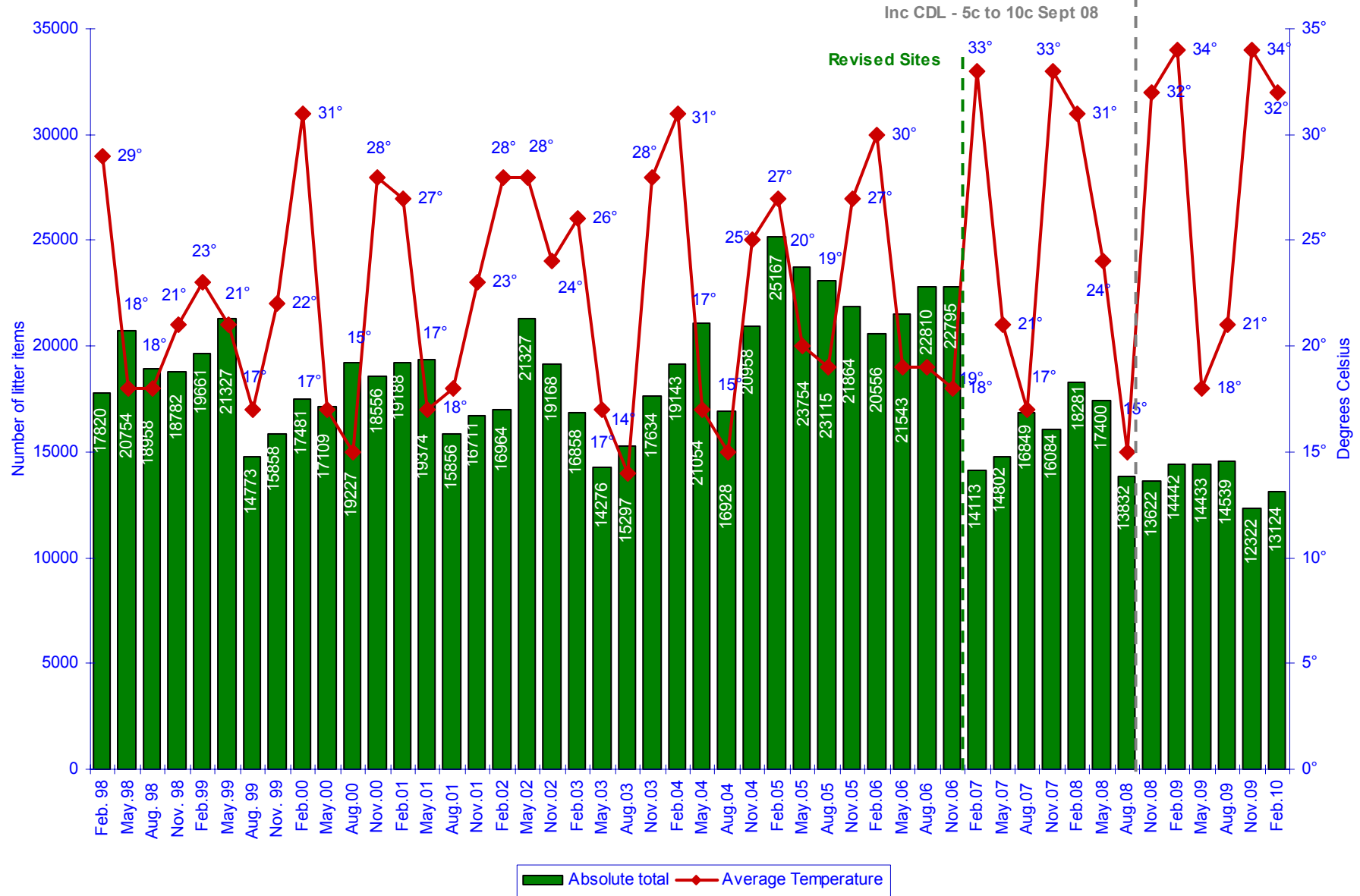
Unweighted Tracking Graphs

- Items

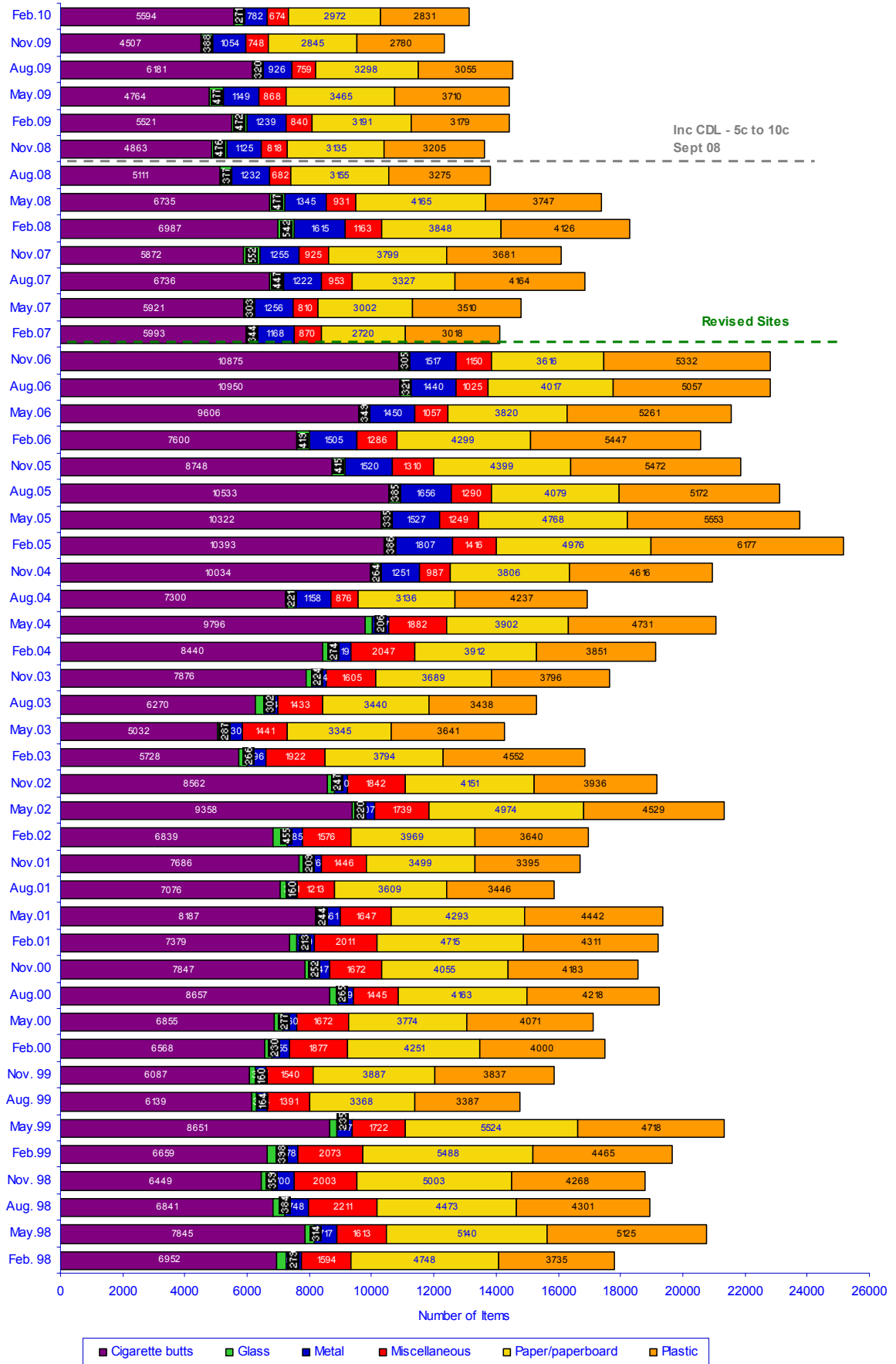
Total Litter - Number of Items



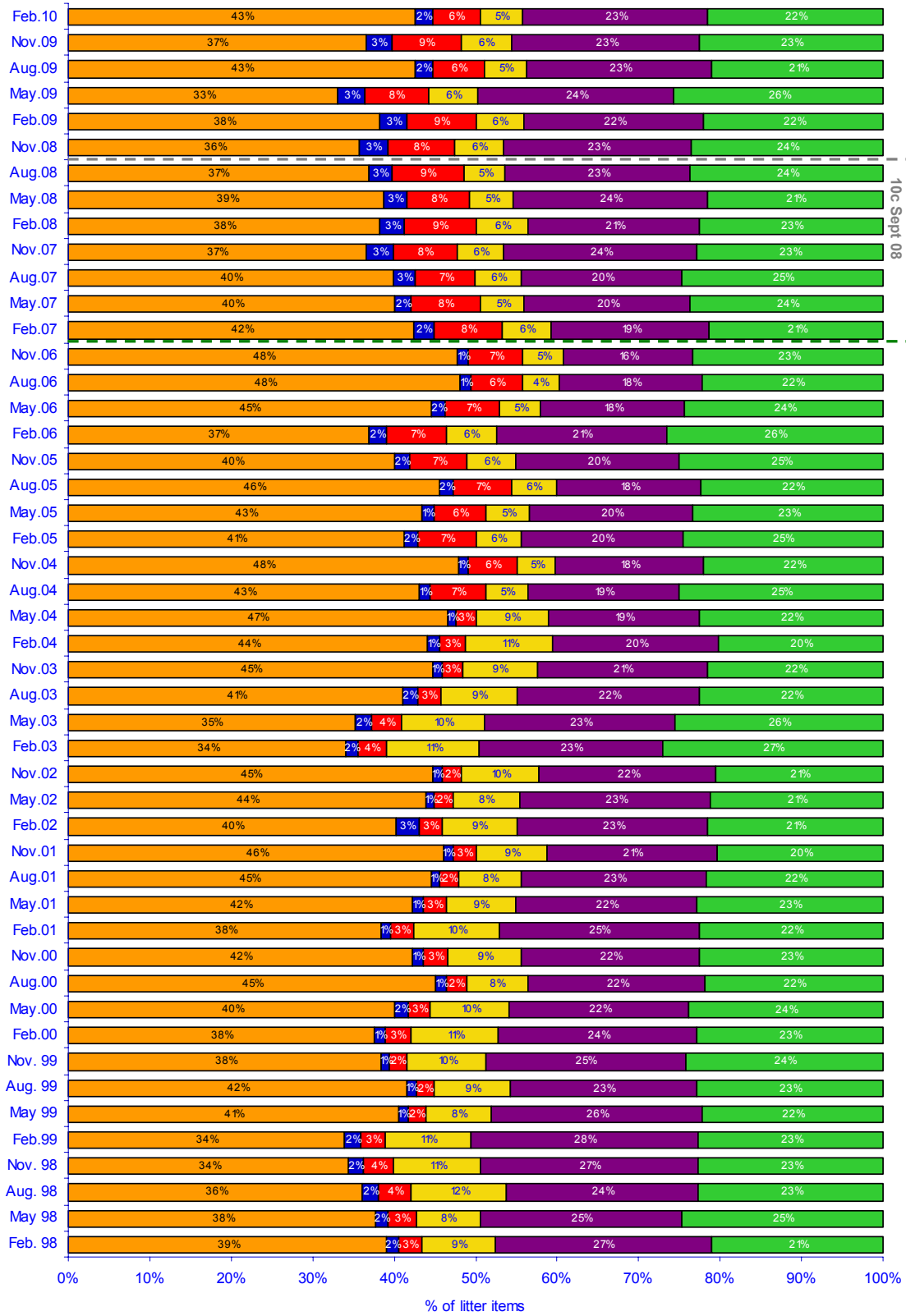
Weather Temperature and Total Number of Litter Items



Number of Litter Items by Material Type

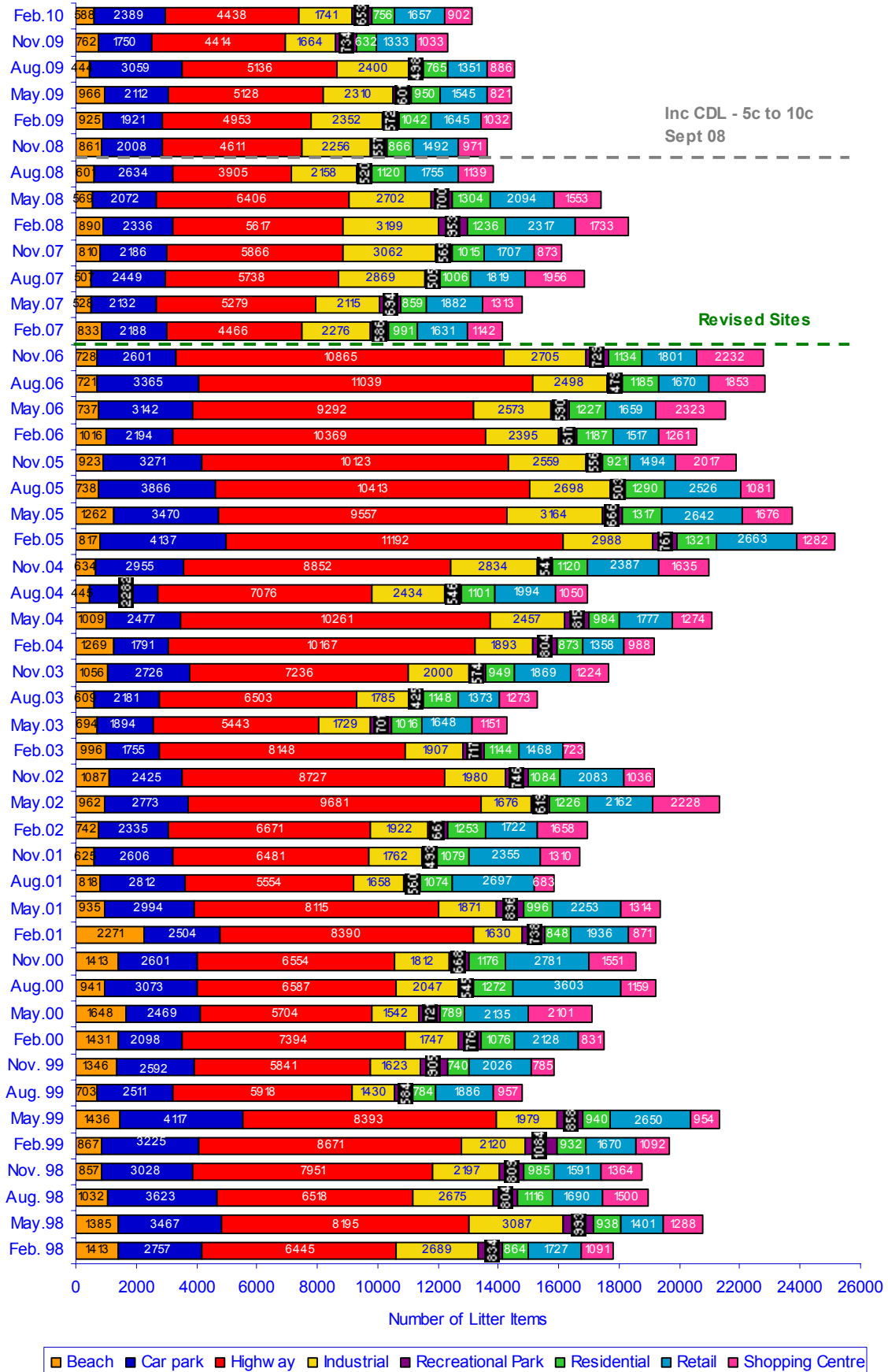


Proportion of Total Litter Stream by Material Type

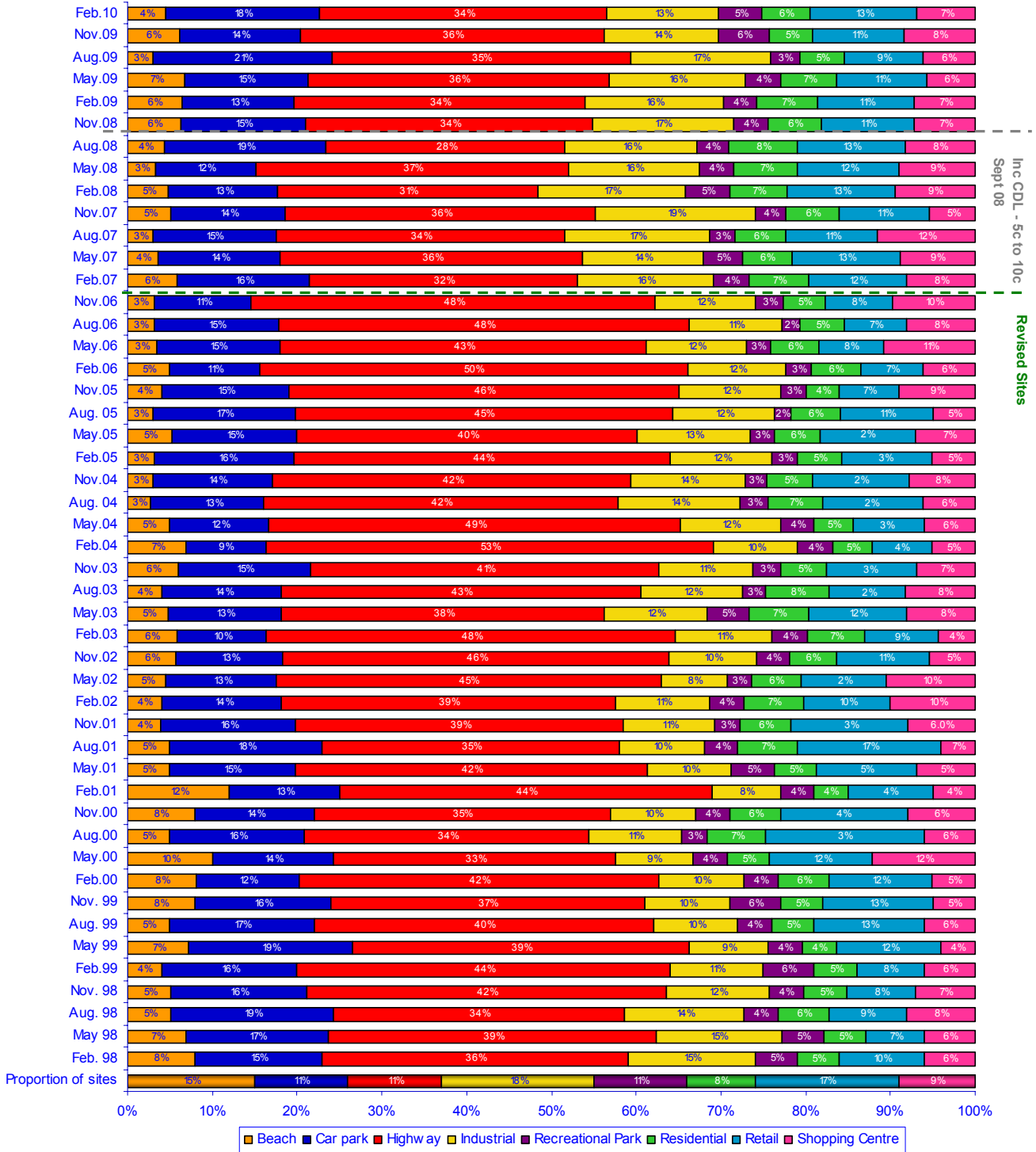


■ Cigarette butts
 ■ Glass
 ■ Metal
 ■ Miscellaneous
 ■ Paper/paperboard
 ■ Plastic

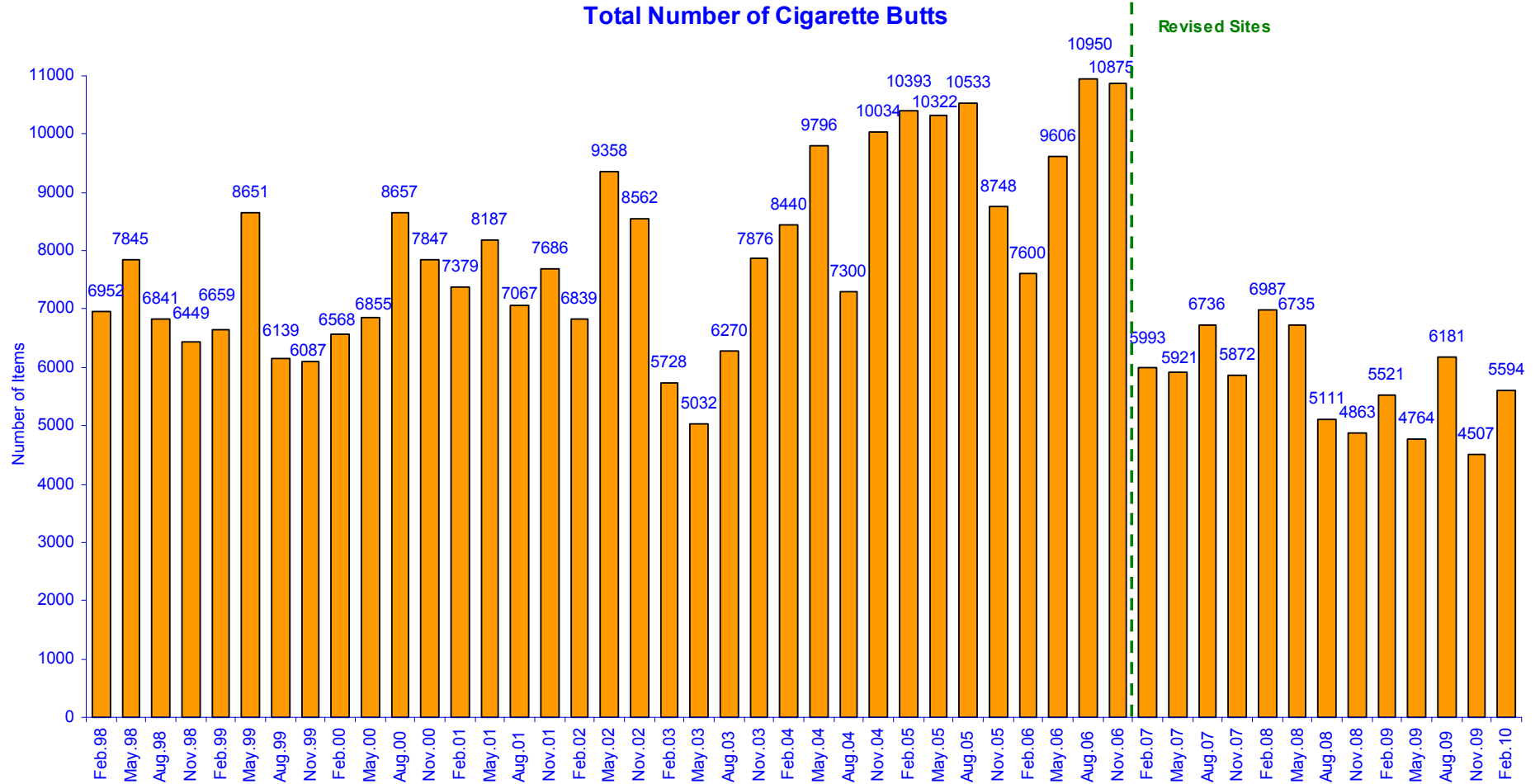
Number of Litter Items by Site Type



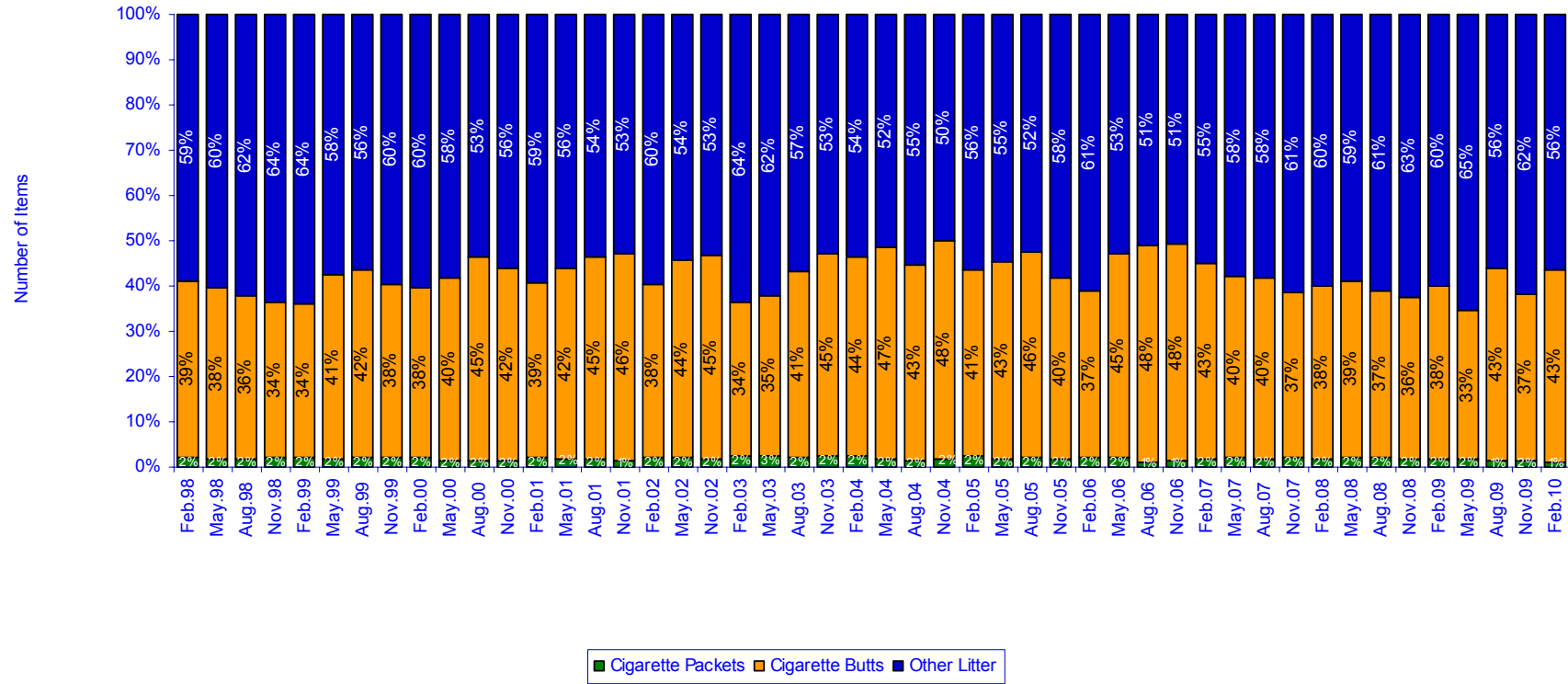
Proportion of Total Litter by Site Type



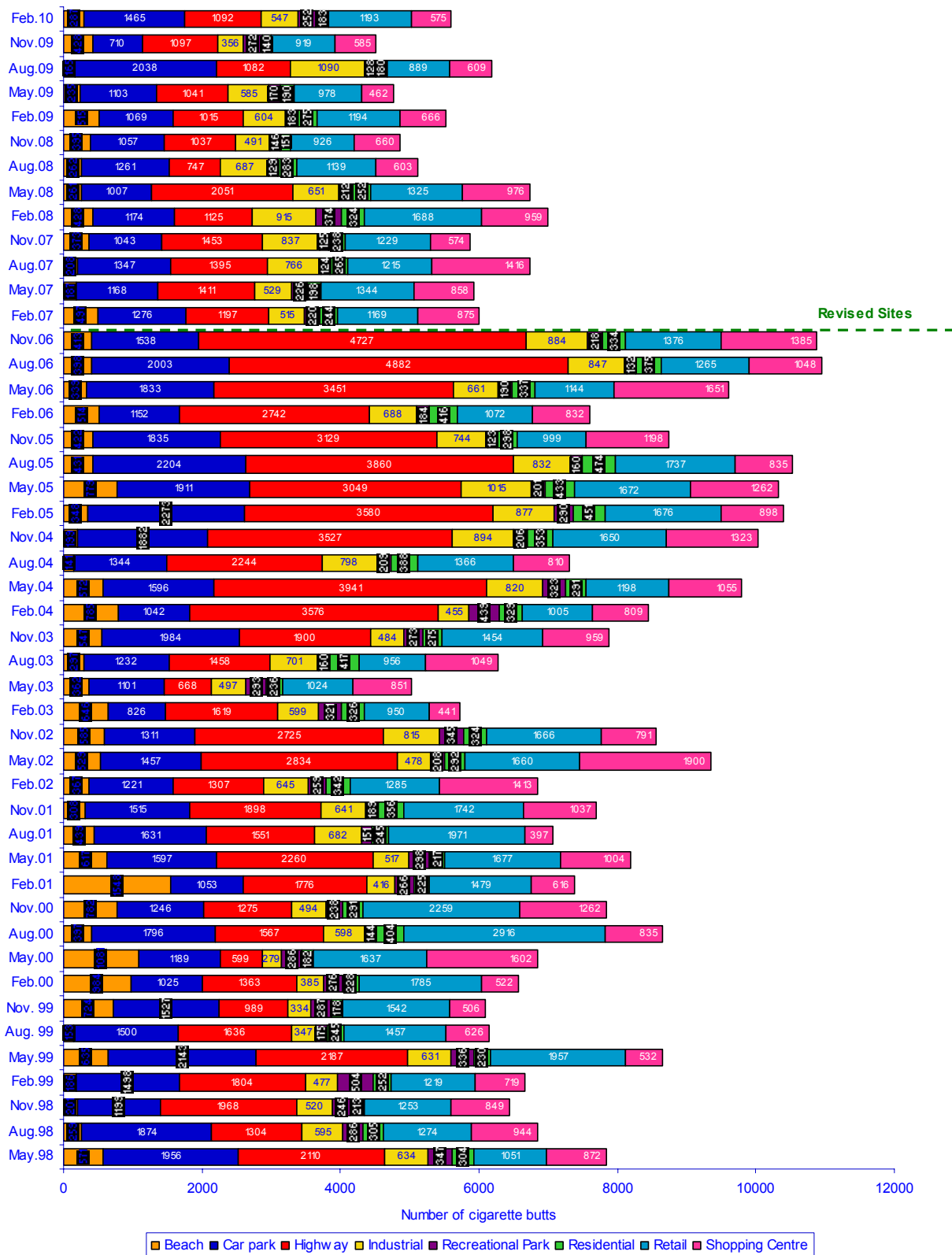
Total Number of Cigarette Butts



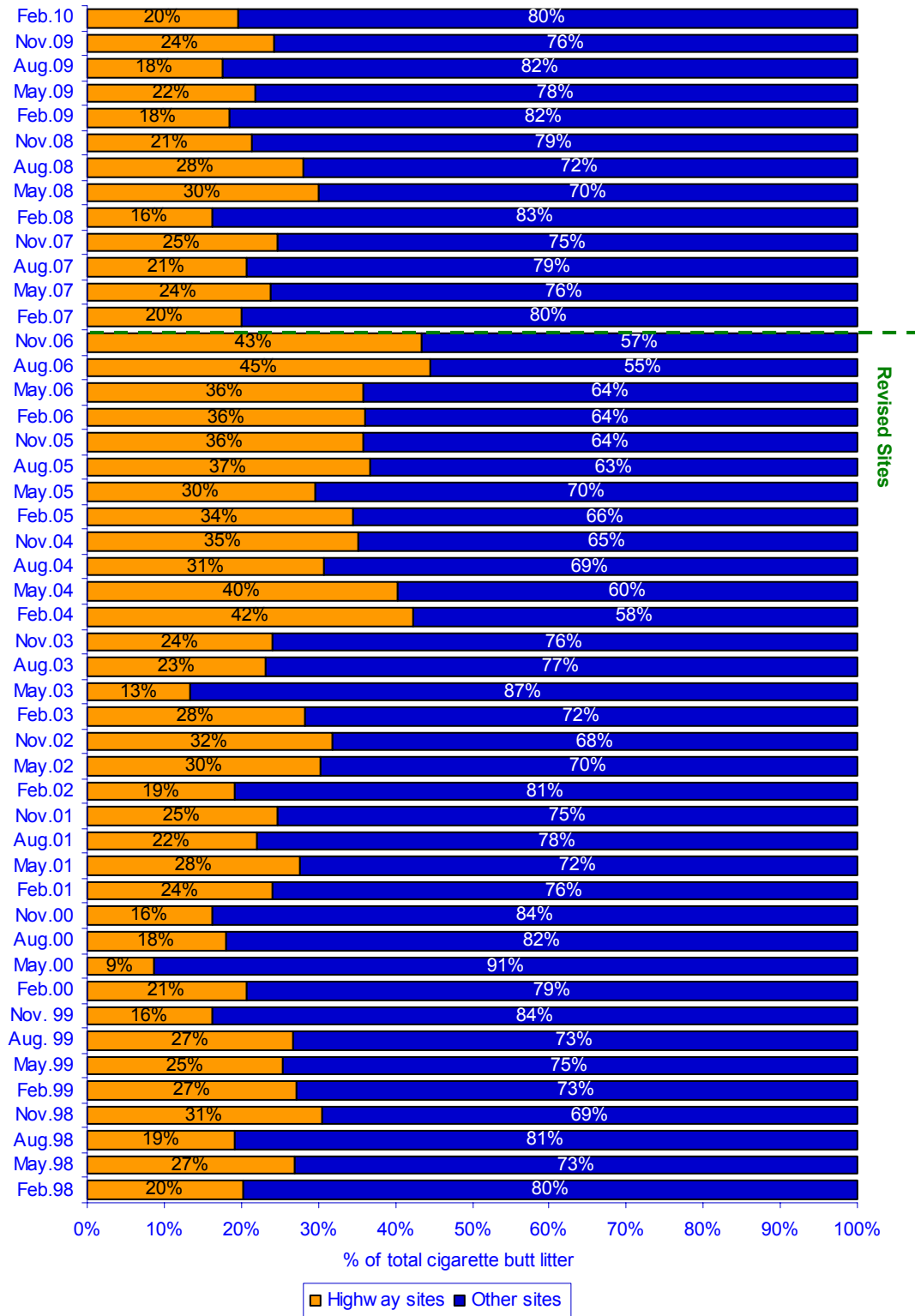
Proportion of Cigarette Related Litter Items in Total Litter Stream



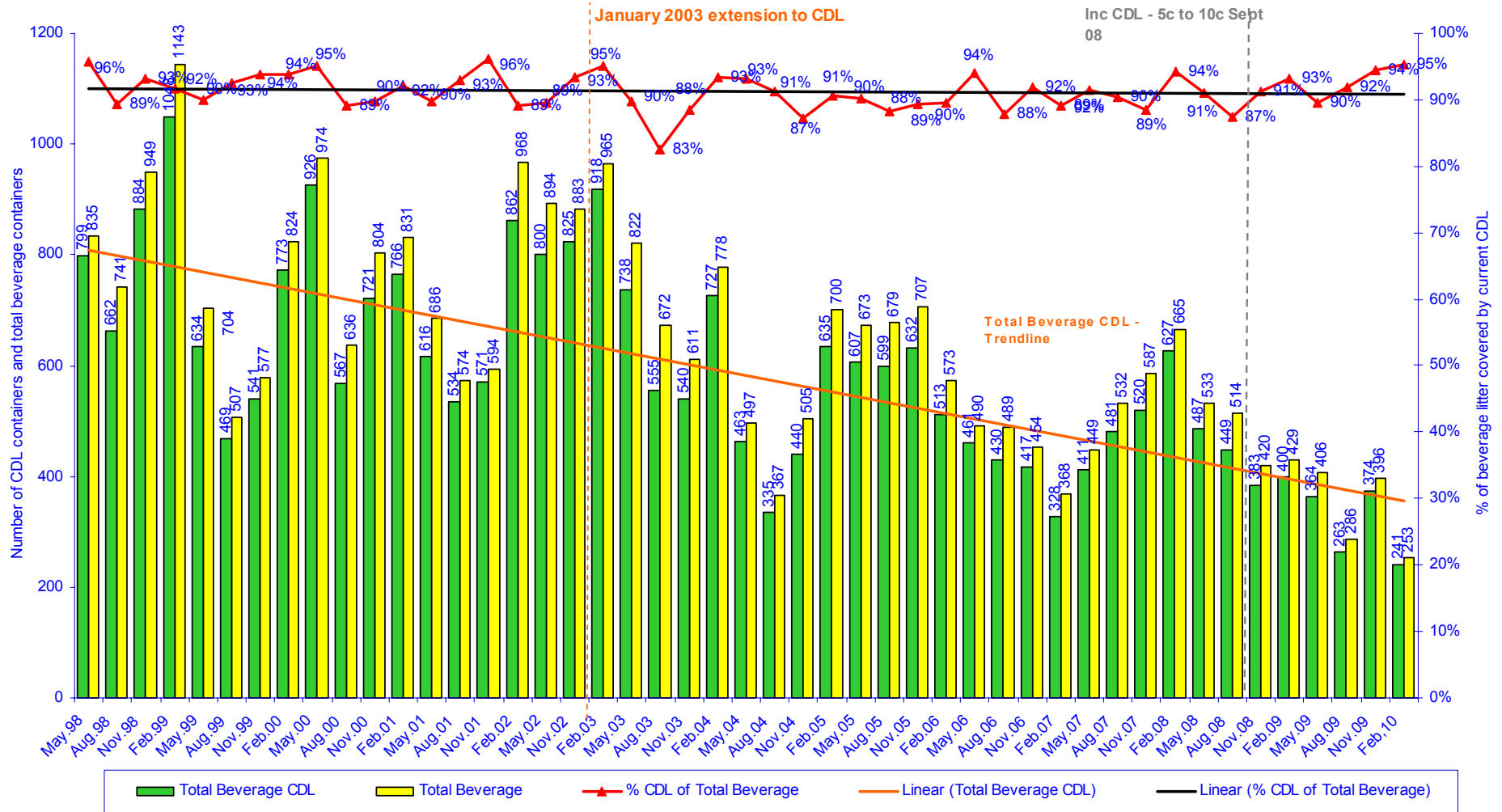
Number of Cigarette Butts by Site Type



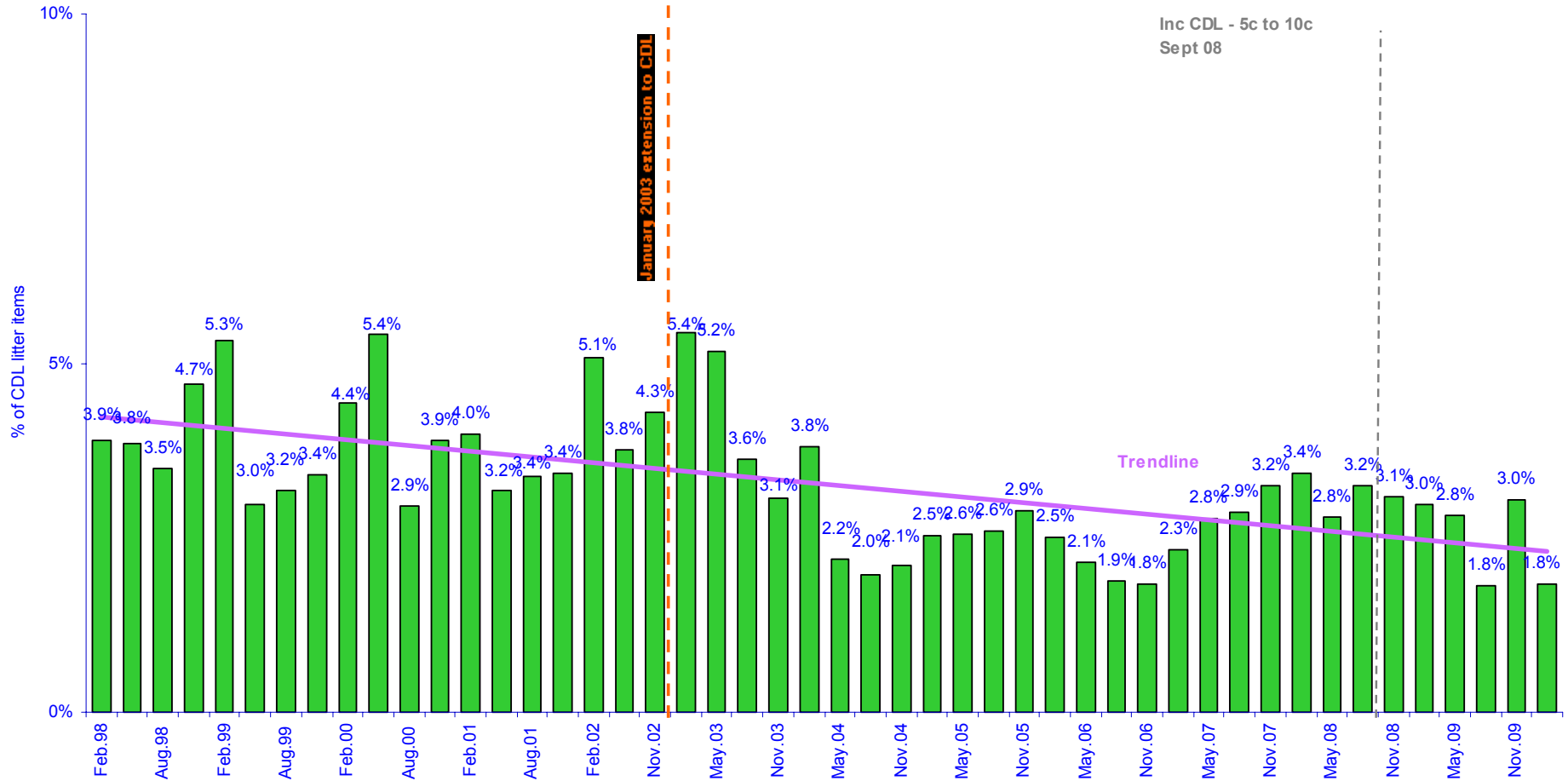
Proportion of Total Cigarette Butt Litter at Highway sites & Other sites



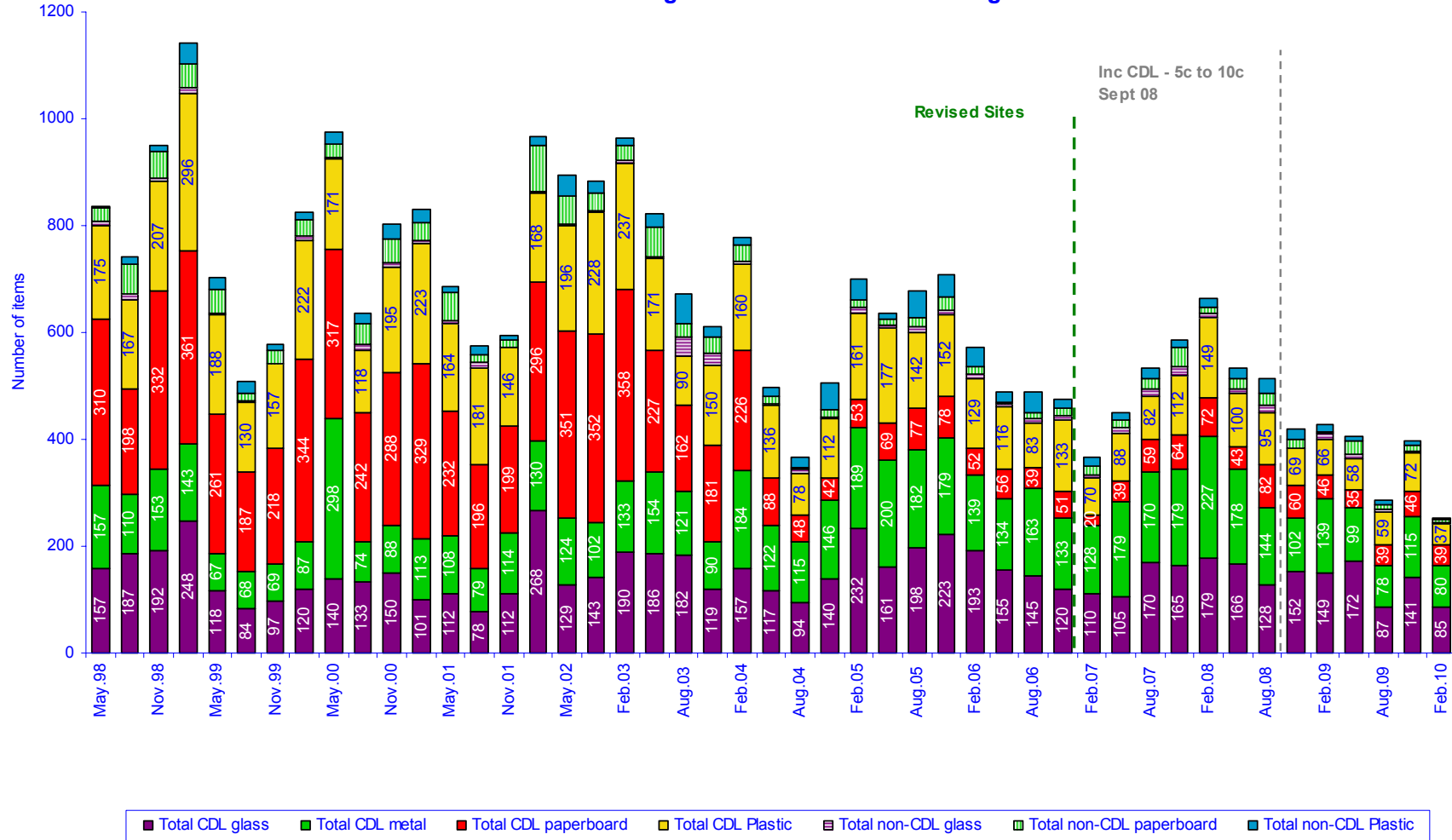
Proportion of Beverage Litter Covered By Current CDL &
Total Number of Beverage Litter Items & Containers Covered By Current CDL



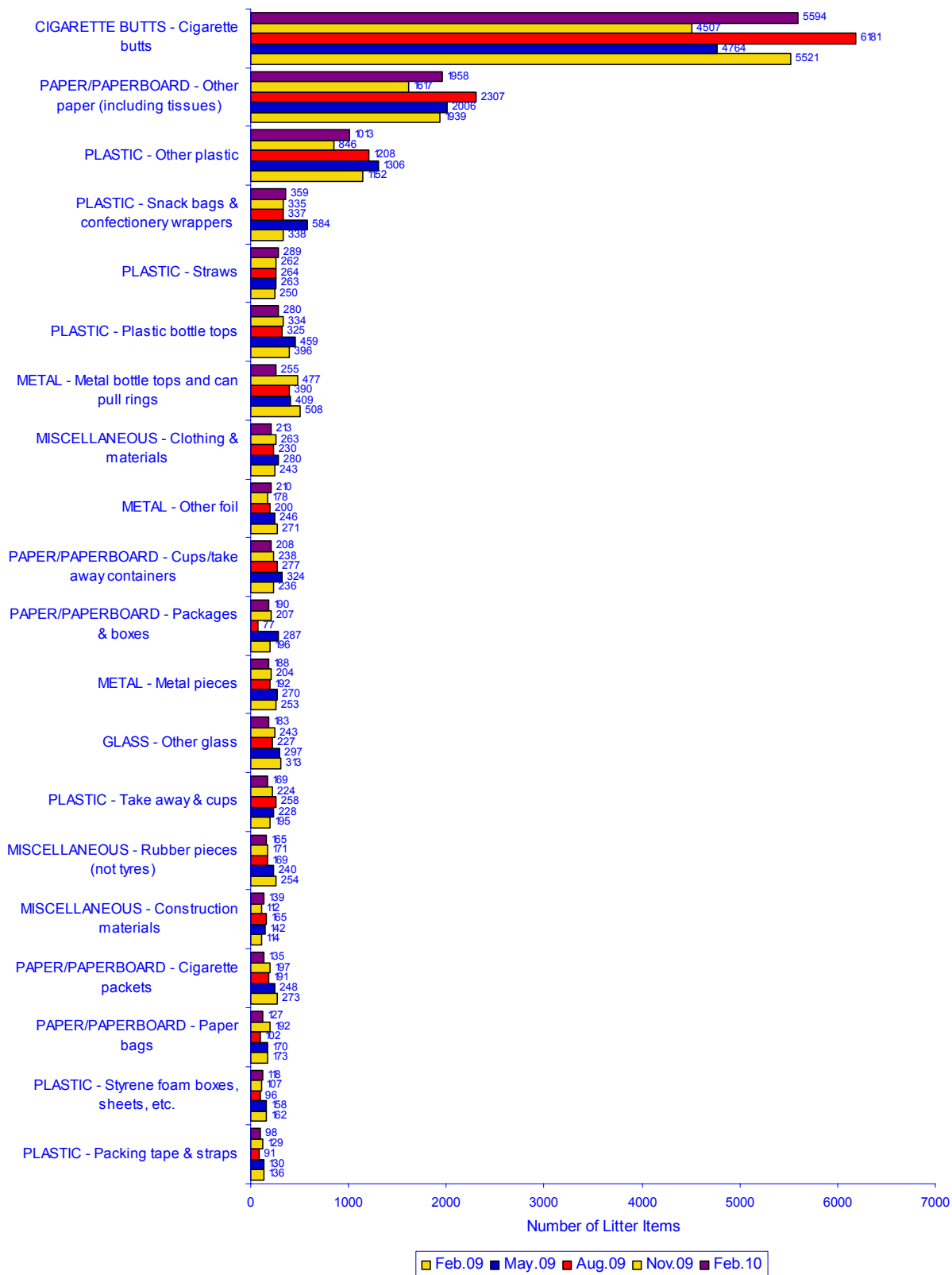
Proportion of Current CDL Litter Items in Total Litter Stream



CDL and Non-CDL Beverage Items Within Material Categories

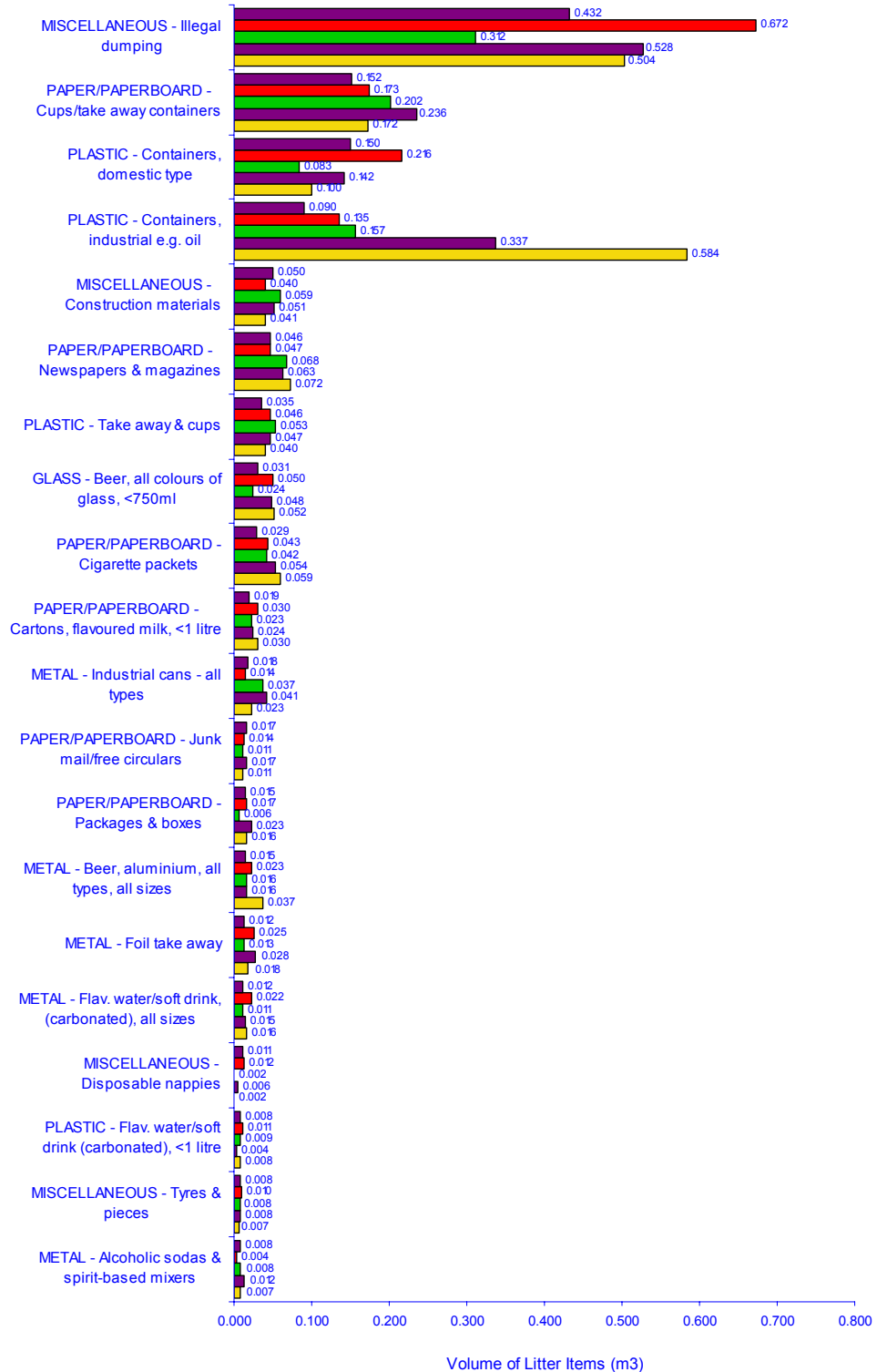


Top 20 Litter Items - Highest Counts



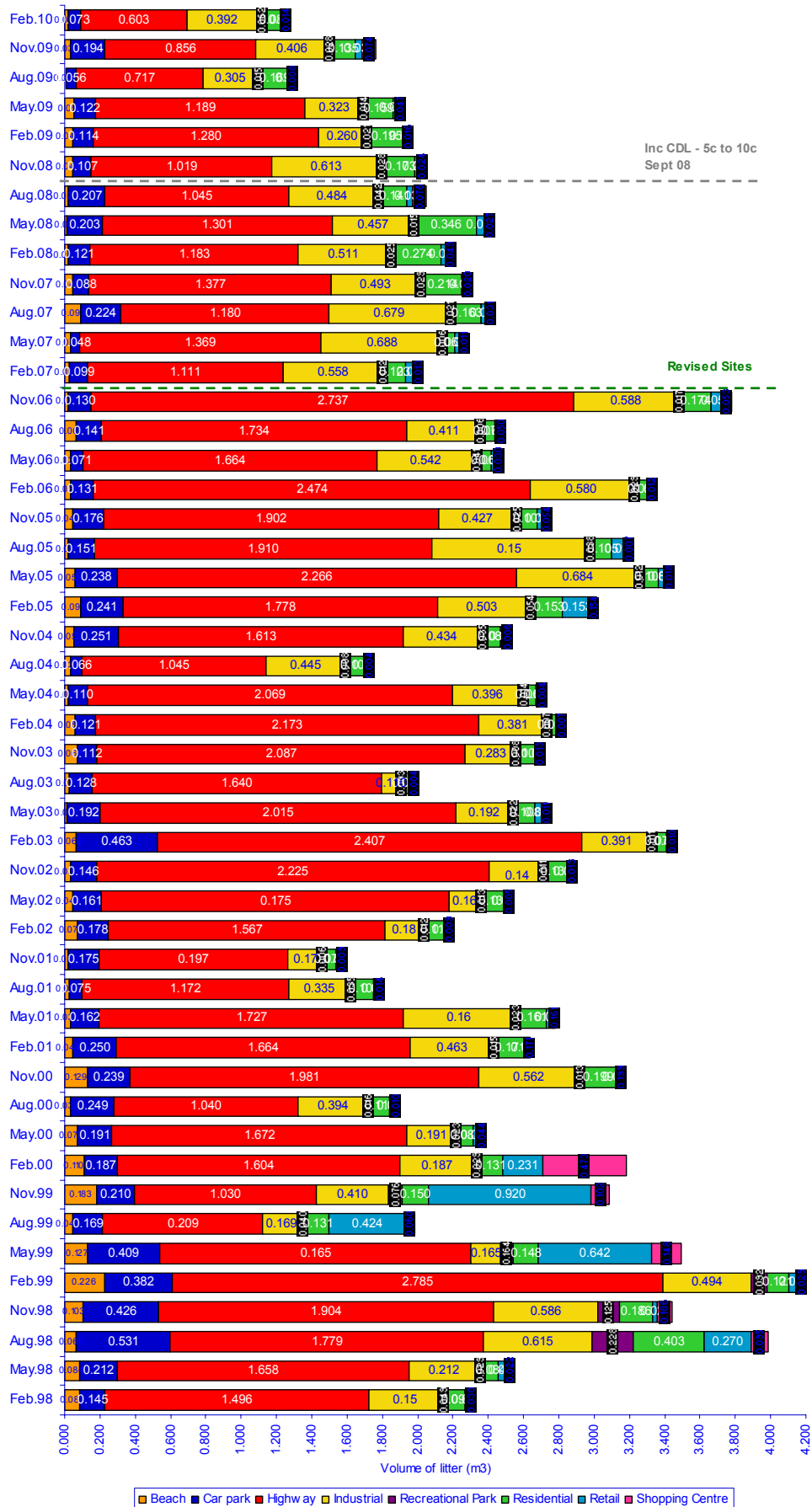
***Unweighted Tracking Graphs
- Volume***

Top 20 Litter Items by Volume

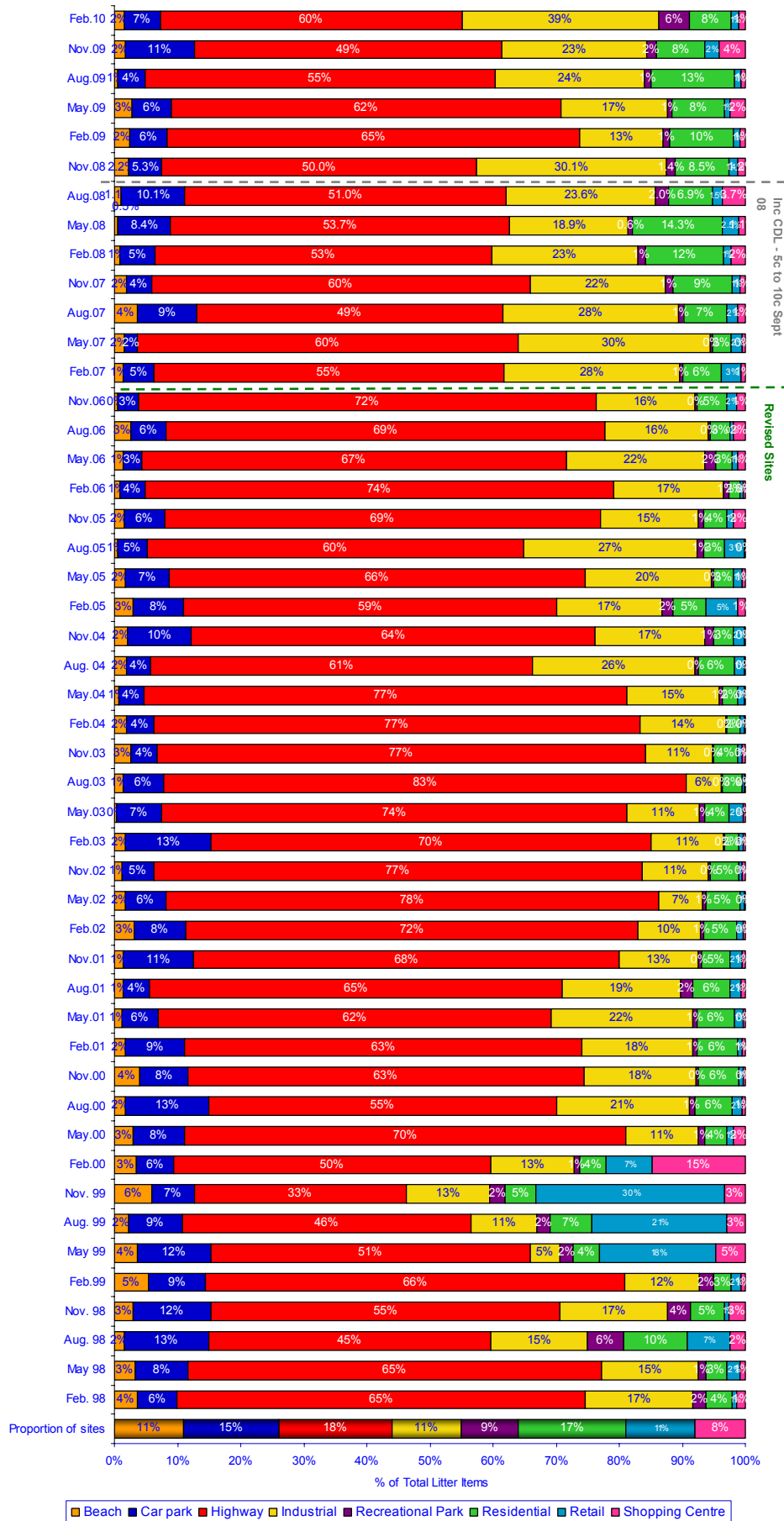


Legend: Feb.09 (Yellow), May.09 (Purple), Aug.09 (Green), Nov.09 (Red), Feb.10 (Dark Purple)

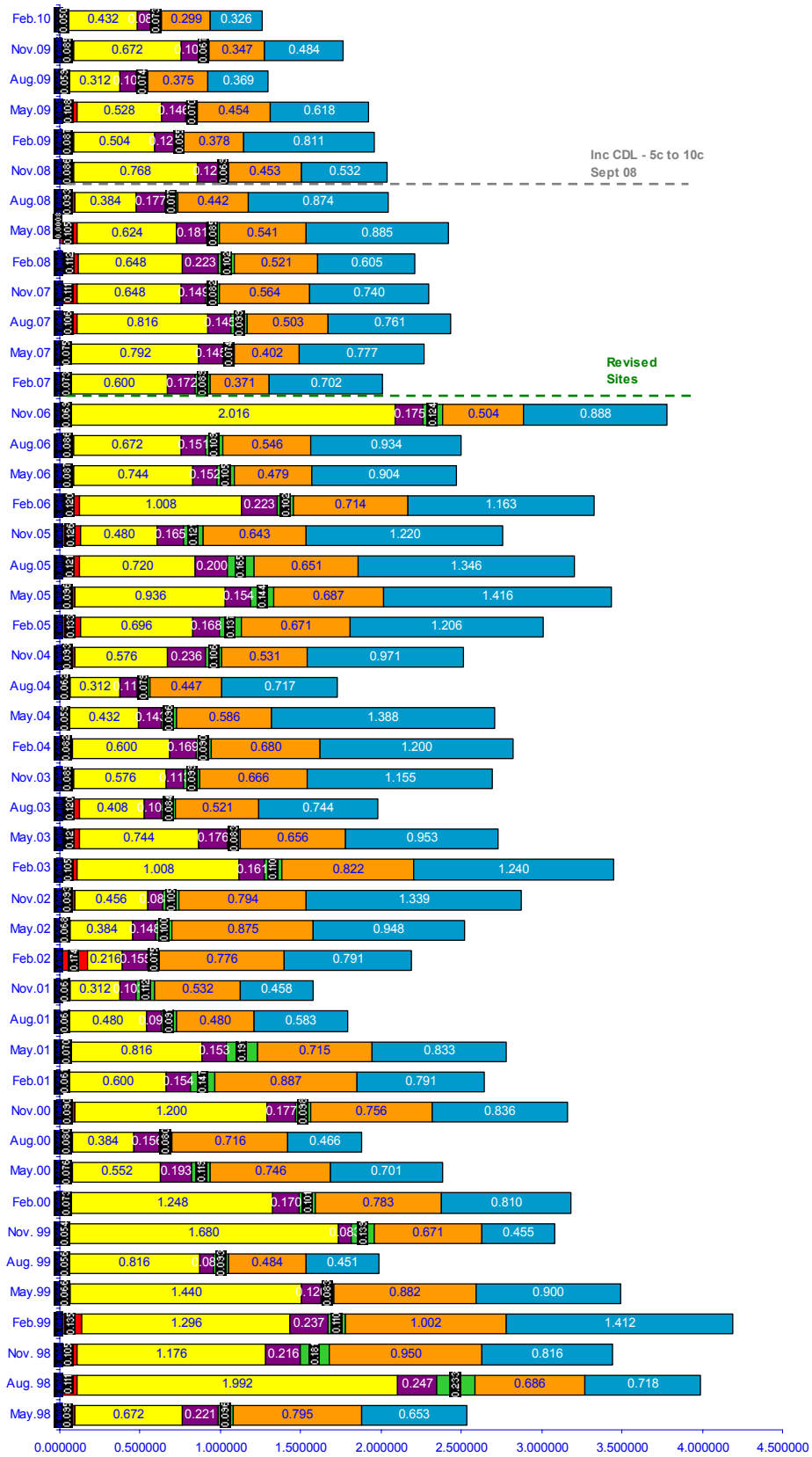
Volume of Litter by Site Type



Proportion of Litter Volume in Total Litter Stream by Site Type



Volume of Litter Items by Material Type

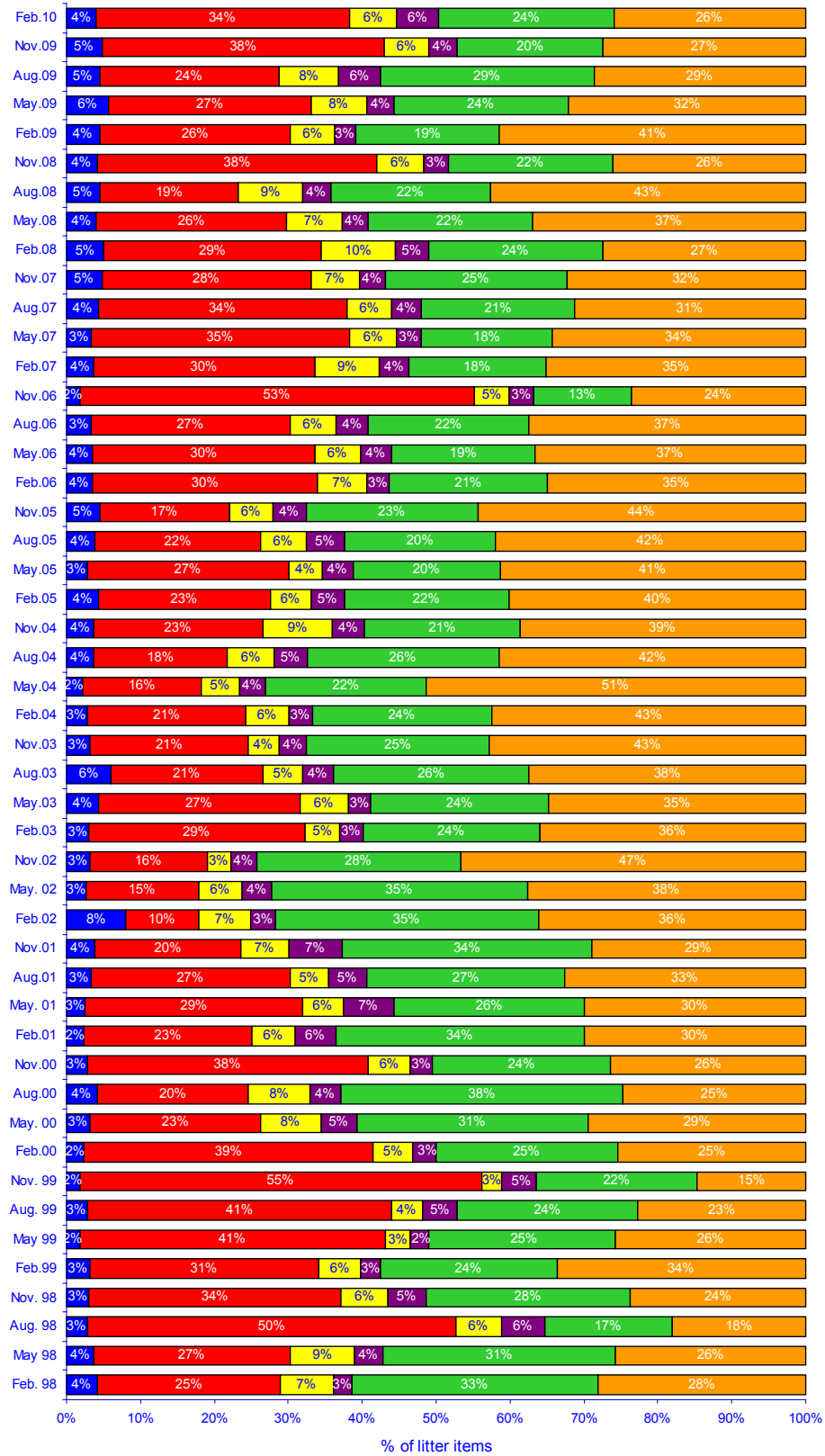


Volume of items (m³)

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

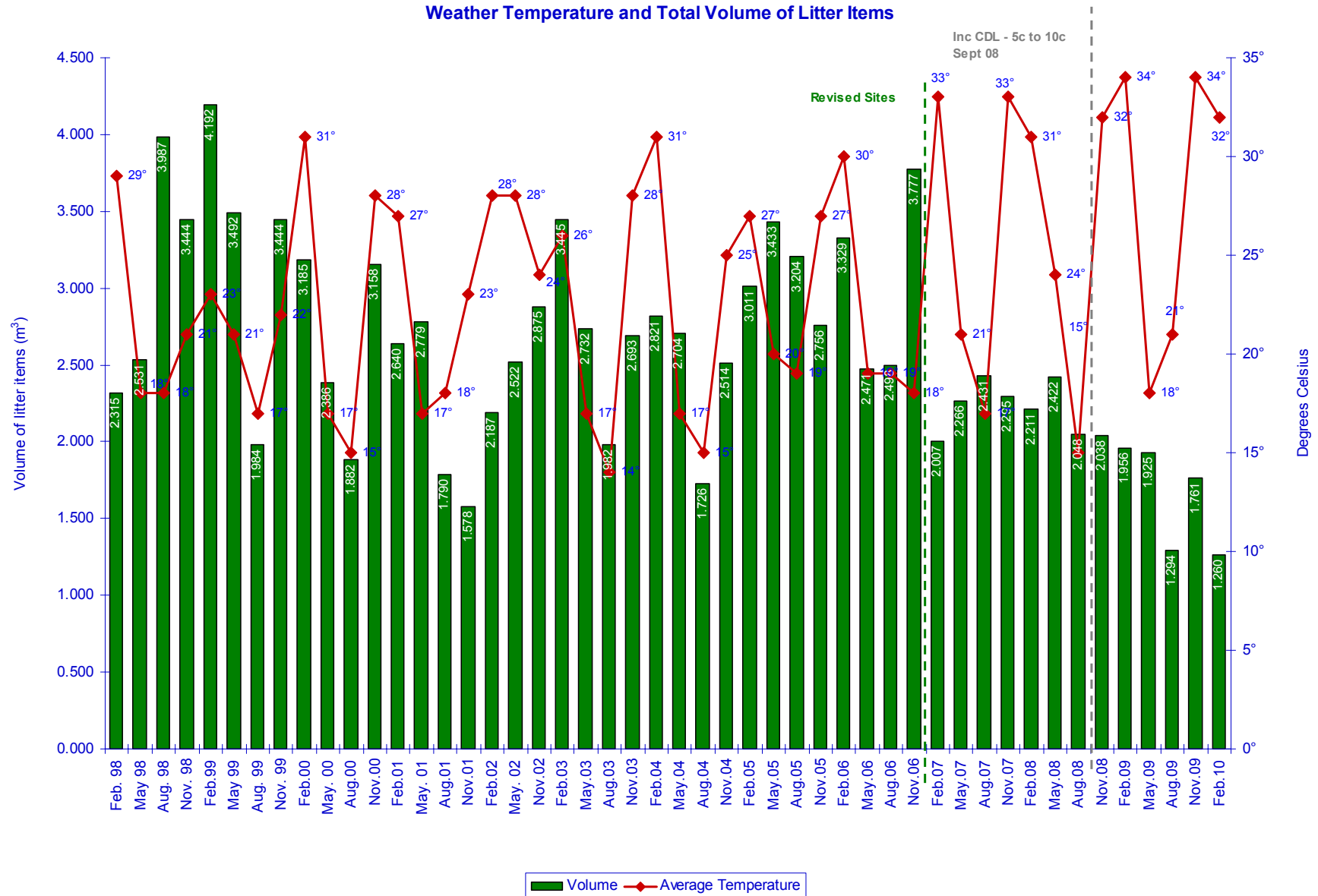
Proportion of Total Litter Volume by Material Type

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

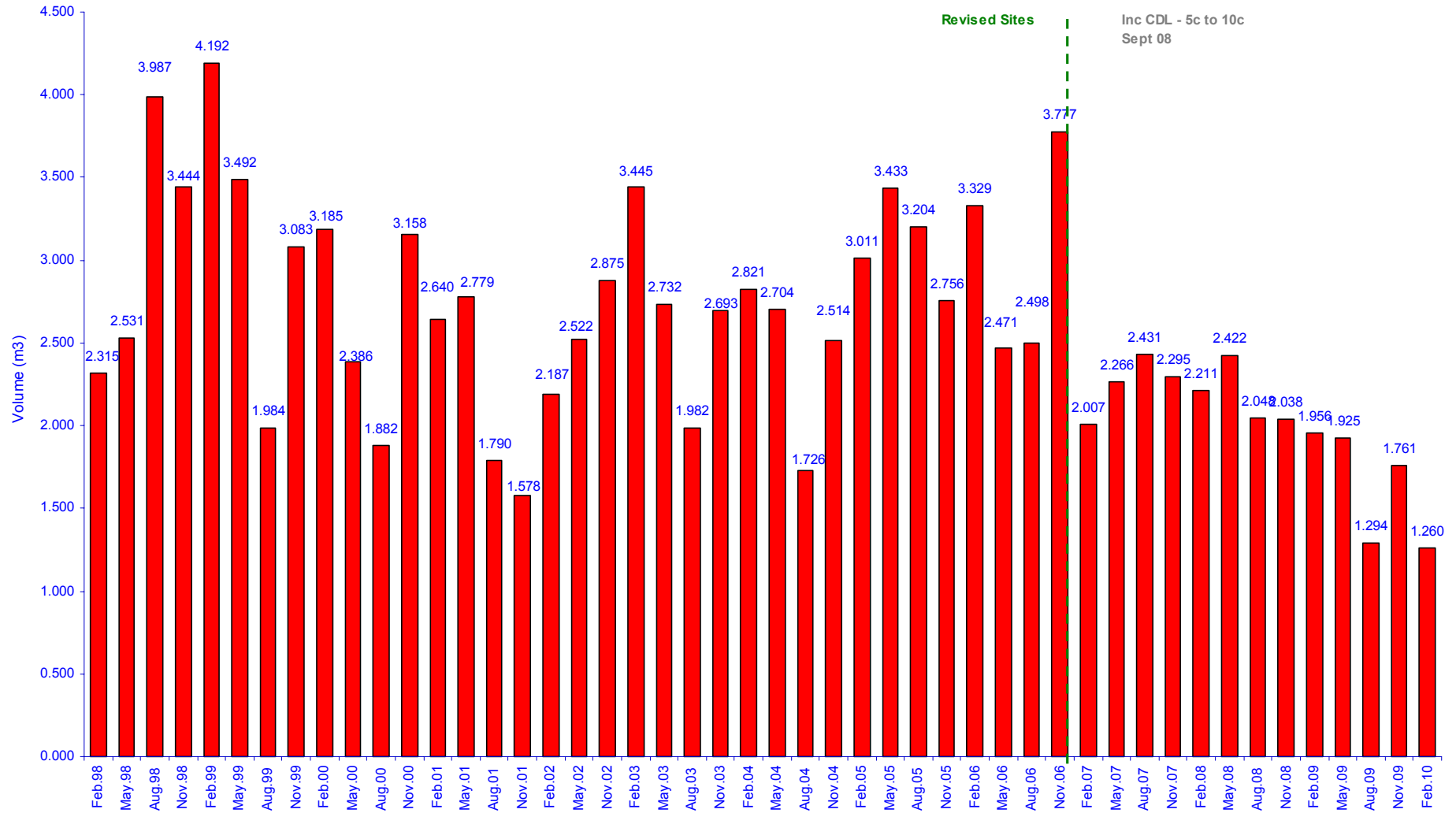


■ Glass ■ Illegal dumping ■ Metal ■ Miscellaneous (excluding illegal dumping) ■ Paper/paperboard ■ Plastic

Weather Temperature and Total Volume of Litter Items



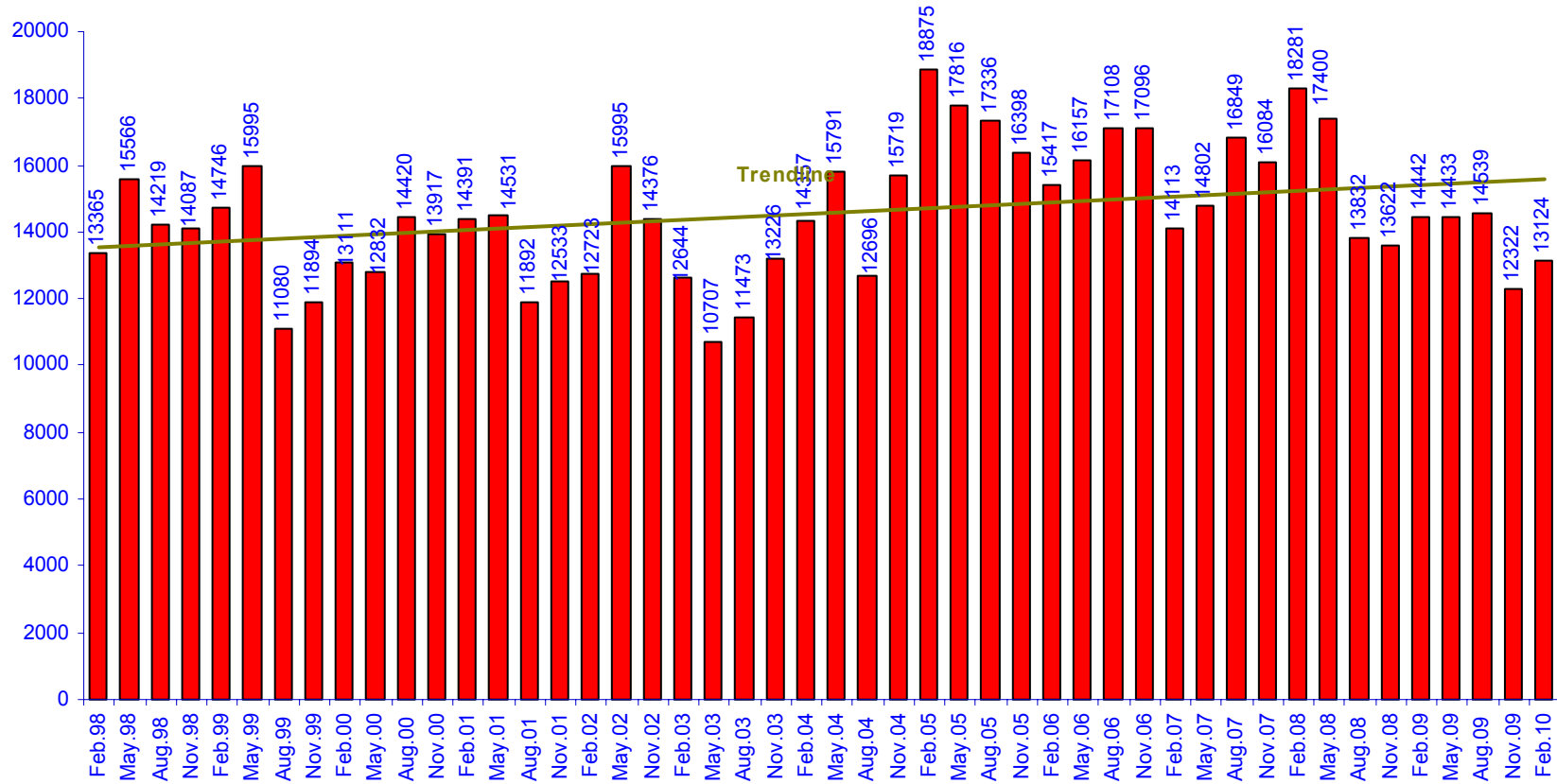
Total Volume (Cubic Metres) of Litter



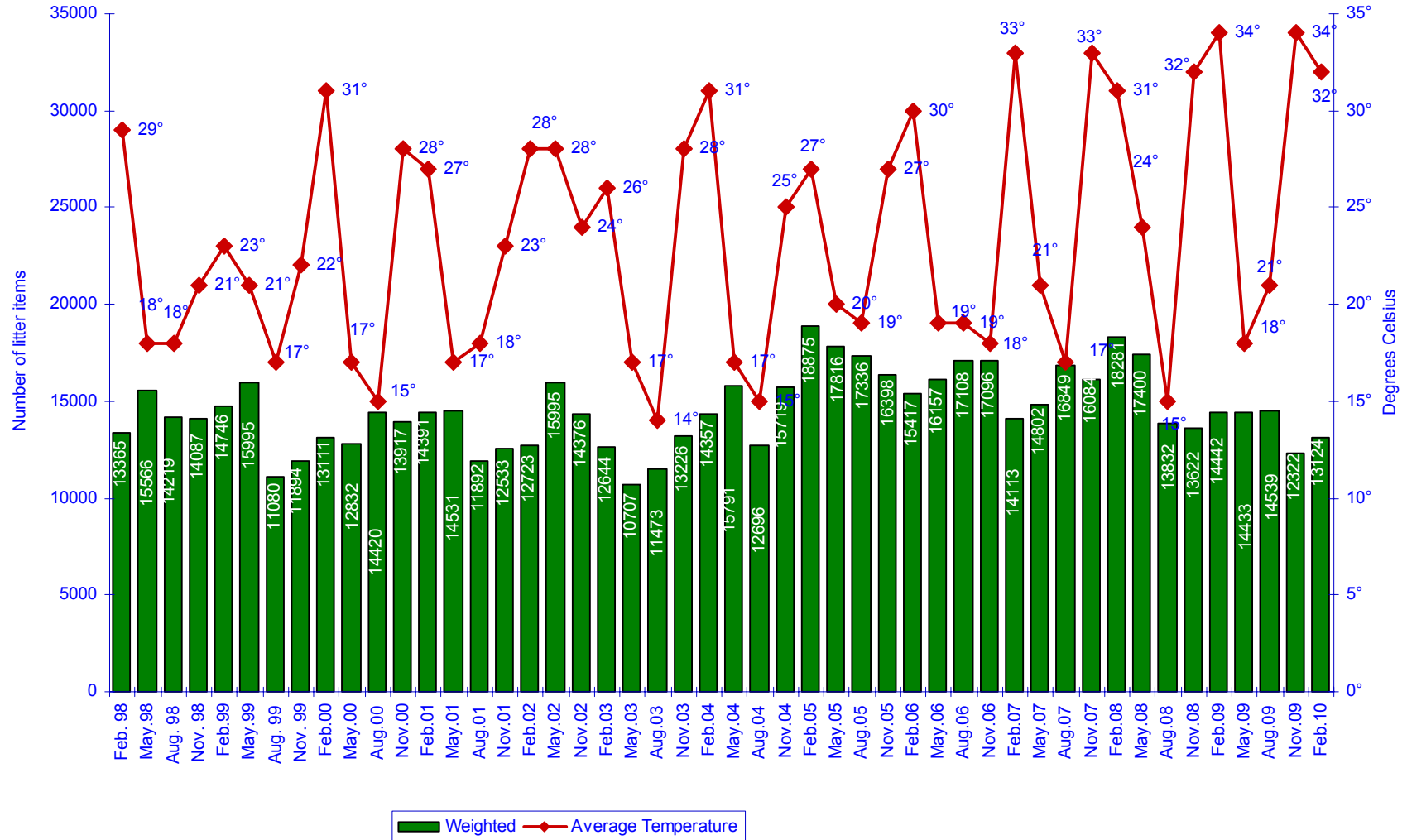
Weighted Tracking Graphs

- Items

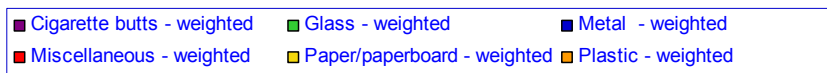
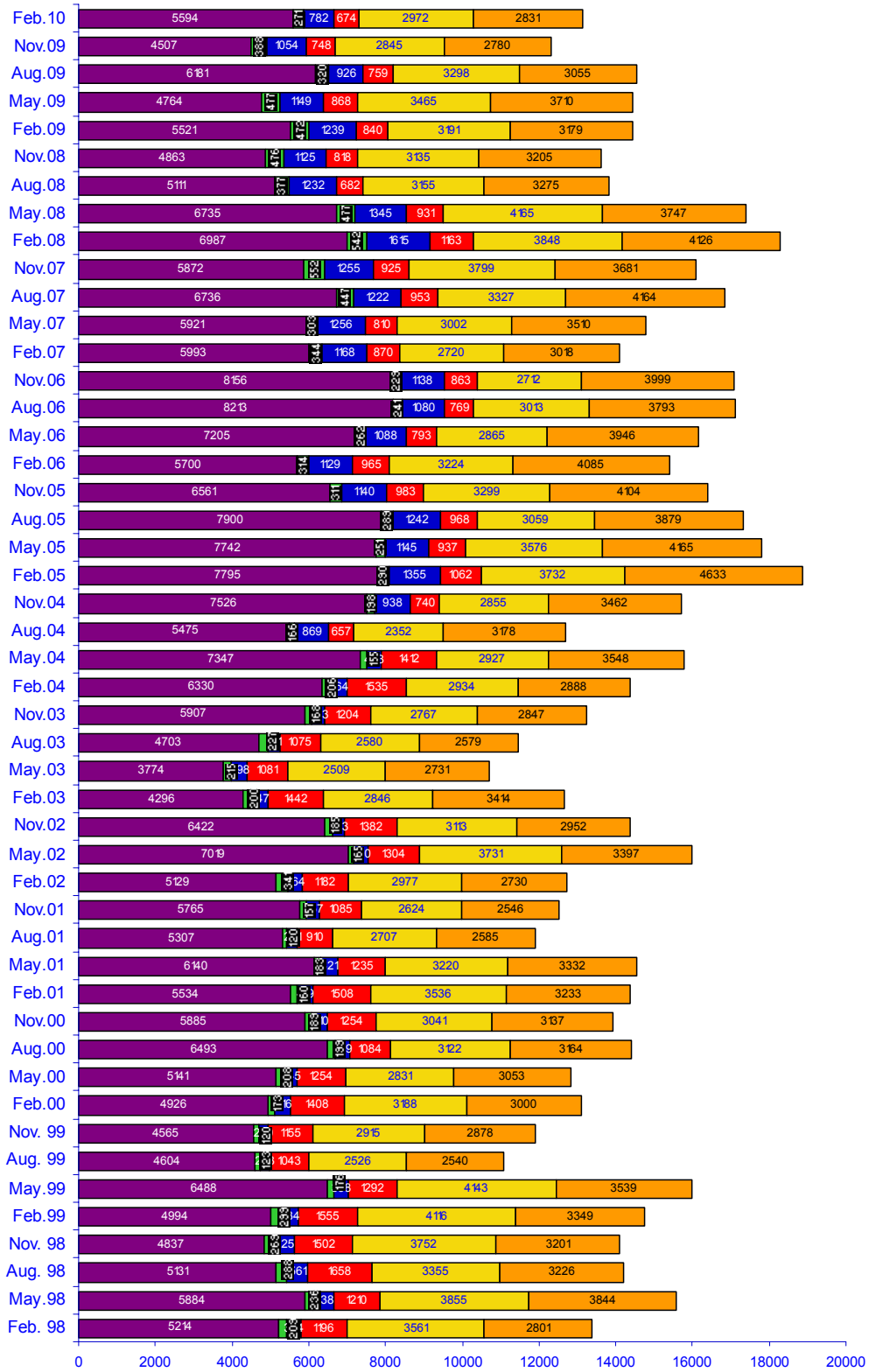
Total Litter - Number of Items - Weighted



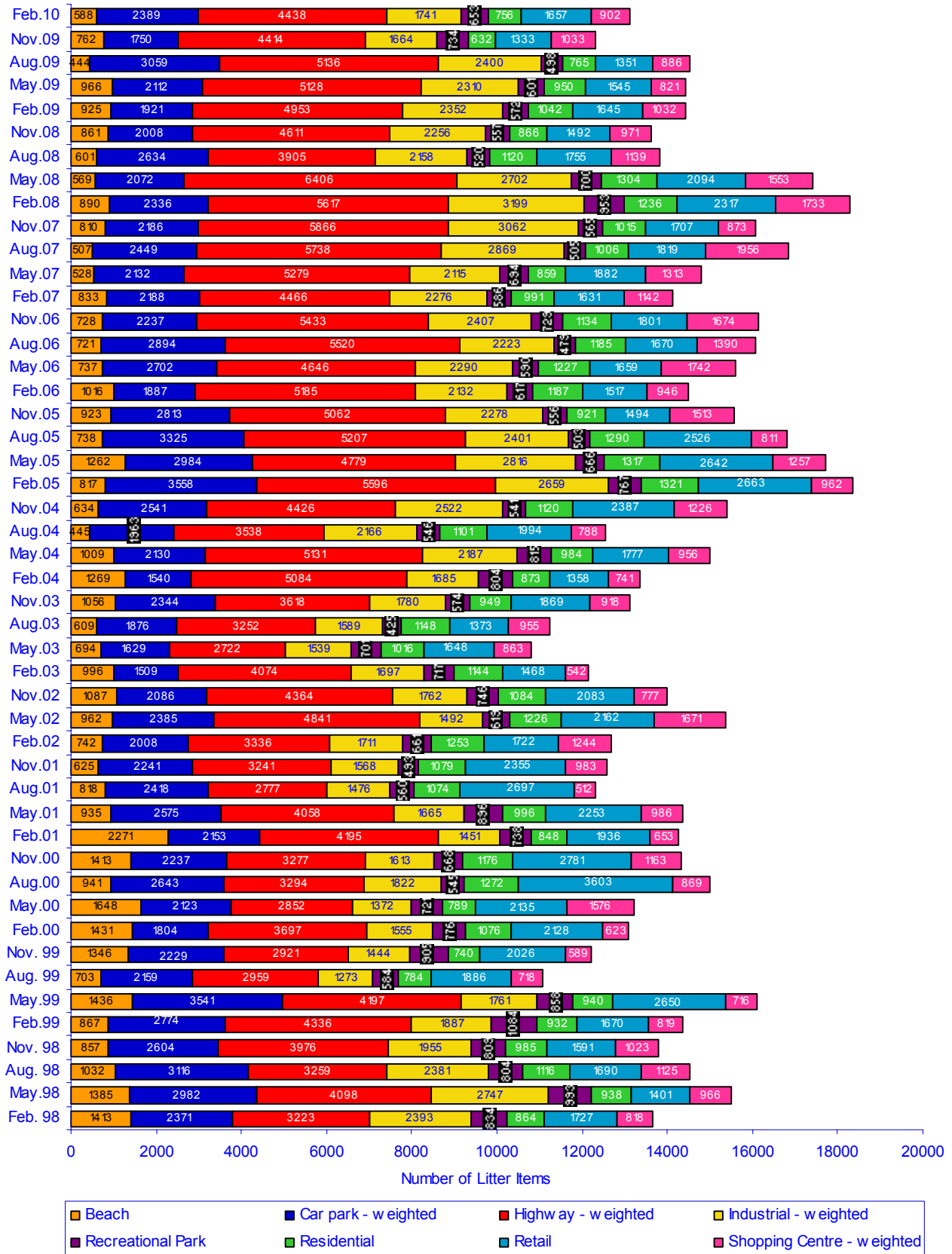
Weather Temperature and Total Number of Litter Items - Weighted



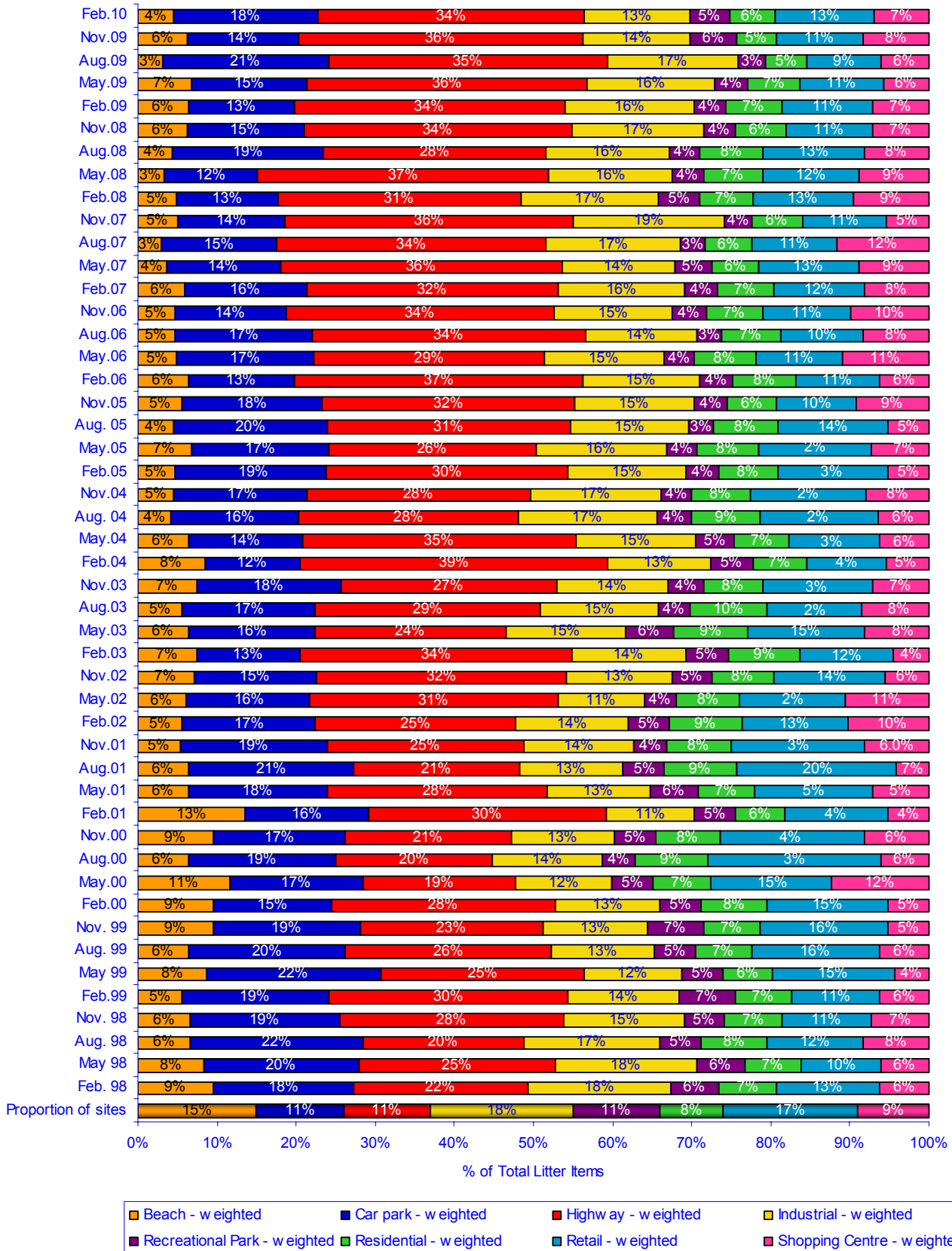
Number of Litter Items by Material Type - Weighted

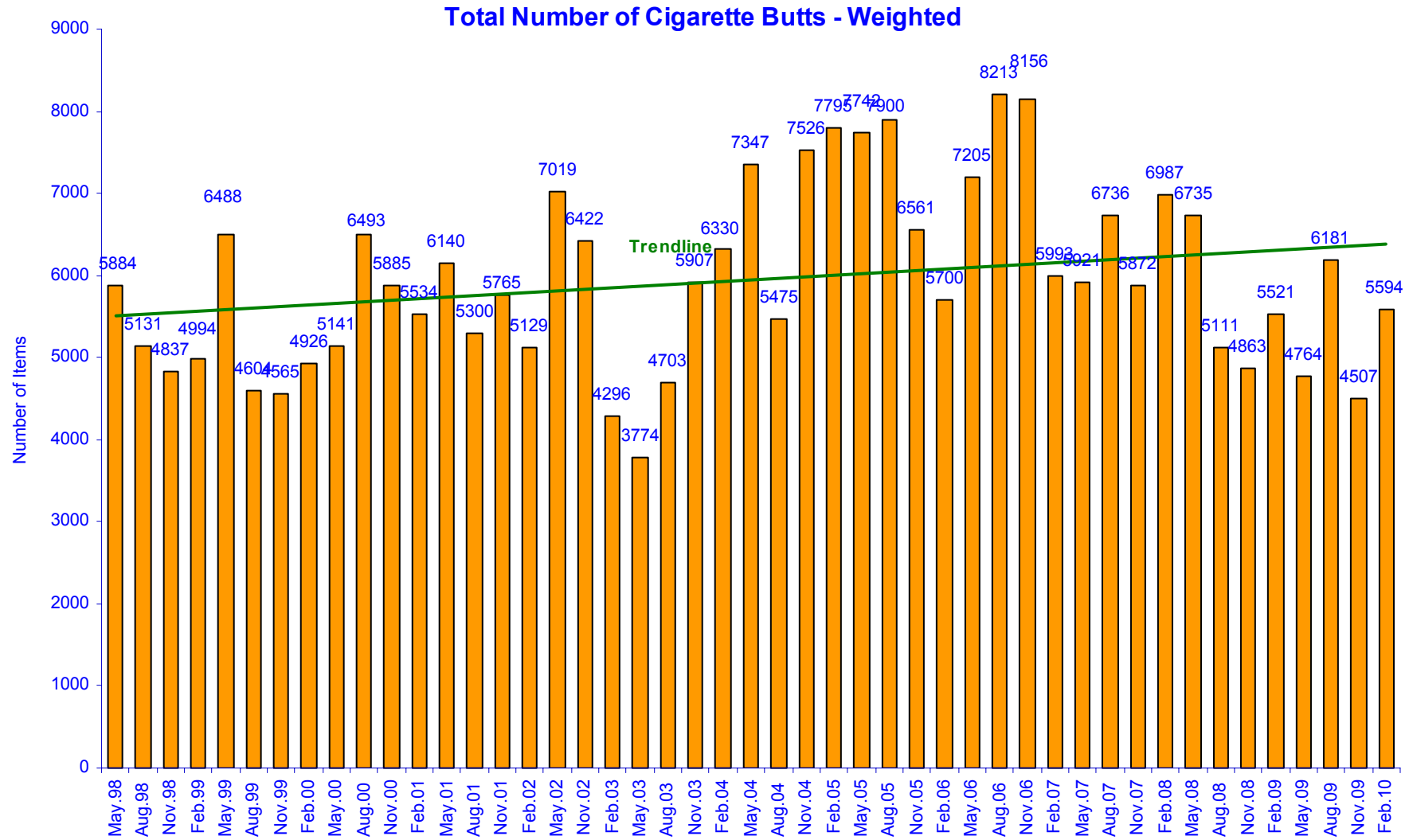


Number of Litter Items by Site Type - Weighted

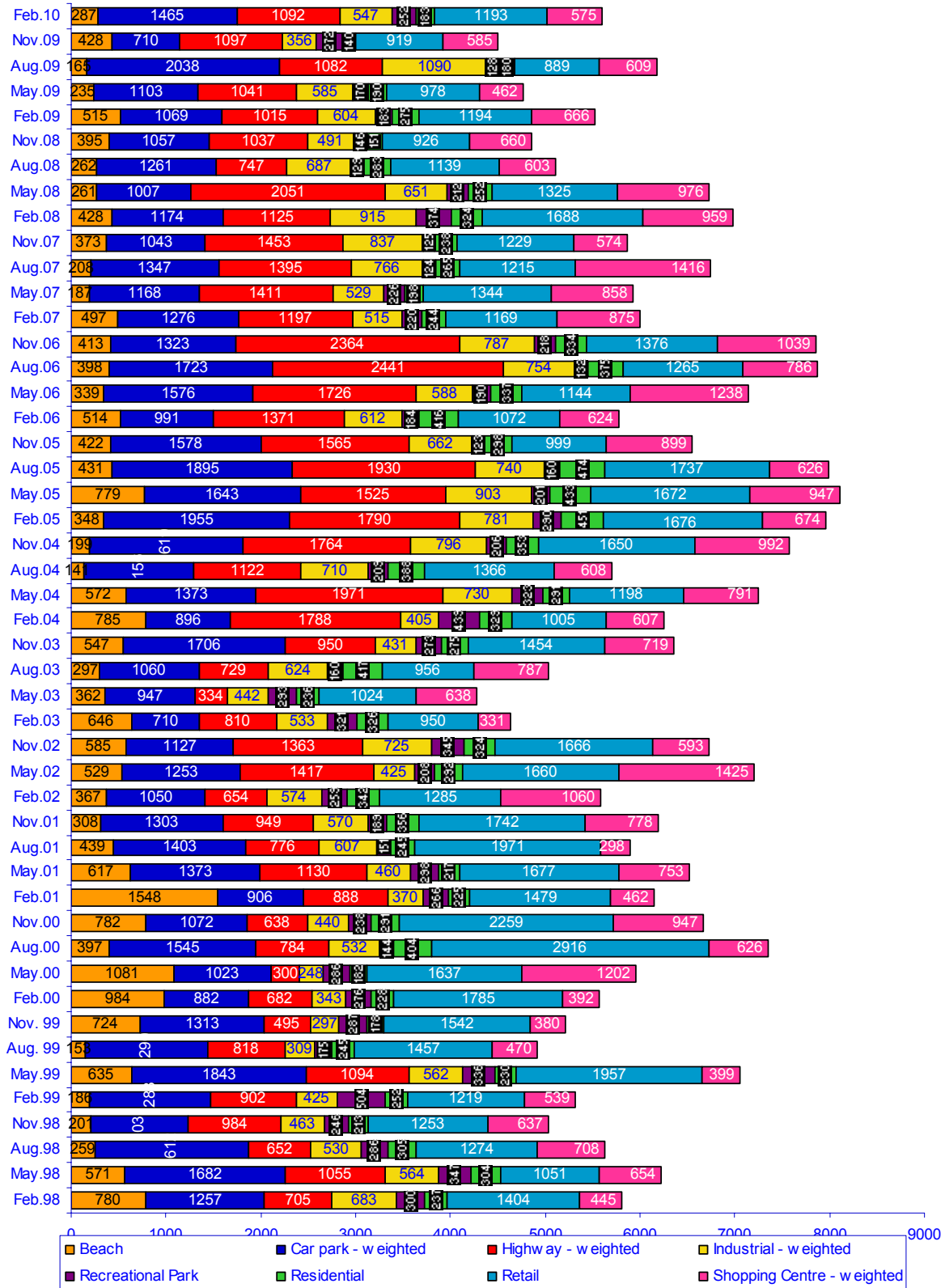


Proportion of Total Litter by Site Type - Weighted

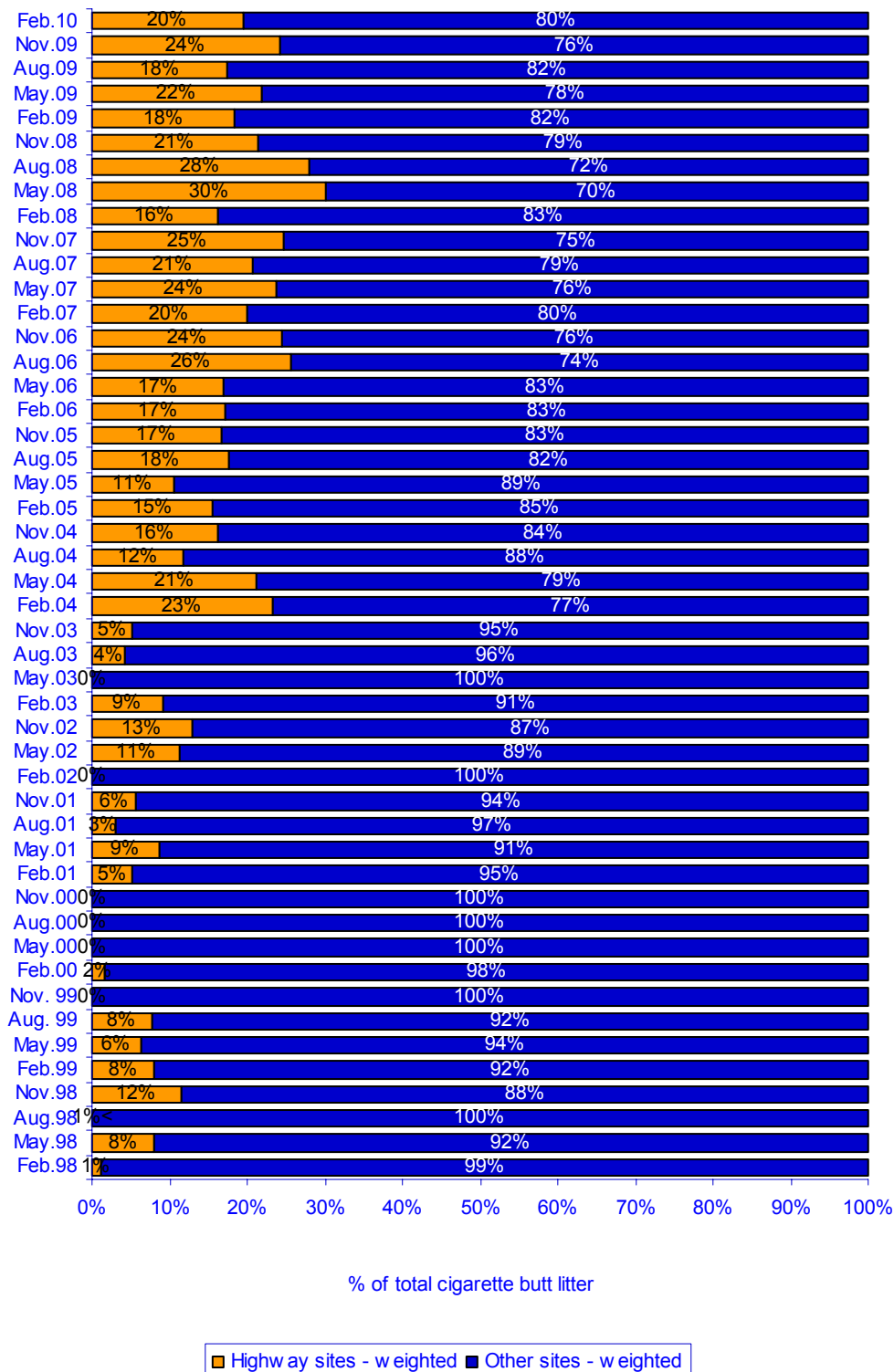




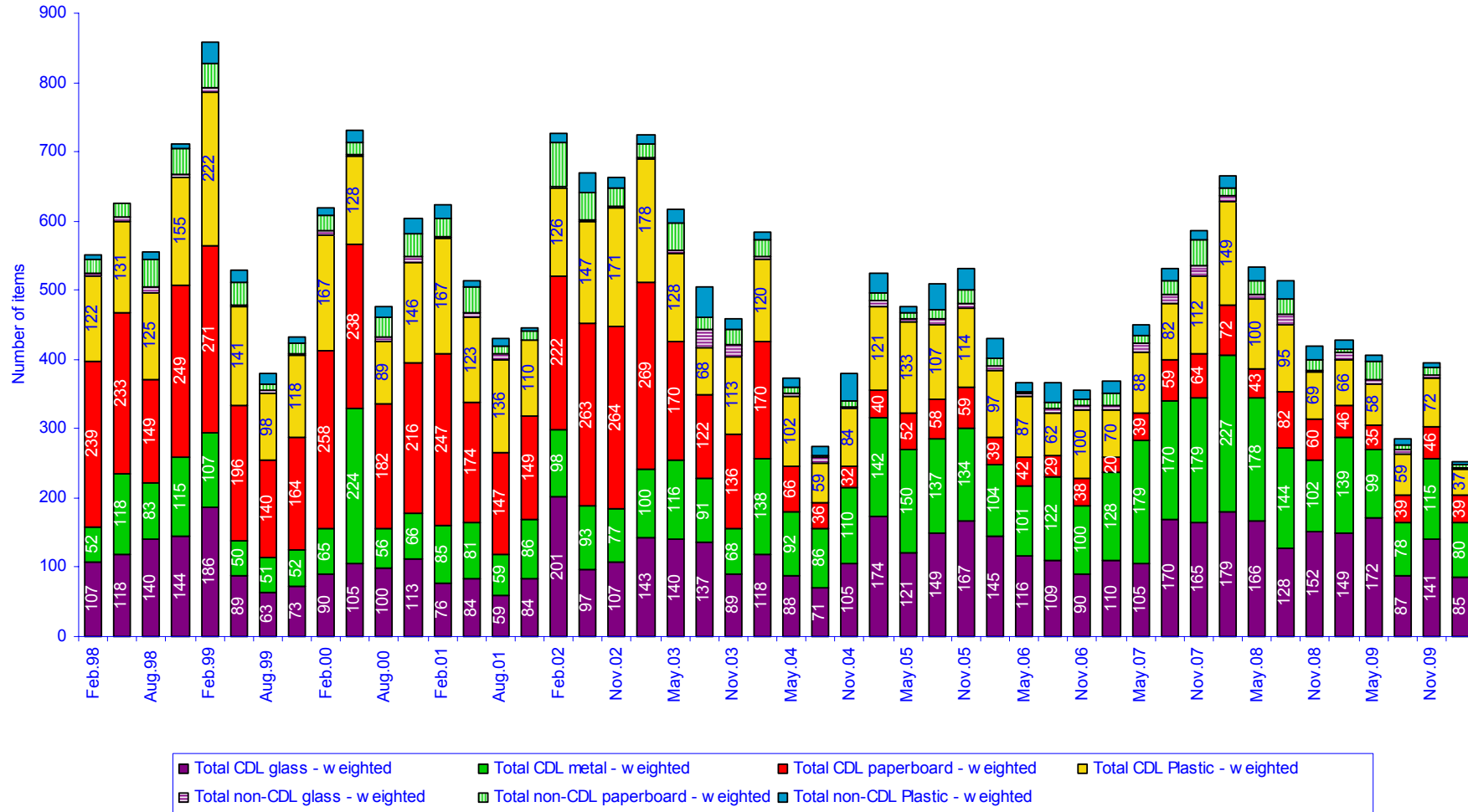
Number of Cigarette Butts by Site Type - Weighted



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



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

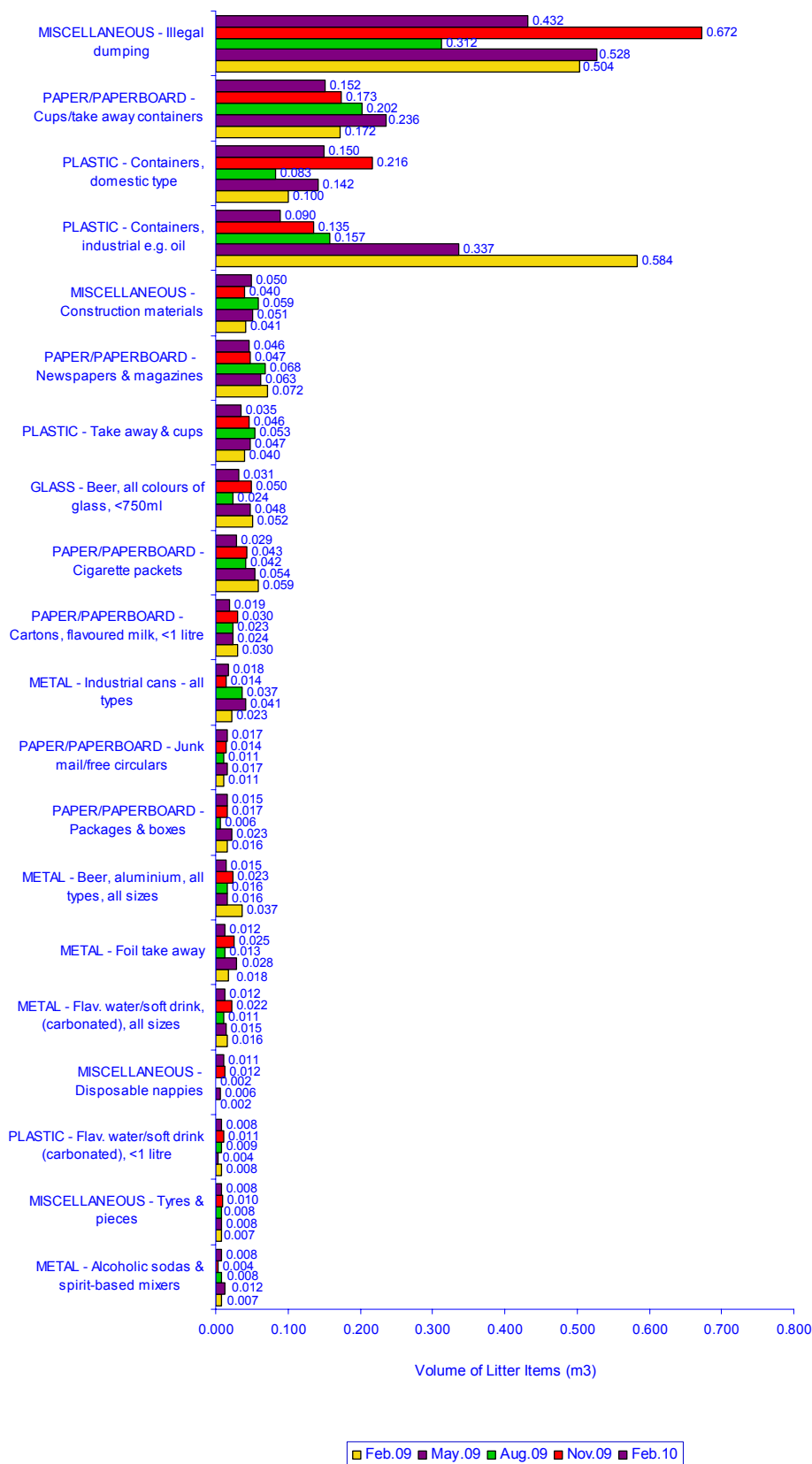


Top 20 Litter Items - Highest Counts - Weighted

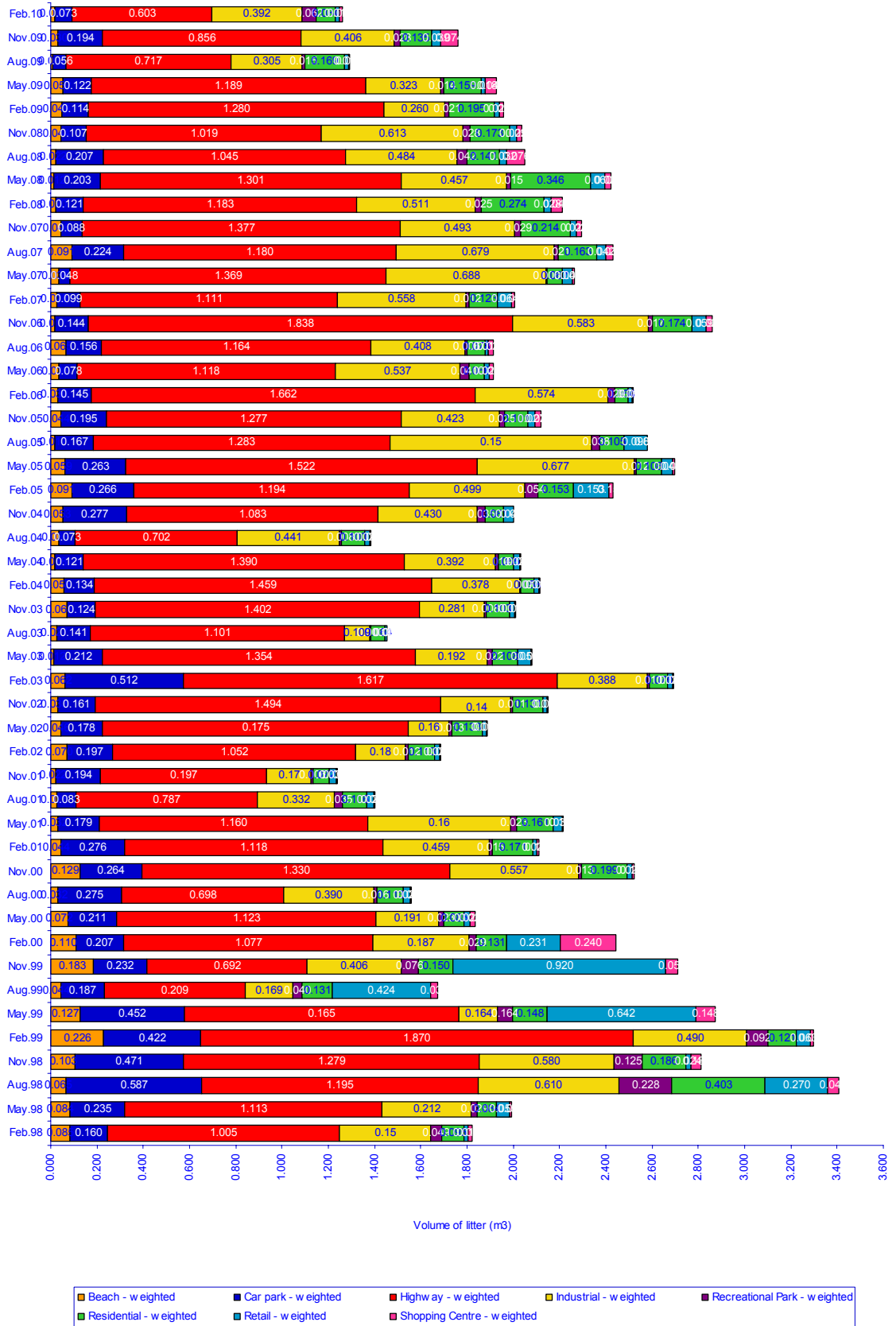


Weighted Tracking Graphs - Volumes

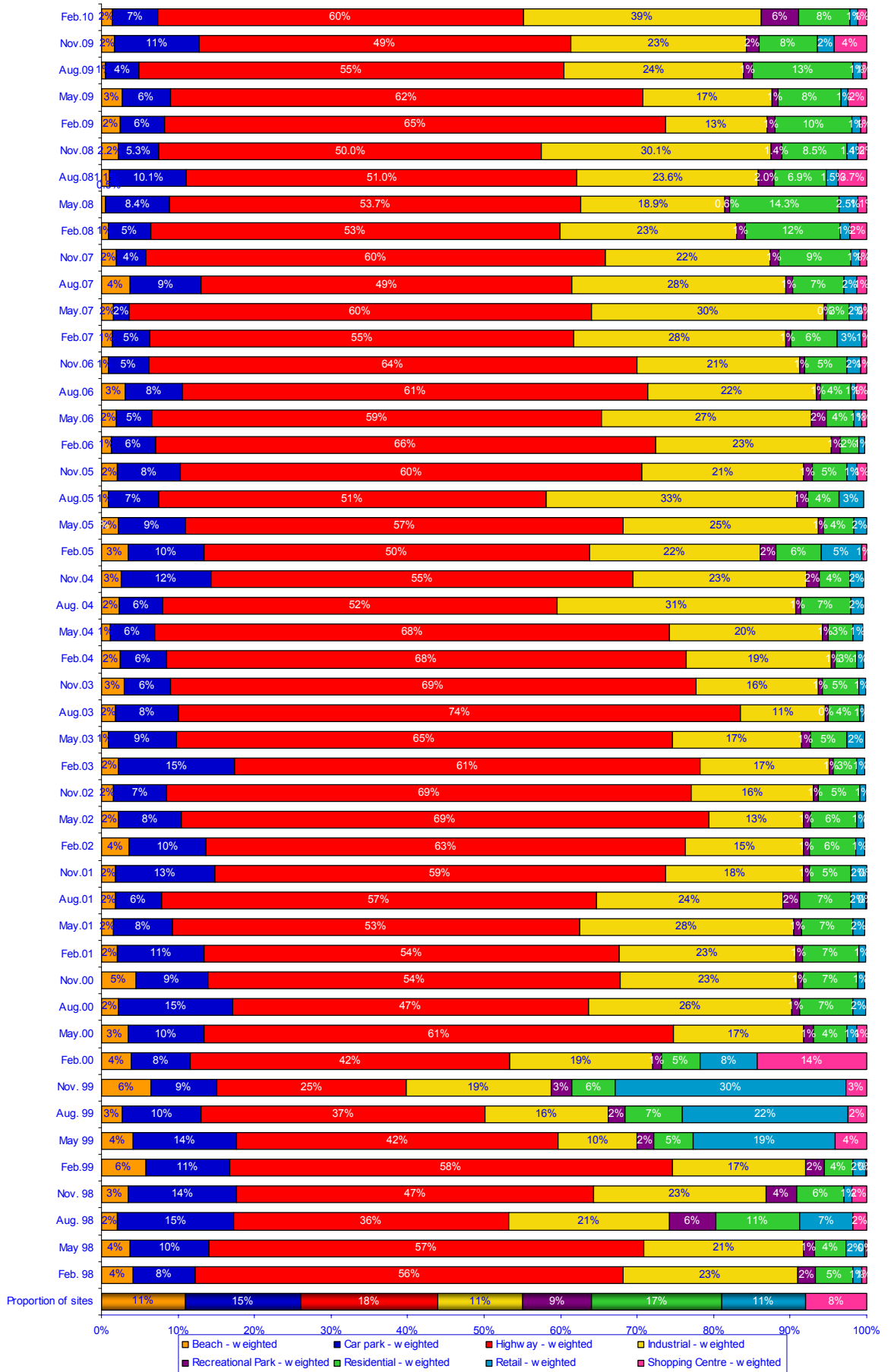
Top 20 Litter Items by Volume - Weighted



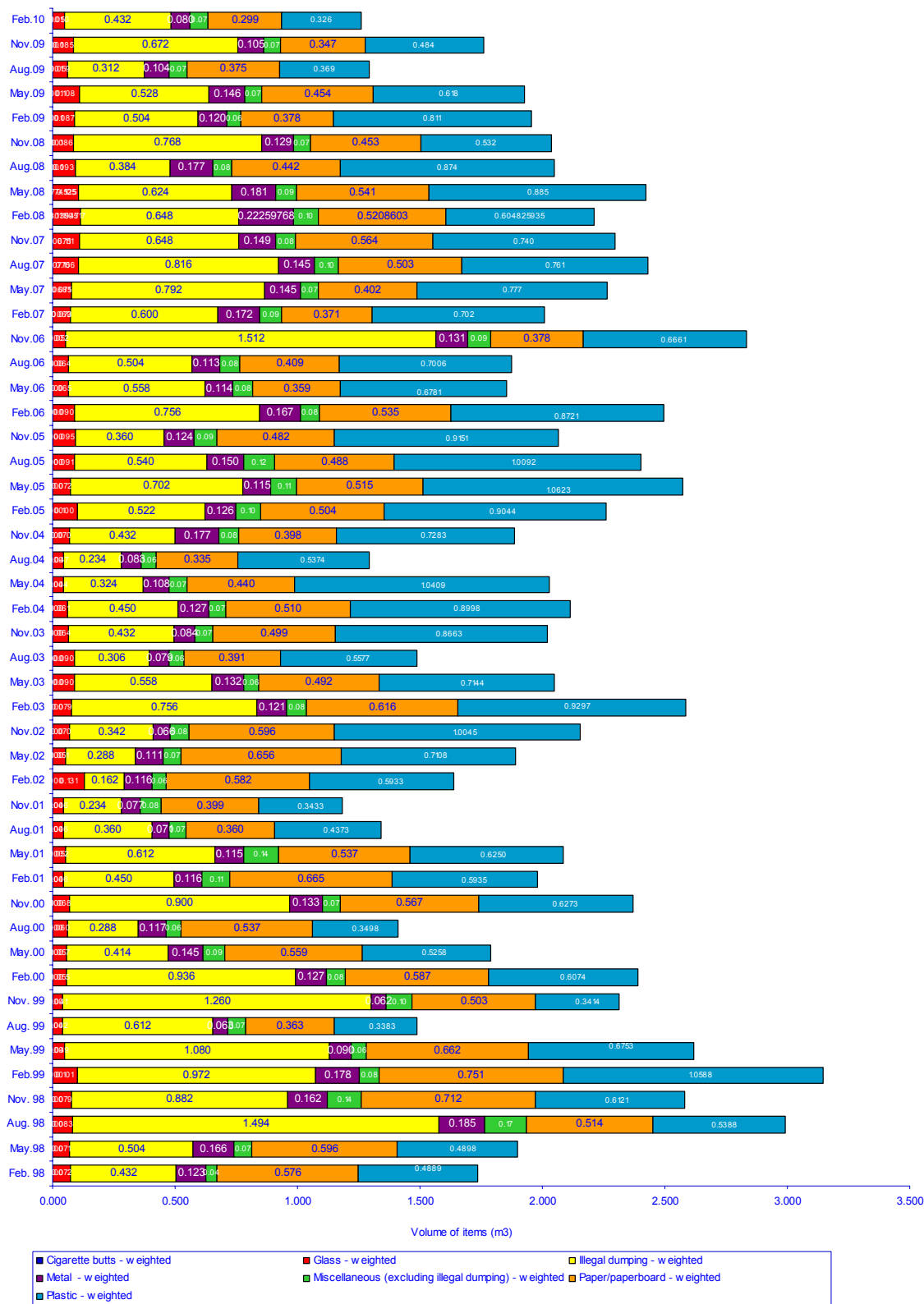
Volume of Litter by Site Type - Weighted



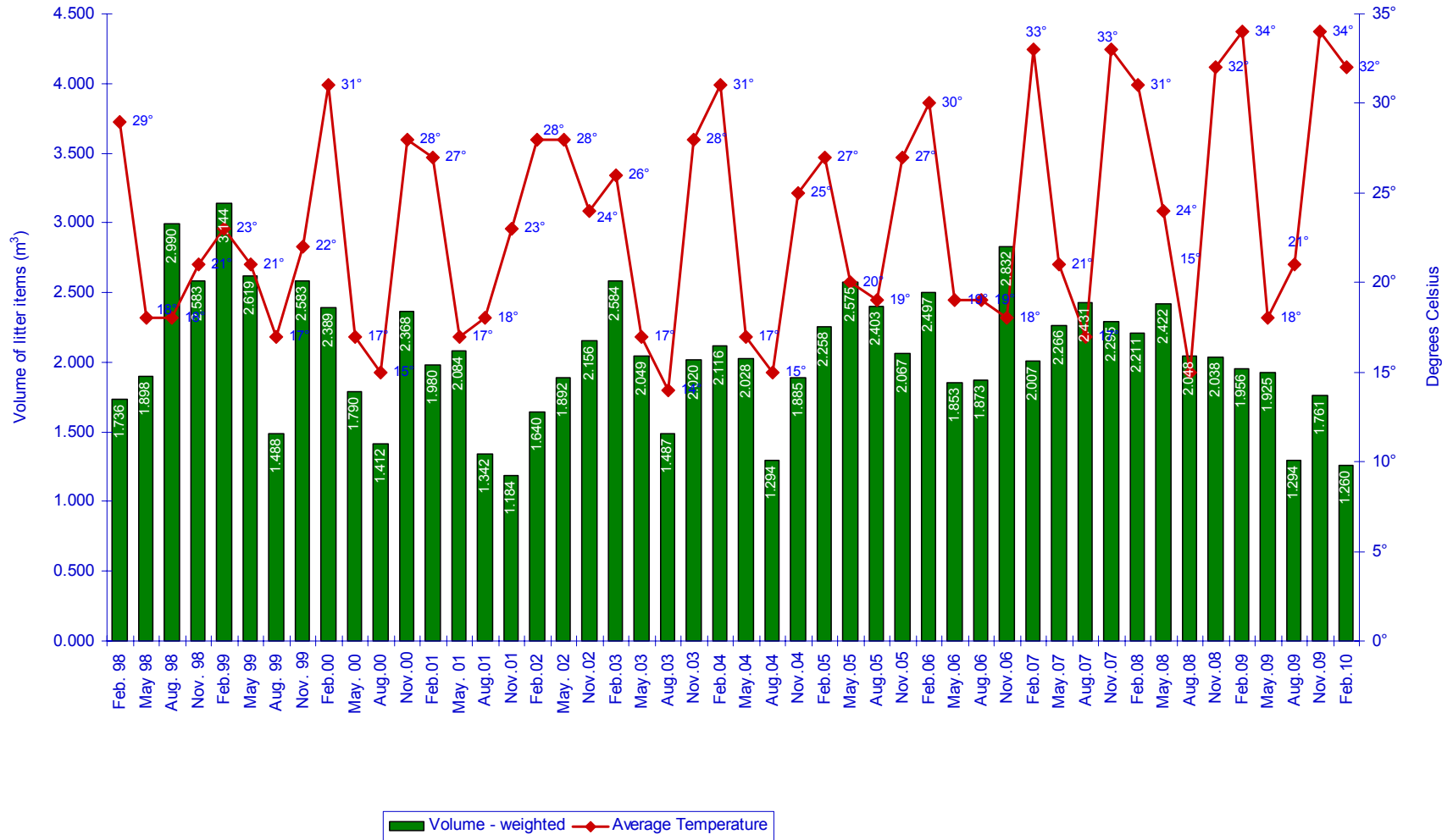
Proportion of Litter Volume in Total Litter Stream by Site Type - Weighted



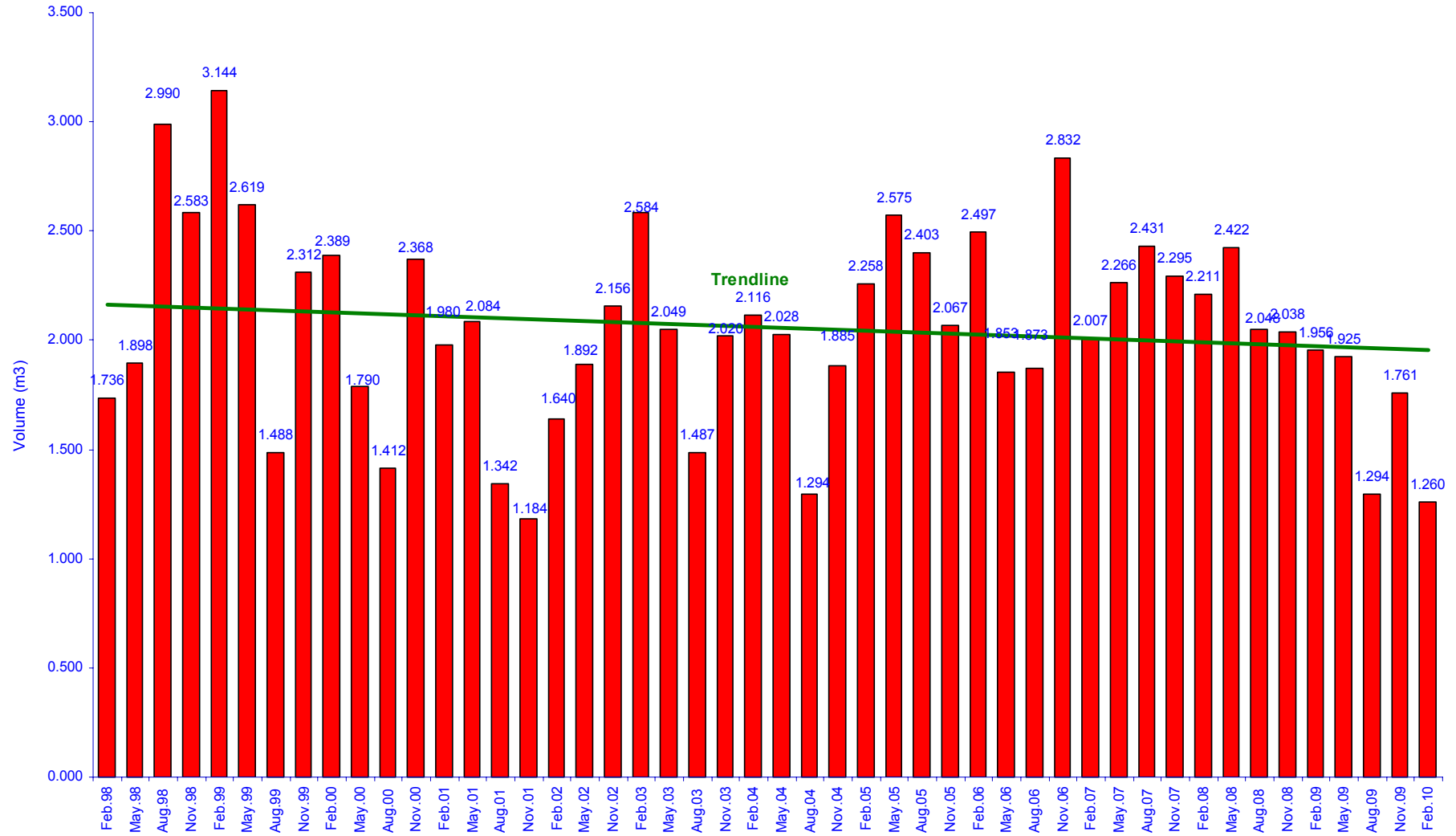
Volume of Litter Items by Material Type - Weighted



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: _____

| SITE CODE: | | SITE RESPONSIBLE PERSON: | | | DATE: | | | | | | |
|------------|-----------------|---|-----------|-------|--|----|--|---------------------------|-------------------------|--|--|
| Item Type | | Brand | Work Area | Total | Item Type | | Brand | Work Area | Total | | |
| GLASS | Ga | Plain water (carbonated or non-carb.), 1 litre+ | NONE | | METAL | Ma | Beer, aluminium, all types, all sizes | | | | |
| | Gb | Plain water (carbonated or non-carb.), <1 litre | NONE | | | Mb | Alcoholic sodas & spirit-based mixers | | | | |
| | Gc | Flavoured water/soft drink (carbonated) 1 litre+ | NONE | | | Mc | Cider/fruit based etc. | | | | |
| | Gd | Flavoured water/soft drink (carbonated) <1 litre | NONE | | | Md | Water, carbonated & flavoured/soft drink | | | | |
| | Ge | Flav. water / fruit juice drink/ sports drink, (non carb), 1 litre+ | NONE | | | Me | Water, non-carbonated & flavoured, all sizes | | | | |
| | Gf | Flav. water / fruit juice drink/ sports drink, (non carb), <1 litre | NONE | | | Mf | Food cans (including pet food) | | | | |
| | Gg | Fruit juice, 1 litre or more | NONE | | | Mg | Industrial cans - all types | | | | |
| | Gh | Fruit juice, < 1 litre | NONE | | | Mh | Aerosols - pressure packs | | | | |
| | Gi | Wine cooler, all sizes | NONE | | | Mi | Metal bottle tops and can pull rings | | | | |
| | Gj | Alcoholic sodas / spirit-based mixers, all sizes | NONE | | | Mj | Metal pieces | | | | |
| | Gk | Cider/fruit based etc. | NONE | | | Mk | Foil take away | | | | |
| | Gl | Wine & spirit, all sizes | NONE | | | Ml | Other foil | | | | |
| | Gm | Beer, 750ml or more, all colours of glass | NONE | | | Xa | Tyres & pieces | | | | |
| | Gn | Beer, < 750ml, all colours of glass | NONE | | | Xb | Clothing & materials | | | | |
| | Go | Other glass | NONE | | | Xc | Illegal dumping | | | | |
| | CIGARETTE BUTTS | | | | | | MISCELLANEOUS | Xd | Syringes - Do Not Touch | | |
| | | | | | | Xe | | Ice cream sticks | | | |
| | | | | | | Xf | | Rubber pieces (not tyres) | | | |
| | | | | | | Xg | | Condoms | | | |
| | | | | | | Xh | | Construction materials | | | |
| | | | | Xi | Disposable nappies | | | | | | |
| | | | | Xj | OTHER MSC - (Please specify item types and brands below) | | | | | | |

| 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 | | | | |