# Australian Litter Measure

## LITTER SURVEY
## Perth Metropolitan Area
2024 – 2025

Perth NRM

GOVERNMENT OF WESTERN AUSTRALIA

WASTE AUTHORITY
WA...TOO GOOD TO WASTE

Keep Australia Beautiful WA

# Contents

# Executive Summary

This report presents the findings of Australian Litter Measure litter surveys completed by Perth NRM across the Perth metropolitan area during the 12 months to June 2025. To date, seven bi-annual surveys have been completed using this method and this report includes the full results of the November 24 and May 25 surveys, as well as a preliminary overview of trends/patterns seen across the seven surveys completed to date.

For 2024/25, across 106,619 square metres surveyed, 12,764 items of litter were counted, with a calculated volume of 716.61 litres.

**Cigarette Butts and filters** were found to be the most common item by count, while **Paper and Card food packaging** was the highest item by volume. On a raw basis, **Main Road** sites contained the highest litter by count and Industrial had the highest litter by volume. **Beaches** had the lowest litter levels by raw count and volume. **Plastic** represented the highest material found by count (58%) and volume (31%). Detailed data and analysis is provided for site types, and key litter items and categories in *Section 3.0 Litter Data by Site Type* and *Section 4.0 Key Categories and Items*.

In this report litter data has been provided by site types and key categories to establish a basis for trend analysis under this newly developed litter count method.

# About Perth NRM

Perth NRM is a not-for-profit organisation, in the natural resources management (NRM) sector.

Perth NRM has successfully partnered with industry groups, local, state and federal government departments, educational institutions, and land care groups to promote long-term outcomes in water quality, biodiversity enhancement, healthy coastal environments, cultural heritage preservation and sustainable agricultural practices. Through collaborative natural resource management initiatives, we contribute to the social, economic, and environmental well-being of the Perth region.

**Our purpose:** Empowering people to positive ecological impact.
**Our vision:** We live in thriving natural ecosystems with sustainable food production.

# 1.0   Project Summary

## Project Background

The Australian Litter Measure ("AusLM") is a newly developed litter count method, designed to capture high volumes of standardised litter data across all states of Australia. In May 22 an initial baseline litter survey was completed by Perth NRM utilising this method, which served to identify key items and indicators for litter in the Perth metropolitan area. Following this initial survey, Keep Australia Beautiful Council ('KABC') has engaged Perth NRM for a continuous Litter Survey that is scheduled twice a year over a three-year period.  These litter surveys will help to identify trends in litter levels, as well as assist KABC to track the efficacy of its programs.

The full findings of the November 24 and May 25 litter surveys are contained in this report. Reports from previously completed litter surveys (including the May 22 baseline litter survey) can be obtained from the Keep Australia Beautiful WA website.

# 1.0 Project Summary

## Scope

Over a two-week period in both November 24 and May 25, litter surveys were conducted at 57 sites across ten local government jurisdictions within the Perth Metropolitan area. The litter surveys were completed following the guidelines contained in the AusLM Field Guide (a comprehensive nationally applicable handbook that provides detailed guidance on all aspects of the AusLM litter count method). The guide defines six distinct site types where surveys should be undertaken, summarised in the below table. The guide also prescribes the relevant parameters for the area to survey at each of the site types, and the number of transects (straight lines where litter counting is undertaken) to survey. In most cases, one of each site type was surveyed in each local government area.

| Site type | Description |
|---|---|
| Beach | A mostly sandy beach frequently visited by people for activities such as swimming, walking, other recreation and relaxation. |
| Residential Area | A street/collection of streets in a residential area. The street has homes, units, or apartments on both sides of the street |
| Industrial Area | A street/collection of streets in an industrial area. |
| Retail Area | A street/collection of streets within a retail precinct (i.e., shopfronts). |
| Recreational Park | A public outdoor park mostly covered by grass and frequently visited by individuals and families for recreation and leisure activities. |
| Main roads | Straight open stretches of sealed road with wide verges. Roads that typically act as an arterial for traffic between and around population centres. |

The table below provides an overview of the number of sites and transects surveyed in this program of litter surveys.

| Location | Number of sites surveyed* | Number of transects surveyed |
|---|---|---|
| LGA 01 | 6 | 28 |
| LGA 02 | 5* | 23 |
| LGA 03 | 6 | 28 |
| LGA 04 | 6 | 28 |
| LGA 05 | 5* | 23 |
| LGA 06 | 6 | 28 |
| LGA 07 | 6 | 28 |
| LGA 08 | 6 | 28 |
| LGA 09 | 5* | 23 |
| LGA 10 | 6 | 28 |
| Total | 57 | 265 |

* Three local government areas did not contain a suitable site (river or coastal) within their boundary, therefore those LGA areas only had 5 sites surveyed.

# 1.0   Project Summary

## Survey Methodology

KABC selected the 57 sites to be surveyed based on the AusLM Site Type assessment criteria (attached at Appendix 1).

Perth NRM engaged a team of litter surveyors to complete the periods of surveys. Prior to undertaking the surveys, the team received comprehensive theory and field-based training in the AusLM method.

The litter surveyors conducting the surveys worked in pairs, completing one site per team, per day. Data was collected on tablet devices, in an Excel workbook. Litter observed was classified based on the 247 items in the count sheet in the current AusLM Field Guide (refer Appendix 2).

Both team members set up the transects and collected site context information (to determine whether certain factors had an impact on the litter levels, such as the presence of waste and recycling bins, BBQ areas in parks and council bin days). For the litter counting, one "spotter" called out the items observed, while the other surveyor recorded the data into the workbook.

Perth NRM has undertaken the data collation, review and analysis of the final findings and compilation of the written report.

## Measurement Methodology

AusLM uses a standing stock visual litter count. This method was chosen as the most appropriate way of answering questions about broad trends and achievements at the jurisdictional scale. Under this method, litter items are counted and categorised in a defined area and litter is left in place. It is a relatively fast and cost-effective method that indicates the extent and composition of litter at a site at a point in time.

# 1.0  Project Summary

## Data Calculation Basis

The following calculations have been utilised throughout the report:

**Raw Measures**

**Total Litter Items by Count (#)**         total number of individual items counted

**Total Litter Volume – litres (l)**         total number of individual items counted x standard volume per item*

**Normalised Measures**

**Total Litter Items by Count (#) per 1,000m²**

$$\frac{\text{total number of individual items counted}}{\text{total square metres surveyed}} \times 1000$$

**Total Litter Volume litres (l) per 1,000m²**

$$\frac{\text{total number of individual items counted x standard volume per item*}}{\text{total square metres surveyed}} \times 1000$$

*This estimated standard volume for each item is attached at Appendix 3.

## Data Periods Presentation

This report contains two periods of survey data. Colours have been used to identify when tables/graphs include data from a discrete period; specifically **blue headers/tables** contain data for November 24 and **Orange headers/tables** contain data for May 25. Figures referenced as 2024/25 and **green headers/tables**, indicate data for the two surveys has been aggregated (average of the two periods).

## 2.0 Overall Litter Data

### Annual Litter Data and Key Findings

| Annual Litter Data - All Periods | | | | | |
|---|---|---|---|---|---|
| | Total Area Surveyed | Total Litter Items | Litter Items /1000m2 | Total Litter Volume (l) | Litter Volume (l)/1000m2 |
| 2024/25 | 106,619 | 12,764 | 119.72 | 716.61 | 6.72 |
| 2023/24 | 107,677 | 10,700 | 99.37 | 740.99 | 6.88 |
| 2022/23 | 104,876 | 17,195 | 163.95 | 1,129.24 | 10.77 |
| May 22 Baseline | 104,726 | 18,245 | 174.22 | 1,145.65 | 10.94 |

Aggregated litter data by site type for 2024/25 year is provided below, with more detailed commentary on the individual survey periods provided later in this section.

| Summary Data by Site Type - 2024/25 | | | | | |
|---|---|---|---|---|---|
| Site Type | Total Area Surveyed | Total Litter Items | Litter Items /1000m2 | Total Litter Volume (l) | Litter Volume /1000m2 |
| Beach | 5,741.25 | 197 | 34.23 | 20.38 | 3.55 |
| Retail | 13,892.13 | 2,691 | 193.71 | 112.87 | 8.12 |
| Residential | 35,005.03 | 1,385 | 38.81 | 92.29 | 2.64 |
| Industrial | 21,912.50 | 3,868 | 176.52 | 250.33 | 11.42 |
| Park | 11,875.95 | 776 | 65.34 | 38.53 | 3.24 |
| Main Road | 18,192.00 | 3,874 | 212.95 | 202.21 | 11.12 |
| TOTAL | 106,618.86 | 12,764 | 119.72 | 716.61 | 6.72 |

# 2.0 Overall Litter Data

- Consistent with the last two years annual reports, the top litter items by count in 2024/25 were **Cigarette butts and filters**, followed by **Hard plastic fragment – small** and **Paper and card fragment – small**.

- By volume, **Paper and card food packaging** was the largest contributor, followed by **Construction Materials** and **Clothing**.

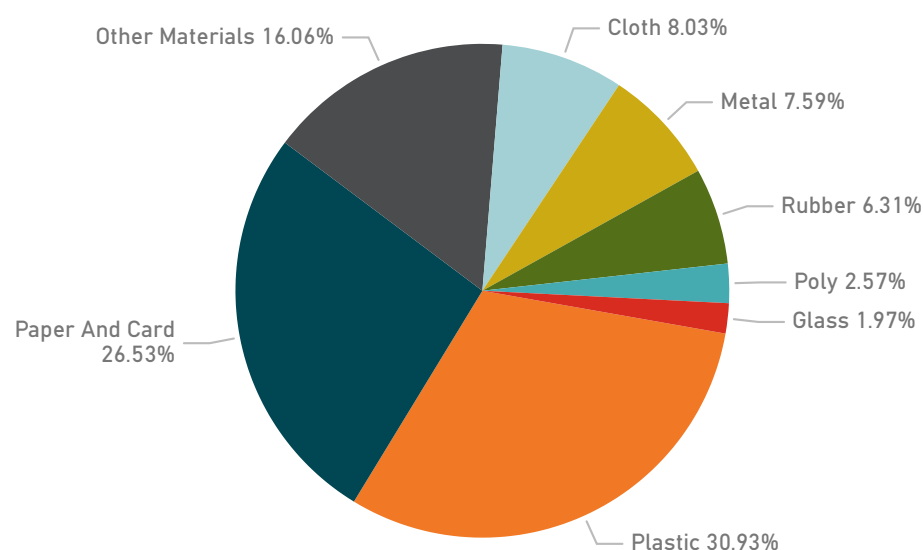- By raw count **Main Road** was the highest littered site, with **Industrial** a very close second (just six items between them). Once figures are normalised to account for the varying square metres surveyed, **Retail** moves into second place by count, ahead of **Industrial**. From a volume perspective **Industrial** sites contain the highest litter levels, on both a raw and normalised basis. Further detail on trends at each of the Site Types including the impacts of normalising the figures, is contained in *Section 3.0 Litter Data by Site Type*.

- Of all litter items counted in 2024/25, 58% were made of **Plastic** (including Hard Plastic, Soft Plastic and Fragments). From a volume perspective, Plastic items accounted for 31% of the litter, with **Paper and Card** the second largest contributor, at 27% of total volume.

## Litter Count by Source Material



Paper And Card 19.9%
Metal 6.78%
Other Materials 5.92%
Glass 3.59%
Cloth 2.43%
Rubber 2.16%
Poly 1.44%
Plastic 57.77%

## Litter Volume by Source Material



Other Materials 16.06%
Cloth 8.03%
Metal 7.59%
Rubber 6.31%
Poly 2.57%
Glass 1.97%
Paper And Card 26.53%
Plastic 30.93%
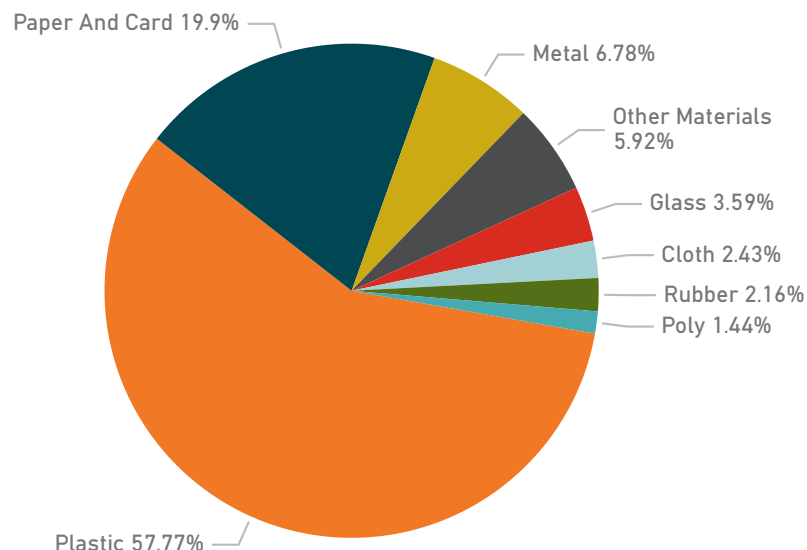
# 2.0 Overall Litter Data

| Top 15 Items by Count | |
|---|---|
| **Item** | **Count** |
| Cigarette butts and filters | 2,722 |
| Hard plastic<br>Size 1 – Small ( > 2.5 cm to 8 cm) | 1,109 |
| Paper and Card<br>Size 1 – Small ( > 2.5 cm to 8 cm) | 1,036 |
| Soft plastic<br>Size 1 – Small ( > 2.5 cm to 8 cm) | 679 |
| Food/confect. Wrappers | 671 |
| Lids - Beverage container lids/caps | 404 |
| Paper tissues/napkin | 368 |
| Paper and Card<br>Size 2 – Medium ( > 8 cm to 16 cm) | 349 |
| Glass<br>Size 1 – Small ( > 2.5 cm to 8 cm) | 343 |
| Hard plastic<br>Size 2 – Medium ( > 8 cm to 16 cm) | 340 |
| Soft plastic<br>Size 2 – Medium ( > 8 cm to 16 cm) | 269 |
| Lids, bottle tops, can ring pulls | 261 |
| Shopper dockets, tickets/receipts | 230 |
| Metal<br>Size 1 – Small ( > 2.5 cm to 8 cm) | 186 |
| Tape/narrow soft plastic film | 172 |

| Top 15 Items by Volume | |
|---|---|
| **Item** | **Volume** |
| Paper/card food packaging | 63.75 |
| Construction materials | 54.54 |
| Clothing | 41.00 |
| Tyres | 40.00 |
| Food/confect. Wrappers | 33.53 |
| Rope/string | 24.90 |
| Non-Food package | 18.75 |
| Paper tissues/napkin | 18.40 |
| Cup - Coffee cup | 17.80 |
| Packages & boxes | 17.50 |
| Other Food Package | 17.00 |
| Aluminium foil wrap | 16.30 |
| Strapping band | 14.60 |
| Takeaway food container | 14.25 |
| Other cloth item | 13.60 |

## 2.0 Overall Litter Data

### Period Litter Data and Key Findings

Some key findings of the distinct survey periods of November 24 and May 25 are discussed below. Further detail on these trends amongst sites and key categories is contained in *3.0 Litter Data by Site Type and Section 4.0 Key Categories and Items*.

| Summary Data by Period – 2024/25 | | | | | |
|---|---|---|---|---|---|
| | Total Area Surveyed | Total Litter Items | Litter Items /1000m2 | Total Litter Volume (l) | Litter Volume (l)/1000m2 |
| May 25 | 106,978.88 | 11,859.00 | 110.85 | 724.51 | 6.77 |
| November 24 | 106,258.84 | 13,669.00 | 128.64 | 708.71 | 6.67 |

- In November 24, **Main Roads** were the sites with the highest litter level by raw count (4,257) and volume (215.06 litres). Elevated litter levels were more of a consistent trend across the locations this year, with four of ten sites surveyed containing greater than 400 items. **Industrial** sites contained the second highest litter levels by raw count (3,892 items) and volume (205.41 litres). Once the figures are normalised, **Retail** moves into top spot from a count perspective, and second place by volume.

- In the May 25 survey, **Industrial** sites recorded the highest litter by raw count (3,844 items) and volume (295.25 litres). Whilst the litter count at **Industrial** sites remained steady between November 24 and May 25, the calculated volume increased significantly, driven by an increase in the number of items recorded with a high calculated volume, such as **Tyres** and **Construction Materials** at this site type.

- **Beaches** and **Parks** continue to record the lowest litter levels on a raw basis, together accounting for just 7.42% of the total litter items by count and 8.35% by volume in November 24 and 7.85% of the total litter items by count and 8.08% of the volume in May 25. With these sites having the least area covered, the impact of normalisation means some adjustments are seen when the square metres surveyed is taken into account. In November 24 **Parks** move into fourth place ahead of **Residential** by normalised count and volume. In May 25, **Beaches** move into fourth place by normalised volume; some interesting indicators highlighting the importance of considering both raw and normalised figures.

- Consistent with all previous AusLM litter surveys completed in Perth, **Cigarette butts and filters** were the highest item by count in both November 24 and May 25. In November 24, total **Cigarette butts and filters** counted were 3,217, accounting for 23.54% of the total items or 0.91% of the total volume. In May 25, total **Cigarette butts and filters** counted were 2,227, accounting for 18.78% of total items of 0.61% of total volume. They were highly concentrated in **Retail**, **Main Road** and

**Industrial** sites, with those locations accounting for greater than 89% of the **Cigarette butts and filters** recorded in the 2024/25 survey periods. Cigarette butt bins were not observed at any of those sites.

- In November 24, the **Takeaway food packaging** category represented 13.78% of total items and 21.48% of the volume. In May 25 this alters to 16.62% of total items and 21.64% of total volume. Consistent with 2023/24 in both November 24 and May 25, the top items by count within this category were **Food and confectionary wrappers**, followed by **Lids – Beverage container lids /caps** (plastic) and **Lids, bottle tops, can ring pulls** (metal). By volume, **Paper and card food packaging** represented the highest contributor within this category in both survey periods.

- **Fragments** made up a significant portion of litter items counted, totalling 5,442 across all sizes and categories in November 24, and 5,194 in May 25. This equates to 39.81% of total litter items counted in November 24 and 43.80% in May 25.  In November 24, **Paper and card fragments** were the most common material by count, accounting for 1,593 or 29.27% of the total fragments. As was the case for the previous two years, this alters to **Hard plastic** in the May survey period, with 1,533 **Hard plastic fragments** counted in May 25, accounting for 29.51% of the total fragments observed.

- Data on **Beverage Containers** was collected, including segregation of those eligible for a 10c refund, under the Container Deposit Scheme ("CDS"). In November 24, there was a total of 98 **Beverage Containers** counted, which included 86 that were classified as eligible for a refund under the CDS and a further 12 that were not. In May 25, 101 **Beverage Containers** were recorded, including 93 that were classified as eligible for a refund under the CDS. Soft drink (which includes flavoured water, fruit juice drink, sports drinks, energy drinks) continues to the be the greatest contributor to this category, accounting for 35% and 49% of CDS beverage containers recorded in November 24 and May 25 respectively. It is interesting to note that while the litter levels of beverage containers themselves appear to be kept well contained by the CDS scheme – the lids associated with these beverage containers persist as a litter issue, with 581 beverage container lids[1] recorded in November 24, and 748 in May 25.

[1] The sum of Lids beverage container lids/caps (plastic) and Lids, bottle tops, can ring pulls (metal).

# 2.0  Overall Litter Data

| Top Litter Item by Count and Site Type November 24 | | |
|---|---|---|
| Site Type | Item | Total Items |
| Beach | Hard plastic fragment – small | 28 |
| Retail | Cigarette butts and filters | 1,695 |
| Residential | Cigarette butts and filters | 118 |
| Industrial | Cigarette butts and filters | 657 |
| Park | Cigarette butts and filters | 182 |
| Main Road | Paper and card fragment – small | 666 |

| Top Litter Item by Count and Site Type May 25 | | |
|---|---|---|
| Site Type | Item | Total Items |
| Beach | Food/confect. Wrappers | 33 |
| Retail | Cigarette Butts and Filters | 951 |
| Residential | Hard plastic fragment – small | 237 |
| Industrial | Cigarette Butts and Filters | 355 |
| Park | Cigarette butts and filters | 113 |
| Main Road | Cigarette Butts and Filters | 653 |

| Top Litter Item by Volume and Site Type November 24 | | |
|---|---|---|
| Site Type | Item | Total Volume (l) |
| Beach | Rope/string | 3.00 |
| Retail | Paper/card food packaging | 20.50 |
| Residential | Construction Materials | 13.32 |
| Industrial | Paper/card food packaging | 17.00 |
| Park | Paper/card food packaging | 4.50 |
| Main Road | Paper/card food packaging | 22.50 |

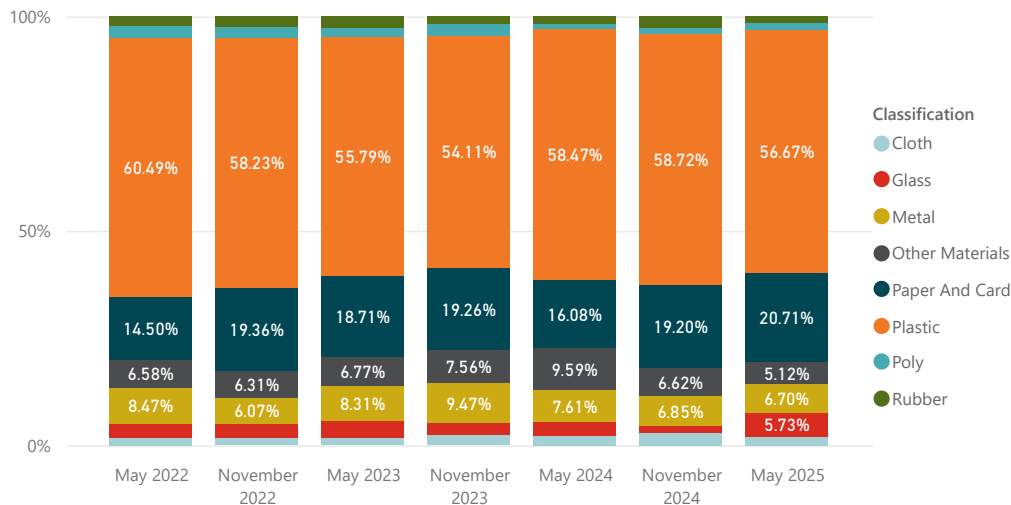| Top Litter Item by Volume and Site Type May 25 | | |
|---|---|---|
| Site Type | Item | Total Volume (l) |
| Beach | Clothing | 10.00 |
| Retail | Paper/card food packaging | 13.50 |
| Residential | Construction Materials | 6.12 |
| Industrial | Tyres | 60.00 |
| Park | Clothing | 4.00 |
| Main Road | Tyres | 20.00 |

## Comparison with Previous Periods

- Whilst the AusLM litter survey method is still in the early stages of adoption, we would anticipate some variances between periods driven by learning and bedding in of the guidelines and methodology. Seasonal variation, such as the unseasonally late commencement of winter rains in 2024 may also have impacted the scale and placement of litter and may explain the particularly low litter level recorded in the May 24 count. Whist it is considered premature to attribute or predict any consistency of falling litter numbers or volumes, initial trends between periods have been summarised below.

- Graphs provided on the following pages highlight the proportionate trends in source material of litter items over all AUSLM surveys in Perth. The raw and proportionate trends of fragments, cigarette butts and filters and all other items is also demonstrated. As highlighted in the **Total Litter Items by Period** graph, when comparing the period data for the seven surveys completed to date, there is a notable reduction in total items counted (-6,386 between May 22 and May 25). Of this reduction, 57% is attributable to a drop in **Fragments** (-1,864) and **Cigarette Butt and filters** (-1,783). Whilst all other items have shown a reduction of 2,739, the small but very prevalent items of **Fragments** and **Cigarette butts and filters** account for the largest portion of the reduced count. While the reduced total litter items by count is closely linked to **Fragments** and **Cigarette butts and filters**, variances in total litter volume between periods is a result of varying levels of items with a high calculated volume, such as **Tyres, Paper and Card food packaging**, and **Construction materials**.

- **Litter Count by Source Material** highlights that despite some slight movements in the intervening periods, the proportion of **Plastic** litter items had shown a reduction of 3.82% between May 22 and May 25, reducing from 60.49% of items counted in 2022, to 56.67% in May 25. **Paper and card** appears to be tracking upwards, increasing from 14.50% of items counted in May 22, to 20.71% in May 25.

# 2.0   Overall Litter Data
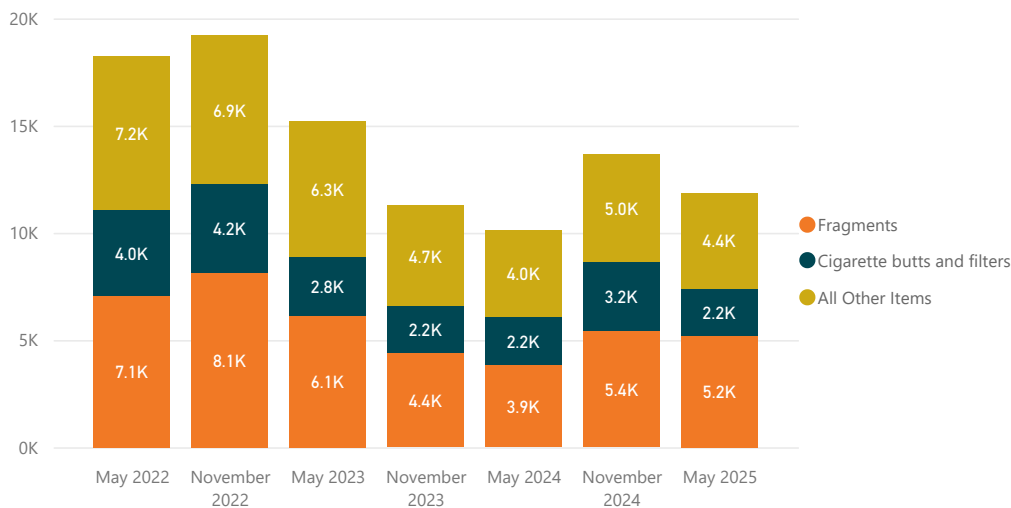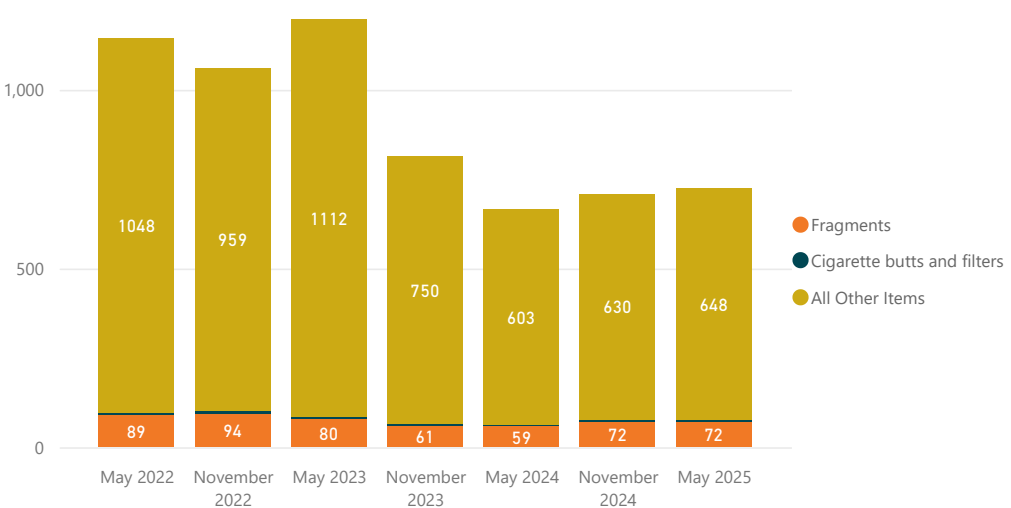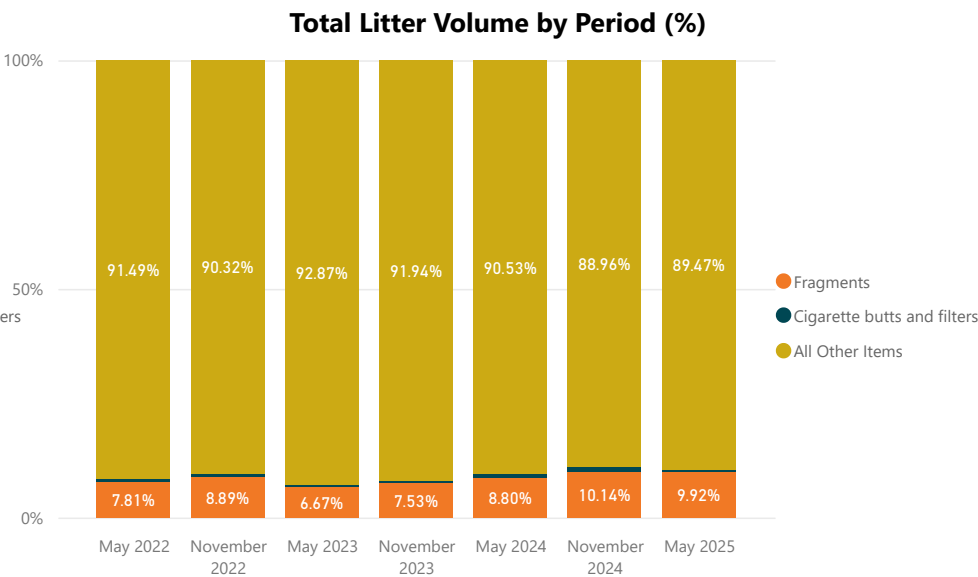
## Litter Count by Source Material (%)



| Classification |
|---|
| ● Cloth |
| ● Glass |
| ● Metal |
| ● Other Materials |
| ● Paper And Card |
| ● Plastic |
| ● Poly |
| ● Rubber |

May 2022: Plastic 60.49%, Paper And Card 14.50%, Other Materials 6.58%, Metal 8.47%
November 2022: Plastic 58.23%, Paper And Card 19.36%, Other Materials 6.31%, Metal 6.07%
May 2023: Plastic 55.79%, Paper And Card 18.71%, Other Materials 6.77%, Metal 8.31%
November 2023: Plastic 54.11%, Paper And Card 19.26%, Other Materials 7.56%, Metal 9.47%
May 2024: Plastic 58.47%, Paper And Card 16.08%, Other Materials 9.59%, Metal 7.61%
November 2024: Plastic 58.72%, Paper And Card 19.20%, Other Materials 6.62%, Metal 6.85%
May 2025: Plastic 56.67%, Paper And Card 20.71%, Other Materials 5.12%, Metal 6.70%, Glass 5.73%

## Litter Volume by Source Material (%)



| Classification |
|---|
| ● Cloth |
| ● Glass |
| ● Metal |
| ● Other Materials |
| ● Paper And Card |
| ● Plastic |
| ● Poly |
| ● Rubber |

May 2022: Cloth 6.94%, Plastic 32.63%, Paper And Card 22.52%, Other Materials 13.87%, Metal 9.45%, Cloth 8.44%
November 2022: Rubber 6.46%, Cloth 4.83%, Plastic 30.64%, Paper And Card 27.19%, Other Materials 13.70%, Metal 7.72%, Cloth 6.68%
May 2023: Rubber 20.84%, Plastic 25.17%, Paper And Card 23.59%, Other Materials 10.42%, Metal 8.08%, Cloth 7.13%
November 2023: Cloth 6.39%, Plastic 33.33%, Paper And Card 24.12%, Other Materials 14.32%, Metal 10.95%, Cloth 6.49%
May 2024: Rubber 6.67%, Plastic 32.31%, Paper And Card 22.41%, Other Materials 20.85%, Metal 7.86%, Cloth 7.46%
November 2024: Plastic 32.81%, Paper And Card 26.16%, Other Materials 17.09%, Metal 8.75%, Cloth 9.10%
May 2025: Rubber 11.59%, Plastic 29.09%, Paper And Card 26.90%, Other Materials 15.06%, Metal 6.46%, Cloth 6.98%

## Total Litter Items by Period



| | Fragments | Cigarette butts and filters | All Other Items |
|---|---|---|---|
| ● Fragments | | | |
| ● Cigarette butts and filters | | | |
| ● All Other Items | | | |

May 2022: All Other Items 7.2K, Cigarette butts and filters 4.0K, Fragments 7.1K
November 2022: All Other Items 6.9K, Cigarette butts and filters 4.2K, Fragments 8.1K
May 2023: All Other Items 6.3K, Cigarette butts and filters 2.8K, Fragments 6.1K
November 2023: All Other Items 4.7K, Cigarette butts and filters 2.2K, Fragments 4.4K
May 2024: All Other Items 4.0K, Cigarette butts and filters 2.2K, Fragments 3.9K
November 2024: All Other Items 5.0K, Cigarette butts and filters 3.2K, Fragments 5.4K
May 2025: All Other Items 4.4K, Cigarette butts and filters 2.2K, Fragments 5.2K

## Total Litter Volume by Period



| | Fragments | Cigarette butts and filters | All Other Items |
|---|---|---|---|
| ● Fragments | | | |
| ● Cigarette butts and filters | | | |
| ● All Other Items | | | |

May 2022: All Other Items 1048, Fragments 89
November 2022: All Other Items 959, Fragments 94
May 2023: All Other Items 1112, Fragments 80
November 2023: All Other Items 750, Fragments 61
May 2024: All Other Items 603, Fragments 59
November 2024: All Other Items 630, Fragments 72
May 2025: All Other Items 648, Fragments 72

# 2.0 Overall Litter Data

## Total Litter Items by Period (%)



| Period | Fragments | Cigarette butts and filters | All Other Items |
|---|---|---|---|
| May 2022 | 38.68% | 21.98% | 39.34% |
| November 2022 | 42.33% | 21.69% | 35.98% |
| May 2023 | 40.21% | 18.10% | 41.70% |
| November 2023 | 39.12% | 19.17% | 41.70% |
| May 2024 | 38.09% | 21.99% | 39.92% |
| November 2024 | 39.81% | 23.54% | 36.65% |
| May 2025 | 43.80% | 18.78% | 37.42% |

## Total Litter Volume by Period (%)



| Period | Fragments | All Other Items |
|---|---|---|
| May 2022 | 7.81% | 91.49% |
| November 2022 | 8.89% | 90.32% |
| May 2023 | 6.67% | 92.87% |
| November 2023 | 7.53% | 91.94% |
| May 2024 | 8.80% | 90.53% |
| November 2024 | 10.14% | 88.96% |
| May 2025 | 9.92% | 89.47% |

# 3.0 Litter Data by Site Type

The AusLM Field Guide defines litter counts at six distinct site types along with exclusion criteria that can render a site "failed" (refer Appendix 1). Sites that were noted as failed were counted and included, however the reason for failure will be reviewed and may result in alternate sites being selected in future litter audits.

The largest area surveyed was Residential sites, with an average of 35,000 square meters covered in the 2024/25 surveys. Residential sites consist of variable widths, defined as road's edge to property boundary, meaning transect widths of up to 11m were surveyed, with an average width of 5.9m. Beach sites were the smallest area surveyed, with an average of 5,700 square meters covered in the 2024/25 surveys. This lower area is in part due to three local government areas not having a suitable beach site to audit. In addition, whilst beach sites are defined to include a width of 6m, the length of some beach transects was at times quite short, with the average beach transect length totalling 28.35m.

The varying square metres surveyed across the different site types is adjusted for in the normalised (/1,000m2) figures referenced throughout this report. Further analysis of the differences between the raw and normalised figures is provided in the **Normalised Litter Data by Site Type** section.
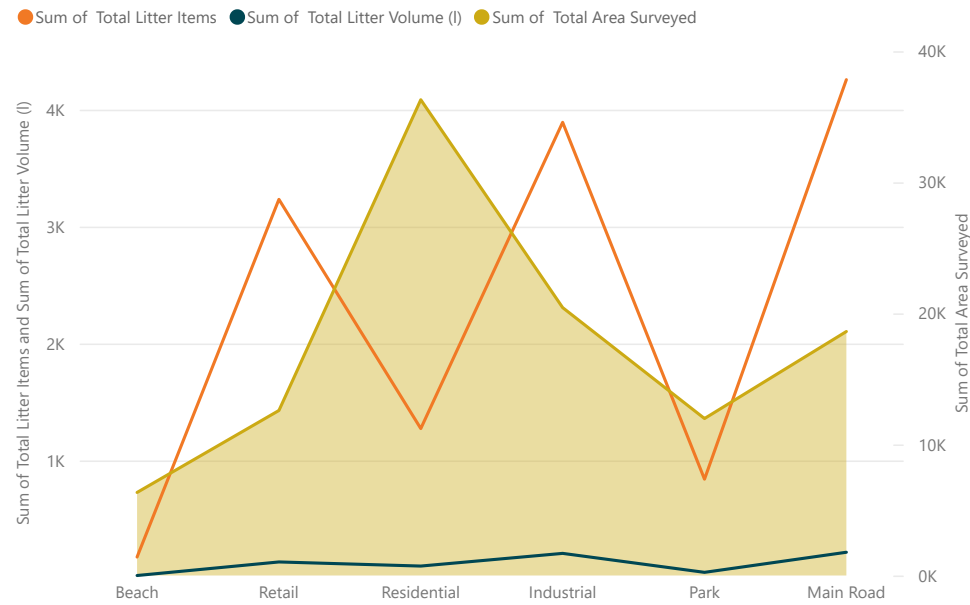
| Litter Data by Site Type – November 24 | | | | | |
|---|---|---|---|---|---|
| **Site Type** | **Total Area Surveyed** | **Total Litter Items** | **Litter Items /1000m2** | **Total Litter Volume (l)** | **Litter Volume /1000m2** |
| **Beach** | 6,336.60 | 174 | 27.46 | 16.08 | 2.54 |
| **Retail** | 12,590.38 | 3,233 | 256.78 | 132.09 | 10.49 |
| **Residential** | 36,299.06 | 1,273 | 35.07 | 96.92 | 2.67 |
| **Industrial** | 20,440.00 | 3,892 | 190.41 | 205.41 | 10.05 |
| **Park** | 11,976.30 | 840 | 70.14 | 43.15 | 3.60 |
| **Main Road** | 18,616.50 | 4,257 | 228.67 | 215.06 | 11.55 |
| **Total** | **106,258.84** | **13,669** | **128.64** | **708.71** | **6.67** |

# 3.0   Litter Data by Site Type

| Litter Data by Site Type - May 25 | | | | | |
|---|---|---|---|---|---|
| **Site Type** | **Total Area Surveyed** | **Total Litter Items** | **Litter Items /1000m2** | **Total Litter Volume (l)** | **Litter Volume /1000m2** |
| **Beach** | 5,145.90 | 219 | 42.56 | 24.68 | 4.80 |
| **Retail** | 15,193.88 | 2,149 | 141.44 | 93.65 | 6.16 |
| **Residential** | 33,711.00 | 1,444 | 42.83 | 87.67 | 2.60 |
| **Industrial** | 23,385.00 | 3,844 | 164.38 | 295.25 | 12.63 |
| **Park** | 11,775.60 | 712 | 60.46 | 33.91 | 2.88 |
| **Main Road** | 17,767.50 | 3,491 | 196.48 | 189.35 | 10.66 |
| **Total** | **106,978.88** | **11,859** | **110.85** | **724.51** | **6.77** |

The below **Area Surveyed to Litter Items and Volume** graphs highlights the difference in total square metres surveyed, between the six site types. It confirms the need to also consider the normalised figures; as can be seen the higher square metres covered does not always correlate with higher litter count/volume.

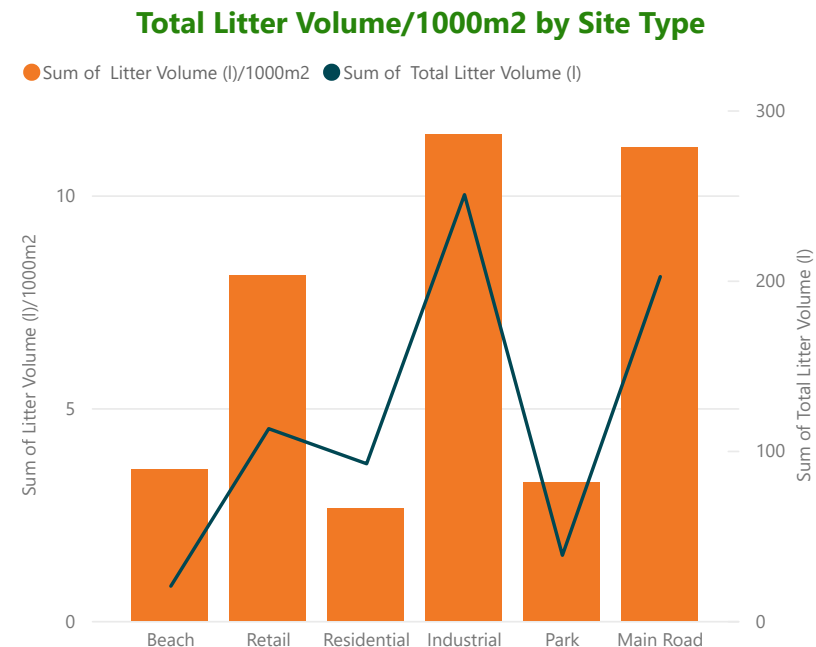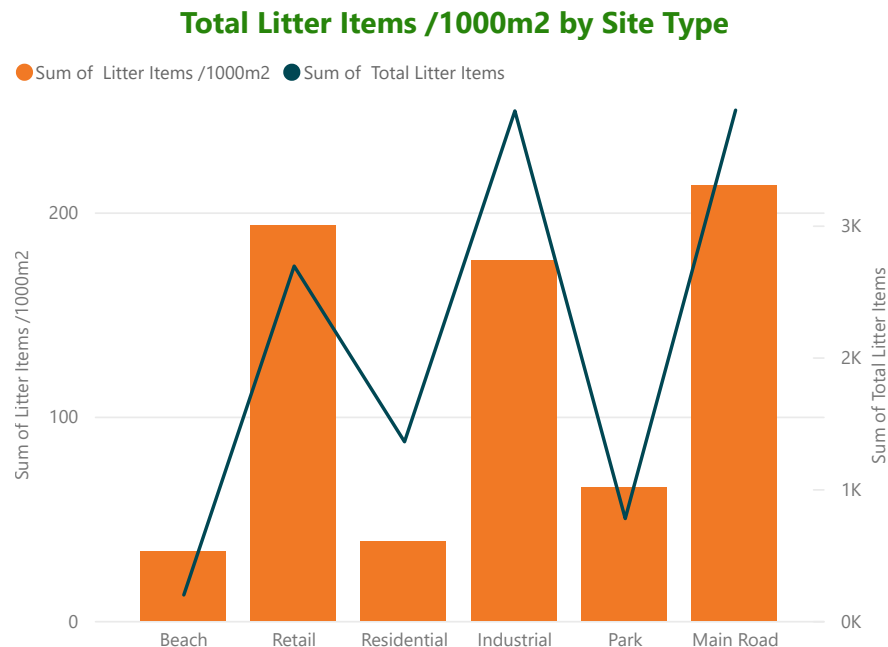### Area Surveyed to Litter Items and Volume - November 24

- Sum of Total Litter Items ● Sum of Total Litter Volume (l) ● Sum of Total Area Surveyed



### Area Surveyed to Litter Items and Volume  - May 25

- Sum of Total Litter Items ● Sum of Total Litter Volume (l) ● Sum of Total Area Surveyed
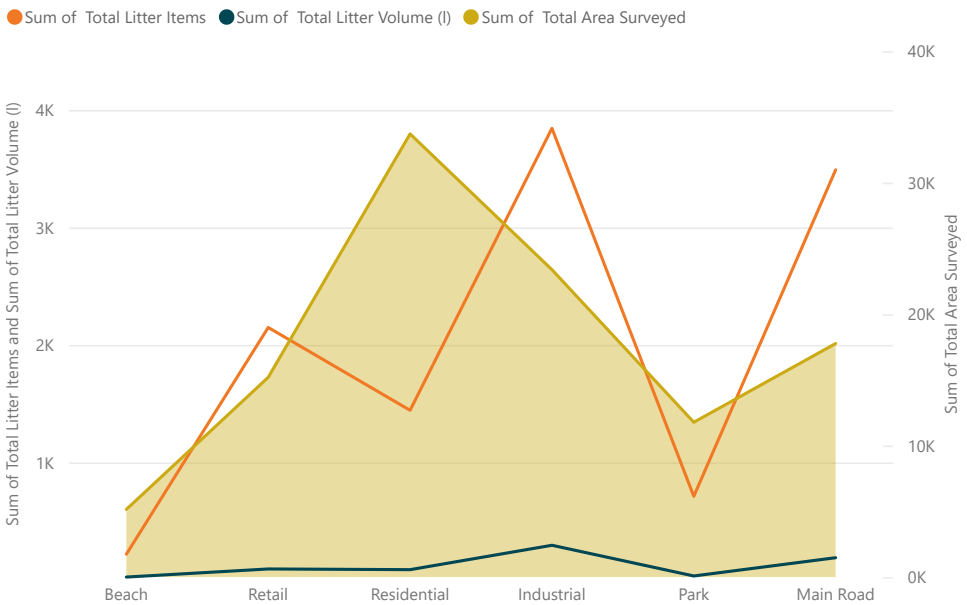
# 3.0   Litter Data by Site Type

## Normalised Litter Data by Site Type

### Total Litter Items /1000m2 by Site Type

● Sum of Litter Items /1000m2  ● Sum of Total Litter Items



### Total Litter Volume/1000m2 by Site Type

● Sum of Litter Volume (l)/1000m2  ● Sum of Total Litter Volume (l)
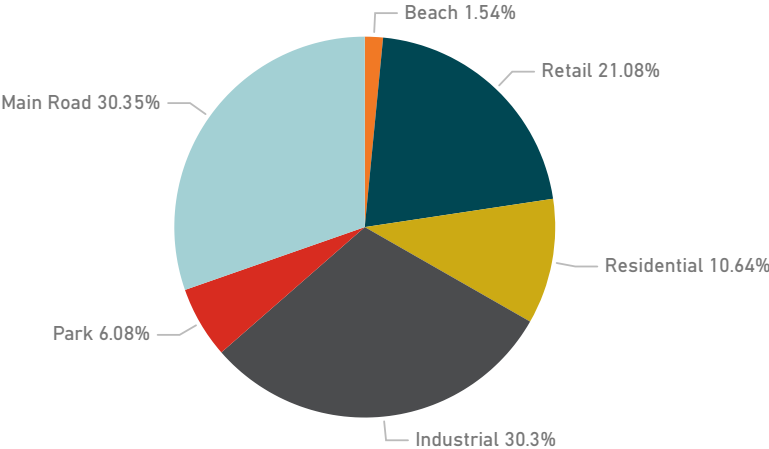


Raw litter information (# of items and calculated volume) has been normalised, to adapt to the fluctuating absolute square meters surveyed across each site type, and to allow more exact examinations of litter density. Normalising the findings included increasing the complete litter items and volume over a standard 1,000 square metre area, to eliminate the effect of the differing square meters surveyed by site type. The formulas to normalise the data are provided in *Section 1.0 Project Summary*.
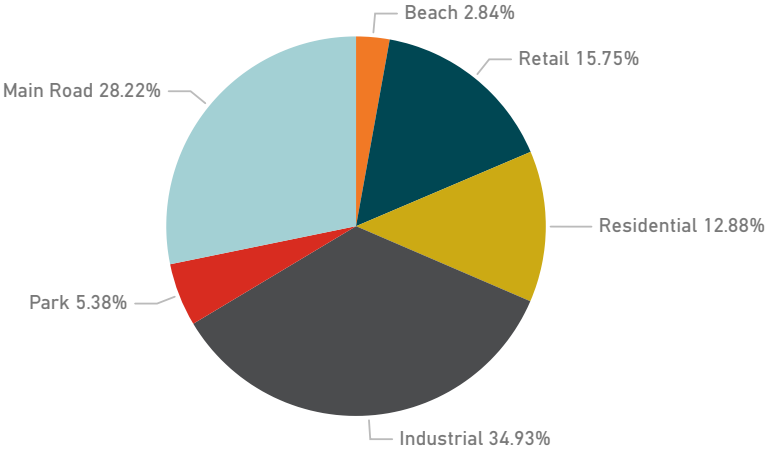
While the normalised figures for 2024/25 are fairly aligned with the raw numbers – there are some interesting differentials. Industrial comes in a close second by count, on a raw basis, just six items short of **Main Roads**. However, once the figures are normalised, **Industrial** falls to third place, highlighting that some of the elevated count figure for this site type can be attributed to the high area covered (over 21,000 sqm in 2024/25).  In **Retail** sites a discrepancy is noted the other way, with the raw litter items line below the normalised figures; this is a product of the lower square metres surveyed and indicates the litter density is elevated at this site type.

# 3.0 Litter Data by Site Type

### Raw Litter Items by Site Type

Beach 1.54%
Retail 21.08%
Main Road 30.35%
Residential 10.64%
Park 6.08%
Industrial 30.3%

### Raw Litter Volume by Site Type

Beach 2.84%
Retail 15.75%
Main Road 28.22%
Residential 12.88%
Park 5.38%
Industrial 34.93%

### Normalised Litter Items by Site Type

Beach 4.74%
Retail 26.85%
Main Road 29.51%
Residential 5.38%
Park 9.06%
Industrial 24.46%
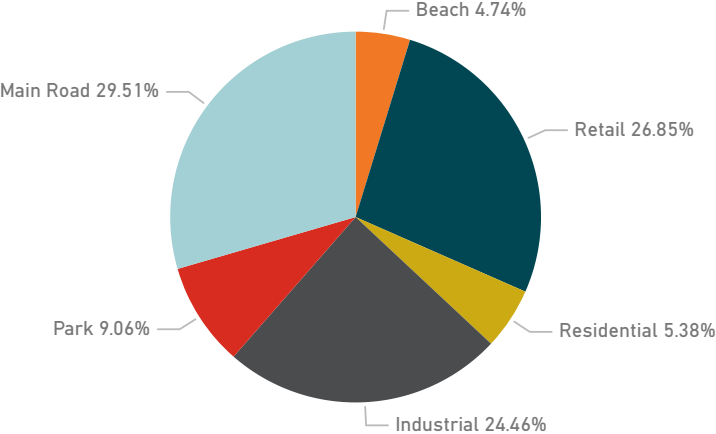
### Normalised Litter Volume by Site Type

Beach 8.85%
Retail 20.26%
Main Road 27.72%
Residential 6.58%
Park 8.09%
Industrial 28.49%
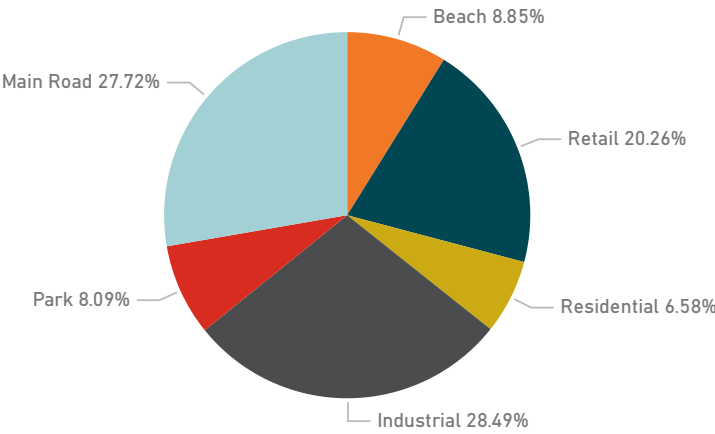
# 3.0 Litter Data by Site Type

## Site Type Summary – Beach

| SITE SNAPSHOT | | |
|---|---|---|
| | **November 24** | **May 25** |
| Total Number of Items - (#) | 174 | 219 |
| Total Volume of Items- (l) | 16.08 | 24.68 |
| Items /1000m2 | 27.46 | 42.56 |
| Volume (l)/1000m2 | 2.54 | 4.80 |
| Highest Site Litter Count – Number (#) | 59 | 58 |
| Highest Site Litter Count – Volume (l) | 6.69 | 6.49 |
| Lowest Site Litter Count – Number (#) | 1 | 10 |
| Lowest Site Litter Count – Volume (l) | 0.02 | 0.29 |

| | **Raw** | **Normalised** |
|---|---|---|
| Site type count as a % of total items | 1.54% | 4.74% |
| Site type volume as a % of total volume | 2.84% | 8.85% |

| Top 3 Items by Count (#) – November 24 | |
|---|---|
| Hard plastic fragment - small | 28 |
| Rope/String | 15 |
| Cigarette butts and filters | 13 |

| Top 3 Items by Volume (l) –  November 24 | |
|---|---|
| Rope/String | 3.00 |
| Clothing | 2.00 |
| Takeaway food container | 1.50 |

| Top 3 Items by Count (#) – May 25 | |
|---|---|
| Food/confect. Wrappers | 33 |
| Cigarette butts and filters | 30 |
| Hard plastic fragment - small | 18 |

| Top 3 Items by Volume (l) – May 25 | |
|---|---|
| Clothing | 10.00 |
| Rope/string | 3.40 |
| Food/confect. Wrappers | 1.65 |

## Common Site Features/Observations

General waste bins were frequently observed at Beach sites, although not often inside the transects themselves (i.e. they were usually observed on grassed, leisure zones adjoining to the shoreline, or at beach site car parks).

It was noted on several occasions that the litter counted at beach sites had a tendency to accumulate at the dune end of the transect, or in corners of engineered structures. It follows that the impact of wind was noted as a factor at a number of beach sites, highlighting litter is unlikely to stay in situ for an extended period and will more likely be blown to a hard boundary. Evidence of cleaning (raking or litter collection) was noted on four occasions; interestingly "cleaned" sites remained among the higher littered beach sites in the applicable period.

# 3.0 Litter Data by Site Type

## Site Type Summary – Retail

| SITE SNAPSHOT | | |
|---|---|---|
| | November 24 | May 25 |
| Total Number of Items - (#) | 3,233 | 2,149 |
| Total Volume of Items- (l) | 132.09 | 93.65 |
| Items /1000m2 | 256.78 | 141.44 |
| Volume (l)/1000m2 | 10.49 | 6.16 |
| Highest Site Litter Count – Number (#) | 695 | 362 |
| Highest Site Litter Count – Volume (l) | 39.08 | 21.93 |
| Lowest Site Litter Count – Number (#) | 38 | 80 |
| Lowest Site Litter Count – Volume (l) | 0.89 | 2.67 |

| | Raw | Normalised |
|---|---|---|
| Site type count as a % of total items | 21.08% | 26.85% |
| Site type volume as a % of total volume | 15.75% | 20.26% |

| Top 3 Items by Count (#) – November 24 | |
|---|---|
| Cigarette butts and filters | 1,695 |
| Paper tissues/napkin | 161 |
| Food/confect. Wrappers | 125 |

| Top 3 Items by Volume (l) – November 24 | |
|---|---|
| Paper/card food packaging | 20.50 |
| Paper tissues/napkin | 8.05 |
| Packages & boxes | 7.50 |

**Common Site Features/Observations**

On an annual, normalised basis, Retail sites account for the second highest litter by count, indicating litter density at these sites is significant. In both survey periods, this is driven by a high level of Cigarette butts and filters, accounting for 49.16% of total litter items at this site type.

Rubbish bins were commonly noted, recorded at over 50% of the Retail transects surveyed in the year. Evidence of cleaning was observed on two occasions, indicating that the quantity of items littered at these site types may be higher still, if it wasn't for this mitigating action.

Hard boundaries/edges were noted as a litter trap in a number of instances, with these areas attracting high accumulations of mixed litter.

| Top 3 Items by Count (#) – May 25 | |
|---|---|
| Cigarette butts and filters | 951 |
| Food/confect. Wrappers | 127 |
| Paper and Card fragment - small | 125 |

| Top 3 Items by Volume (l) – May 25 | |
|---|---|
| Paper/card food packaging | 13.50 |
| Construction Materials | 7.20 |
| Food/confect. Wrappers | 6.35 |

## Site Type Summary – Residential

| SITE SNAPSHOT | | |
|---|---|---|
| | **November 24** | **May 25** |
| Total Number of Items - (#) | 1,273 | 1,444 |
| Total Volume of Items- (l) | 96.92 | 87.67 |
| Items /1000m2 | 35.07 | 42.83 |
| Volume (l)/1000m2 | 2.67 | 2.60 |
| Highest Site Litter Count – Number (#) | 313 | 402 |
| Highest Site Litter Count – Volume (l) | 30.55 | 19.16 |
| Lowest Site Litter Count – Number (#) | 20 | 37 |
| Lowest Site Litter Count – Volume (l) | 0.99 | 2.01 |

| | **Raw** | **Normalised** |
|---|---|---|
| Site type count as a % of total items | 10.64% | 5.38% |
| Site type volume as a % of total volume | 12.88% | 6.58% |

| Top 3 Items by Count (#) – November 24 | |
|---|---|
| Cigarette butts and filters | 118 |
| Paper and Card fragment - small | 116 |
| Food/confect. Wrappers | 90 |

| Top 3 Items by Volume (l) –  November 24 | |
|---|---|
| Construction materials | 13.32 |
| Clothing | 5.00 |
| Non-Food package | 4.50 |

### Common Site Features/Observations

Residential sites accounted for the largest area surveyed. However, the total item count did not directly reflect this, with Residential sites showing the fourth highest litter count on a raw basis, behind Main Roads, Industrial and Retail. Once the figures are normalised to account for the varying square metres surveyed, Residential drops into 5th place, confirming the low litter density at this site type.

A number of active instances of construction were noted as impacting Residential transects, resulting in the applicable area being excluded from the survey.

The litter levels graph at the end of this Section demonstrates that litter at individual Residential sites is generally within a very low range, with just a couple of locations with higher counts, as outliers.

| Top 3 Items by Count (#) – May 25 | |
|---|---|
| Hard plastic fragment - small | 237 |
| Cigarette butts and filters | 125 |
| Food/confect. Wrappers | 95 |

| Top 3 Items by Volume (l) – May 25 | |
|---|---|
| Construction materials | 6.12 |
| Paper/card food packaging | 6.00 |
| Junk mail / free circulars | 5.50 |

## Site Type Summary – Industrial

| SITE SNAPSHOT | | |
|---|---|---|
| | **November 24** | **May 25** |
| Total Number of Items - (#) | 3,892 | 3,844 |
| Total Volume of Items- (l) | 205.41 | 295.25 |
| Items /1000m2 | 190.41 | 164.38 |
| Volume (l)/1000m2 | 10.05 | 12.63 |
| Highest Site Litter Count – Number (#) | 990 | 1,303 |
| Highest Site Litter Count – Volume (l) | 47.72 | 81.72 |
| Lowest Site Litter Count – Number (#) | 199 | 65 |
| Lowest Site Litter Count – Volume (l) | 6.94 | 4.82 |

| | **Raw** | **Normalised** |
|---|---|---|
| Site type count as a % of total items | 30.30% | 24.46% |
| Site type volume as a % of total volume | 34.93% | 28.49% |

| Top 3 Items by Count (#) – November 24 | |
|---|---|
| Cigarette butts and filters | 657 |
| Hard plastic fragment - small | 467 |
| Soft plastic fragment - small | 275 |

| Top 3 Items by Volume (l) –  November 24 | |
|---|---|
| Paper/card food packaging | 17.00 |
| Clothing | 14.00 |
| Construction materials | 8.64 |

| Top 3 Items by Count (#) – May 25 | |
|---|---|
| Cigarette butts and filters | 355 |
| Hard plastic fragment - small | 306 |
| Glass fragment - small | 266 |

| Top 3 Items by Volume (l) – May 25 | |
|---|---|
| Tyres | 60.00 |
| Construction materials | 29.16 |
| Paper/card food packaging | 19.50 |

**Common Site Features/Observations**

On an annual basis, Industrial sites came in with the second highest litter, marginally behind Main Roads. By Volume, Industrial recorded the highest litter level, linked to prevalence of high volume items at this site type such as tyres and construction materials.

Litter bins were only recorded at one of ten Industrial sites.

Frequent use of Industrial verge areas for parking vehicles was another trend regularly noted, which was identified as a likely contributing factor to the litter observed at these sites.

## Site Type Summary –Park

| SITE SNAPSHOT | | |
|---|---|---|
| | November 24 | May 25 |
| Total Number of Items - (#) | 840 | 712 |
| Total Volume of Items- (l) | 43.15 | 33.91 |
| Items /1000m2 | 70.14 | 60.46 |
| Volume (l)/1000m2 | 3.60 | 2.88 |
| Highest Site Litter Count – Number (#) | 267 | 218 |
| Highest Site Litter Count – Volume (l) | 8.51 | 7.61 |
| Lowest Site Litter Count – Number (#) | 23 | 20 |
| Lowest Site Litter Count – Volume (l) | 0.43 | 0.83 |

| | Raw | Normalised |
|---|---|---|
| Site type count as a % of total items | 6.08% | 9.06% |
| Site type volume as a % of total volume | 5.38% | 8.09% |

| Top 3 Items by Count (#) – November 24 | |
|---|---|
| Cigarette butts and filters | 182 |
| Soft plastic fragment – small | 107 |
| Food/confect. Wrappers | 75 |

| Top 3 Items by Volume (l) – November 24 | |
|---|---|
| Paper/card food packaging | 4.50 |
| Other cloth item | 4.40 |
| Clothing | 4.00 |

**Common Site Features/Observations**

Overall, on a raw basis Parks contained the second lowest litter levels in both survey periods. This has been a consistent position, since these AusLM surveys commenced in May 2022.

Litter bins were observed at all of the ten park sites surveyed and two were also noted as having comingled recycling bins.

There was one particular park site with elevated litter in both periods, accounting for over 30% of the site types litter count, in November 24 and May 25. In both instances, surveyors noted recent mowing activity had occurred at the location, and in the May survey, there was also a kerbside bin collection occurring which may have been a contributing factor.

| Top 3 Items by Count (#) – May 25 | |
|---|---|
| Cigarette butts and filters | 113 |
| Soft plastic fragment – small | 82 |
| Paper and Card fragment – small | 81 |

| Top 3 Items by Volume (l) – May 25 | |
|---|---|
| Clothing | 4.00 |
| Food/confect. Wrappers | 3.50 |
| Paper/card food packaging | 3.00 |

# 3.0  Litter Data by Site Type

## Site Type Summary –Main Road

| SITE SNAPSHOT | | |
|---|---|---|
| | **November 24** | **May 25** |
| Total Number of Items - (#) | 4,257 | 3,491 |
| Total Volume of Items- (l) | 215.06 | 189.35 |
| Items /1000m2 | 228.67 | 196.48 |
| Volume (l)/1000m2 | 11.55 | 10.66 |
| Highest Site Litter Count – Number (#) | 780 | 667 |
| Highest Site Litter Count – Volume (l) | 54.10 | 53.44 |
| Lowest Site Litter Count – Number (#) | 46 | 61 |
| Lowest Site Litter Count – Volume (l) | 3.55 | 4.93 |

| | **Raw** | **Normalised** |
|---|---|---|
| Site type count as a % of total items | 30.35% | 29.51% |
| Site type volume as a % of total volume | 28.22% | 27.72% |

| Top 3 Items by Count (#) – November 24 | |
|---|---|
| Paper and Card fragment - small | 666 |
| Cigarette butts and filters | 552 |
| Hard plastic fragment - small | 506 |

| Top 3 Items by Volume (l) –  November 24 | |
|---|---|
| Paper/card food packaging | 22.50 |
| Construction materials | 20.16 |
| Food/confect. Wrappers | 12.20 |

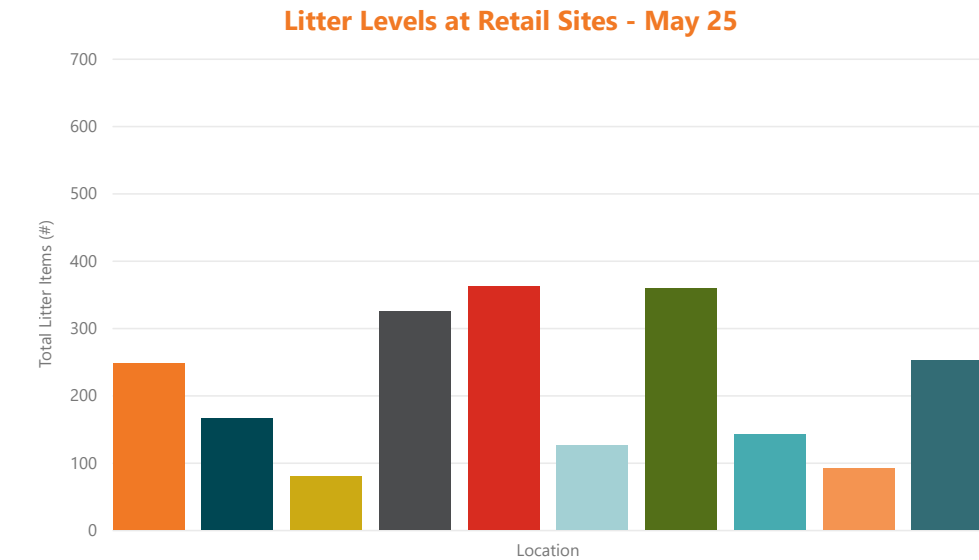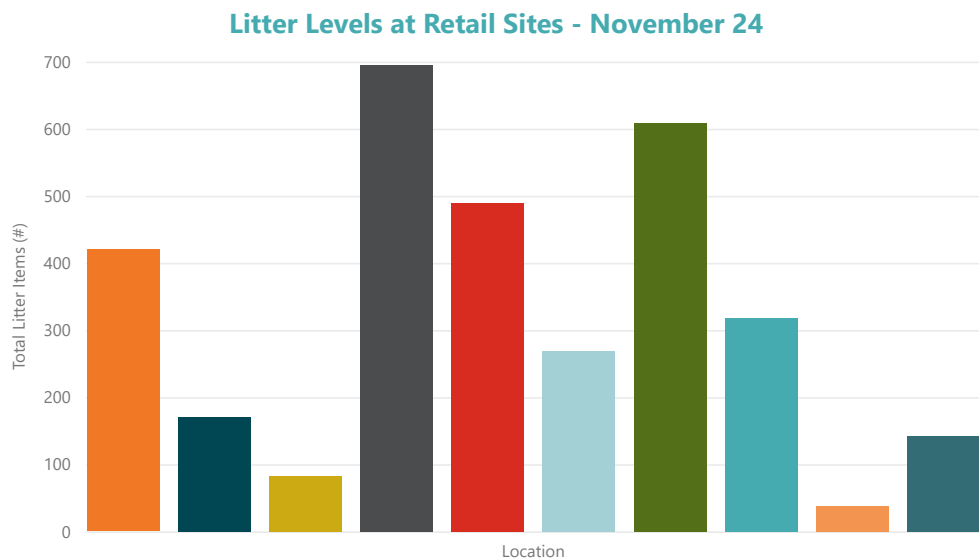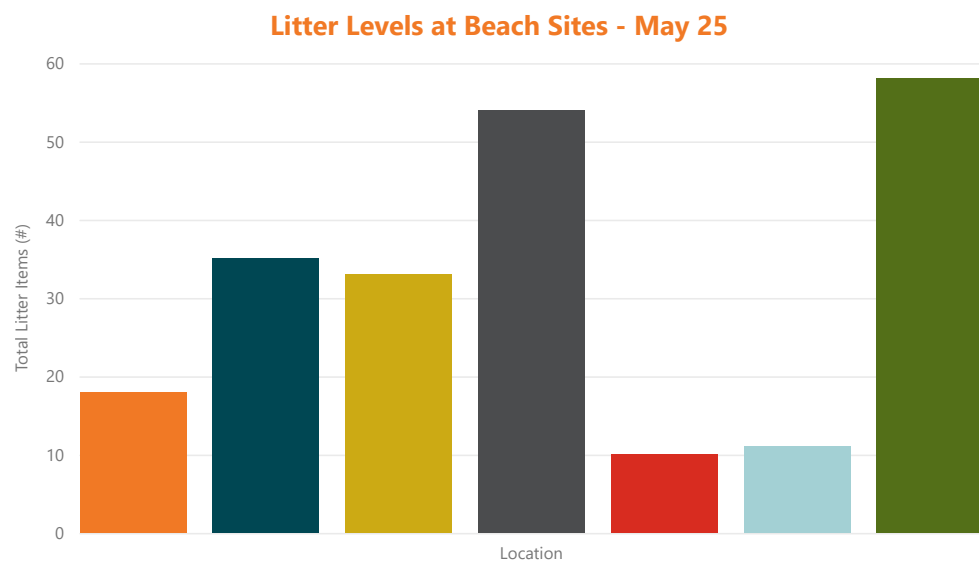### Common Site Features/Observations

Consistent with the previous two years, Main Roads contained the highest litter levels (by raw count and volume) in the November survey, and the second highest in May. On an annual basis in 2024/25, Main Roads came in top place by count and second place by volume.

In both periods, fragments made up two of the three most commonly counted items at this site type, a likely product of verge/median strip mowing. Grass length was consistently recorded as short, and one instance of recent mowing was recorded.

Litter bins were observed at three of ten Main Road sites.

| Top 3 Items by Count (#) – May 25 | |
|---|---|
| Cigarette butts and filters | 653 |
| Hard plastic fragment - small | 391 |
| Paper and Card fragment - small | 339 |

| Top 3 Items by Volume (l) – May 25 | |
|---|---|
| Tyres | 20.00 |
| Construction materials | 16.92 |
| Paper/card food packaging | 15.00 |
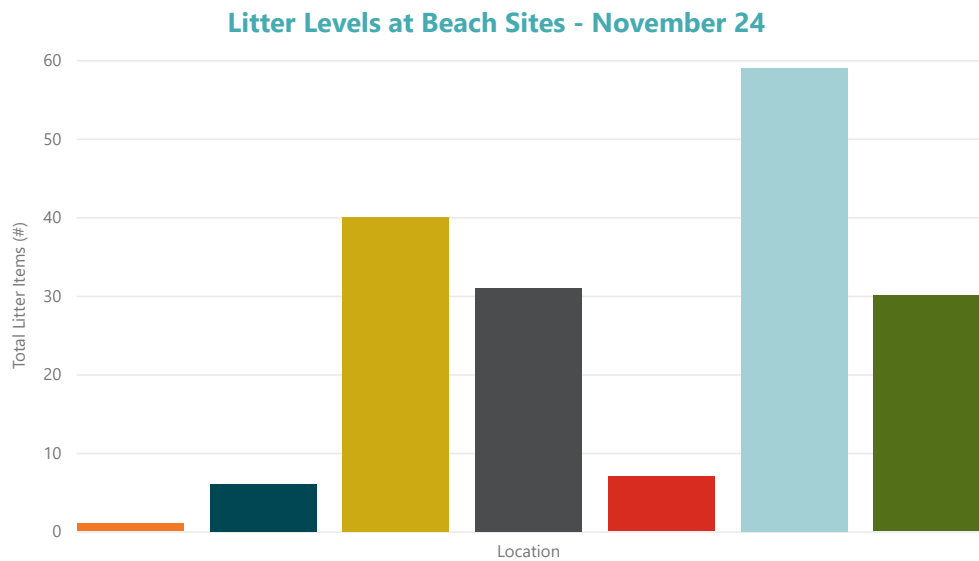
Litter Levels at Beach Sites - November 24



Litter Levels at Beach Sites - May 25



Litter Levels at Retail Sites - November 24



Litter Levels at Retail Sites - May 25

## 3.0  Litter Data by Site Type



Litter Levels at Residential Sites - November 24

Litter Levels at Residential Sites - May 25

Litter Levels at Industrial Sites - November 24

Litter Levels at Industrial Sites - May 25

# 3.0  Litter Data by Site Type



Litter Levels at Park Sites - November 24

Litter Levels at Park Sites - May 25

Litter Levels at Main Road- November 24

Litter Levels at Main Road Sites - May 25
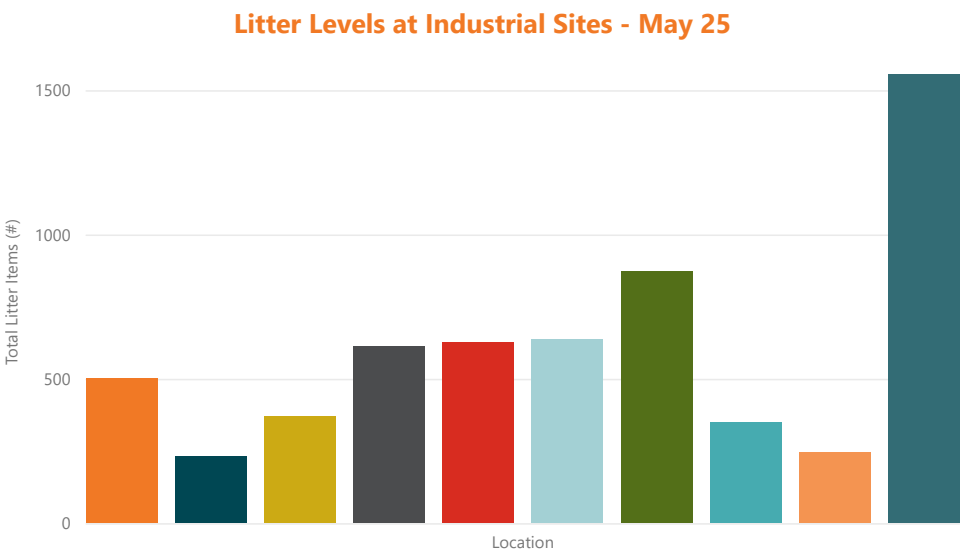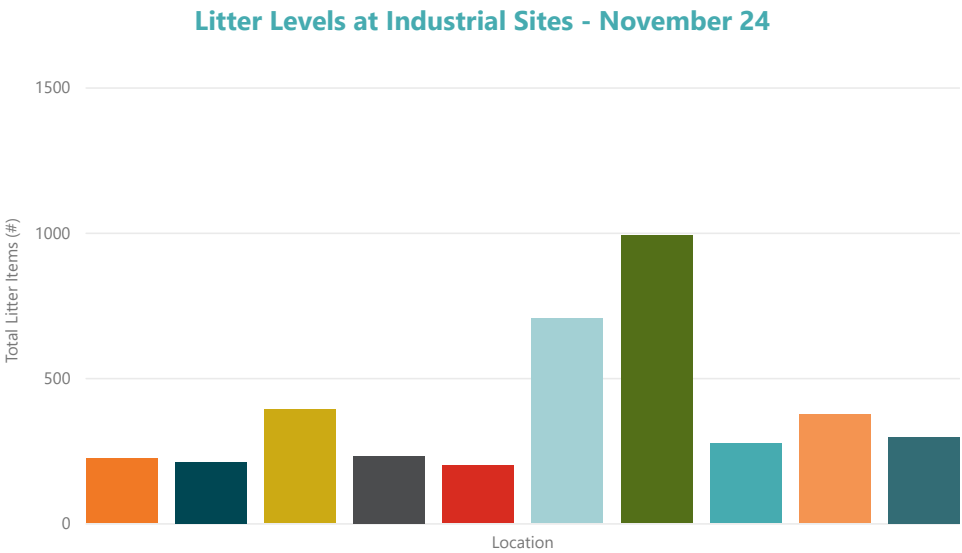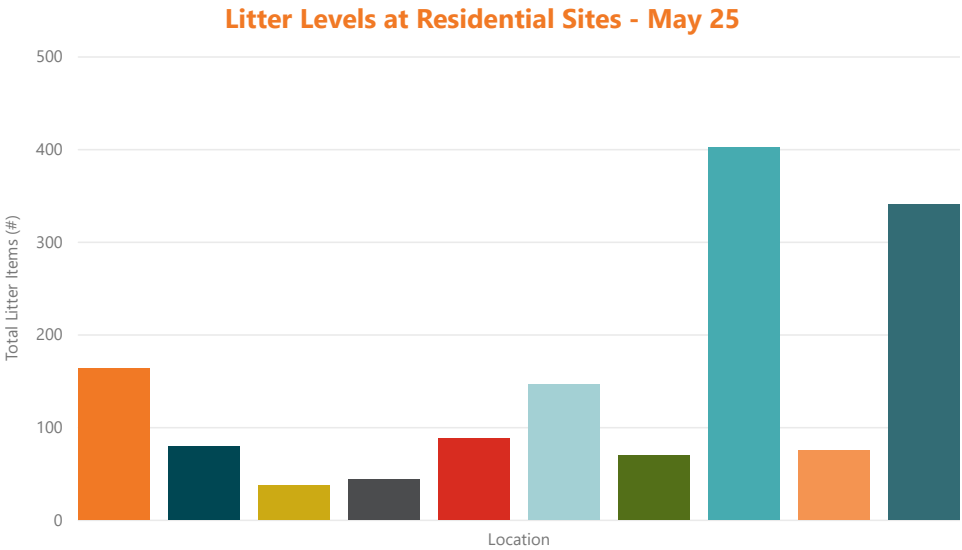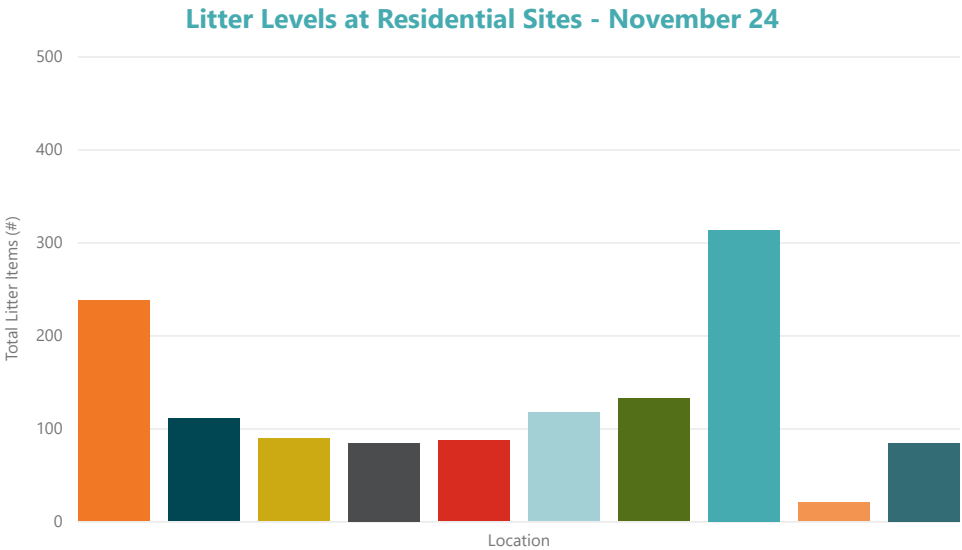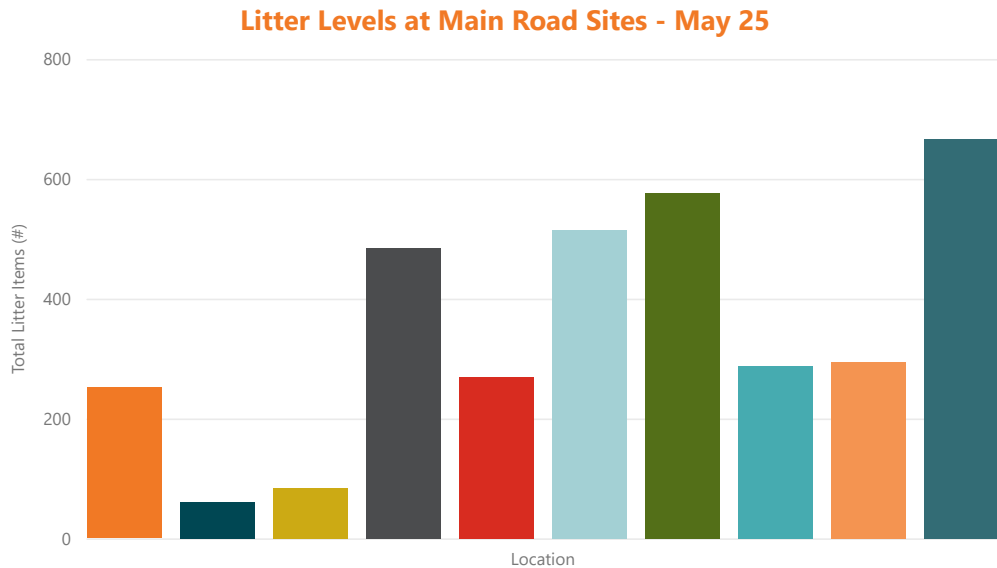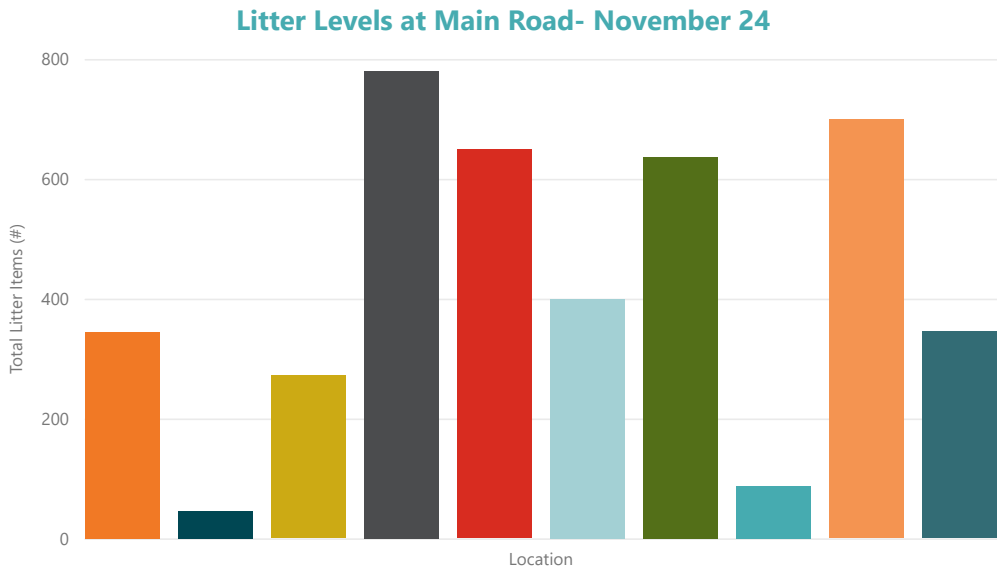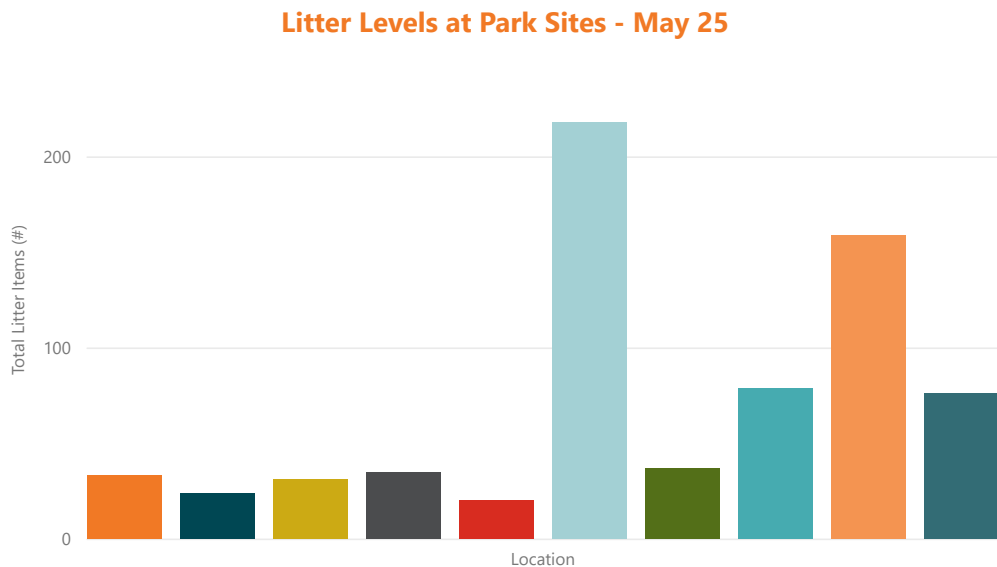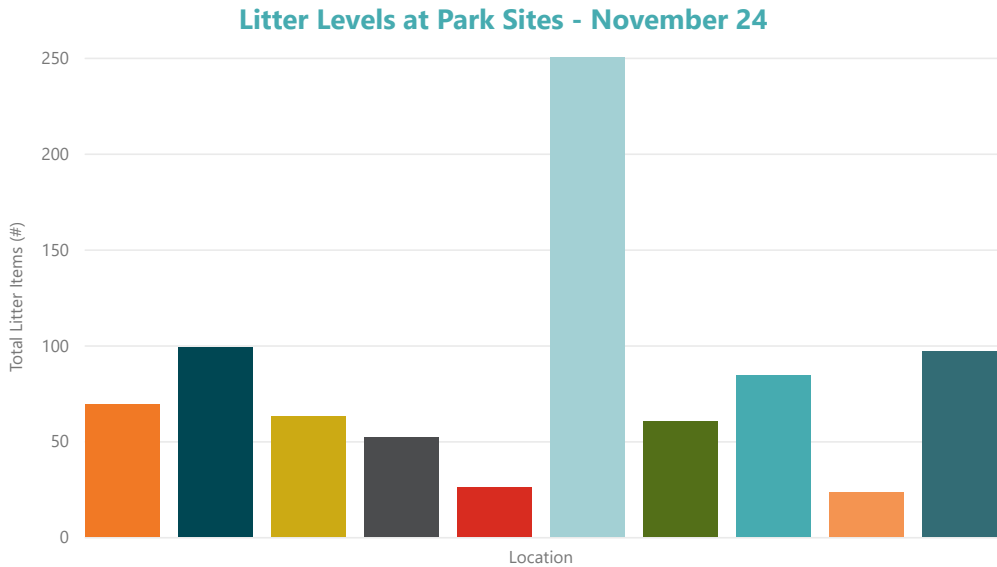
### Single Use Plastic and Single Use Plastic Replacements

| KEY ITEM SNAPSHOT | | |
|---|---|---|
| | November 24 | May 25 |
| Total Number of Items - (#) | 552 | 463 |
| Total Volume of Items- (l) | 76.32 | 69.32 |
| Highest Site Litter Count – Number (#) | 42 | 60 |
| Highest Site Litter Count – Volume (l) | 9.29 | 16.09 |
| Lowest Site Litter Count – Number (#) | 0 | 0 |
| Lowest Site Litter Count – Volume (l) | 0 | 0 |



On the 1st of January 2022, the phased Single Used Plastic ("SUP") ban by the WA Government came into effect. This 'Plan for Plastic' includes a ban on items such as single use plastic cutlery, straws, plastic shopping bags, plastic cups and lids and polystyrene food containers. In order to provide some insight into the transitional impact of the ban, items captured in this category include likely (non-plastic) replacements for the banned items, identified as (SUP – R). Appendix 4 is a count sheet that outlines all items captured in this category.

Out of 57 sites surveyed each period, there were just two in November 24 and eight in May 25 where no Single use plastic items were observed, indicating items in this category are a consistent issue across the majority of site types and locations.

**Category Count as a % of Total Items**

3.98%

0%          100%

**Category Volume as a % of Total Volume**

10.16%

0%          100%
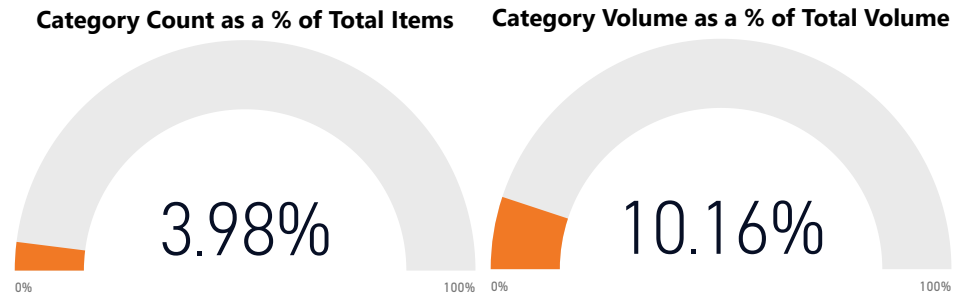
# 4.0 Key Categories and Items

## Concentration of SUP + SUP-R - November 24



Beach 3.44%
Main Road 29.35%
Retail 21.38%
Residential 12.5%
Industrial 25.91%
Park 7.43%

## Concentration of SUP +SUP-R - May 25



Beach 1.51%
Main Road 36.5%
Retail 17.28%
Residential 11.02%
Industrial 27.21%
Park 6.48%
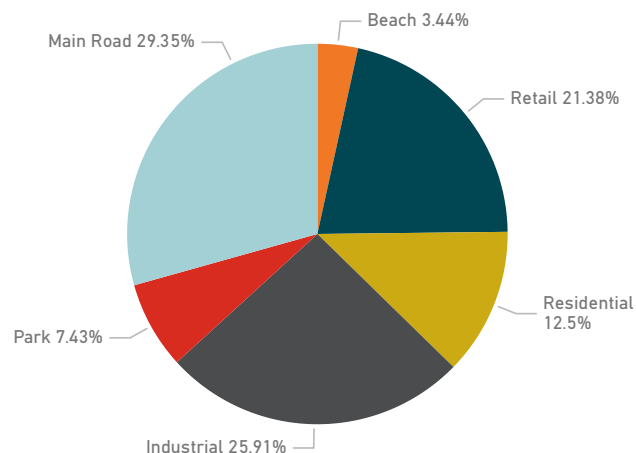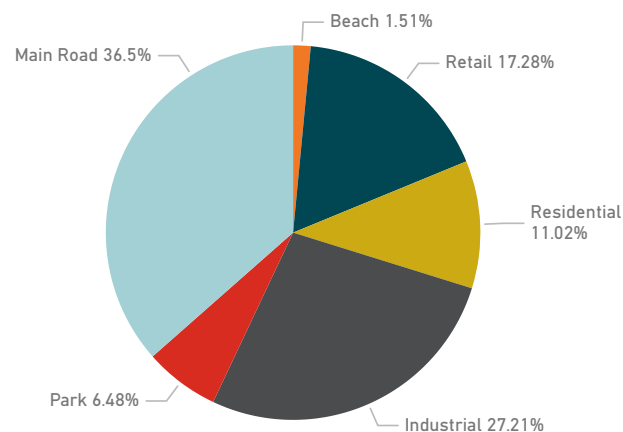
## Category Detail SUP - November 24

| Item | Sum of Count ▼ | Sum of Total Volume (l) |
|---|---|---|
| Cup - Coffee cup | 77 | 15.40 |
| Lollipop Sticks | 65 | 0.07 |
| Bag - Other | 58 | 11.60 |
| Other Food Package | 51 | 25.50 |
| Lids - Other | 43 | 0.86 |
| Lids -Coffee cup lid | 30 | 0.60 |
| Straws | 28 | 0.14 |
| Takeaway food container | 18 | 9.00 |
| Lids - Plastic cup lid | 16 | 0.32 |
| Cotton buds/tips | 11 | 0.01 |
| Bag -Lightweight shop | 10 | 2.00 |
| Plate/bowl – single use | 9 | 1.80 |
| Cup – Single use | 7 | 1.40 |
| Bag - Mesh Bags | 4 | 0.40 |
| Bag - Heavy Supermrkt | 3 | 3.00 |
| Cutlery/chopsticks | 3 | 0.03 |
| Bag - Heavy Boutique | 2 | 2.00 |
| Stirrers | 1 | 0.00 |
| Food pack./clam shells | 0 | 0.00 |
| **Total** | **436** | **74.13** |

## Category Detail SUP-R - November 24

| Item | Sum of Count ▼ | Sum of Total Volume (l) |
|---|---|---|
| Straw (non-plastic) | 77 | 0.39 |
| Cutlery (non-plastic) | 19 | 0.19 |
| Plate/bowl (non-plastic) | 8 | 1.60 |
| Cotton buds/tips (non- plastic) | 6 | 0.01 |
| Stirrers (non-plastic) | 6 | 0.01 |
| **Total** | **116** | **2.19** |

## Category Detail SUP May 25

| Item | Sum of Count ▼ | Sum of Total Volume (l) |
|---|---|---|
| Cup - Coffee cup | 101 | 20.20 |
| Lids -Coffee cup lid | 58 | 1.16 |
| Lollipop Sticks | 39 | 0.04 |
| Takeaway food container | 39 | 19.50 |
| Bag - Other | 28 | 5.60 |
| Cup – Single use | 27 | 5.40 |
| Lids - Plastic cup lid | 22 | 0.44 |
| Other Food Package | 17 | 8.50 |
| Straws | 12 | 0.06 |
| Lids - Other | 11 | 0.22 |
| Cotton buds/tips | 8 | 0.01 |
| Cutlery/chopsticks | 7 | 0.07 |
| Bag - Heavy Supermrkt | 5 | 5.00 |
| Bag -Lightweight shop | 3 | 0.60 |
| Bag - Heavy Boutique | 1 | 1.00 |
| Bag - Mesh Bags | 1 | 0.10 |
| Stirrers | 1 | 0.00 |
| **Total** | **380** | **67.90** |

## Category Detail SUP-R - May 25

| Item | Sum of Count ▼ | Sum of Total Volume (l) |
|---|---|---|
| Straw (non-plastic) | 72 | 0.36 |
| Cutlery (non-plastic) | 6 | 0.06 |
| Plate/bowl (non-plastic) | 5 | 1.00 |
| Cotton buds/tips (non- plastic) | 0 | 0.00 |
| Stirrers (non-plastic) | 0 | 0.00 |
| **Total** | **83** | **1.42** |

# 4.0 Key Categories and Items

**Count of SUP and SUP-R by Period**

● SUP  ● SUP - R

| | May 2022 | November 2022 | May 2023 | November 2023 | May 2024 | November 2024 | May 2025 |
|---|---|---|---|---|---|---|---|
| SUP - R | 70 | 154 | 127 | 127 | 195 | 116 | 83 |
| SUP | 759 | 702 | 543 | 359 | 349 | 436 | 380 |

**SUP and SUP-R by Proportion (%)**

● SUP  ● SUP - R

| | May 2022 | November 2022 | May 2023 | November 2023 | May 2024 | November 2024 | May 2025 |
|---|---|---|---|---|---|---|---|
| SUP - R | 8.44% | 17.99% | 18.96% | 26.13% | 35.85% | 21.01% | 17.93% |
| SUP | 91.56% | 82.01% | 81.04% | 73.87% | 64.15% | 78.99% | 82.07% |
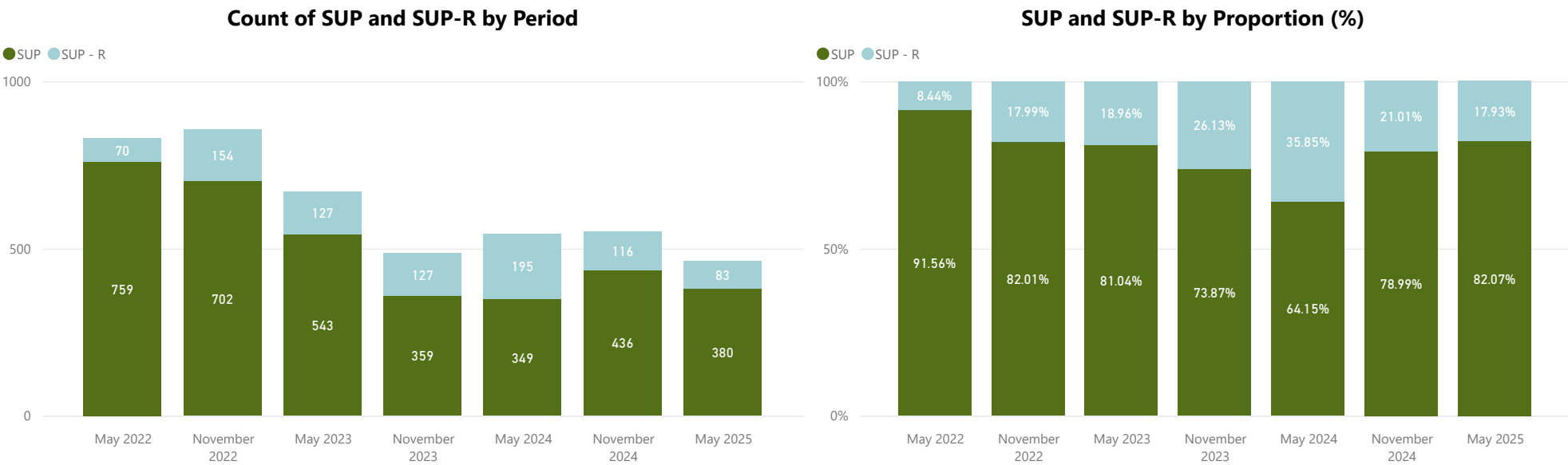
As demonstrated in the above graphs, SUP-R has shown an increase as a % of total category, since May 22. In May 22, SUP-R totalled 70 items, and accounted for 8.44% of the total SUP category, increasing to 83 or 17.93% of the category by May 25. This trend is as expected, as the SUP ban takes full effect, but does highlight that the ban on SUP items in some cases may lead to a substitution rather than completely ceasing certain littering behaviour.

When referring to the **Count of SUP and SUP-R by Period** graph, the increase in SUP in November 24 is driven by an uplift in Coffee cups and Coffee cup lids. Plastic lined coffee cups and plastic coffee cup lids were included in the SUP Ban from March 2024[2]. Whilst the item is still being included in the SUP category, it's anticipated that most coffee cups and coffee cup lids now being recorded would be the compostable (not plastic based) alternatives. The type of coffee cup (plastic lined or compostable) is not a level of detail currently collected in this survey methodology and is a limitation that should be noted when analysing SUP versus SUP-R figures.

[2] Department of Water and Environmental Regulation stage-2-plan-for-plastics_take-away-coffee-cups.pdf Retrieved 20/6/2025

# 4.0 Key Categories and Items

## CDS Beverage Containers

| KEY ITEM SNAPSHOT | | |
|---|---|---|
| | **November 24** | **May 25** |
| **Total Number of Items - (#)** | 86 | 93 |
| **Total Volume of Items- (l)** | 36.98 | 40.73 |
| **Highest Site Litter Count – Number (#)** | 13 | 27 |
| **Highest Site Litter Count – Volume (l)** | 5.33 | 10.35 |
| **Lowest Site Litter Count – Number (#)** | 0 | 0 |
| **Lowest Site Litter Count – Volume (l)** | 0 | 0 |

**Category Count as a % of Total Items**

0.70%

0%          100%

**Category Volume as a % of Total Volume**

5.42%

0%          100%

The Containers for Change program is a container deposit scheme ("CDS") that commenced in Western Australia in October 2020. It allows consumers to take eligible beverage containers to a collection point and get a refund of 10 cents per item. Eligible containers are labelled with a "10 cent refundable" sign. Data presented in the first part of this section refers to CDS eligible containers only. Detail on all beverage containers (including CDS eligible and Non-CDS) is presented at the end of this section.

CDS Containers were stable between both survey periods, with 86 and 93 containers counted in November 24 and May 25 respectively. Main Roads and Industrial sites continue to make up the largest proportion of CDS, together accounting for 76% of total CDS in November 24, and 85% in May 25. In the May 25 survey, one individual Main Road site accounted for 29% of all CDS containers counted, highlighting they aren't a persistent issue across all locations.

Referring to the **Category Count as a % of Total Items** in 2024/25, CDS Beverage Containers accounted for 0.70% by count, or 5.42% by volume.

Out of 57 sites surveyed each period, there were 31 in November 24, and 28 in May 25 where no CDS beverage containers were recorded.
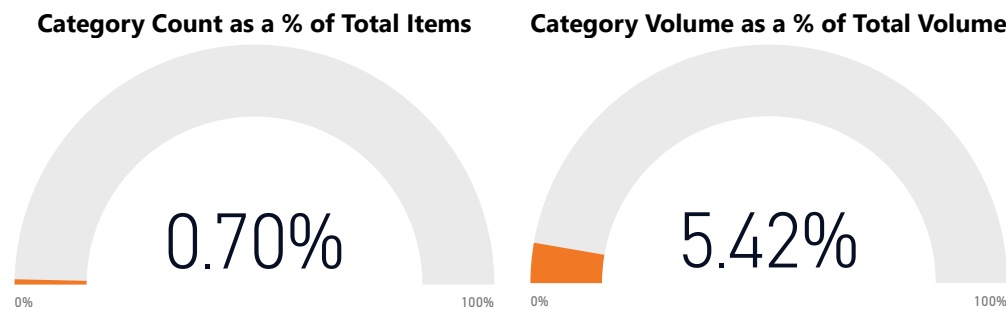
### Concentration of CDS Beverage Containers  - November 24



- Main Road 27.91%
- Beach 3.49%
- Retail 8.14%
- Residential 10.47%
- Park 2.33%
- Industrial 47.67%

### Concentration of CDS Beverage Containers - May 25



- Main Road 47.31%
- Retail 6.45%
- Residential 4.3%
- Industrial 37.63%
- Park 4.3%
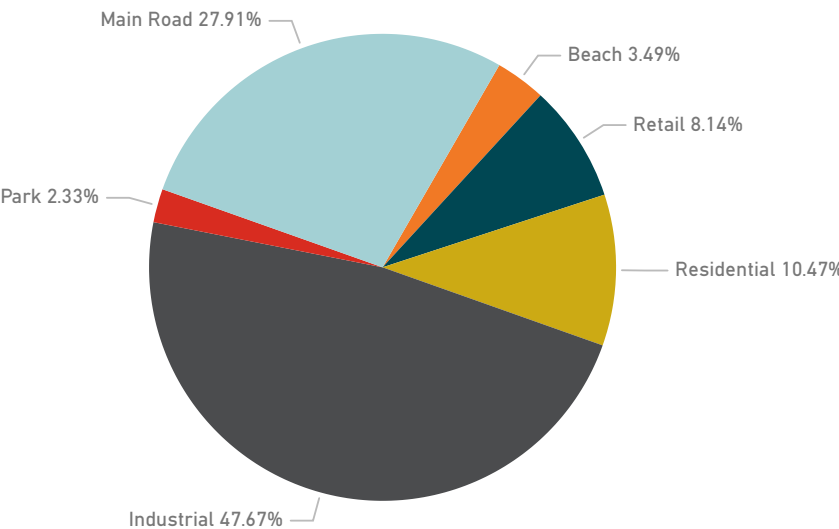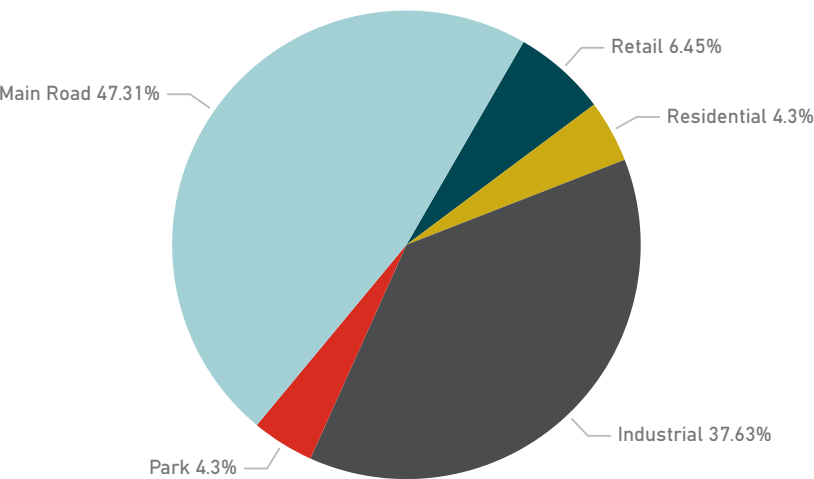
# 4.0 Key Categories and Items

## CDS Beverage Containers by Beverage Type - November 24



- Beer 15
- Water 13
- Flav. Milk 9
- Fruit/vegetable juice 4
- Premixed spirit drinks 15
- Soft Dr/FW/FJD/SpD/EnD 30

## CDS Beverage Containers by Beverage Type - May 25



- Beer 16
- Water 6
- Cider/fruit based 3
- Flav. Milk 4
- Fruit/vegetable juice 5
- Soft Dr/FW/FJD/SpD/EnD 46
- Premixed spirit drinks 13
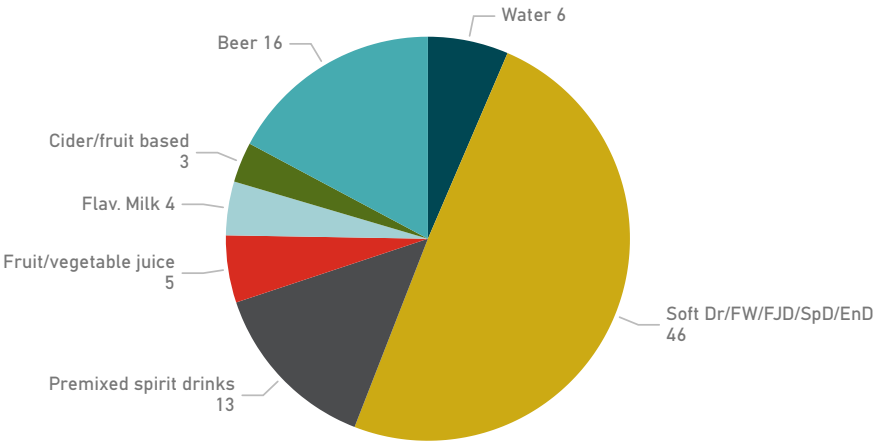
Note: FW/FJD/SpD/EnD refers to Flavoured water, Fruit juice drink, Sports drink and Energy drink.

### Category Detail CDS Beverage Containers November 24

| Classification | Item | Sum of Count | Sum of Total Volume (l) |
|---|---|---|---|
| Metal | Soft Dr/FW/FJD/SpD/EnD 150-499mL | 17 | 6.38 |
| Metal | Premixed spirit drinks 150-499mL | 13 | 4.88 |
| Glass | Beer 150-499mL | 10 | 3.75 |
| Plastic | Water 150-499mL | 8 | 3.00 |
| Plastic | Water 500-999mL | 5 | 3.00 |
| Metal | Beer 150-499mL | 4 | 1.50 |
| Paper And Card | Flav. milk (Cartons) 150-499mL | 4 | 1.50 |
| Plastic | Flav. Milk 500-999mL | 4 | 2.40 |
| Plastic | Soft Dr/FW/FJD/SpD/EnD 150-499mL | 4 | 1.50 |
| Metal | Soft Dr/FW/FJD/SpD/EnD 500-999mL | 4 | 2.40 |
| Glass | Soft Dr/FW/FJD/SpD/EnD 150-499mL | 3 | 1.13 |
| Plastic | Fruit/vegetable juice 150-499mL | 2 | 0.75 |
| Glass | Premixed spirit drinks 150-499mL | 2 | 0.75 |
| Glass | Beer 500-999mL | 1 | 0.60 |
| Plastic | Flav. Milk 150-499mL | 1 | 0.38 |
| Paper And Card | Fruit Juice 150-499mL | 1 | 0.38 |
| Plastic | Fruit/vegetable juice 500-999mL | 1 | 0.60 |
| Plastic | Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL | 1 | 1.50 |
| Plastic | Soft Dr/FW/FJD/SpD/EnD 500-999mL | 1 | 0.60 |
| **Total** | | **86** | **36.98** |

### Category Detail CDS Beverage Containers May 25
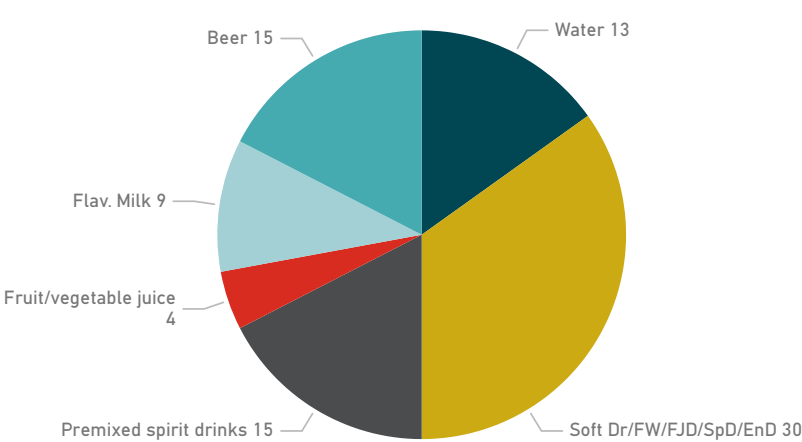
| Classification | Item | Sum of Count | Sum of Total Volume (l) |
|---|---|---|---|
| Paper And Card | FW/FW/FJD/SpD/EnD 150-499mL | 18 | 6.75 |
| Metal | Premixed spirit drinks 150-499mL | 13 | 4.88 |
| Metal | Soft Dr/FW/FJD/SpD/EnD 150-499mL | 12 | 4.50 |
| Metal | Beer 150-499mL | 9 | 3.38 |
| Glass | Beer 150-499mL | 6 | 2.25 |
| Plastic | Soft Dr/FW/FJD/SpD/EnD 500-999mL | 6 | 3.60 |
| Glass | Soft Dr/FW/FJD/SpD/EnD 150-499mL | 4 | 1.50 |
| Plastic | Water 500-999mL | 4 | 2.40 |
| Paper And Card | Fruit Juice 150-499mL | 3 | 1.13 |
| Metal | Cider/fruit based 150-499mL | 2 | 0.75 |
| Paper And Card | Flav. milk (Cartons) 500-999mL | 2 | 1.20 |
| Plastic | Fruit/vegetable juice 150-499mL | 2 | 0.75 |
| Plastic | Soft Dr/FW/FJD/SpD/EnD 150-499mL | 2 | 0.75 |
| Plastic | Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL | 2 | 3.00 |
| Plastic | Water 150-499mL | 2 | 0.75 |
| Glass | Beer 500-999mL | 1 | 0.60 |
| Glass | Cider 150-499mL | 1 | 0.38 |
| Plastic | Flav. Milk 150-499mL | 1 | 0.38 |
| Plastic | Flav. Milk 500-999mL | 1 | 0.60 |
| Glass | Soft Dr/FW/FJD/SpD/EnD 500-999mL | 1 | 0.60 |
| Metal | Soft Dr/FW/FJD/SpD/EnD 500-999mL | 1 | 0.60 |
| **Total** | | **93** | **40.73** |

## CDS Beverage Containers by Site Type (%)

Site Type  ● Beach  ● Retail  ● Residential  ● Industrial  ● Park  ● Main Road
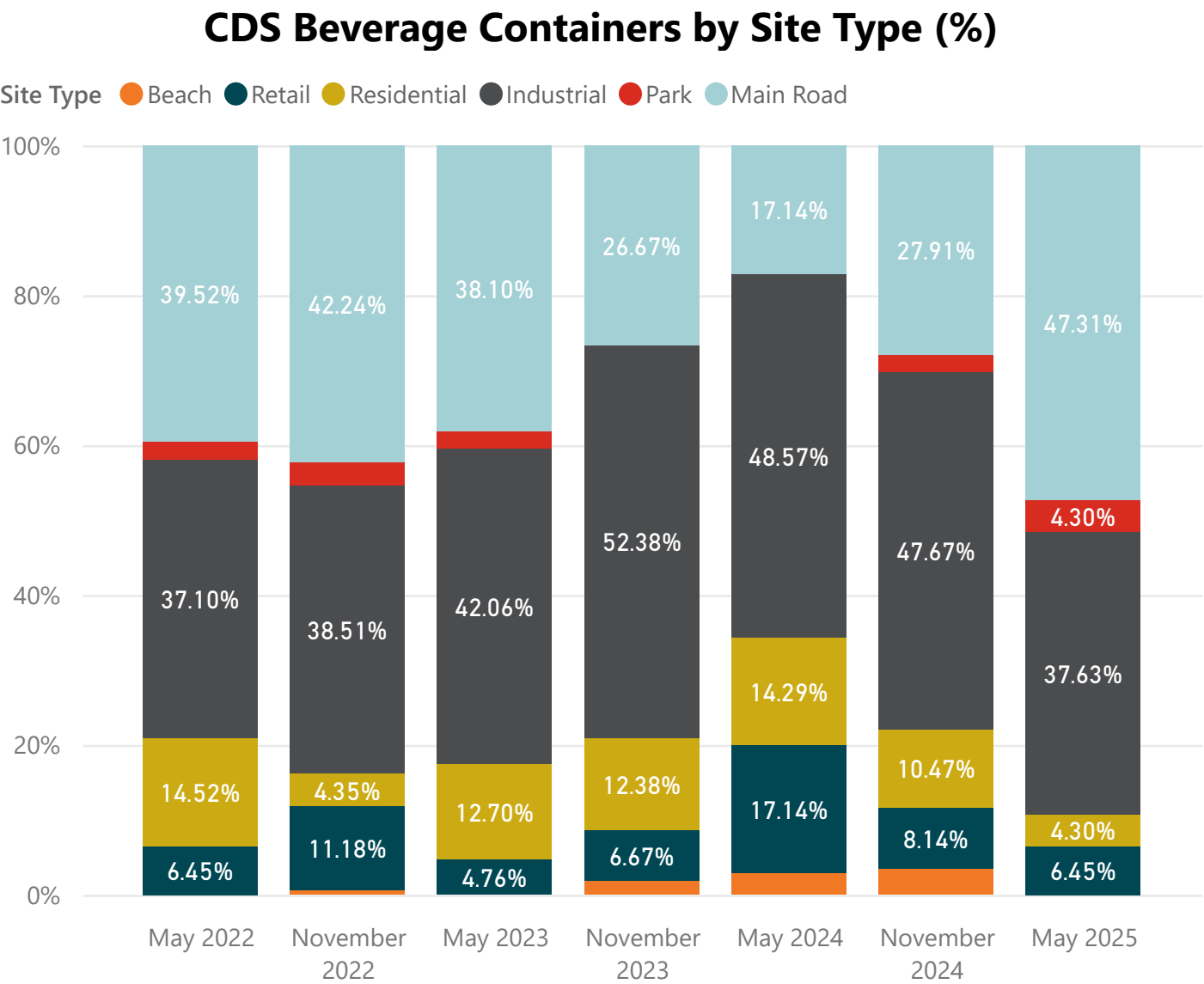
## Total Beverage Containers (CDS and Non CDS)

Across both survey periods, in addition to the above-reported CDS eligible containers there were a further 20 containers found that were classified as not eligible for the CDS scheme (12 in November 24 and 8 in May 25). This included items such as plastic (non-flavoured) milk containers 1000ml-3000ml, plastic <150ml flavoured milk containers, glass (non premixed) spirits containers and plastic <150ml (non premixed) spirit containers.

It follows that in 2024/25 total beverage containers (including Non CDS eligible) equated to 0.78% of total items counted, or 6.59% of the volume.



**Category Count as a % of Total Items**

0.78%

0%           100%

**Category Volume as a % of Total Volume**

6.59%

0%           100%

**Count of CDS and Non CDS Beverage Containers**

● CDS ● Non CDS

| Survey | CDS | Non CDS |
|---|---|---|
| May 2022 | 124 | 27 |
| November 2022 | 161 | 23 |
| May 2023 | 126 | 14 |
| November 2023 | 105 | 28 |
| May 2024 | 70 | 9 |
| November 2024 | 86 | 12 |
| May 2025 | 93 | 8 |
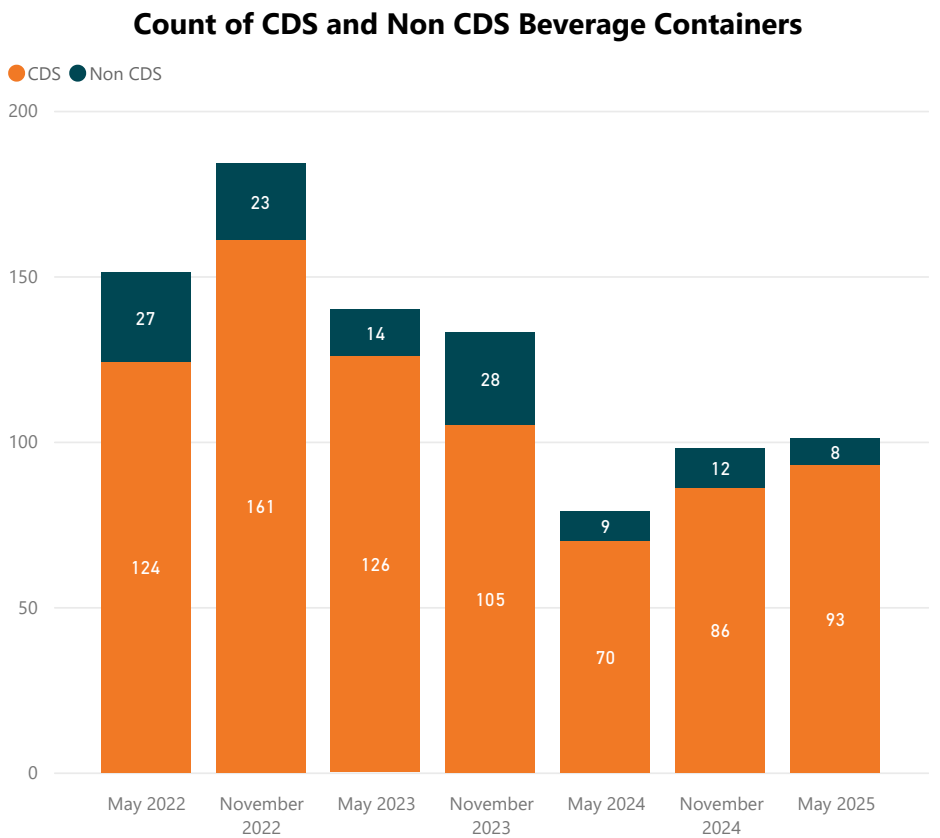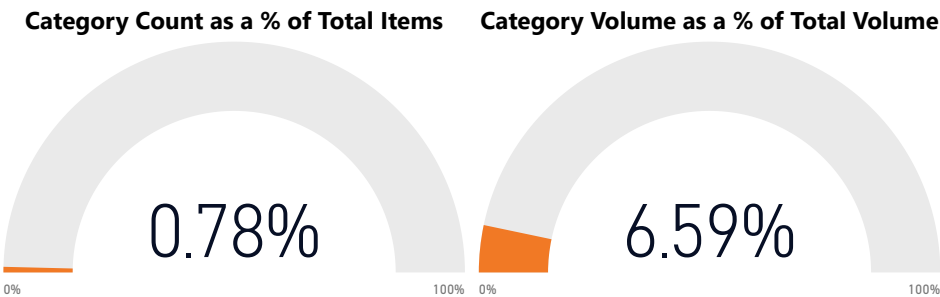
## Cigarette Butts and Filters

| KEY ITEM SNAPSHOT | | |
|---|---|---|
| | **November 24** | **May 25** |
| **Total Number of Items - (#)** | 3,217 | 2,227 |
| **Total Volume of Items- (l)** | 6.43 | 4.45 |
| **Highest Site Litter Count – Number (#)** | 438 | 248 |
| **Highest Site Litter Count – Volume (l)** | 0.88 | 0.50 |
| **Lowest Site Litter Count – Number (#)** | 0 | 0 |
| **Lowest Site Litter Count – Volume (l)** | 0 | 0 |

**Cigarette Butts and Filters** were the highest individual litter item by count in both survey periods. In 2024/25, there was 25.53 Cigarette butts and Filters counted per 1,000 square metres surveyed.

Up just marginally on previous periods, Cigarette Butts and Filters in the 2024/25 survey account for 21.33% of all litter items counted (compares with 20.50% in 2023/24 and 20.10% in 2022/23).

The highest site type for Cigarette Butts and Filters was Retail, accounting for 53% and 43% of the total counted in November 24 and May 25 respectively.

Out of 57 sites surveyed there were just six in November 24 and eight in May 25, where no Cigarette Butts and Filters were observed. Cigarette butt bins were only observed at one site during each survey period.



**Category Count as a % of Total Items**

21.33%

0%                    100%

**Category Volume as a % of Total Volume**

0.76%

0%                    100%
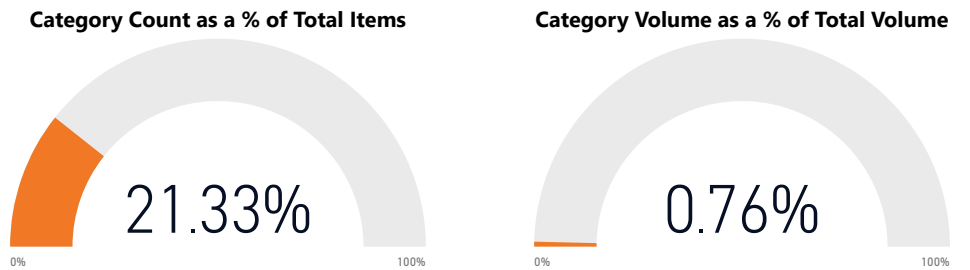
# 4.0 Key Categories and Items

## Concentration of Cigarette Butts & Filters  - November 24
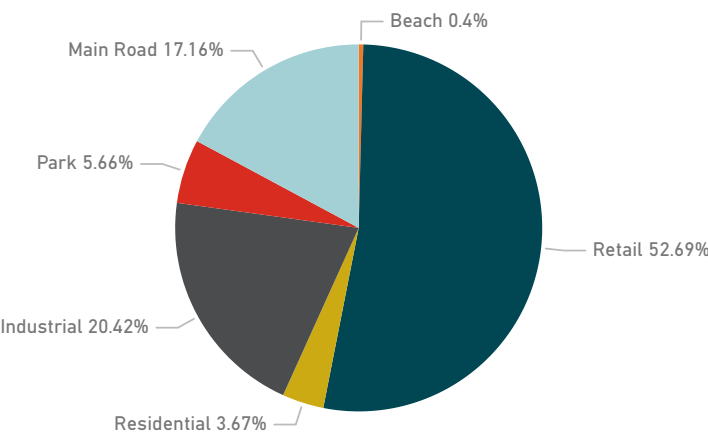


- Beach 0.4%
- Main Road 17.16%
- Park 5.66%
- Industrial 20.42%
- Residential 3.67%
- Retail 52.69%

## Concentration of Cigarette Butts & Filters -May 25



- Beach 1.35%
- Main Road 29.32%
- Park 5.07%
- Industrial 15.94%
- Residential 5.61%
- Retail 42.7%
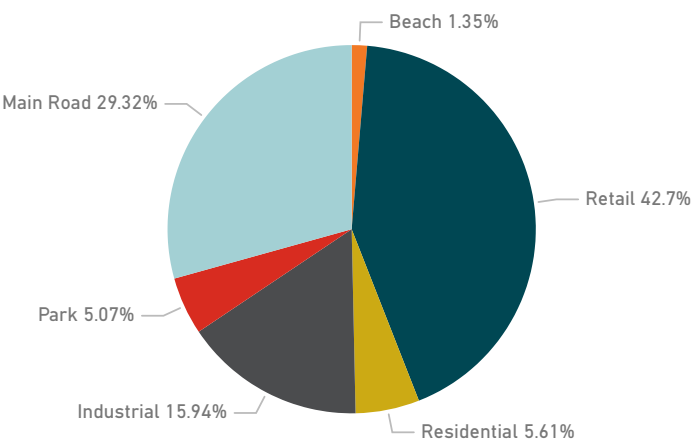
## Takeaway Food Packaging

| KEY ITEM SNAPSHOT | | |
|---|---|---|
| | **November 24** | **May 25** |
| **Total Number of Items - (#)** | 1,884 | 1,971 |
| **Total Volume of Items- (l)** | 152.24 | 156.75 |
| **Highest Site Litter Count – Number (#)** | 144 | 134 |
| **Highest Site Litter Count – Volume (l)** | 15.87 | 20.91 |
| **Lowest Site Litter Count – Number (#)** | 0 | 1 |
| **Lowest Site Litter Count – Volume (l)** | 0 | 0.02 |

Items in this section include a variety of materials that are used to package, wrap and transport takeaway and convenience food and beverages. The Count Sheet at Appendix 4 details the items captured in this category.

Out of 57 sites surveyed each period, they was just one in November 24 and nil in May 25 where no items from the Takeaway food packaging category observed. This highlights that this category of litter is a persistent issue across all site types and locations.

Takeaway food packaging as a % of total count and volume for 2024/25 is shown below. This compares to 2023/24 when the category accounted for 14.53% of total litter items by count, and 16.77% of the total volume.

### Count of Takeaway Items by Site Type
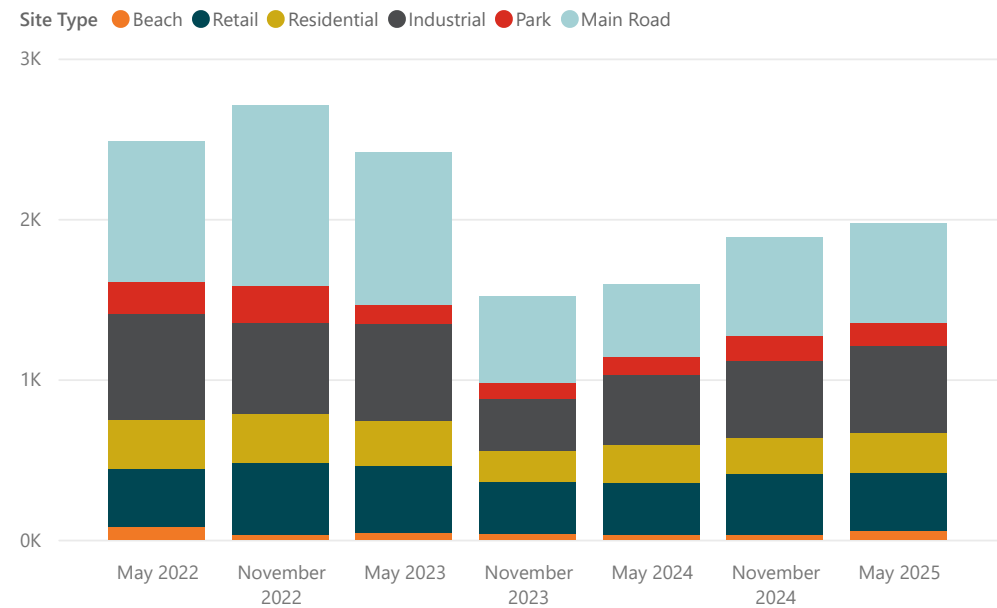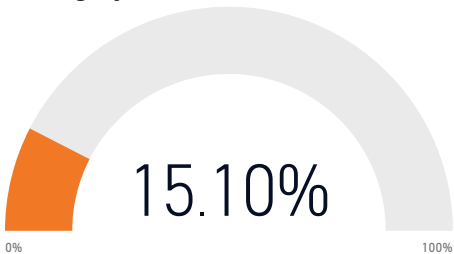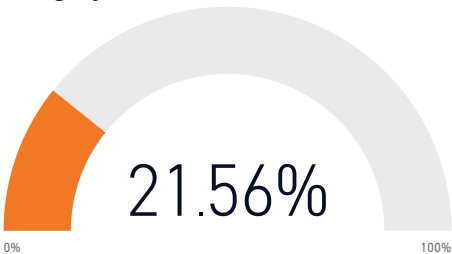
Site Type ● Beach ● Retail ● Residential ● Industrial ● Park ● Main Road



**Category Count as a % of Total Items**

15.10%

0%                              100%

**Category Volume as a % of Total Volume**

21.56%

0%                              100%

# 4.0  Key Categories and Items

## Concentration of Takeaway Food Packaging  - November 24



- Beach 1.75%
- Retail 20.01%
- Main Road 32.48%
- Residential 11.89%
- Park 8.44%
- Industrial 25.42%

## Concentration of Takeaway Food Packaging - May 25
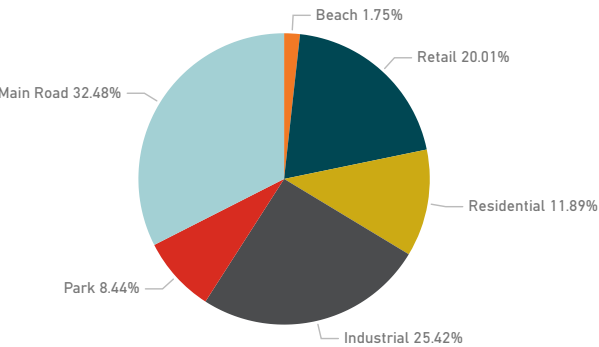


- Beach 2.79%
- Retail 18.26%
- Main Road 31.46%
- Residential 12.84%
- Park 7.1%
- Industrial 27.55%
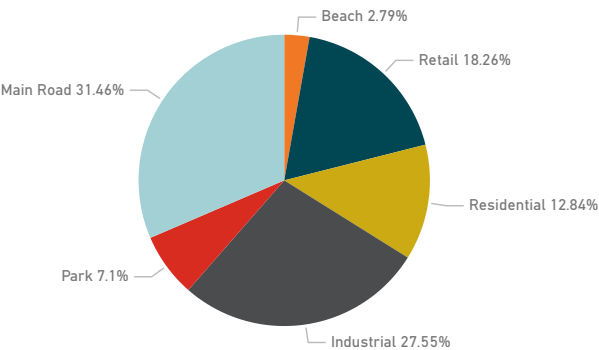
## Category Detail Takeaway Food Packaging - November 24

| Item | Sum of Count | Sum of Total Volume (l) |
|---|---|---|
| Food/confect. Wrappers | 683 | 34.15 |
| Lids - Beverage container lids /caps | 324 | 6.48 |
| Lids, bottle tops, can ring pulls | 257 | 0.51 |
| Paper/card food packaging | 138 | 69.00 |
| Cup - Coffee cup | 77 | 15.40 |
| Straw (non-plastic) | 77 | 0.39 |
| Lollipop Sticks | 65 | 0.07 |
| Lids - Other | 43 | 0.86 |
| Cup - Other paper cup | 41 | 8.20 |
| Lids -Coffee cup lid | 30 | 0.60 |
| Straws | 28 | 0.14 |
| Cutlery (non-plastic) | 19 | 0.19 |
| Takeaway food container | 18 | 9.00 |
| Lids - Plastic cup lid | 16 | 0.32 |
| Ice Cream Stick | 14 | 0.01 |
| Ice cream wrappers | 14 | 0.28 |
| Plate/bowl – single use | 9 | 1.80 |
| Plate/bowl (non-plastic) | 8 | 1.60 |
| Cup – Single use | 7 | 1.40 |
| Stirrers (non-plastic) | 6 | 0.01 |
| Cutlery/chopsticks | 3 | 0.03 |
| Six pack rings | 3 | 0.60 |
| Foil takeaway container | 2 | 1.00 |
| Cups (foam) | 1 | 0.20 |
| Stirrers | 1 | 0.00 |
| Food pack./clam shells | 0 | 0.00 |
| **Total** | **1884** | **152.24** |

## Category Detail Takeaway Food Packaging - May 25

| Item | Sum of Count | Sum of Total Volume (l) |
|---|---|---|
| Food/confect. Wrappers | 658 | 32.90 |
| Lids - Beverage container lids /caps | 484 | 9.68 |
| Lids, bottle tops, can ring pulls | 264 | 0.53 |
| Paper/card food packaging | 117 | 58.50 |
| Cup - Coffee cup | 101 | 20.20 |
| Straw (non-plastic) | 72 | 0.36 |
| Lids -Coffee cup lid | 58 | 1.16 |
| Lollipop Sticks | 39 | 0.04 |
| Takeaway food container | 39 | 19.50 |
| Cup - Other paper cup | 27 | 5.40 |
| Cup – Single use | 27 | 5.40 |
| Lids - Plastic cup lid | 22 | 0.44 |
| Ice Cream Stick | 14 | 0.01 |
| Straws | 12 | 0.06 |
| Lids - Other | 11 | 0.22 |
| Cutlery/chopsticks | 7 | 0.07 |
| Cutlery (non-plastic) | 6 | 0.06 |
| Plate/bowl (non-plastic) | 5 | 1.00 |
| Six pack rings | 4 | 0.80 |
| Cups (foam) | 2 | 0.40 |
| Ice cream wrappers | 1 | 0.02 |
| Stirrers | 1 | 0.00 |
| Foil takeaway container | 0 | 0.00 |
| Food pack./clam shells | 0 | 0.00 |
| Plate/bowl – single use | 0 | 0.00 |
| Stirrers (non-plastic) | 0 | 0.00 |
| **Total** | **1971** | **156.75** |

## Polystyrene

| KEY ITEM SNAPSHOT | | |
|---|---|---|
| | **November 24** | **May 25** |
| **Total Number of Items - (#)** | 186 | 182 |
| **Total Volume of Items- (l)** | 22.03 | 14.78 |
| **Highest Site Litter Count – Number (#)** | 23 | 38 |
| **Highest Site Litter Count – Volume (l)** | 5.00 | 2.17 |
| **Lowest Site Litter Count – Number (#)** | 0 | 0 |
| **Lowest Site Litter Count – Volume (l)** | 0 | 0 |

This category captures Polystyrene takeaway food packaging and cups, insulation and packaging, and fragments.

Fragments make up the largest proportion of this category, accounting for 166 or 89% in November 24 and 170 or 93% in May 25.

**Category Count as a % of Total Items**

1.44%

0%                    100%

**Category Volume as a % of Total Volume**

2.57%

0%                    100%
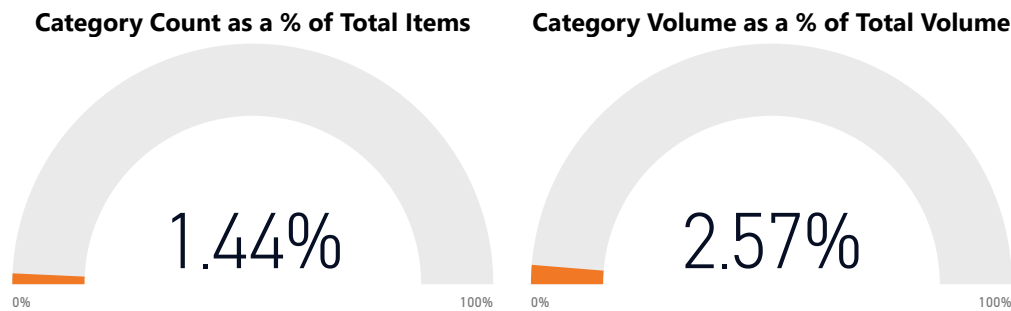
# 4.0 Key Categories and Items

## Concentration of Polystyrene - November 24



Main Road 37.1%
Retail 4.3%
Residential 18.28%
Industrial 33.33%
Park 6.99%

## Concentration of Polystyrene - May 25



Main Road 20.88%
Beach 2.75%
Retail 4.4%
Residential 9.34%
Industrial 52.2%
Park 10.44%
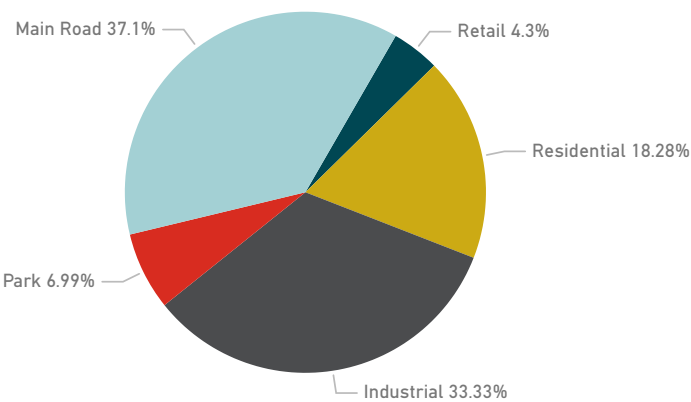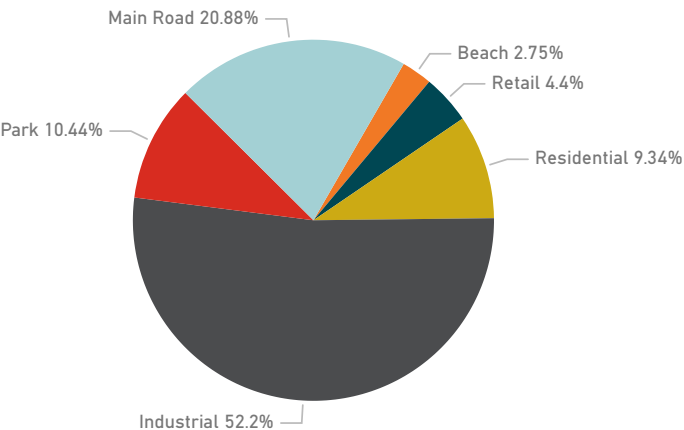
## Count of Polystyrene by Item



Fragments
- Polystyrene Fragments
- Other polystyrene item
- Insulation & Packaging
- Food pack./clam shells
- Cups (foam)
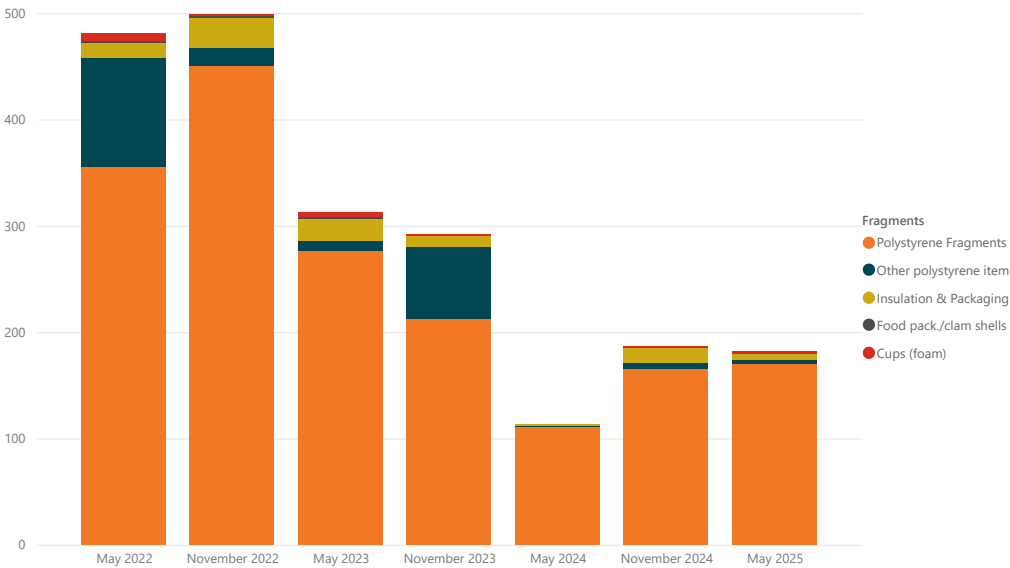
## Fragments

| KEY ITEM SNAPSHOT | | |
|---|---|---|
| | **November 24** | **May 25** |
| **Total Number of Items - (#)** | 5,442 | 5,194 |
| **Total Volume of Items- (l)** | 71.84 | 71.85 |
| **Highest Site Litter Count – Number (#)** | 317 | 399 |
| **Highest Site Litter Count – Volume (l)** | 2.54 | 3.19 |
| **Lowest Site Litter Count – Number (#)** | 0 | 0 |
| **Lowest Site Litter Count – Volume (l)** | 0 | 0 |

The AusLM Field Guide defines Fragments as "pieces of litter [that are] either no longer identifiable as a whole item, or there is less than half of the whole item found in one or multiple contributing pieces"

Fragments were classified based on their source material, and size;

- small (2.5 cm to 8 cm)
- medium (8 cm to 16 cm)
- large (larger than 16 cm)

Fragments consistently make up a significant portion of the litter items counted. In 2024/25 Plastic fragments (including hard and soft plastic) continues to make up the largest proportion of the fragments counted, accounting for between 47% and 49% of fragments each period.

**Category Count as a % of Total Items**



41.66%

0%                              100%

**Category Volume as a % of Total Volume**



10.03%

0%                              100%
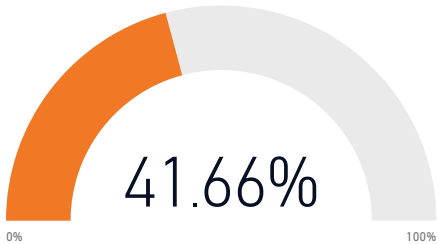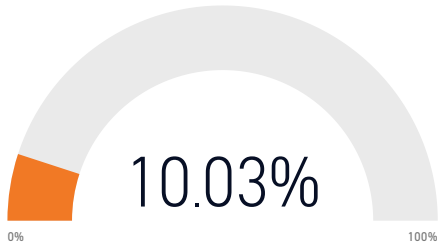
**Concentration of Fragments- November 24**
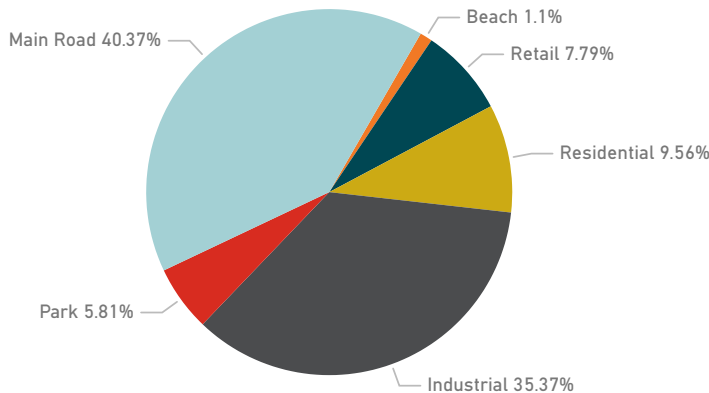


Main Road 40.37%

Beach 1.1%

Retail 7.79%

Residential 9.56%

Industrial 35.37%

Park 5.81%

**Concentration of Fragments - May 25**



Main Road 32.6%

Beach 1.14%

Retail 7.89%

Residential 13.71%

Park 5.6%

Industrial 39.06%

## Count of Fragments by Source Material



**Source Material**
- Rubber
- Poly
- Plastic
- Paper And Card
- Metal
- Glass
- Cloth

## Count of Fragments by Source Material %



**Classification**
- Rubber
- Poly
- Plastic
- Paper And Card
- Metal
- Glass
- Cloth
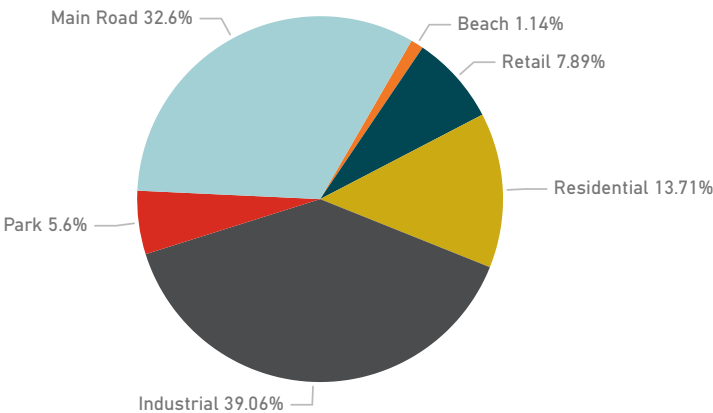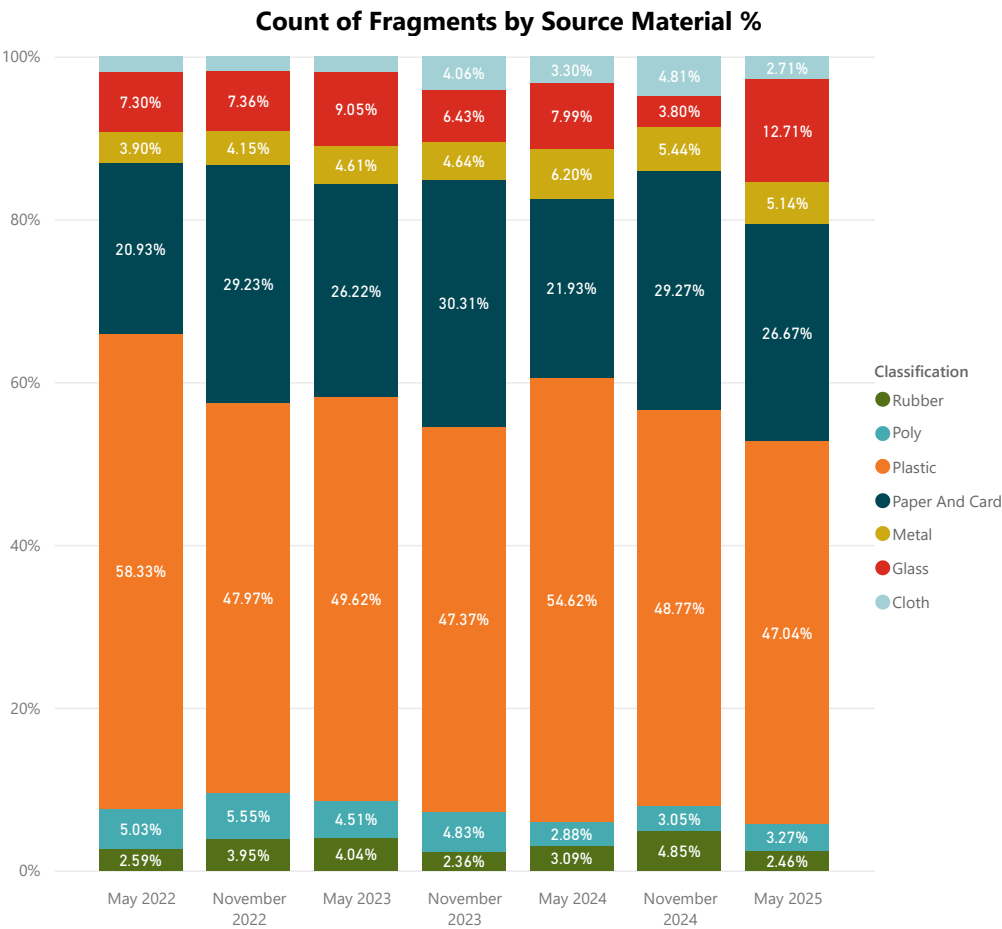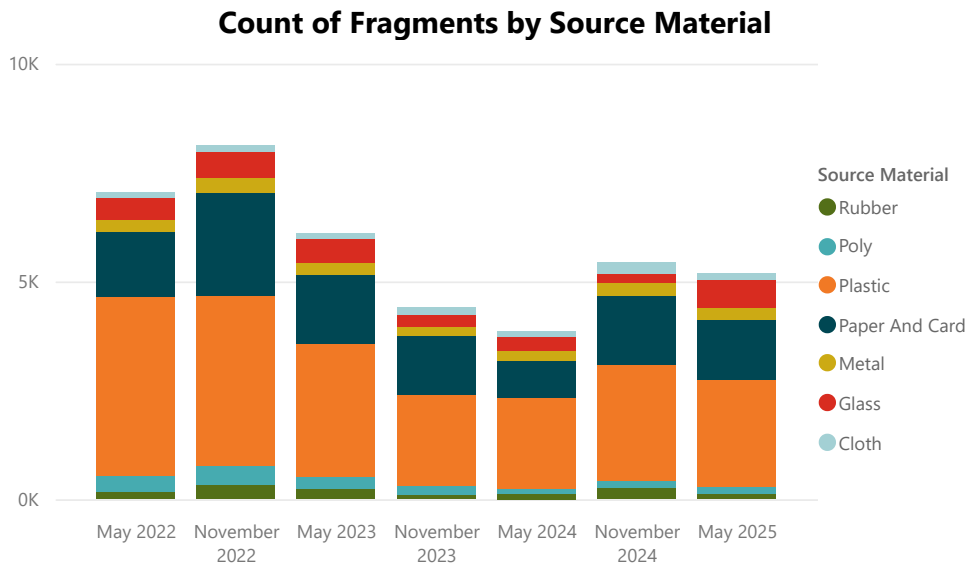
## Items of Note – Facemasks

| KEY ITEM SNAPSHOT | | |
|---|---|---|
| | November 24 | May 25 |
| Total Number of Items - (#) | 11 | 4 |
| Total Volume of Items- (l) | 1.10 | 0.40 |
| Highest Site Litter Count – Number (#) | 2 | 1 |
| Highest Site Litter Count – Volume (l) | 0.20 | 0.10 |
| Lowest Site Litter Count – Number (#) | 0 | 0 |
| Lowest Site Litter Count – Volume (l) | 0 | 0 |

Over the past five and a half years, the Coronavirus Pandemic has resulted in Public Health Orders, including periods of Facemask mandates across the Perth metropolitan area.

There were no periods of general public mask mandates during the 12 months to June 25, and the resulting reduction in Facemasks counted is evident in the **Count of Facemasks by Period** graph.



**Category Count as a % of Total Ite...**

0%   0.06%   100%

**Category Volume as a % of To...**

0%   0.10%   100%

# 5.0 Other Observations

## Concentration of Facemasks - November 24
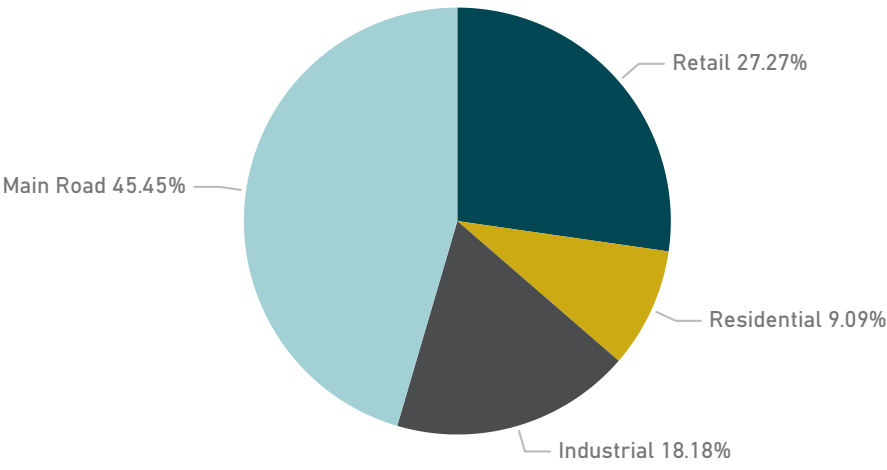


Retail 27.27%
Main Road 45.45%
Residential 9.09%
Industrial 18.18%

## Concentration of Facemasks - May 25



Retail 25%
Main Road 50%
Park 25%

## Count of Facemasks



| Item |
|---|
| ● Face mask – disposable |
| ● Face mask – reusable |

May 2022: 72 / 8
November 2022: 71 / 8
May 2023: 21 / 3
November 2023: 13
May 2024: 4
November 2024: 8 / 3
May 2025: 3
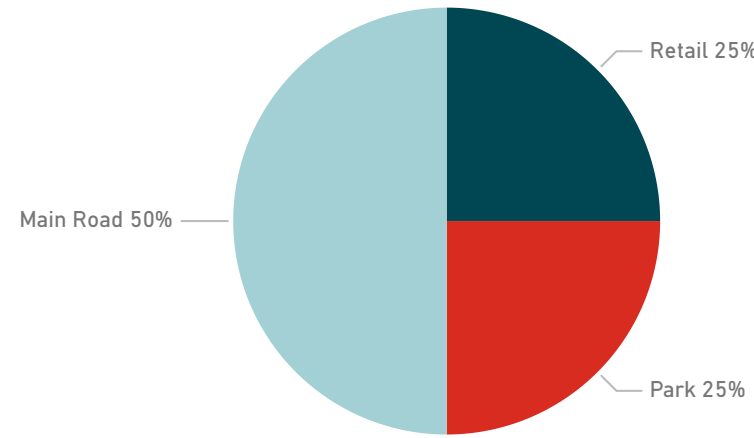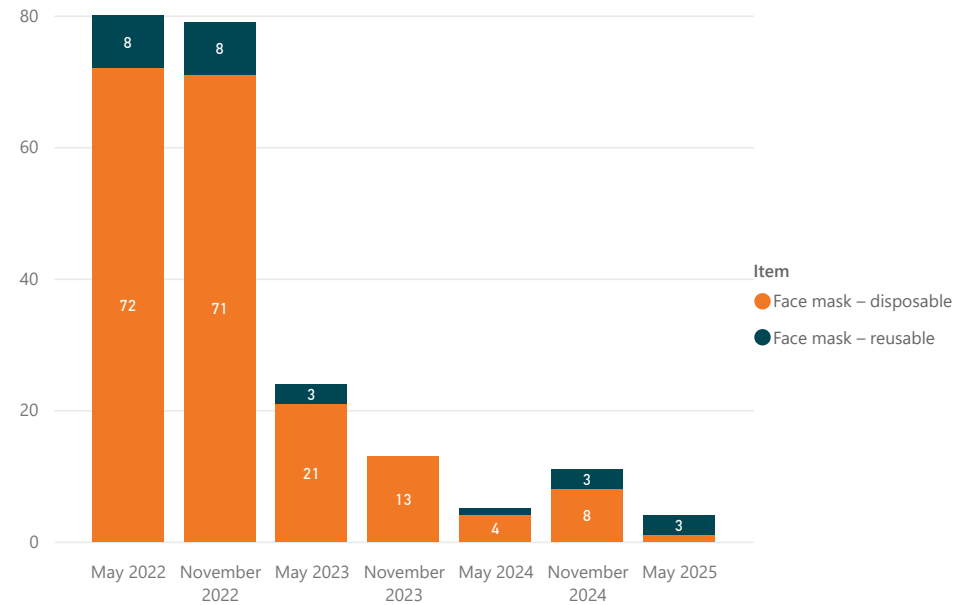
## Items of Note – Vape Pens and Vape Packaging

| KEY ITEM SNAPSHOT | | |
|---|---|---|
| | November 24 | May 25 |
| Total Number of Items - (#) | 28 | 3 |
| Total Volume of Items- (l) | 1.40 | 0.15 |
| Highest Site Litter Count – Number (#) | 10 | 2 |
| Highest Site Litter Count – Volume (l) | 0.50 | 0.10 |
| Lowest Site Litter Count – Number (#) | 0 | 0 |
| Lowest Site Litter Count – Volume (l) | 0 | 0 |

**Category Count as a % of Total Items**

0.12%

0%                                         100%

**Category Volume as a % of Total Volume**

0.11%

0%                                         100%

**Count of Vape Pens and Packaging by Site Type**

Site Type  ● Beach ● Retail ● Residential ● Industrial ● Park ● Main Road
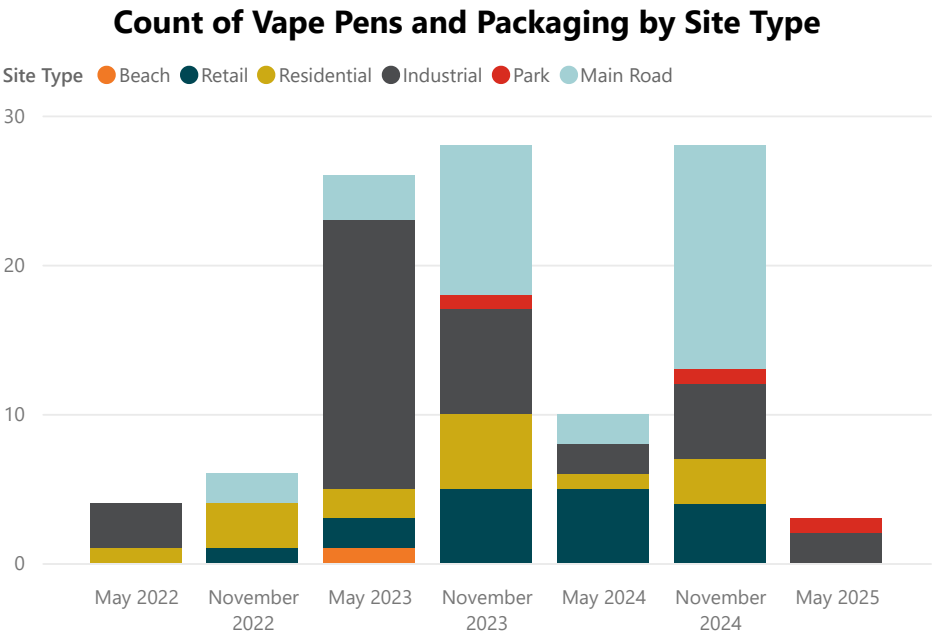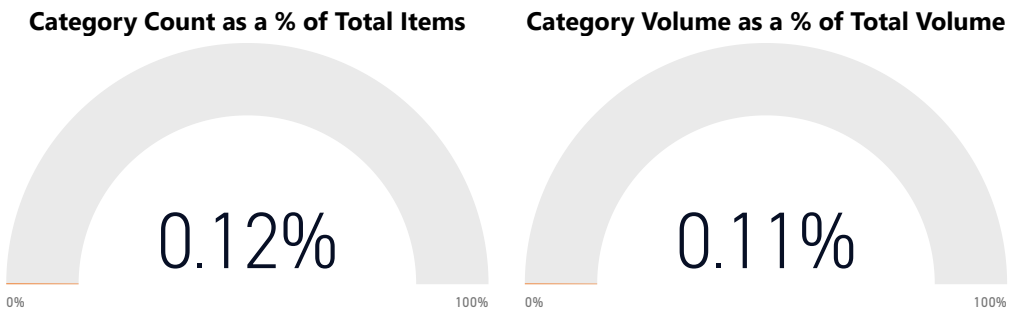


As demonstrated in the above **Vape Pens and Packaging by Site Type and Period** graph, the count of Vape Pens and Vape Packaging has been recorded at varying levels period to period, since the first survey in 2022.

There is a noticeable drop in May 25 of Vape Pens and Vape Packaging. As relatively new products to the market, it is worth noting these items may be inconsistently recognised by survey team members, which may lead to them on occasion being recorded under more generic item classifications.

# 5.0  Other Observations

## Concentration of Vape Pens and Packaging  - November 24

- Retail 14.29%
- Residential 10.71%
- Industrial 17.86%
- Park 3.57%
- Main Road 53.57%
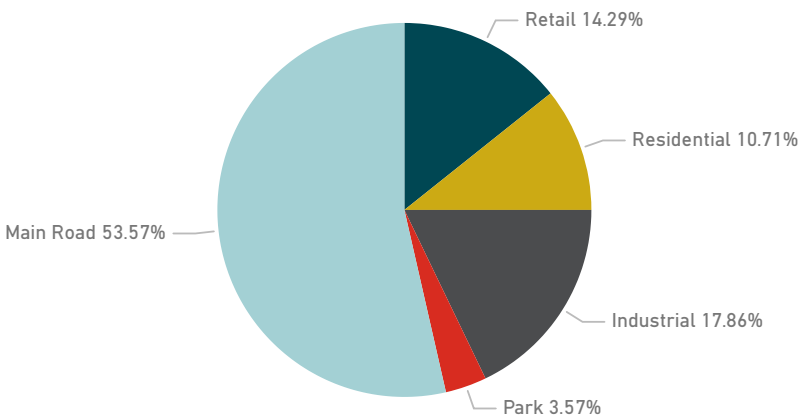


## Concentration of Vape Pens and Packaging - May 25

- Park 33.33%
- Industrial 66.67%
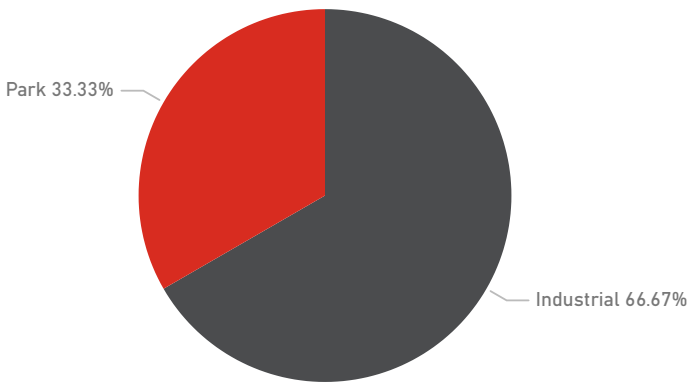
## Illegal Dumping

There were a number of occasions where illegal dumping was observed during the litter surveys. Per the AusLM Field Guide the items of illegal dumping were excluded from the count and the area containing the items plus a one metre buffer was removed from the surveyed area.

In November 24, three instances of dumping were noted within a specific transect. One instance was noted in each a Retail, Main Road and Industrial site.
Illegally dumped items included retic piping, a pallet, and a box of mixed waste.

In May 25, four instances of illegal dumping were recorded, three at Industrial sites and one at Residential. Items included construction waste and rubble, piping and tyres.

# 6.0  Appendices

## Appendix 1

## Site Type Assessment Checklist

**RESIDENTIAL AREA**

| | |
|---|---|
| **Summary** | A street/collection of streets in a residential area. The street has homes, units, or apartments on both sides of the street. |
| **Inclusion criteria** | ☐ Houses, multi-unit developments, apartments and townhouses on both sides of the street. |
| **Exclusion criteria** | ☐ Streets maximum speed limits greater than 60 km/h.<br>☐ Dead end/blind-ended streets (e.g. courts, cul-de-sac)<br>☐ Streets with schools or other significant public amenity (though these can be nearby in neighbouring streets). |

**RETAIL AREA**

| | |
|---|---|
| **Summary** | A street/collection of streets within a retail precinct (i.e. shopfronts). |
| **Inclusion criteria** | ☐ Majority of street contains retail shops and food stores. A small fraction of other building types (e.g. a library, a small office frontage) is allowed. The retail strip might be only on one side of the road or both. Buildings that have retail fronts/at ground level and residential above can be included. |
| **Exclusion criteria** | ☐ A strip that is dominated by restaurants/pubs (i.e. more than 80% of the land use areas). |

**INDUSTRIAL AREA**

| | |
|---|---|
| **Summary** | A street/collection of streets in an industrial area. |
| **Inclusion criteria** | ☐ Streets will include factories, industrial offices, warehouses, workshops or other industrial buildings. |
| **Exclusion criteria** | ☐ Industrial areas that are accessed by a private road. e.g. Industrial parks where the listed address is the main road at the front of the estate.<br>☐ More than 10% of the street length contains retail shops-. |

**RECREATIONAL PARK**

| | |
|---|---|
| **Summary** | A public outdoor space frequently visited by individuals and families for recreation and leisure. |
| **Inclusion criteria** | ☐ Has **one or more** of the following: a playground or covered eating area (e.g. a rotunda) or barbeque or similar substantial piece of infrastructure.<br>☐ 50% or more open area (i.e. grass, paths) that is not playgrounds or dense vegetation. |
| **Exclusion criteria** | ☐ Parks with food retail outlets (kiosks, takeaway stores etc.) within the site or within 50 m of the park boundary. |

**BEACH**

| | |
|---|---|
| **Summary** | A mostly sandy beach frequently visited by people for activities such as swimming, walking, other recreation and relaxation. |
| **Inclusion criteria** | ☐ The majority (i.e. 90% or more) of the beach area to be sampled is sand (or sand covered in seaweed etc.). |
| **Exclusion criteria** | ☐ Piers, jetties, wharves or boat ramps are within 100 metres of the location of the transects to be surveyed. |

**MAIN ROAD**

| | |
|---|---|
| **Summary** | Straight open stretches of sealed road with wide verges. Roads that typically act as an arterial for traffic between and around population centres. |
| **Inclusion criteria** | ☐ A main road linking population centres (towns/cities)<br>☐ Vegetation bordering each side of the road |
| **Exclusion criteria** | ☐ Petrol stations, fast food outlets and service centres within 2 km of the site<br>☐ Site has bridges, overpasses, rest stops, turn-offs, intersections (except driveways), and slipways<br>☐ Areas with steeply sloped verges (i.e. >45$^0$) are excluded. |

# 6.0 Appendices

## Appendix 2

## Total Items and Volume in Count Sheet Format

| | Nov-24 | | May-24 | | 2025FY Total | | | |
|---|---|---|---|---|---|---|---|---|
| | Total Number of Items | Total Volume (l) | Total Number of Items | Total Volume (l) | Average Number of Items | Items /1000m2 | Average Volume (l) | Volume (l)/1000m2 |
| **PLASTIC** | | | | | | | | |
| Cigarette butts and filters | 3,217 | 6.43 | 2,227 | 4.45 | 2,722 | 25.53 | 5.44 | 0.05 |
| Bag - Dog Poo | 18 | 3.60 | 4 | 0.80 | 11 | 0.10 | 2.20 | 0.02 |
| Bag - Fruit/Veg | 12 | 2.40 | 2 | 0.40 | 7 | 0.07 | 1.40 | 0.01 |
| Bag - Green Reusable | 3 | 3.00 | 1 | 1.00 | 2 | 0.02 | 2.00 | 0.02 |
| Bag - Heavy Boutique | 2 | 2.00 | 1 | 1.00 | 2 | 0.01 | 1.50 | 0.01 |
| Bag - Heavy Supermarket | 3 | 3.00 | 5 | 5.00 | 4 | 0.04 | 4.00 | 0.04 |
| Bag – Ice | 3 | 1.50 | 1 | 0.50 | 2 | 0.02 | 1.00 | 0.01 |
| Bag -Lightweight shop | 10 | 2.00 | 3 | 0.60 | 7 | 0.06 | 1.30 | 0.01 |
| Bag - Mesh Bags | 4 | 0.40 | 1 | 0.10 | 3 | 0.02 | 0.25 | 0.00 |
| Bag - Other | 58 | 11.60 | 28 | 5.60 | 43 | 0.40 | 8.60 | 0.08 |
| Bread Bag Tags/twist ties | 22 | 0.02 | 12 | 0.01 | 17 | 0.16 | 0.02 | 0.00 |
| Cable ties | 127 | 0.64 | 93 | 0.47 | 110 | 1.03 | 0.55 | 0.01 |
| Cigarette Lighters | 6 | 0.06 | 2 | 0.02 | 4 | 0.04 | 0.04 | 0.00 |
| Cigarette packet cellophane wrap | 38 | 0.04 | 14 | 0.02 | 26 | 0.24 | 0.03 | 0.00 |
| Cotton buds/tips | 11 | 0.01 | 8 | 0.01 | 10 | 0.09 | 0.01 | 0.00 |
| Cup – Single use | 7 | 1.40 | 27 | 5.40 | 17 | 0.16 | 3.40 | 0.03 |
| Cup – Reusable | 1 | 0.20 | 1 | 0.20 | 1 | 0.01 | 0.20 | 0.00 |
| Cutlery/chopsticks | 3 | 0.03 | 7 | 0.07 | 5 | 0.05 | 0.05 | 0.00 |
| Fishing related | 12 | 0.60 | 3 | 0.15 | 8 | 0.07 | 0.38 | 0.00 |
| Food/confect. Wrappers | 683 | 34.15 | 658 | 32.90 | 671 | 6.29 | 33.53 | 0.31 |
| Lids - Beverage container lids /caps | 324 | 6.48 | 484 | 9.68 | 404 | 3.79 | 8.08 | 0.08 |
| Lids - Plastic cup lid | 16 | 0.32 | 22 | 0.44 | 19 | 0.18 | 0.38 | 0.00 |
| Lids -Coffee cup lid | 30 | 0.60 | 58 | 1.16 | 44 | 0.41 | 0.88 | 0.01 |
| Lids - Other | 43 | 0.86 | 11 | 0.22 | 27 | 0.25 | 0.54 | 0.01 |

# 6.0  Appendices

| | | Nov-24 | | May-24 | | 2025FY Total | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Total Number of Items | Total Volume (l) | Total Number of Items | Total Volume (l) | Average Number of Items | Items /1000m2 | Average Volume (l) | Volume (l)/1000m2 |
| PLASTIC | Lollipop Sticks | 65 | 0.07 | 39 | 0.04 | 52 | 0.49 | 0.05 | 0.00 |
| | Non-Food Bottle | 13 | 6.50 | 3 | 1.50 | 8 | 0.08 | 4.00 | 0.04 |
| | Non-Food package | 31 | 15.50 | 44 | 22.00 | 38 | 0.35 | 18.75 | 0.18 |
| | Other Food Package | 51 | 25.50 | 17 | 8.50 | 34 | 0.32 | 17.00 | 0.16 |
| | Plate/bowl – single use | 9 | 1.80 | - | - | 5 | 0.04 | 0.90 | 0.01 |
| | Plate/bowl – reusable | 3 | 0.60 | 8 | 1.60 | 6 | 0.05 | 1.10 | 0.01 |
| | Plastic wrap non-food | 15 | 3.00 | 38 | 7.60 | 27 | 0.25 | 5.30 | 0.05 |
| | Six pack rings | 3 | 0.60 | 4 | 0.80 | 4 | 0.03 | 0.70 | 0.01 |
| | Strapping band | 74 | 14.80 | 72 | 14.40 | 73 | 0.68 | 14.60 | 0.14 |
| | Stirrers | 1 | 0.00 | 1 | 0.00 | 1 | 0.01 | 0.00 | 0.00 |
| | Straws | 28 | 0.14 | 12 | 0.06 | 20 | 0.19 | 0.10 | 0.00 |
| | Syringe | 2 | 0.02 | 1 | 0.01 | 2 | 0.01 | 0.02 | 0.00 |
| | Takeaway food container | 18 | 9.00 | 39 | 19.50 | 29 | 0.27 | 14.25 | 0.13 |
| | Tape/narrow soft plastic film | 206 | 10.30 | 137 | 6.85 | 172 | 1.61 | 8.58 | 0.08 |
| | Tobacco pouch | 8 | 0.80 | 1 | 0.10 | 5 | 0.04 | 0.45 | 0.00 |
| | Toys | 27 | 2.70 | 23 | 2.30 | 25 | 0.23 | 2.50 | 0.02 |
| | Whipper snipper cord | 29 | 0.15 | 21 | 0.11 | 25 | 0.23 | 0.13 | 0.00 |
| | Other plastic item | 105 | 10.50 | 123 | 12.30 | 114 | 1.07 | 11.40 | 0.11 |
| METAL | Aerosol cans | 3 | 0.90 | - | - | 2 | 0.01 | 0.45 | 0.00 |
| | Aluminium foil wrap | 190 | 19.00 | 136 | 13.60 | 163 | 1.53 | 16.30 | 0.15 |
| | Foil takeaway container | 2 | 1.00 | - | - | 1 | 0.01 | 0.50 | 0.00 |
| | Lids, bottle tops, can ring pulls | 257 | 0.51 | 264 | 0.53 | 261 | 2.44 | 0.52 | 0.00 |
| | Other metal item | 150 | 15.00 | 90 | 9.00 | 120 | 1.13 | 12.00 | 0.11 |
| GLASS | Glass jars | 33 | 1.88 | - | - | 3 | 0.02 | 0.94 | 0.01 |
| | Other glass item | 77 | 0.80 | 6 | 1.20 | 5 | 0.05 | 1.00 | 0.01 |

# 6.0 Appendices

| | | Nov-24 | | May-24 | | 2025FY Total | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Total Number of Items | Total Volume (l) | Total Number of Items | Total Volume (l) | Average Number of Items | Items /1000m2 | Average Volume (l) | Volume (l)/1000m2 |
| PAPER | Cigarette packets | 41 | 3.30 | 28 | 2.80 | 31 | 0.29 | 3.05 | 0.03 |
| | Cup - Coffee cup | 14 | 15.40 | 101 | 20.20 | 89 | 0.83 | 17.80 | 0.17 |
| | Cup - Other paper cup | 8 | 8.20 | 27 | 5.40 | 34 | 0.32 | 6.80 | 0.06 |
| | Ice cream wrappers | 19 | 0.28 | 1 | 0.02 | 8 | 0.07 | 0.15 | 0.00 |
| | Junk mail / free circulars | 29 | 4.00 | 27 | 13.50 | 18 | 0.16 | 8.75 | 0.08 |
| | Newspaper/Magazine | 34 | 9.50 | 13 | 6.50 | 16 | 0.15 | 8.00 | 0.08 |
| | Packages & boxes | 138 | 14.50 | 41 | 20.50 | 35 | 0.33 | 17.50 | 0.16 |
| | Paper bags | 412 | 10.20 | 27 | 8.10 | 31 | 0.29 | 9.15 | 0.09 |
| | Paper/card food packaging | 172 | 69.00 | 117 | 58.50 | 128 | 1.20 | 63.75 | 0.60 |
| | Paper tissues/napkin | 50 | 20.60 | 324 | 16.20 | 368 | 3.45 | 18.40 | 0.17 |
| | Shopper dockets, tickets/receipts | 172 | 8.60 | 288 | 14.40 | 230 | 2.16 | 11.50 | 0.11 |
| | Other paper & card. | 50 | 2.50 | 54 | 2.70 | 52 | 0.49 | 2.60 | 0.02 |
| RUBBER | Rubber band/hair tie | 56 | 0.28 | 36 | 0.18 | 46 | 0.43 | 0.23 | 0.00 |
| | Rubber toy | 2 | 0.10 | 1 | 0.05 | 2 | 0.01 | 0.08 | 0.00 |
| | Tyre pieces | 12 | 0.06 | 1 | 0.01 | 7 | 0.06 | 0.03 | 0.00 |
| | Tyres | - | - | 4 | 80.00 | 2 | 0.02 | 40.00 | 0.38 |
| | Other rubber item | 27 | 2.70 | 21 | 2.10 | 24 | 0.23 | 2.40 | 0.02 |
| POLY | Cups (foam) | 1 | 0.20 | 2 | 0.40 | 2 | 0.01 | 0.30 | 0.00 |
| | Food pack./clam shells | - | - | - | - | - | - | - | - |
| | Insulation & Packaging | 14 | 14.00 | 6 | 6.00 | 10 | 0.09 | 10.00 | 0.09 |
| | Other polystyrene item | 5 | 2.50 | 4 | 2.00 | 5 | 0.04 | 2.25 | 0.02 |
| CLOTH | Clothing | 43 | 43.00 | 39 | 39.00 | 41 | 0.38 | 41.00 | 0.38 |
| | Other cloth item | 88 | 17.60 | 48 | 9.60 | 68 | 0.64 | 13.60 | 0.13 |

# 6.0  Appendices

| | | Nov-24 | | May-24 | | 2025FY Total | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Total Number of Items | Total Volume (l) | Total Number of Items | Total Volume (l) | Average Number of Items | Items /1000m2 | Average Volume (l) | Volume (l)/1000m2 |
| OTHER MATERIALS | Balloons | 29 | 1.45 | 8 | 0.40 | 19 | 0.17 | 0.93 | 0.01 |
| | Batteries | 10 | 0.10 | 3 | 0.03 | 7 | 0.06 | 0.07 | 0.00 |
| | Condom | 3 | 0.02 | 2 | 0.01 | 3 | 0.02 | 0.01 | 0.00 |
| | Construction materials | 133 | 47.88 | 170 | 61.20 | 152 | 1.42 | 54.54 | 0.51 |
| | Cotton buds/tips (non- plastic) | 6 | 0.01 | - | - | 3 | 0.03 | 0.00 | 0.00 |
| | Cutlery (non-plastic) | 19 | 0.19 | 6 | 0.06 | 13 | 0.12 | 0.13 | 0.00 |
| | Dog poo | 48 | 2.40 | 12 | 0.60 | 30 | 0.28 | 1.50 | 0.01 |
| | Electrical wire | 49 | 0.49 | 33 | 0.33 | 41 | 0.38 | 0.41 | 0.00 |
| | Face mask – disposable | 8 | 0.80 | 1 | 0.10 | 5 | 0.04 | 0.45 | 0.00 |
| | Face mask – reusable | 3 | 0.30 | 3 | 0.30 | 3 | 0.03 | 0.30 | 0.00 |
| | Fruit/vegetable/food | 51 | 10.20 | 39 | 7.80 | 45 | 0.42 | 9.00 | 0.08 |
| | Gum | 16 | - | 1 | - | 9 | 0.08 | - | - |
| | Ice Cream Stick | 14 | 0.01 | 14 | 0.01 | 14 | 0.13 | 0.01 | 0.00 |
| | Nappy | 2 | 1.00 | 3 | 1.50 | 3 | 0.02 | 1.25 | 0.01 |
| | Personal Effects | 39 | 7.80 | 12 | 2.40 | 26 | 0.24 | 5.10 | 0.05 |
| | Plate/bowl (non-plastic) | 8 | 1.60 | 5 | 1.00 | 7 | 0.06 | 1.30 | 0.01 |
| | Rope/string | 134 | 26.80 | 115 | 23.00 | 125 | 1.17 | 24.90 | 0.23 |
| | Sanitary Items | 16 | 3.20 | 5 | 1.00 | 11 | 0.10 | 2.10 | 0.02 |
| | Stirrers (non-plastic) | 6 | 0.01 | - | - | 3 | 0.03 | 0.01 | 0.00 |
| | Straw (non-plastic) | 77 | 0.39 | 72 | 0.36 | 75 | 0.70 | 0.37 | 0.00 |
| | Vape packaging | 12 | 0.60 | - | - | 6 | 0.06 | 0.30 | 0.00 |
| | Vape pen | 16 | 0.80 | 3 | 0.15 | 10 | 0.09 | 0.48 | 0.00 |
| | Vehicle parts | 27 | 1.35 | 8 | 0.40 | 18 | 0.16 | 0.88 | 0.01 |
| | Wet wipes | 85 | 4.25 | 65 | 3.25 | 75 | 0.70 | 3.75 | 0.04 |
| | Wooden items | 74 | 7.40 | 14 | 1.40 | 44 | 0.41 | 4.40 | 0.04 |
| | Unknown item | 17 | 1.70 | 8 | 0.80 | 13 | 0.12 | 1.25 | 0.01 |

# 6.0  Appendices

| | | Nov-24 | | May-24 | | 2025FY Total | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Total Number of Items | Total Volume (l) | Total Number of Items | Total Volume (l) | Average Number of Items | Items /1000m2 | Average Volume (l) | Volume (l)/1000m2 |
| **BEVERAGE CONTAINERS** | | | | | | | | | |
| PLASTIC | Drink pouches <150 ml | - | - | - | - | - | - | - | - |
| | Drink pouches 150-499mL | - | - | - | - | - | - | - | - |
| | Drink pouches 500-999mL | 1 | 0.60 | - | - | 1 | 0.00 | 0.30 | 0.00 |
| | Drink pouches 1000mL-3000mL | 1 | 1.50 | - | - | 1 | 0.00 | 0.75 | 0.01 |
| | Drink pouches >3000mL | - | - | - | - | - | - | - | - |
| | Flav. Milk <150 ml | 1 | 0.12 | 1 | 0.12 | 1 | 0.01 | 0.12 | 0.00 |
| | Flav. Milk 150-499mL | 1 | 0.38 | 1 | 0.38 | 1 | 0.01 | 0.38 | 0.00 |
| | Flav. Milk 500-999mL | 4 | 2.40 | 1 | 0.60 | 3 | 0.02 | 1.50 | 0.01 |
| | Flav. Milk 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | Flav. Milk >3000mL | - | - | - | - | - | - | - | - |
| | Soft Dr/FW/FJD/SpD/EnD <150 ml | - | - | - | - | - | - | - | - |
| | Soft Dr/FW/FJD/SpD/EnD 150-499mL | 4 | 1.50 | 2 | 0.75 | 3 | 0.03 | 1.13 | 0.01 |
| | Soft Dr/FW/FJD/SpD/EnD 500-999mL | 1 | 0.60 | 6 | 3.60 | 4 | 0.03 | 2.10 | 0.02 |
| | Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL | 1 | 1.50 | 2 | 3.00 | 2 | 0.01 | 2.25 | 0.02 |
| | Soft Dr/FW/FJD/SpD/EnD >3000mL | - | - | - | - | - | - | - | - |
| | Fruit/vegetable juice <150 ml | - | - | - | - | - | - | - | - |
| | Fruit/vegetable juice 150-499mL | 2 | 0.75 | 2 | 0.75 | 2 | 0.02 | 0.75 | 0.01 |
| | Fruit/vegetable juice 500-999mL | 1 | 0.60 | - | - | 1 | 0.00 | 0.30 | 0.00 |
| | Fruit/vegetable juice 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | Fruit/vegetable juice >3000mL | - | - | - | - | - | - | - | - |
| | Water <150 ml | - | - | - | - | - | - | - | - |
| | Water 150-499mL | 8 | 3.00 | 2 | 0.75 | 5 | 0.05 | 1.88 | 0.02 |
| | Water 500-999mL | 5 | 3.00 | 4 | 2.40 | 5 | 0.04 | 2.70 | 0.03 |
| | Water 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | Water >3000mL | - | - | - | - | - | - | - | - |

# 6.0 Appendices

| | | Nov-24 | | May-24 | | 2025FY Total | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Total Number of Items | Total Volume (l) | Total Number of Items | Total Volume (l) | Average Number of Items | Items /1000m2 | Average Volume (l) | Volume (l)/1000m2 |
| PLASTIC | White milk <150 ml | - | - | - | - | - | - | - | - |
| | White milk 150-499mL | - | - | - | - | - | - | - | - |
| | White milk 500-999mL | - | - | - | - | - | - | - | - |
| | White milk 1000mL-3000mL | 2 | 4.00 | 1 | 2.00 | 2 | 0.01 | 3.00 | 0.03 |
| | White milk >3000mL | - | - | - | - | - | - | - | - |
| METAL | Beer <150 ml | - | - | - | - | - | - | - | - |
| | Beer 150-499mL | 4 | 1.50 | 9 | 3.38 | 7 | 0.06 | 2.44 | 0.02 |
| | Beer 500-999mL | - | - | - | - | - | - | - | - |
| | Beer 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | Beer >3000mL | - | - | - | - | - | - | - | - |
| | Cider/fruit based <150 ml | - | - | - | - | - | - | - | - |
| | Cider/fruit based 150-499mL | - | - | 2 | 0.75 | 1 | 0.01 | 0.38 | 0.00 |
| | Cider/fruit based 500-999mL | - | - | - | - | - | - | - | - |
| | Cider/fruit based 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | Cider/fruit based >3000mL | - | - | - | - | - | - | - | - |
| | Premixed spirit drinks <150 ml | - | - | - | - | - | - | - | - |
| | Premixed spirit drinks 150-499mL | 13 | 4.88 | 13 | 4.88 | 13 | 0.12 | 4.88 | 0.05 |
| | Premixed spirit drinks 500-999mL | - | - | - | - | - | - | - | - |
| | Premixed spirit drinks 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | Premixed spirit drinks >3000mL | - | - | - | - | - | - | - | - |
| | Soft Dr/FW/FJD/SpD/EnD <150 ml | - | - | - | - | - | - | - | - |
| | Soft Dr/FW/FJD/SpD/EnD 150-499mL | 17 | 6.38 | 12 | 4.50 | 15 | 0.14 | 5.44 | 0.05 |
| | Soft Dr/FW/FJD/SpD/EnD 500-999mL | 4 | 2.40 | 1 | 0.60 | 3 | 0.02 | 1.50 | 0.01 |
| | Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | Soft Dr/FW/FJD/SpD/EnD >3000mL | - | - | - | - | - | - | - | - |
| | Wine Bladders <150 ml | - | - | - | - | - | - | - | - |

|  |  | Nov-24 | | May-24 | | 2025FY Total | | | |
|---|---|---|---|---|---|---|---|---|---|
|  |  | Total Number of Items | Total Volume (l) | Total Number of Items | Total Volume (l) | Average Number of Items | Items /1000m2 | Average Volume (l) | Volume (l)/1000m2 |
| METAL | Wine Bladders 150-499mL | - | - | - | - | - | - | - | - |
|  | Wine Bladders 500-999mL | - | - | - | - | - | - | - | - |
|  | Wine Bladders 1000mL-3000mL | - | - | - | - | - | - | - | - |
|  | Wine Bladders >3000mL | - | - | - | - | - | - | - | - |
| GLASS | Wine <150 ml | - | - | - | - | - | - | - | - |
|  | Wine 150-499mL | - | - | - | - | - | - | - | - |
|  | Wine 500-999mL | 1 | 0.75 | - | - | 1 | 0.00 | 0.38 | 0.00 |
|  | Wine 1000mL-3000mL | - | - | - | - | - | - | - | - |
|  | Wine >3000mL | - | - | - | - | - | - | - | - |
|  | Spirit <150 ml | - | - | - | - | - | - | - | - |
|  | Spirit 150-499mL | - | - | 1 | 0.38 | 1 | 0.00 | 0.19 | 0.00 |
|  | Spirit 500-999mL | 2 | 1.40 | - | - | 1 | 0.01 | 0.70 | 0.01 |
|  | Spirit 1000mL-3000mL | 1 | 1.50 | - | - | 1 | 0.00 | 0.75 | 0.01 |
|  | Spirit >3000mL | - | - | - | - | - | - | - | - |
|  | Premixed spirit drinks <150 ml | - | - | - | - | - | - | - | - |
|  | Premixed spirit drinks 150-499mL | 2 | 0.75 | - | - | 1 | 0.01 | 0.38 | 0.00 |
|  | Premixed spirit drinks 500-999mL | - | - | - | - | - | - | - | - |
|  | Premixed spirit drinks 1000mL-3000mL | - | - | - | - | - | - | - | - |
|  | Premixed spirit drinks >3000mL | - | - | - | - | - | - | - | - |
|  | Beer <150 ml | - | - | - | - | - | - | - | - |
|  | Beer 150-499mL | 10 | 3.75 | 6 | 2.25 | 8 | 0.08 | 3.00 | 0.03 |
|  | Beer 500-999mL | 1 | 0.60 | 1 | 0.60 | 1 | 0.01 | 0.60 | 0.01 |
|  | Beer 1000mL-3000mL | - | - | - | - | - | - | - | - |
|  | Beer >3000mL | - | - | - | - | - | - | - | - |
|  | Cider <150 ml | - | - | - | - | - | - | - | - |
|  | Cider 150-499mL | - | - | 1 | 0.38 | 1 | 0.00 | 0.19 | 0.00 |

# 6.0 Appendices

| | | Nov-24 | | May-24 | | 2025FY Total | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Total Number of Items | Total Volume (l) | Total Number of Items | Total Volume (l) | Average Number of Items | Items /1000m2 | Average Volume (l) | Volume (l)/1000m2 |
| GLASS | Cider 500-999mL | - | - | - | - | - | - | - | - |
| | Cider 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | Cider >3000mL | - | - | - | - | - | - | - | - |
| | Soft Dr/FW/FJD/SpD/EnD <150 ml | - | - | - | - | - | - | - | - |
| | Soft Dr/FW/FJD/SpD/EnD 150-499mL | 3 | 1.13 | 4 | 1.50 | 4 | 0.03 | 1.31 | 0.01 |
| | Soft Dr/FW/FJD/SpD/EnD 500-999mL | - | - | 1 | 0.60 | 1 | 0.00 | 0.30 | 0.00 |
| | Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | Soft Dr/FW/FJD/SpD/EnD >3000mL | - | - | - | - | - | - | - | - |
| | Fruit juice <150 ml | - | - | - | - | - | - | - | - |
| | Fruit juice 150-499mL | - | - | - | - | - | - | - | - |
| | Fruit juice 500-999mL | - | - | - | - | - | - | - | - |
| | Fruit juice 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | Fruit juice >3000mL | - | - | - | - | - | - | - | - |
| | Water <150 ml | - | - | - | - | - | - | - | - |
| | Water 150-499mL | - | - | - | - | - | - | - | - |
| | Water 500-999mL | - | - | - | - | - | - | - | - |
| | Water 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | Water >3000mL | - | - | - | - | - | - | - | - |
| | Wine-based/wine cooler <150 ml | - | - | - | - | - | - | - | - |
| | Wine-based/wine cooler 150-499mL | - | - | - | - | - | - | - | - |
| | Wine-based/wine cooler 500-999mL | - | - | - | - | - | - | - | - |
| | Wine-based/wine cooler 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | Wine-based/wine cooler >3000mL | - | - | - | - | - | - | - | - |
| CARD | Flav. milk (Cartons) <150 ml | - | - | - | - | - | - | - | - |
| | Flav. milk (Cartons) 150-499mL | 4 | 1.50 | - | - | 2 | 0.02 | 0.75 | 0.01 |
| | Flav. milk (Cartons) 500-999mL | - | - | 2 | 1.20 | 1 | 0.01 | 0.60 | 0.01 |
| | Flav. milk (Cartons) 1000mL-3000mL | - | - | - | - | - | - | - | - |

# 6.0 Appendices

| | | Nov-24 | | May-24 | | 2025FY Total | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Total Number of Items | Total Volume (l) | Total Number of Items | Total Volume (l) | Average Number of Items | Items /1000m2 | Average Volume (l) | Volume (l)/1000m2 |
| **CARD** | Flav. milk (Cartons) >3000mL | - | - | - | - | - | - | - | - |
| | Fruit Juice <150 ml | - | - | - | - | - | - | - | - |
| | Fruit Juice 150-499mL | 1 | 0.38 | 3 | 1.13 | 2 | 0.02 | 0.75 | 0.01 |
| | Fruit Juice 500-999mL | - | - | - | - | - | - | - | - |
| | Fruit Juice 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | Fruit Juice >3000mL | - | - | - | - | - | - | - | - |
| | FW/FW/FJD/SpD/EnD <150 ml | - | - | - | - | - | - | - | - |
| | FW/FW/FJD/SpD/EnD 150-499mL | - | - | 18 | 6.75 | 9 | 0.08 | 3.38 | 0.03 |
| | FW/FW/FJD/SpD/EnD 500-999mL | - | - | - | - | - | - | - | - |
| | FW/FW/FJD/SpD/EnD 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | FW/FW/FJD/SpD/EnD >3000mL | - | - | - | - | - | - | - | - |
| | Milk, plain (white) <150 ml | - | - | - | - | - | - | - | - |
| | Milk, plain (white) 150-499mL | - | - | - | - | - | - | - | - |
| | Milk, plain (white) 500-999mL | - | - | - | - | - | - | - | - |
| | Milk, plain (white) 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | Milk, plain (white) >3000mL | - | - | - | - | - | - | - | - |
| **ANY** | Other beverage <150 ml | 3 | 0.36 | - | - | 2 | 0.01 | 0.18 | 0.00 |
| | Other beverage 150-499mL | - | - | - | - | - | - | - | - |
| | Other beverage 500-999mL | - | - | 5 | 3.00 | 3 | 0.02 | 1.50 | 0.01 |
| | Other beverage 1000mL-3000mL | - | - | - | - | - | - | - | - |
| | Other beverage >3000mL | - | - | - | - | - | - | - | - |
| **FRAGMENTS** | | | | | | | | | |
| **FRAGMENTS** | "Hard plastic Size 1 – Small ( > 2.5 cm to 8 cm)" | 1,178 | 9.42 | 1,040 | 8.32 | 1,109 | 10.40 | 8.87 | 0.08 |
| | "Hard plastic Size 2 – Medium ( > 8 cm to 16 cm)" | 266 | 4.26 | 413 | 6.61 | 340 | 3.18 | 5.43 | 0.05 |
| | "Hard plastic Size 3 – Large ( > 16 cm)" | 71 | 2.27 | 80 | 2.56 | 76 | 0.71 | 2.42 | 0.02 |

| | | Nov-24 | | May-24 | | 2025FY Total | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Total Number of Items | Total Volume (l) | Total Number of Items | Total Volume (l) | Average Number of Items | Items /1000m2 | Average Volume (l) | Volume (l)/1000m2 |
| FRAGMENTS | "Soft plastic Size 1 – Small ( > 2.5 cm to 8 cm)" | 782 | 6.26 | 575 | 4.60 | 679 | 6.36 | 5.43 | 0.05 |
| FRAGMENTS | "Soft plastic Size 2 – Medium ( > 8 cm to 16 cm)" | 273 | 4.37 | 264 | 4.22 | 269 | 2.52 | 4.30 | 0.04 |
| FRAGMENTS | "Soft plastic Size 3 – Large ( > 16 cm)" | 84 | 2.69 | 71 | 2.27 | 78 | 0.73 | 2.48 | 0.02 |
| FRAGMENTS | "Metal Size 1 – Small ( > 2.5 cm to 8 cm)" | 193 | 4.63 | 178 | 4.27 | 186 | 1.74 | 4.45 | 0.04 |
| FRAGMENTS | "Metal Size 2 – Medium ( > 8 cm to 16 cm)" | 85 | 4.08 | 67 | 3.22 | 76 | 0.71 | 3.65 | 0.03 |
| FRAGMENTS | "Metal Size 3 – Large ( > 16 cm)" | 18 | 1.73 | 22 | 2.11 | 20 | 0.19 | 1.92 | 0.02 |
| FRAGMENTS | "Glass Size 1 – Small ( > 2.5 cm to 8 cm)" | 160 | 1.28 | 526 | 4.21 | 343 | 3.22 | 2.74 | 0.03 |
| FRAGMENTS | "Glass Size 2 – Medium ( > 8 cm to 16 cm)" | 41 | 0.66 | 114 | 1.82 | 78 | 0.73 | 1.24 | 0.01 |
| FRAGMENTS | "Glass Size 3 – Large ( > 16 cm)" | 6 | 0.19 | 20 | 0.64 | 13 | 0.12 | 0.42 | 0.00 |
| FRAGMENTS | "Paper and Card Size 1 – Small ( > 2.5 cm to 8 cm)" | 1,201 | 9.61 | 870 | 6.96 | 1,036 | 9.71 | 8.28 | 0.08 |
| FRAGMENTS | "Paper and Card Size 2 – Medium ( > 8 cm to 16 cm)" | 295 | 4.72 | 402 | 6.43 | 349 | 3.27 | 5.58 | 0.05 |
| FRAGMENTS | "Paper and Card Size 3 – Large ( > 16 cm)" | 97 | 3.10 | 113 | 3.62 | 105 | 0.98 | 3.36 | 0.03 |
| FRAGMENTS | "Rubber Size 1 – Small ( > 2.5 cm to 8 cm)" | 163 | 1.30 | 70 | 0.56 | 117 | 1.09 | 0.93 | 0.01 |
| FRAGMENTS | "Rubber Size 2 – Medium ( > 8 cm to 16 cm)" | 73 | 1.17 | 49 | 0.78 | 61 | 0.57 | 0.98 | 0.01 |
| FRAGMENTS | "Rubber Size 3 – Large ( > 16 cm)" | 28 | 0.90 | 9 | 0.29 | 19 | 0.17 | 0.59 | 0.01 |

|  |  | Nov-24 | | May-24 | | 2025FY Total | | | |
| :-- | :-- | --: | --: | --: | --: | --: | --: | --: | --: |
|  |  | Total Number of Items | Total Volume (l) | Total Number of Items | Total Volume (l) | Average Number of Items | Items /1000m2 | Average Volume (l) | Volume (l)/1000m2 |
| FRAGMENTS | "Polystyrene Size 1 – Small ( > 2.5 cm to 8 cm)" | 126 | 3.02 | 108 | 2.59 | 117 | 1.10 | 2.81 | 0.03 |
|  | "Polystyrene Size 2 – Medium ( > 8 cm to 16 cm)" | 32 | 1.54 | 45 | 2.16 | 39 | 0.36 | 1.85 | 0.02 |
|  | "Polystyrene Size 3 – Large ( > 16 cm)" | 8 | 0.77 | 17 | 1.63 | 13 | 0.12 | 1.20 | 0.01 |
| FRAGMENTS | "Cloth Size 1 – Small ( > 2.5 cm to 8 cm)" | 133 | 1.06 | 80 | 0.64 | 107 | 1.00 | 0.85 | 0.01 |
|  | "Cloth Size 2 – Medium ( > 8 cm to 16 cm)" | 82 | 1.31 | 39 | 0.62 | 61 | 0.57 | 0.97 | 0.01 |
|  | "Cloth Size 3 – Large ( > 16 cm)" | 47 | 1.50 | 22 | 0.70 | 35 | 0.32 | 1.10 | 0.01 |
| | TOTAL | 13,669.00 | 708.71 | 11,859 | 724.51 | 12,764 | 119.72 | 716.61 | 6.72 |

## Appendix 3

## Total Estimated Volume by Item

| | Item | Estimated volume (ml) | Estimated volume (l) |
|---|---|---|---|
| PLASTIC | Cigarette butts and filters | 2 | 0.002 |
| | Bag - Dog Poo | 200 | 0.2 |
| | Bag - Fruit/Veg | 200 | 0.2 |
| | Bag - Green Reusable | 1000 | 1 |
| | Bag - Heavy Boutique | 1000 | 1 |
| | Bag - Heavy Supermrkt | 1000 | 1 |
| | Bag – Ice | 500 | 0.5 |
| | Bag -Lightweight shop | 200 | 0.2 |
| | Bag - Mesh Bags | 100 | 0.1 |
| | Bag - Other | 200 | 0.2 |
| | Bread Bag Tags/twist ties | 1 | 0.001 |
| | Cable ties | 5 | 0.005 |
| | Cigarette Lighters | 10 | 0.01 |
| | Cigarette packet cellophane wrap | 1.1 | 0.0011 |
| | Cotton buds/tips | 1 | 0.001 |
| | Cup – Single use | 200 | 0.2 |
| | Cup – Reusable | 200 | 0.2 |
| | Cutlery/chopsticks | 10 | 0.01 |
| | Fishing related | 50 | 0.05 |
| | Food/confect. Wrappers | 50 | 0.05 |
| | Lids - Beverage container lids /caps | 20 | 0.02 |
| | Lids - Plastic cup lid | 20 | 0.02 |
| | Lids -Coffee cup lid | 20 | 0.02 |
| | Lids - Other | 20 | 0.02 |
| | Lollipop Sticks | 1 | 0.001 |
| | Non-Food Bottle | 500 | 0.5 |
| | Non-Food package | 500 | 0.5 |
| | Other Food Package | 500 | 0.5 |
| | Plate/bowl – single use | 200 | 0.2 |
| | Plate/bowl – reusable | 200 | 0.2 |
| | Plastic wrap non-food | 200 | 0.2 |
| | Six pack rings | 200 | 0.2 |
| | Strapping band | 200 | 0.2 |
| | Stirrers | 1 | 0.001 |
| | Straws | 5 | 0.005 |
| | Syringe | 10 | 0.01 |
| | Takeaway food container | 500 | 0.5 |
| | Tape/narrow soft plastic film | 50 | 0.05 |

| | Item | Estimated volume (ml) | Estimated volume (l) |
|---|---|---|---|
| PLASTIC | Tobacco pouch | 100 | 0.1 |
| | Toys | 100 | 0.1 |
| | Whipper snipper cord | 5 | 0.005 |
| | **Other plastic item** | 100 | 0.1 |
| METAL | Aerosol cans | 300 | 0.3 |
| | Aluminium foil wrap | 100 | 0.1 |
| | Foil takeaway container | 500 | 0.5 |
| | Lids, bottle tops, can ring pulls | 2 | 0.002 |
| | **Other metal item** | 100 | 0.1 |
| GLASS | Glass jars | 375 | 0.375 |
| | **Other glass item** | 200 | 0.2 |
| PAPER & CARD | Cigarette packets | 100 | 0.1 |
| | Cup - Coffee cup | 200 | 0.2 |
| | Cup - Other paper cup | 200 | 0.2 |
| | Ice cream wrappers | 20 | 0.02 |
| | Junk mail / free circulars | 500 | 0.5 |
| | Newspaper/Magazine | 500 | 0.5 |
| | Packages & boxes | 500 | 0.5 |
| | Paper bags | 300 | 0.3 |
| | Paper/card food packaging | 500 | 0.5 |
| | Paper tissues/napkin | 50 | 0.05 |
| | Shopper dockets, tickets/receipts | 50 | 0.05 |
| | **Other paper & card.** | 50 | 0.05 |
| RUBBER | Rubber band/hair tie | 5 | 0.005 |
| | Rubber toy | 50 | 0.05 |
| | Tyre pieces | 5 | 0.005 |
| | Tyres | 20000 | 20 |
| | **Other rubber item** | 100 | 0.1 |
| POLY | Cups (foam) | 200 | 0.2 |
| | Food pack./clam shells | 500 | 0.5 |
| | Insulation & Packaging | 1000 | 1 |
| | **Other polystyrene item** | 500 | 0.5 |
| CLOTH | Clothing | 1000 | 1 |
| | **Other cloth item** | 200 | 0.2 |
| OTHER | Balloons | 50 | 0.05 |
| | Batteries | 10 | 0.01 |
| | Condom | 5 | 0.005 |
| | Construction materials | 360 | 0.36 |

| | Item | Estimated volume (ml) | Estimated volume (l) |
|---|---|---|---|
| OTHER MATERIALS | Cotton buds/tips (non- plastic) | 1 | 0.001 |
| | Cutlery (non-plastic) | 10 | 0.01 |
| | Dog poo | 50 | 0.05 |
| | Electrical wire | 10 | 0.01 |
| | Face mask – disposable | 100 | 0.1 |
| | Face mask – reusable | 100 | 0.1 |
| | Fruit/vegetable/food | 200 | 0.2 |
| | Gum | | 0 |
| | Ice Cream Stick | 0.9 | 0.0009 |
| | Nappy | 500 | 0.5 |
| | Personal Effects | 200 | 0.2 |
| | Plate/bowl (non-plastic) | 200 | 0.2 |
| | Rope/string | 200 | 0.2 |
| | Sanitary Items | 200 | 0.2 |
| | Stirrers (non-plastic) | 2 | 0.002 |
| | Straw (non-plastic) | 5 | 0.005 |
| | Vape packaging | 50 | 0.05 |
| | Vape pen | 50 | 0.05 |
| | Vehicle parts | 50 | 0.05 |
| | Wet wipes | 50 | 0.05 |
| | Wooden items | 100 | 0.1 |
| | **Unknown item** | 100 | 0.1 |
| | **BEVERAGE CONTAINERS** | | 0 |
| PLASTIC | Drink pouches <150 ml | 120 | 0.12 |
| | Drink pouches 150-499mL | 375 | 0.375 |
| | Drink pouches 500-999mL | 600 | 0.6 |
| | Drink pouches 1000mL-3000mL | 1500 | 1.5 |
| | Drink pouches >3000mL | 3500 | 3.5 |
| | Flav. Milk <150 ml | 120 | 0.12 |
| | Flav. Milk 150-499mL | 375 | 0.375 |
| | Flav. Milk 500-999mL | 600 | 0.6 |
| | Flav. Milk 1000mL-3000mL | 1500 | 1.5 |
| | Flav. Milk >3000mL | 3500 | 3.5 |
| | Soft Dr/FW/FJD/SpD/EnD <150 ml | 120 | 0.12 |
| | Soft Dr/FW/FJD/SpD/EnD 150-499mL | 375 | 0.375 |
| | Soft Dr/FW/FJD/SpD/EnD 500-999mL | 600 | 0.6 |

# 6.0  Appendices

| | Item | Estimated volume (ml) | Estimated volume (l) |
|---|---|---|---|
| PLASTIC | Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL | 1500 | 1.5 |
| | Soft Dr/FW/FJD/SpD/EnD >3000mL | 3500 | 3.5 |
| | Fruit/vegetable juice <150 ml | 120 | 0.12 |
| | Fruit/vegetable juice 150-499mL | 375 | 0.375 |
| | Fruit/vegetable juice 500-999mL | 600 | 0.6 |
| | Fruit/vegetable juice 1000mL-3000mL | 1500 | 1.5 |
| | Fruit/vegetable juice >3000mL | 3500 | 3.5 |
| | Water <150 ml | 120 | 0.12 |
| | Water 150-499mL | 375 | 0.375 |
| | Water 500-999mL | 600 | 0.6 |
| | Water 1000mL-3000mL | 1500 | 1.5 |
| | Water >3000mL | 3500 | 3.5 |
| | White milk <150 ml | 120 | 0.12 |
| | White milk 150-499mL | 500 | 0.5 |
| | White milk 500-999mL | 1000 | 1 |
| | White milk 1000mL-3000mL | 2000 | 2 |
| | White milk >3000mL | 3500 | 3.5 |
| METAL | Beer <150 ml | 120 | 0.12 |
| | Beer 150-499mL | 375 | 0.375 |
| | Beer 500-999mL | 600 | 0.6 |
| | Beer 1000mL-3000mL | 1500 | 1.5 |
| | Beer >3000mL | 3500 | 3.5 |
| | Cider/fruit based <150 ml | 120 | 0.12 |
| | Cider/fruit based 150-499mL | 375 | 0.375 |
| | Cider/fruit based 500-999mL | 600 | 0.6 |
| | Cider/fruit based 1000mL-3000mL | 1500 | 1.5 |
| | Cider/fruit based >3000mL | 3500 | 3.5 |
| | Premixed spirit drinks <150 ml | 120 | 0.12 |
| | Premixed spirit drinks 150-499mL | 375 | 0.375 |
| | Premixed spirit drinks 500-999mL | 600 | 0.6 |
| | Premixed spirit drinks 1000mL-3000mL | 1500 | 1.5 |
| | Premixed spirit drinks >3000mL | 3500 | 3.5 |
| | Soft Dr/FW/FJD/SpD/EnD <150 ml | 120 | 0.12 |
| | Soft Dr/FW/FJD/SpD/EnD 150-499mL | 375 | 0.375 |
| | Soft Dr/FW/FJD/SpD/EnD 500-999mL | 600 | 0.6 |
| | Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL | 1500 | 1.5 |
| | Soft Dr/FW/FJD/SpD/EnD >3000mL | 3500 | 3.5 |
| | Wine Bladders <150 ml | 120 | 0.12 |
| | Wine Bladders 150-499mL | 375 | 0.375 |
| | Wine Bladders 500-999mL | 600 | 0.6 |
| | Wine Bladders 1000mL-3000mL | 1500 | 1.5 |
| | Wine Bladders >3000mL | 3500 | 3.5 |

| | Item | Estimated volume (ml) | Estimated volume (l) |
|---|---|---|---|
| GLASS | Wine <150 ml | 120 | 0.12 |
| | Wine 150-499mL | 375 | 0.375 |
| | Wine 500-999mL | 750 | 0.75 |
| | Wine 1000mL-3000mL | 1500 | 1.5 |
| | Wine >3000mL | 3000 | 3 |
| | Spirit <150 ml | 120 | 0.12 |
| | Spirit 150-499mL | 375 | 0.375 |
| | Spirit 500-999mL | 700 | 0.7 |
| | Spirit 1000mL-3000mL | 1500 | 1.5 |
| | Spirit >3000mL | 3500 | 3.5 |
| | Premixed spirit drinks <150 ml | 120 | 0.12 |
| | Premixed spirit drinks 150-499mL | 375 | 0.375 |
| | Premixed spirit drinks 500-999mL | 600 | 0.6 |
| | Premixed spirit drinks 1000mL-3000mL | 1500 | 1.5 |
| | Premixed spirit drinks >3000mL | 3500 | 3.5 |
| | Beer <150 ml | 120 | 0.12 |
| | Beer 150-499mL | 375 | 0.375 |
| | Beer 500-999mL | 600 | 0.6 |
| | Beer 1000mL-3000mL | 1500 | 1.5 |
| | Beer >3000mL | 3500 | 3.5 |
| | Cider <150 ml | 120 | 0.12 |
| | Cider 150-499mL | 375 | 0.375 |
| | Cider 500-999mL | 600 | 0.6 |
| | Cider 1000mL-3000mL | 1500 | 1.5 |
| | Cider >3000mL | 3500 | 3.5 |
| | Soft Dr/FW/FJD/SpD/EnD <150 ml | 120 | 0.12 |
| | Soft Dr/FW/FJD/SpD/EnD 150-499mL | 375 | 0.375 |
| | Soft Dr/FW/FJD/SpD/EnD 500-999mL | 600 | 0.6 |
| | Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL | 1500 | 1.5 |
| | Soft Dr/FW/FJD/SpD/EnD >3000mL | 3500 | 3.5 |
| | Fruit juice <150 ml | 120 | 0.12 |
| | Fruit juice 150-499mL | 375 | 0.375 |
| | Fruit juice 500-999mL | 600 | 0.6 |
| | Fruit juice 1000mL-3000mL | 1500 | 1.5 |
| | Fruit juice >3000mL | 3500 | 3.5 |
| | Water <150 ml | 120 | 0.12 |
| | Water 150-499mL | 375 | 0.375 |
| | Water 500-999mL | 600 | 0.6 |
| | Water 1000mL-3000mL | 1500 | 1.5 |
| | Water >3000mL | 3500 | 3.5 |

| | Item | Estimated volume (ml) | Estimated volume (l) |
|---|---|---|---|
| GLASS | Wine-based/wine cooler <150 ml | 120 | 0.12 |
| | Wine-based/wine cooler 150-499mL | 375 | 0.375 |
| | Wine-based/wine cooler 500-999mL | 600 | 0.6 |
| | Wine-based/wine cooler 1000mL-3000mL | 1500 | 1.5 |
| | Wine-based/wine cooler >3000mL | 3500 | 3.5 |
| CARD | Flav. milk (Cartons) <150 ml | 120 | 0.12 |
| | Flav. milk (Cartons) 150-499mL | 375 | 0.375 |
| | Flav. milk (Cartons) 500-999mL | 600 | 0.6 |
| | Flav. milk (Cartons) 1000mL-3000mL | 1500 | 1.5 |
| | Flav. milk (Cartons) >3000mL | 3500 | 3.5 |
| | Fruit Juice <150 ml | 120 | 0.12 |
| | Fruit Juice 150-499mL | 375 | 0.375 |
| | Fruit Juice 500-999mL | 600 | 0.6 |
| | Fruit Juice 1000mL-3000mL | 1500 | 1.5 |
| | Fruit Juice >3000mL | 3500 | 3.5 |
| | FW/FW/FJD/SpD/EnD <150 ml | 120 | 0.12 |
| | FW/FW/FJD/SpD/EnD 150-499mL | 375 | 0.375 |
| | FW/FW/FJD/SpD/EnD 500-999mL | 600 | 0.6 |
| | FW/FW/FJD/SpD/EnD 1000mL-3000mL | 1500 | 1.5 |
| | FW/FW/FJD/SpD/EnD >3000mL | 3500 | 3.5 |
| | Milk, plain (white) <150 ml | 120 | 0.12 |
| | Milk, plain (white) 150-499mL | 375 | 0.375 |
| | Milk, plain (white) 500-999mL | 600 | 0.6 |
| | Milk, plain (white) 1000mL-3000mL | 1500 | 1.5 |
| | Milk, plain (white) >3000mL | 3500 | 3.5 |
| ANY | Other beverage <150 ml | 120 | 0.12 |
| | Other beverage 150-499mL | 375 | 0.375 |
| | Other beverage 500-999mL | 600 | 0.6 |
| | Other beverage 1000mL-3000mL | 1500 | 1.5 |
| | Other beverage >3000mL | 3500 | 3.5 |

# 6.0 Appendices

| | Item | Estimated volume (ml) | Estimated volume (l) |
|---|---|---|---|
| | **FRAGMENTS** | | 0 |
| PLASTIC | Hard plastic<br>Size 1 - Small ( > 2.5 cm to 8 cm) | 8 | 0.008 |
| PLASTIC | Hard plastic<br>Size 2 - Medium ( > 8 cm to 16 cm) | 16 | 0.016 |
| PLASTIC | Hard plastic<br>Size 3 -- Large ( > 16 cm) | 32 | 0.032 |
| PLASTIC | Soft plastic<br>Size 1 – Small ( > 2.5 cm to 8 cm) | 8 | 0.008 |
| PLASTIC | Soft plastic<br>Size 2 – Medium ( > 8 cm to 16 cm) | 16 | 0.016 |
| PLASTIC | Soft plastic<br>Size 3 – Large ( > 16 cm) | 32 | 0.032 |
| METAL | Metal<br>Size 1 – Small ( > 2.5 cm to 8 cm) | 24 | 0.024 |
| METAL | Metal<br>Size 2 – Medium ( > 8 cm to 16 cm) | 48 | 0.048 |
| METAL | Metal<br>Size 3 – Large ( > 16 cm) | 96 | 0.096 |
| GLASS | Glass<br>Size 1 – Small ( > 2.5 cm to 8 cm) | 8 | 0.008 |
| GLASS | Glass<br>Size 2 – Medium ( > 8 cm to 16 cm) | 16 | 0.016 |
| GLASS | Glass<br>Size 3 – Large ( > 16 cm) | 32 | 0.032 |
| CARD | Paper and Card<br>Size 1 – Small ( > 2.5 cm to 8 cm) | 8 | 0.008 |
| CARD | Paper and Card<br>Size 2 – Medium ( > 8 cm to 16 cm) | 16 | 0.016 |
| CARD | Paper and Card<br>Size 3 – Large ( > 16 cm) | 32 | 0.032 |
| RUBBER | Rubber<br>Size 1 – Small ( > 2.5 cm to 8 cm) | 8 | 0.008 |
| RUBBER | Rubber<br>Size 2 – Medium ( > 8 cm to 16 cm) | 16 | 0.016 |
| RUBBER | Rubber<br>Size 3 – Large ( > 16 cm) | 32 | 0.032 |
| POLY | Polystyrene<br>Size 1 – Small ( > 2.5 cm to 8 cm) | 24 | 0.024 |
| POLY | Polystyrene<br>Size 2 – Medium ( > 8 cm to 16 cm) | 48 | 0.048 |
| POLY | Polystyrene<br>Size 3 – Large ( > 16 cm) | 96 | 0.096 |
| CLOTH | Cloth<br>Size 1 – Small ( > 2.5 cm to 8 cm) | 8 | 0.008 |
| CLOTH | Cloth<br>Size 2 – Medium ( > 8 cm to 16 cm) | 16 | 0.016 |
| CLOTH | Cloth<br>Size 3 – Large ( > 16 cm) | 32 | 0.032 |

# 6.0 Appendices

## Appendix 4

## Category Classifications: Single Use Plastics and Takeaway Food Packaging

| | | SINGLE USE PLASTIC | TAKEAWAY FOOD PACKAGING |
|---|---|---|---|
| PLASTIC | Cigarette butts and filters | | |
| | Bag - Dog Poo | | |
| | Bag - Fruit/Veg | | |
| | Bag - Green Reusable | | |
| | Bag - Heavy Boutique | Y | |
| | Bag - Heavy Supermrkt | Y | |
| | Bag – Ice | | |
| | Bag -Lightweight shop | Y | |
| | Bag - Mesh Bags | Y | |
| | Bag - Other | Y | |
| | Bread Bag Tags/twist ties | | |
| | Cable ties | | |
| | Cigarette Lighters | | |
| | Cigarette packet cellophane wrap | | |
| | Cotton buds/tips | Y | |
| | Cup – Single use | Y | Y |
| | Cup – Reusable | | |
| | Cutlery/chopsticks | Y | Y |
| | Fishing related | | |
| | Food/confect. Wrappers | | Y |
| | Lids - Beverage container lids /caps | | Y |
| | Lids - Plastic cup lid | Y | Y |
| | Lids -Coffee cup lid | Y | Y |
| | Lids - Other | Y | Y |
| | Lollipop Sticks | Y | Y |
| | Non-Food Bottle | | |
| | Non-Food package | | |
| | Other Food Package | Y | |
| | Plate/bowl – single use | Y | Y |
| | Plate/bowl – reusable | | |
| | Plastic wrap non-food | | |
| | Six pack rings | | Y |
| | Strapping band | | |
| | Stirrers | Y | Y |
| | Straws | Y | Y |
| | Syringe | | |
| | Takeaway food container | Y | Y |
| | Tape/narrow soft plastic film | | |

| | | SINGLE USE PLASTIC | TAKEAWAY FOOD PACKAGING |
|---|---|---|---|
| PLASTIC | Tobacco pouch | | |
| | Toys | | |
| | Whipper snipper cord | | |
| | **Other plastic item** | | |
| METAL | Aerosol cans | | |
| | Aluminium foil wrap | | |
| | Foil takeaway container | | Y |
| | Lids, bottle tops, can ring pulls | | Y |
| | **Other metal item** | | |
| GLASS | Glass jars | | |
| | **Other glass item** | | |
| PAPER & CARD | Cigarette packets | | |
| | Cup - Coffee cup | Y | Y |
| | Cup - Other paper cup | | Y |
| | Ice cream wrappers | | Y |
| | Junk mail / free circulars | | |
| | Newspaper/Magazine | | |
| | Packages & boxes | | |
| | Paper bags | | |
| | Paper/card food packaging | | Y |
| | Paper tissues/napkin | | |
| | Shopper dockets, tickets/receipts | | |
| | **Other paper & card.** | | |
| RUBBER | Rubber band/hair tie | | |
| | Rubber toy | | |
| | Tyre pieces | | |
| | Tyres | | |
| | **Other rubber item** | | |
| POLY | Cups (foam) | | Y |
| | Food pack./clam shells | Y | Y |
| | Insulation & Packaging | | |
| | **Other polystyrene item** | | |
| CLOTH | Clothing | | |
| | **Other cloth item** | | |

| | | SINGLE USE PLASTIC | TAKEAWAY FOOD PACKAGING |
|---|---|---|---|
| OTHER | Balloons | | |
| | Batteries | | |
| | Condom | | |
| | Construction materials | | |
| OTHER MATERIALS | Cotton buds/tips (non- plastic) | Y | |
| | Cutlery (non-plastic) | Y | Y |
| | Dog poo | | |
| | Electrical wire | | |
| | Face mask – disposable | | |
| | Face mask – reusable | | |
| | Fruit/vegetable/food | | |
| | Gum | | |
| | Ice Cream Stick | | Y |
| | Nappy | | |
| | Personal Effects | | |
| | Plate/bowl (non-plastic) | Y | Y |
| | Rope/string | | |
| | Sanitary Items | | |
| | Stirrers (non-plastic) | Y | Y |
| | Straw (non-plastic) | Y | Y |
| | Vape packaging | | |
| | Vape pen | | |
| | Vehicle parts | | |
| | Wet wipes | | |
| | Wooden items | | |
| | **Unknown item** | | |

## Category Classifications: Beverage Containers – Container Deposit Scheme (CDS) and Non-CDS.

### PLASTIC

| CONTAINER TYPE | CATEGORY |
|---|---|
| Drink pouches <150 ml | NON-CDS |
| Drink pouches 150-499mL | NON-CDS |
| Drink pouches 500-999mL | NON-CDS |
| Drink pouches 1000mL-3000mL | NON-CDS |
| Drink pouches >3000mL | NON-CDS |
| Flav. Milk <150 ml | NON-CDS |
| Flav. Milk 150-499mL | CDS |
| Flav. Milk 500-999mL | CDS |
| Flav. Milk 1000mL-3000mL | NON-CDS |
| Flav. Milk >3000mL | NON-CDS |
| Soft Dr/FW/FJD/SpD/EnD <150 ml | NON-CDS |
| Soft Dr/FW/FJD/SpD/EnD 150-499mL | CDS |
| Soft Dr/FW/FJD/SpD/EnD 500-999mL | CDS |
| Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL | CDS |
| Soft Dr/FW/FJD/SpD/EnD >3000mL | NON-CDS |
| Fruit/vegetable juice <150 ml | NON-CDS |
| Fruit/vegetable juice 150-499mL | CDS |
| Fruit/vegetable juice 500-999mL | CDS |
| Fruit/vegetable juice 1000mL-3000mL | NON-CDS |
| Fruit/vegetable juice >3000mL | NON-CDS |
| Water <150 ml | NON-CDS |
| Water 150-499mL | CDS |
| Water 500-999mL | CDS |
| Water 1000mL-3000mL | CDS |
| Water >3000mL | NON-CDS |
| White milk <150 ml | NON-CDS |
| White milk 150-499mL | NON-CDS |
| White milk 500-999mL | NON-CDS |
| White milk 1000mL-3000mL | NON-CDS |
| White milk >3000mL | NON-CDS |

### METAL

| CONTAINER TYPE | CATEGORY |
|---|---|
| Beer <150 ml | NON-CDS |
| Beer 150-499mL | CDS |
| Beer 500-999mL | CDS |
| Beer 1000mL-3000mL | CDS |
| Beer >3000mL | CDS |
| Cider/fruit based <150 ml | NON-CDS |
| Cider/fruit based 150-499mL | CDS |
| Cider/fruit based 500-999mL | CDS |
| Cider/fruit based 1000mL-3000mL | CDS |
| Cider/fruit based >3000mL | CDS |
| Premixed spirit drinks <150 ml | NON-CDS |
| Premixed spirit drinks 150-499mL | CDS |
| Premixed spirit drinks 500-999mL | CDS |
| Premixed spirit drinks 1000mL-3000mL | CDS |
| Premixed spirit drinks >3000mL | CDS |
| Soft Dr/FW/FJD/SpD/EnD <150 ml | NON-CDS |
| Soft Dr/FW/FJD/SpD/EnD 150-499mL | CDS |
| Soft Dr/FW/FJD/SpD/EnD 500-999mL | CDS |
| Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL | CDS |
| Soft Dr/FW/FJD/SpD/EnD >3000mL | CDS |
| Wine Bladders <150 ml | NON-CDS |
| Wine Bladders 150-499mL | NON-CDS |
| Wine Bladders 500-999mL | NON-CDS |
| Wine Bladders 1000mL-3000mL | NON-CDS |
| Wine Bladders >3000mL | NON-CDS |

### GLASS

| CONTAINER TYPE | CATEGORY |
|---|---|
| Wine <150 ml | NON-CDS |
| Wine 150-499mL | NON-CDS |
| Wine 500-999mL | NON-CDS |
| Wine 1000mL-3000mL | NON-CDS |
| Wine >3000mL | NON-CDS |
| Spirit <150 ml | NON-CDS |
| Spirit 150-499mL | NON-CDS |
| Spirit 500-999mL | NON-CDS |
| Spirit 1000mL-3000mL | NON-CDS |
| Spirit >3000mL | NON-CDS |
| Premixed spirit drinks <150 ml | NON-CDS |
| Premixed spirit drinks 150-499mL | CDS |
| Premixed spirit drinks 500-999mL | CDS |
| Premixed spirit drinks 1000mL-3000mL | CDS |
| Premixed spirit drinks >3000mL | CDS |
| Beer <150 ml | NON-CDS |
| Beer 150-499mL | CDS |
| Beer 500-999mL | CDS |
| Beer 1000mL-3000mL | CDS |
| Beer >3000mL | CDS |
| Cider <150 ml | NON-CDS |
| Cider 150-499mL | CDS |
| Cider 500-999mL | CDS |
| Cider 1000mL-3000mL | CDS |
| Cider >3000mL | CDS |
| Soft Dr/FW/FJD/SpD/EnD <150 ml | NON-CDS |
| Soft Dr/FW/FJD/SpD/EnD 150-499mL | CDS |
| Soft Dr/FW/FJD/SpD/EnD 500-999mL | CDS |
| Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL | CDS |
| Soft Dr/FW/FJD/SpD/EnD >3000mL | CDS |
| Fruit juice <150 ml | NON-CDS |
| Fruit juice 150-499mL | CDS |
| Fruit juice 500-999mL | CDS |
| Fruit juice 1000mL-3000mL | CDS |
| Fruit juice >3000mL | NON-CDS |
| Water <150 ml | NON-CDS |
| Water 150-499mL | CDS |
| Water 500-999mL | CDS |
| Water 1000mL-3000mL | CDS |
| Water >3000mL | CDS |
| Wine-based/wine cooler <150 ml | NON-CDS |
| Wine-based/wine cooler 150-499mL | CDS |
| Wine-based/wine cooler 500-999mL | CDS |
| Wine-based/wine cooler 1000mL-3000mL | CDS |
| Wine-based/wine cooler >3000mL | CDS |

### CARD

| CONTAINER TYPE | CATEGORY |
|---|---|
| Flav. milk (Cartons) <150 ml | NON-CDS |
| Flav. milk (Cartons) 150-499mL | CDS |
| Flav. milk (Cartons) 500-999mL | CDS |
| Flav. milk (Cartons) 1000mL-3000mL | NON-CDS |
| Flav. milk (Cartons) >3000mL | NON-CDS |
| Fruit Juice <150 ml | NON-CDS |
| Fruit Juice 150-499mL | CDS |
| Fruit Juice 500-999mL | CDS |
| Fruit Juice 1000mL-3000mL | NON-CDS |
| Fruit Juice >3000mL | NON-CDS |
| FW/FW/FJD/SpD/EnD <150 ml | NON-CDS |
| FW/FW/FJD/SpD/EnD 150-499mL | CDS |
| FW/FW/FJD/SpD/EnD 500-999mL | CDS |
| FW/FW/FJD/SpD/EnD 1000mL-3000mL | CDS |
| FW/FW/FJD/SpD/EnD >3000mL | NON-CDS |
| Milk, plain (white) <150 ml | NON-CDS |
| Milk, plain (white) 150-499mL | NON-CDS |
| Milk, plain (white) 500-999mL | NON-CDS |
| Milk, plain (white) 1000mL-3000mL | NON-CDS |
| Milk, plain (white) >3000mL | NON-CDS |

### ANY

| CONTAINER TYPE | CATEGORY |
|---|---|
| Other beverage <150 ml | NON-CDS |
| Other beverage 150-499mL | NON-CDS |
| Other beverage 500-999mL | NON-CDS |
| Other beverage 1000mL-3000mL | NON-CDS |
| Other beverage >3000mL | NON-CDS |