



STATEWIDE LITTER SURVEYS 2023-26
ANNUAL LITTER SURVEY
2023-2024 REPORT

MAY 2024

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Contents

Introduction	4
Program	4
Scope.....	5
Survey Methodology.....	6
Measurement Methodology.....	6
Data Calculation Basis.....	7
Litter Composition	8
Litter by Item.....	8
Litter by Volume.....	10
Litter Data by Site Type	12
Litter Items by Site Type.....	13
Litter Volume by Site Type	14
Key Litter Categories and Items	21
Beverage Containers	21
Single Use Plastics	24
Summary and Conclusion	26

Introduction

DLC Spatial has been engaged by the Department of Natural Resources and Environment (“NRE”) to complete a series of litter surveys and to produce a series of reports on the findings utilising the Australian Litter Measure (“AusLM”) method.

AusLM has been developed to standardised litter data across all states of Australia. DLC Spatial has used AusLM as a tool for measuring the extent and nature of littering; and to assist with collecting, analysing, and presenting data on litter.

This is the first full set of litter surveys completed using the AusLM method in Tasmania.

Program

Litter will be surveyed twice yearly (December and May), commencing in December 2023 and concluding in May 2026, across four local government areas around Tasmania, with litter data to be analysed according to litter type, count, volume, site type and also ‘key categories and items’, specifically beverage containers and single use plastics.

The findings of the surveys will then be summarised into annual reports, with a focus on highlighting key litter items, trends in litter volumes at the defined site types, and identifying key drivers and impacts on litter volumes overall. This is the first annual report to be prepared.

Table 1: Program Delivery Schedule

Stage	Deliverable	Delivery Date
Stage 1	Three-Year Survey Plan and Program	By 27 November 2023
Stage 2	December 2023 Surveys	By 28 Dec 2023
	May 2024 Surveys	By 28 May 2024
	Annual Litter Survey 2023-2024 Report – this document	By 28 May 2024
Stage 3	December 2024 Surveys	By 31 Dec 2024
	May 2025 Surveys	By 28 May 2025
	Annual Litter Survey 2024-2025 Report	By 28 May 2025
Stage 4	December 2025 Surveys	By 31 Dec 2025
	May 2026 Surveys	By 28 May 2026
	Annual Litter Survey 2025-2026 Report	By 28 May 2026

Stage 5	Status of Litter in Tasmania 2023-2026 Report	By 28 May 2026
	Presentation	By 28 May 2026

Scope

A total of 24 sites are being surveyed on a biannual basis (December and May). The sites are spread across four local government areas – two in the Greater Hobart Region, one in the Greater Launceston Region, and one in the North-West Region.

The AusLM method classifies sites into six different site type categories – residential areas, retail areas, industrial areas, recreational parks, beaches, and main roads. One of each site type has been surveyed in each local government area.

The following sites were determined to be suitable and to meet the inclusion criteria. In addition, the number of transects was also determined by the AusLM specification. This includes six transects for each residential area and main road, five transects for recreational parks and beaches, and three transects for retail and industrial areas. The total number of site types and transects within each local government area is summarised in Table 2.

Table 2: Total Number of Site Types and Transects

Jurisdiction	Region	Local Government Area	Site Types (Number surveyed)	Number of Transects per site	Survey Dates
Tasmania	South	Clarence City Council	Beach (1)	5	1/12/23
			Main road (1)	6	6/5/24
			Residential (1)	6	
			Retail (1)	3	
			Industrial (1)	3	
			Park (1)	5	
		Glenorchy City Council	Beach (1)	5	1/12/23
			Main road (1)	6	6/5/24
			Residential (1)	6	
			Retail (1)	3	
			Industrial (1)	3	
			Park (1)	5	

	North	West Tamar Council	Beach (1)	5	2/12/23
			Main road (1)	6	20/5/24
			Residential (1)	6	
			Retail (1)	3	
			Industrial (1)	3	
			Park (1)	5	
	North-West	Central Coast Council	Beach (1)	5	2/12/23
			Main road (1)	6	19/5/24
			Residential (1)	6	
			Retail (1)	3	
			Industrial (1)	3	
			Park (1)	5	
	Total			24	112

Survey Methodology

Surveyors were provided with training in the AusLM method, prior to commencing the surveys. They were also provided a copy of the AusLM Field Manual, which provides comprehensive guidelines on all aspects of the litter count method. Data was collected on tablet devices, on a custom GIS database created by DLC Spatial, as well as paper forms, in some instances.

Litter observed was classified based on the current AusLM categories. Site information was collected to ascertain if certain factors impacted the litter levels (such as waste and recycling bins, public transport stops, BBQ areas in parks). Final data collation, review and analysis has been completed by DLC Spatial.

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.

Data Calculation Basis

The following calculations have been utilised throughout the report:

Number of items (#)	Total number of individual items counted
Items (#) per 1000m²	$\frac{\text{Total number of individual items counted}}{\text{Total square metres surveyed}} \times 1000$
Volume – litres (l)	Total number of individual items counted x standard volume per item
Volume (l) per 1000m²	$\frac{\text{Total number of individual items counted x standard volume per item}}{\text{Total square metres surveyed}} \times 1000$

Litter Composition

Summary Litter Data				
Total Area Surveyed (m ²)	Total Litter Items	Litter Items / 1000 m ²	Total Litter Volume (l)	Litter Volume (l)/1000 m ²
45,999	7,275	158.16	1,245	3.44

Litter by Item

The AusLM surveys identified 7,275 items across the 24 sites. The most prevalent litter items were plastic items, accounting for more than a third (33%) of the total litter items (Figure 1). This excludes fragments - hard plastic and fragments – soft plastic. If considering these items, a total of 45% of items counted comprised of plastic. Following plastic, paper and card accounted for 17% of all litter items, with cigarette butts and filters accounting for 14%.

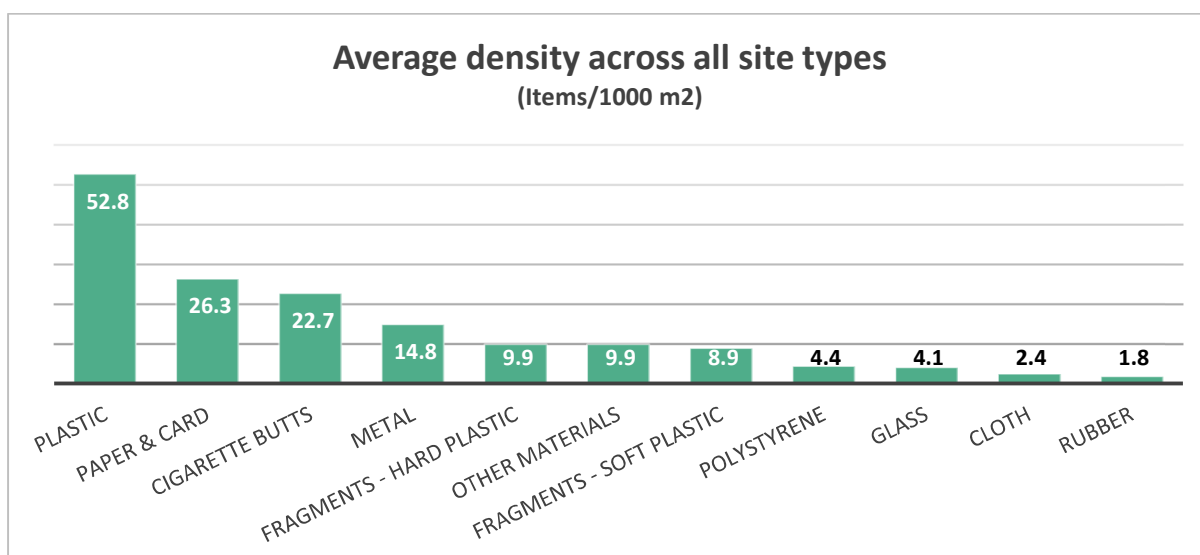


Figure 1 Average density of different litter types across all site types.

Broadly similar patterns in composition were evident at different site types (i.e. dominance of plastic, paper & card, and cigarette butts - see Figure 2).

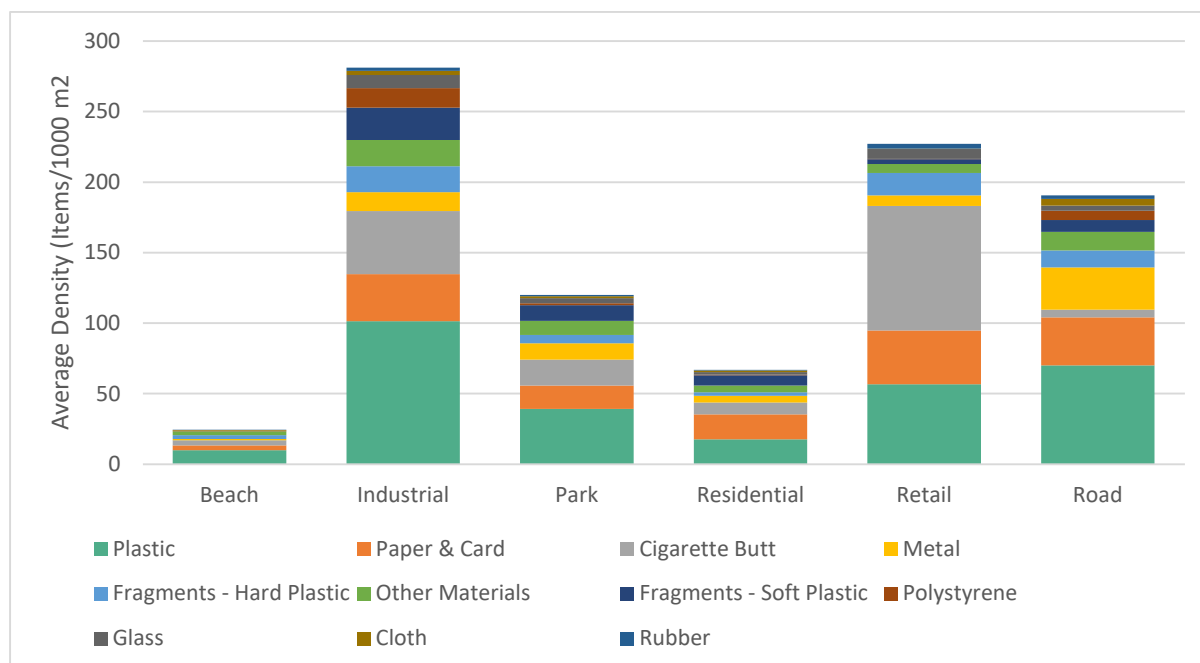


Figure 2 Density of different litter types for different site types

A list of the most prevalent items, aggregated across all sites, is outlined in Table 3. The results are consistent with the average density of litter items across all site types, with cigarette butts and filters, and plastic – food and confectionery wrappers dominating the results.

Table 3 Top 15 litter items (by count) across all site types

Top 15 Items by Count		
Item ¹	Total number of items	Items / 1000m2
Cigarette butts and filters	1,046	22.74
Plastic - food and confectionery wrappers	708	15.39
Hard plastic fragment – small	343	7.46
Soft plastic fragment - small	338	7.35
Plastic - non-food package	329	7.15
Paper & card fragment - small	296	6.43
Paper & card - packages & boxes	242	5.26
Plastic - tape/narrow soft plastic film	175	3.80
Other plastic items	165	3.59
Paper & card - takeaway containers	143	3.11
Metal - Soft Dr/FW/FJD/SpD/EnD (150 - 499 ml)	138	3.00
Metal - Beer (150 - 499 ml)	131	2.85
Paper & card - paper tissues/napkin	123	2.67
Plastic - cup – single use (inc. coffee cups)	106	2.30
Plastic - beverage container lids /caps	103	2.24

¹ Soft Dr/FW/FJD/SpD/EnD = Soft drink, flavoured water, sports drinks, and energy drinks

The prevalence of plastic is concerning, especially in more sensitive environments such as beach and recreational park site types (Table 4), potentially resulting in exposure to aquatic ecosystems, polluting rivers and seas.

Table 4 Proportion of litter material types across different site types

Litter material	Proportion of items (by item count)					
	Beach	Industrial	Park	Residential	Retail	Main Road
Plastic	41%	36%	33%	27%	25%	37%
Paper & card	14%	12%	14%	26%	17%	18%
Cigarette Butts	14%	16%	15%	13%	39%	3%
Metal	3%	5%	10%	7%	3%	16%
Fragments - hard plastic	12%	7%	5%	4%	7%	6%
Other materials	11%	7%	8%	7%	3%	7%
Fragments - soft plastic	0%	8%	9%	11%	2%	4%
Polystyrene	2%	5%	1%	1%	0%	3%
Glass	0%	3%	3%	3%	3%	2%
Cloth	2%	1%	1%	2%	0%	2%
Rubber	1%	1%	1%	1%	2%	1%

Litter by Volume

Only part of the story of litter is captured by the numerical breakdown of litter items. The composition of litter is also described by its size or, more specifically, volume. The volume of key litter categories has been estimated and is outlined in Figure 3. This data needs to be interpreted cautiously as the volume calculations are estimates only.

However, volumes highlight that plastic and paper & card are still the most dominate litter streams across all sites. Conversely, cigarette butts account for a smaller proportion of the overall volume, despite their numerical dominance.

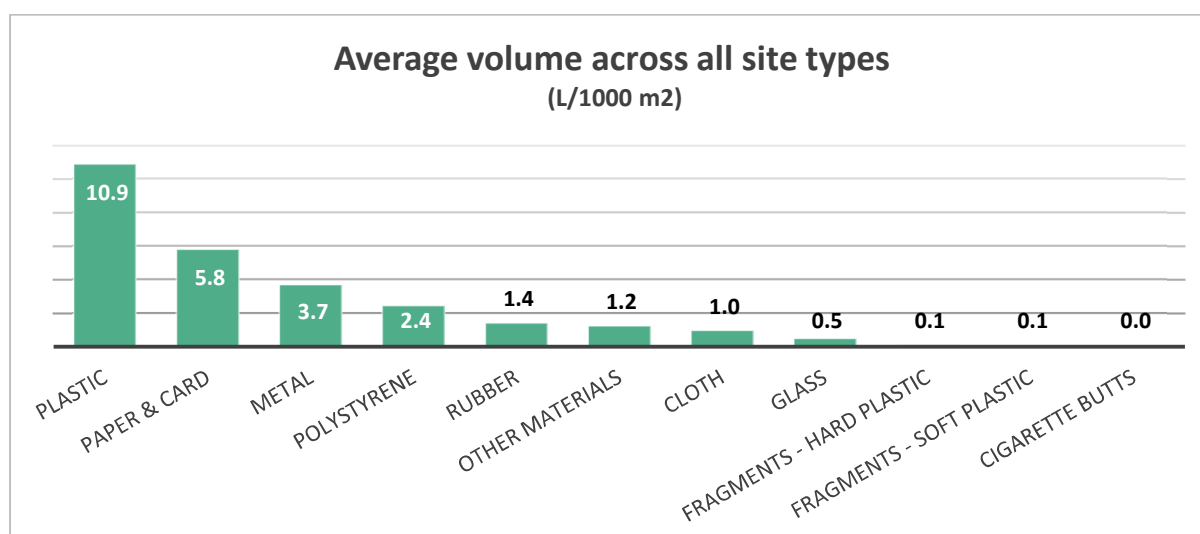


Figure 3 Average volume of different litter types (all sites)

When analysing the survey data by volume, the results are quite different when compared to litter count. Plastic - non-food packaging and paper & card – packages and boxes were the most prevalent items, by volume (Table 5).

Table 5 Top 15 litter items (by volume) across all site types

Top 15 Items by volume		
Item ²	Total volume (l)	Volume (l) / 1000m ²
Plastic - Non-food package	164.5	3.58
Paper & card - Packages & boxes	121.0	2.63
Polystyrene - Insulation & packaging	90.0	1.96
Paper & card - Takeaway containers	71.5	1.55
Rubber - Tyres	60.0	1.30
Metal - Soft Dr/FW/FJD/SpD/EnD (150 - 499 ml)	51.8	1.13
Metal - Beer (150 - 499 ml)	49.1	1.07
Plastic - Other food package	45.5	0.99
Metal - Premixed (150 - 499 ml)	35.6	0.77
Plastic – Food and confectionery wrappers	35.4	0.77
Plastic - Water (500 - 999 ml)	33.0	0.72
Cloth - Clothing	31.0	0.67
Plastic - Soft Dr/FW/FJD/SpD/EnD (1000 - 3000 ml)	30.0	0.65
Other - Construction materials	28.1	0.61
Paper & card - Paper bags (inc. takeaway packaging)	24.0	0.52

² Soft Dr/FW/FJD/SpD/EnD = Soft drink, flavoured water, sports drinks, and energy drinks

Litter Data by Site Type

The AusLM method involves litter counts at six distinct site types. Each site type is defined in the AusLM Field Manual.

Main road sites contributed the largest area surveyed, with over 15,474 square metres surveyed. Parks contributed the smallest area to the survey, with just over 3,000 square metres surveyed (Figure 4).

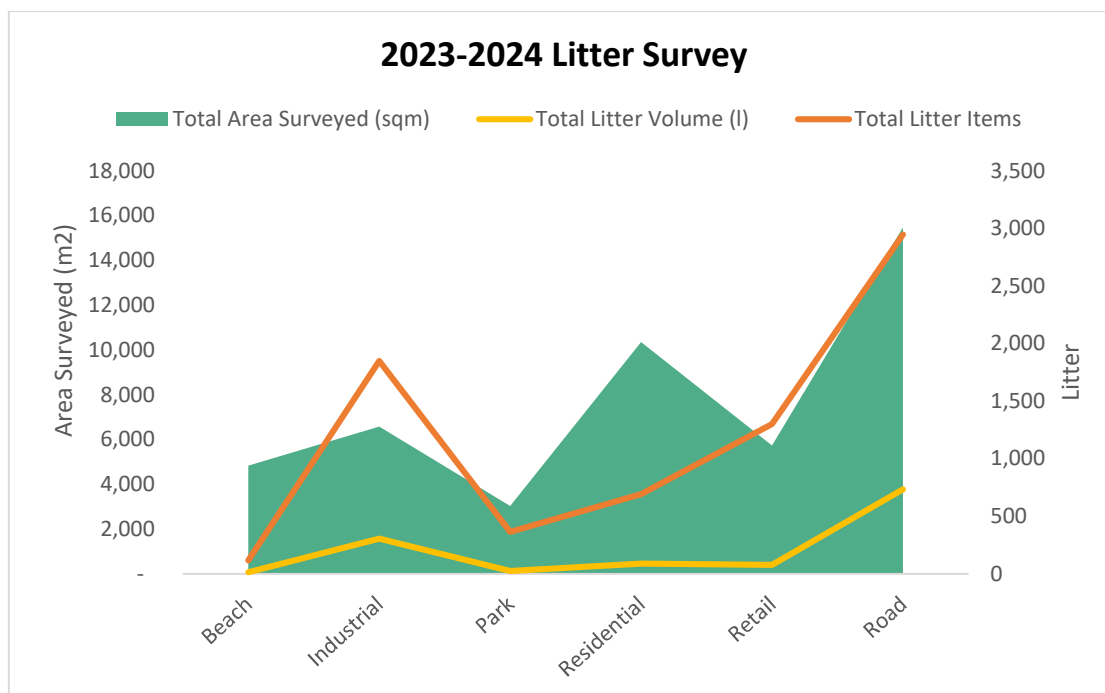


Figure 4 Total area surveyed across all site types, showing relationship with total litter volume and items

Litter Items by Site Type

From a litter count perspective (Figure 5), Main Roads were the site type with the highest litter, accounting for 2,950 items or 40.5% of the total litter items surveyed. Industrial was second highest, accounting for a further 1,848 items or 25.4%. Together, Main Roads and Industrial contributed 66% of the total items counted. Retail sites were the third highest, with 1,302 items, accounting for 17.9% of the total litter items. Beaches contained the lowest litter levels, with only 118 items counted, equating to just 2% of the total items. Figure 6 outlines the estimated litter density at each of the sites surveyed.

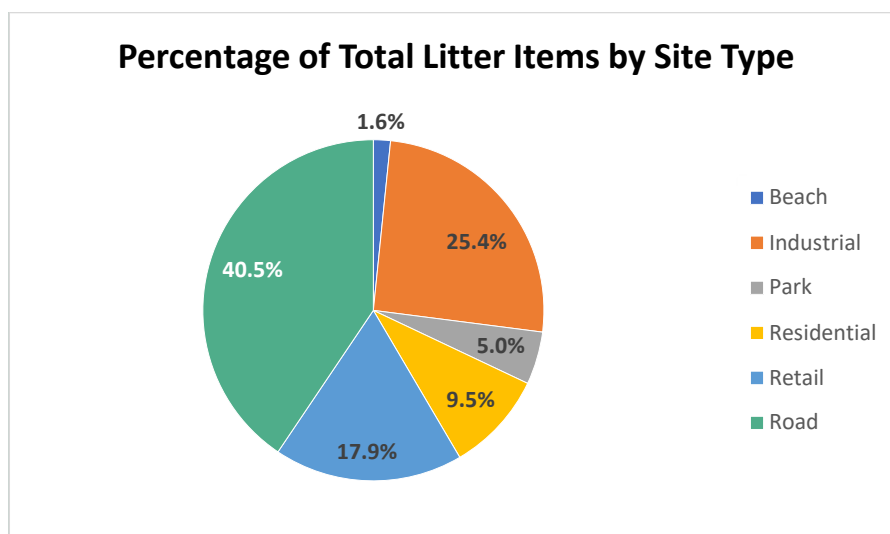


Figure 5 Percentage of total litter items across all site types

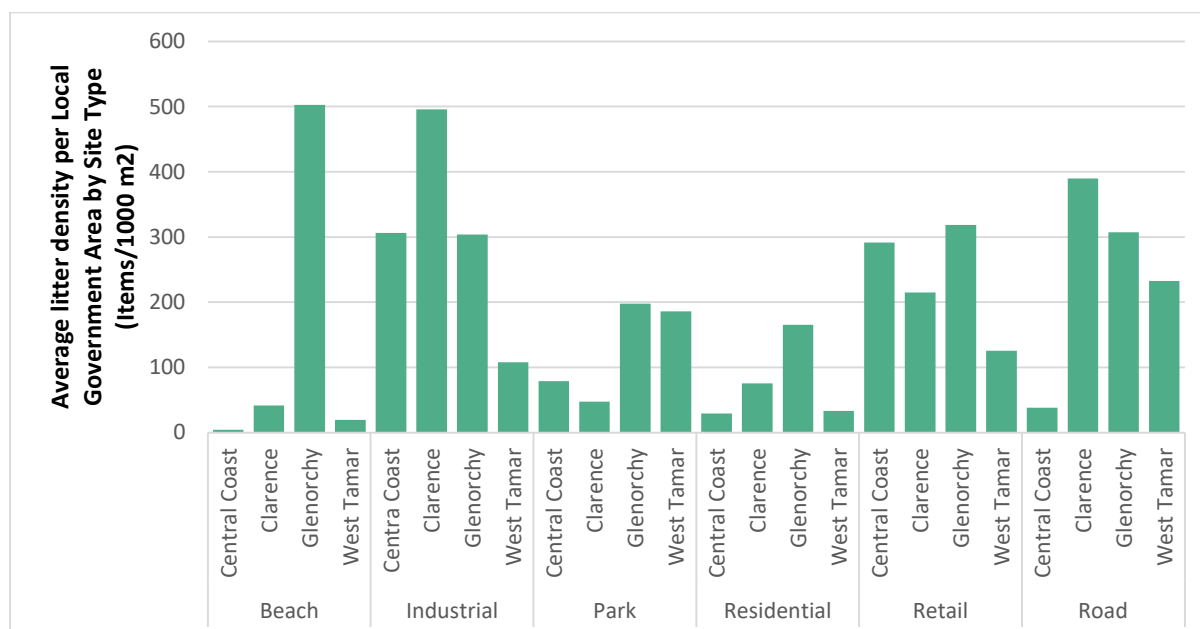


Figure 6 Average density of litter per 1000 m2 per Local Government Area by Site Type surveyed as part of the AusLM survey

Litter Volume by Site Type

Main Roads was also the site type with the highest litter by volume, accounting for 58.9% of the total calculated litter volume (Figure 7). The 18.4% increase in volume (compared to count) indicates that there is a trend towards larger, bulkier items being littered in Main Road sites, or that larger items persist for longer in a Main Road setting, compared to other site types. Industrial sites remained second highest site type by volume. Residential sites jumped into third place from a volume perspective, up from fourth by count. Beaches contained the lowest litter levels by volume, accounting for just 1.2% of the calculated total volume. Figure 8 shows the total litter volume at each of the sites.

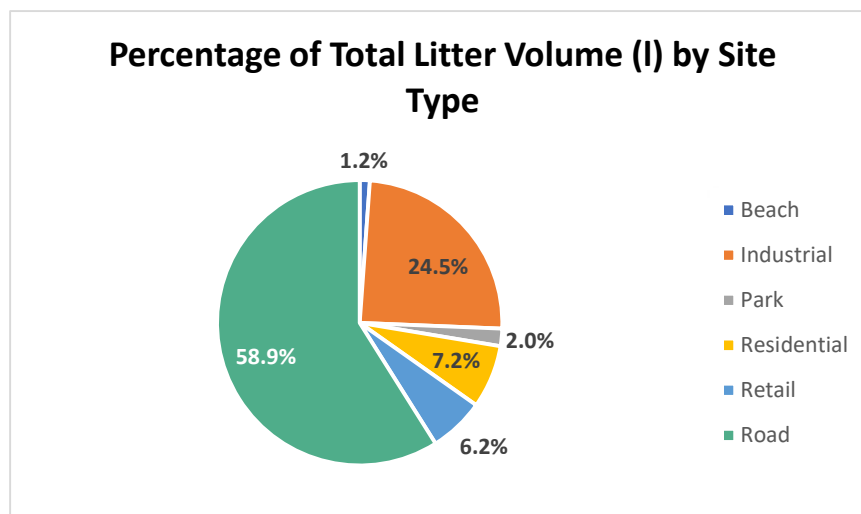


Figure 7 Total litter volume across all site types

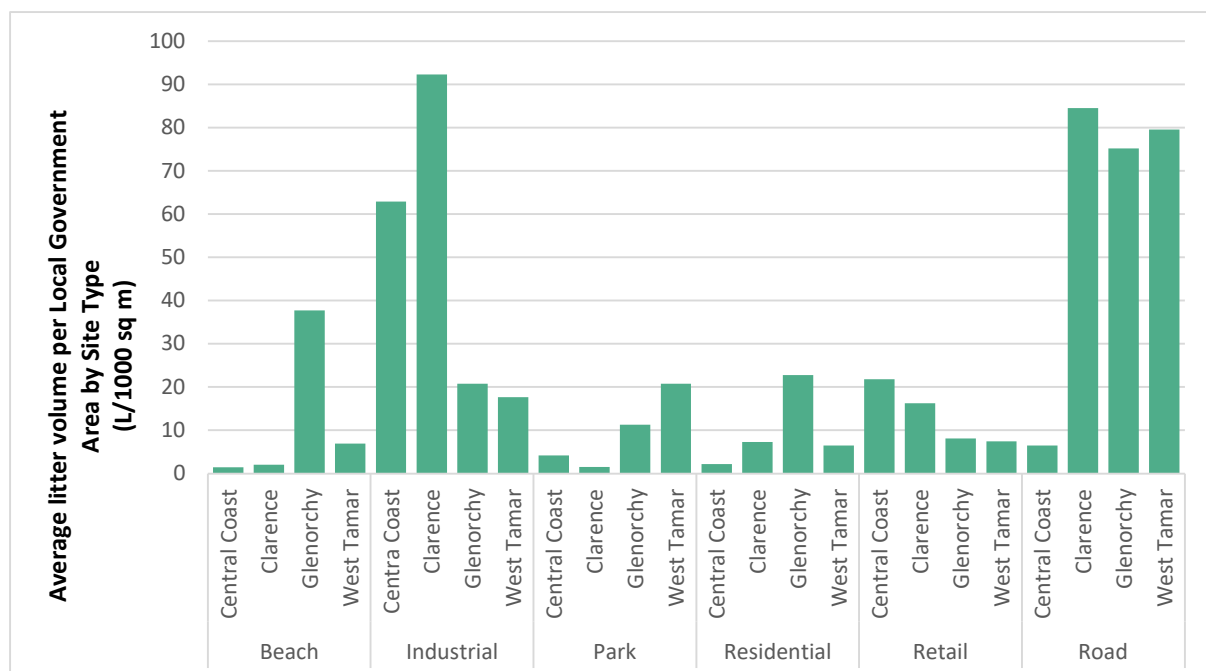


Figure 8 Average volume of litter per 1000 m² at each of the sites surveyed as part of the AusLM survey.

Site Type Summary – Beach

Site Snapshot	
Total Number of Items – (#)	118
Total Volume of Items – (l)	14.4
Items / 1000m ²	24.4
Volume (l) / 1000m ²	3.0
Top 3 Items – Number (#)	<ul style="list-style-type: none"> • Plastic - Food and confectionery wrappers • Cigarette butts and filters • Plastic - Hard plastic fragment - small
Top 3 Items – Volume (l)	<ul style="list-style-type: none"> • Polystyrene - Insulation & packaging • Plastic - Soft Dr/FW/FJD/SpD/EnD³ (1000 - 3000 ml) • Plastic - Non-Food package
Highest Site Litter Count – Number (#)	64 (Glenorchy)
Highest Site Litter Count – Volume (l)	5.1 (Central Coast)
Lowest Site Litter Count – Number (#)	8 (West Tamar)
Lowest Site Litter Count - Volume (l)	1.6 (Clarence)

Common Site Features/Observations

General waste bins were frequently observed within Beach Sites, although not often within the transects themselves (i.e. they were often located on grassed, recreation areas adjacent to beach, or at beach carparks). Recycling bins were observed on occasion. Evidence of cleaning (raking lines) was not noted at any Beach site; however Community Groups regularly coordinate beach clean-ups, which may contribute to the low levels of litter observed. Majority of litter observed at beach sites was found to be in the dune areas.



Figure 9 Photo of a beach transect that was surveyed as part of this study

³ Soft Dr/FW/FJD/SpD/EnD = Soft drink, flavoured water, sports drinks, and energy drinks

Site Type Summary – Industrial

Site Snapshot	
Total Number of Items – (#)	1,848
Total Volume of Items – (l)	305.0
Items / 1000m ²	281.2
Volume (l) / 1000m ²	46.4
Top 3 Items – Number (#)	<ul style="list-style-type: none"> • Cigarette butts and filters • Plastic - Food and confectionery wrappers • Plastic - Soft plastic fragment - small
Top 3 Items – Volume (l)	<ul style="list-style-type: none"> • Plastic - Non-food package • Polystyrene - Insulation & packaging • Paper & card - Packages & boxes
Highest Site Litter Count – Number (#)	726 (Clarence)
Highest Site Litter Count – Volume (l)	135.1 (Clarence)
Lowest Site Litter Count – Number (#)	238 (West Tamar)
Lowest Site Litter Count - Volume (l)	25.3 (Glenorchy)

Common Site Features/Observations

Industrial sites contained the second highest litter load, across most measures (total count, total volume, and volume/1000m²), with the highest count when measured against count/1000m². Litter levels were consistently high across most locations, with an average of 308 items per site. Industrial sites frequently appeared to be highly littered. Verges tended to be poorly maintained and were often very functional spaces used to park vehicles. They were rarely landscaped, and public bins were not commonly noted. It was apparent that most litter was the result of adjoining businesses (i.e. packaging, cable ties, strapping, etc.).



Figure 10 Photo of an industrial transect that was surveyed as part of this study

Site Type Summary – Park

Site Snapshot	
Total Number of Items – (#)	364
Total Volume of Items – (l)	24.6
Items / 1000m ²	120.1
Volume (l) / 1000m ²	8.1
Top 3 Items – Number (#)	<ul style="list-style-type: none"> • Plastic - Food and confectionery wrappers • Cigarette butts and filters • Soft plastic fragment - small
Top 3 Items – Volume (l)	<ul style="list-style-type: none"> • Paper & card - Takeaway containers • Plastic - Food and confectionery wrappers • Plastic - Non-Food package
Highest Site Litter Count – Number (#)	159 (Glenorchy)
Highest Site Litter Count – Volume (l)	10.4 (West Tamar)
Lowest Site Litter Count – Number (#)	36 (Clarence)
Lowest Site Litter Count - Volume (l)	1.1 (Clarence)

Common Site Features/Observations

Overall, parks were one of the lowest littered sites. Items identified as fragments (of all materials and sizes) may be the result of mowing that frequently occurs at public parks. Litter bins were commonly observed at park sites. The recorded presence of features such as BBQs, playgrounds and bench seating at the park sites was also common.



Figure 11 Photo of a park transect that was surveyed as part of this study

Site Type Summary – Residential

Site Snapshot	
Total Number of Items – (#)	693
Total Volume of Items – (l)	89.6
Items / 1000m ²	66.9
Volume (l) / 1000m ²	8.7
Top 3 Items – Number (#)	<ul style="list-style-type: none"> • Cigarette butts and filters • Plastic - Food and confectionery wrappers • Soft plastic fragment - small
Top 3 Items – Volume (l)	<ul style="list-style-type: none"> • Paper & card - Packages & boxes • Paper & card - Takeaway containers • Plastic - Non-Food package
Highest Site Litter Count – Number (#)	330 (Glenorchy)
Highest Site Litter Count – Volume (l)	45.4 (Glenorchy)
Lowest Site Litter Count – Number (#)	80 (Central Coast)
Lowest Site Litter Count - Volume (l)	6 (Central Coast)

Common Site Features/Observations

Residential sites accounted for the second highest area surveyed of any of the site types. Despite this, the total items counted within residential sites was third lowest. The low level of litter may suggest individual householders regularly take responsibility for collection of litter items that end up on their verge area. Litter that was observed was generally found in gutters, ditches, or the result of recent kerbside collection.



Figure 12 Photo of a residential transect that was surveyed as part of this study

Site Type Summary – Retail

Site Snapshot	
Total Number of Items – (#)	1,302
Total Volume of Items – (l)	77.8
Items / 1000m ²	227.1
Volume (l) / 1000m ²	13.6
Top 3 Items – Number (#)	<ul style="list-style-type: none"> • Cigarette butts and filters • Plastic - Food and confectionery wrappers • Hard plastic fragment - small
Top 3 Items – Volume (l)	<ul style="list-style-type: none"> • Paper & card - Packages & boxes • Plastic - Non-Food package • Paper & card - Takeaway containers
Highest Site Litter Count – Number (#)	426 (Clarence)
Highest Site Litter Count – Volume (l)	32.2 (Clarence)
Lowest Site Litter Count – Number (#)	186 (West Tamar)
Lowest Site Litter Count - Volume (l)	8.8 (Glenorchy)

Common Site Features/Observations

Litter bins were frequently observed within retail sites – most commonly general waste bins, but occasionally also comingled recycling. In some instances, general waste bins were observed to be overflowing.

There were also high occurrences of cigarette butts, although some retail areas surveyed were clearly delineated as non-smoking areas. Except for one retail site, it was unclear whether smoking is permitted or banned in retail spaces. Even at the one site where smoking is not permitted, there were still a significant amount of cigarette butts littered. No cigarette bins were available within any of the retail sites. It is possible people are littering cigarette butts to avoid starting fires in a general waste bin.

It was also observed that ATM receipts were common in some retail sites, with many ATMs no longer having a receipt disposal bin available.

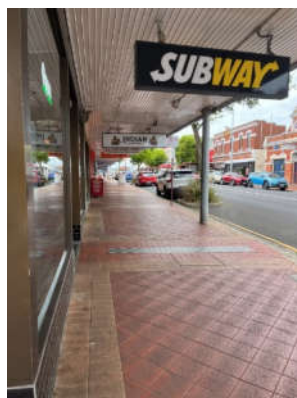


Figure 13 Photo of a retail transect that was surveyed as part of this study

Site Type Summary – Main Road

Site Snapshot	
Total Number of Items – (#)	2,950
Total Volume of Items – (l)	734.1
Items / 1000m ²	190.6
Volume (l) / 1000m ²	47.4
Top 3 Items – Number (#)	<ul style="list-style-type: none"> • Plastic - Food and confectionery wrappers • Plastic - Non-Food package • Paper & card - Packages & boxes
Top 3 Items – Volume (l)	<ul style="list-style-type: none"> • Plastic - Non-Food package • Paper & card - Packages & boxes • Rubber - Tyres
Highest Site Litter Count – Number (#)	1290 (Clarence)
Highest Site Litter Count – Volume (l)	280 (Clarence)
Lowest Site Litter Count – Number (#)	262 (Central Coast)
Lowest Site Litter Count - Volume (l)	44.5 (Central Coast)

Common Site Features/Observations

Main Roads were found to be the highest littered sites across most measures (count, volume, and volume/1000m²). Litter appeared to be distributed along main road sites evenly where footpaths were and were not present, suggesting that litter discarded from vehicles was a contributing factor/source. As a result, continued messaging around not littering from car windows, as well as installation of more bins in targeted roadside areas may be strategies that would reduce the litter at these sites.

There was also a concerning amount of alcoholic beverage containers along main roads. Instances of nitrous oxide (nangs) were also observed. There is an opportunity for NRE to communicate the findings of these surveys with Tasmania Police to allow for increased monitoring.



Figure 14 Photo of a main road transect that was surveyed as part of this study.

Key Litter Categories and Items

In addition to helping to understand the composition of litter and its overall abundance in different areas, the AusLM can be used to explore trends in specific litter items of interest. This can be useful for understanding the effect of policies or programs targeting those materials.

At the request of NRE, this section will focus on beverage containers and single use plastics (as defined by the AusLM).

Beverage Containers

The analysis below has been provided for beverage containers eligible for the yet to be introduced Container Refund Scheme (CRS).

Key Item Snapshot		
Total Number of Items – (#)	601	
Total Volume of Items – (l)	297.06	
Highest Site Litter Count – Number (#)	241	(Clarence)
Highest Site Litter Count – Volume (l)	109.8	(Clarence)
Lowest Site Litter Count – Number (#)	54	(Central Coast)
Lowest Site Litter Count - Volume (l)	25.4	(Central Coast)

Most CRS containers found were in main road sites, with this site type alone accounting for 79% of items counted (Figure 15). Only one CRS container was observed at park sites, and five containers at beach sites. The introduction of the CRS is likely to have a positive impact on reducing the amount of beverage container litter in main road and industrial sites.

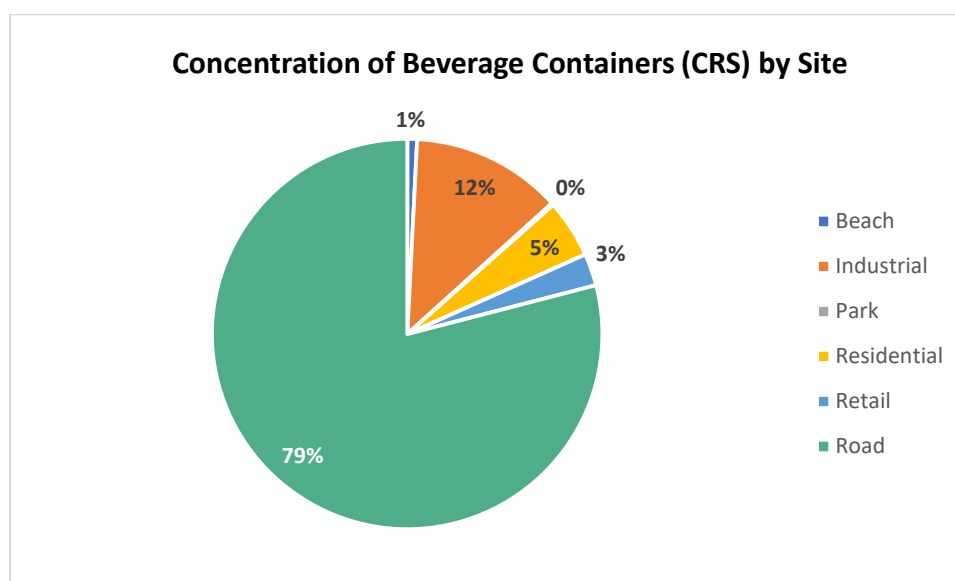


Figure 15 Concentration of beverage containers eligible for the CRS by site type

Soft drink, flavoured water, sports drinks, and energy drinks (Soft Dr/FW/FJD/SpD/EnD) were the largest contributor, accounting for 138 of the 601 beverage containers counted, or 37.4%. Beer was the second highest, accounting for 28.3% of containers (Figure 16).

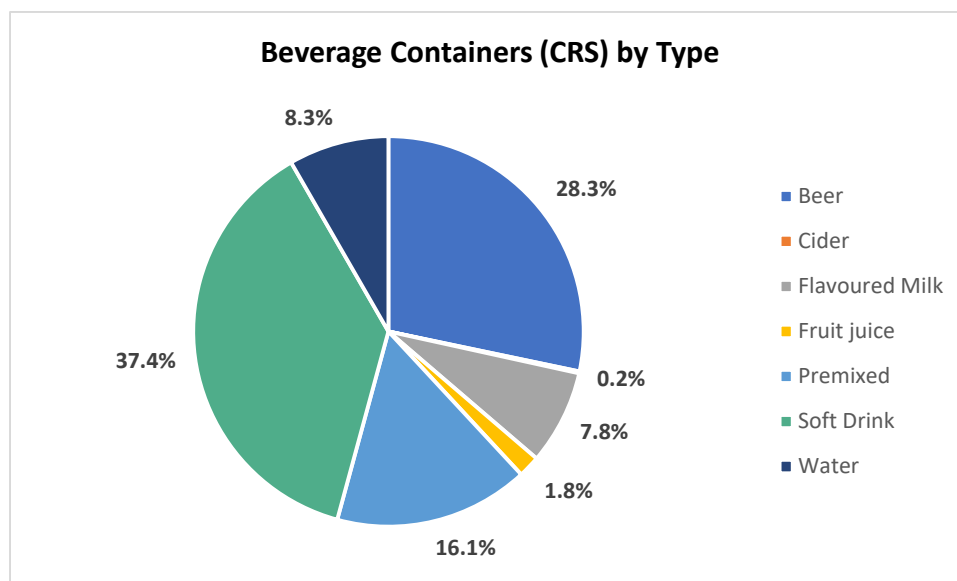


Figure 16 Percentage of beverage containers eligible for CRS by beverage type

Further information including the beverage container type, number and total volume are captured in Table 6.

Table 6 Details of beverage containers counted during the survey

Detail - Beverage Containers		
Item ⁴	Number of Items	Total Volume (L)
Metal Soft Dr/FW/FJD/SpD/EnD 150 - 499 ml	138	51.8
Metal Beer 150 - 499 ml	131	49.1
Metal Premixed 150 - 499 ml	95	35.6
Plastic Water 500 - 999 ml	44	33.0
Glass Beer 150 - 499 ml	38	14.3
Plastic Soft Dr/FW/FJD/SpD/EnD 500 - 999 ml	31	23.3
Plastic Flavoured milk 500 - 999 ml	21	15.8
Plastic Soft Dr/FW/FJD/SpD/EnD 1000 - 3000 ml	20	30.0
Metal Soft Dr/FW/FJD/SpD/EnD 500 - 999 ml	19	14.3
Plastic Soft Dr/FW/FJD/SpD/EnD 150 - 499 ml	13	4.9
Paper & Card Flav. milk (Cartons) 150 - 499 ml	12	4.5
Plastic Flavoured milk 150 - 499 ml	12	4.5
Plastic Water 150 - 499 ml	4	1.47
Plastic Water 1000 - 3000 ml	3	4.5
Metal Soft Dr/FW/FJD/SpD/EnD <150 ml	3	0.4
Plastic Fruit/vegetable juice 150 - 499 ml	3	1.1
Plastic Fruit/vegetable juice <150 ml	2	0.2
Plastic Fruit/vegetable juice 1000 - 3000 ml	2	3.0
Plastic Fruit/vegetable juice 500 - 999 ml	2	1.5
Paper & Card Fruit juice <150 ml	1	0.1
Paper & Card Flav. milk (Cartons) 500 - 999 ml	1	0.8
Glass Beer 500 - 999 ml	1	0.8
Glass Cider 150 - 499 ml	1	0.4
Glass Premixed 500 - 999 ml	1	0.8
Metal Premixed 500 - 999 ml	1	0.8
Plastic Soft Dr/FW/FJD/SpD/EnD <150 ml	1	0.1
Paper & Card Fruit juice 150 - 499 ml	1	0.4
Total	601	297.06

⁴ Soft Dr/FW/FJD/SpD/EnD = Soft drink, flavoured water, sports drinks, and energy drinks

Single Use Plastics

For this section, AusLM defines single use plastics as:

- Plastic - Cups – Single use (including coffee cups)
- Lids, Beverage container lids /caps
- Plastic - Other Food Package
- Lids, Plastic cup lid
- Bag, Other
- Plastic - Takeaway food container
- Lids, Coffee cup lid
- Lollipop Sticks
- Lids, Plastic (other)
- Straws
- Bag, Lightweight, Other
- Bag, Lightweight, Grey
- Polystyrene - Food packaging/clam shells
- Bag, Lightweight, White
- Plastic - Cutlery/chopsticks
- Bag, Heavy, Boutique
- Bag, Ice
- Bag, Mesh

This does not include paper or compostable items.

Key Item Snapshot		
Total Number of Items – (#)	546	
Total Volume of Items – (l)	107.8	
Highest Site Litter Count – Number (#)	194	(Clarence)
Highest Site Litter Count – Volume (l)	37.5	(Clarence)
Lowest Site Litter Count – Number (#)	92	(Central Coast)
Lowest Site Litter Count - Volume (l)	18.9	(West Tamar)

Almost half of all single use plastics (48.9%) were counted in main road sites. It is likely that most of this litter was deposited from moving vehicles travelling along these roads, with single use plastic providing a convenient option when ‘on the go’ (Figure 17).

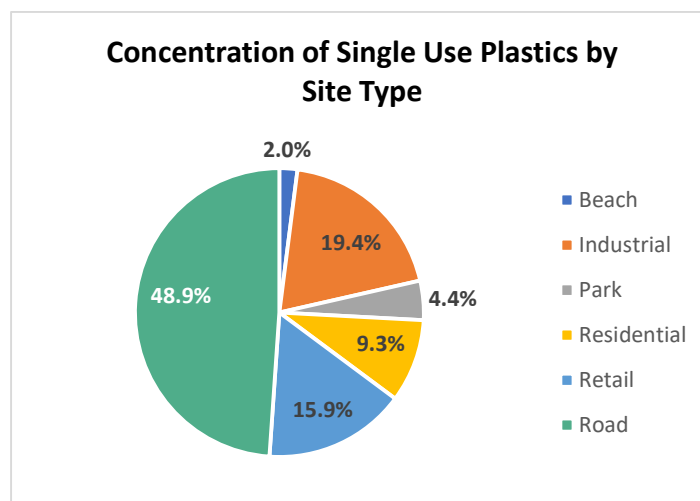


Figure 17 Concentration of single use plastics by site type

Single Use Plastics accounted for 546 or 13.32% of the total items counted, and 107.8 litres of the total volume. Single use cups, including takeaway soft drinks and coffee cups, were the most prevalent single use item observed, closely followed by beverage container lids/caps. Interestingly, only 71 lids (plastic cup and coffee cup) were observed, meaning that 35 lids had likely blown to other parts of the environment given their ease of travelling with wind. Further information is contained within Table 7.

Table 7 Details of single use plastics counted during the survey

Detail - Single Use Plastics		
Item	Number of Items	Total Volume (L)
Cup – Single use (inc. coffee)	106	21.2
Lids, Beverage container lids /caps	103	2.1
Other Food Package	91	45.5
Lids, Plastic cup lid	38	0.8
Bag, Other	36	7.2
Takeaway food container	35	17.5
Lids, Coffee cup lid	33	0.7
Lollipop Sticks	31	0.0
Lids, Plastic (other)	17	0.3
Straws	16	0.1
Bag, Lightweight, Other	9	1.8
Bag, Lightweight, Grey	8	1.6
Food packaging/clam shells	8	4.0
Bag, Lightweight, White	4	0.8
Cutlery/chopsticks	4	0.0
Bag, Heavy, Boutique	3	3.0
Bag, Ice	2	1.0
Bag, Mesh	2	0.2
Total	546	107.8

Summary and Conclusion

The analysis of AusLM data demonstrates the potential to respond to the three key thematic AusLM requirements areas: high-level story about litter prevalence; evaluation of litter prevention and policy intervention; and design of litter prevention intervention and policy. Specifically, the report demonstrated the ability to numerically and graphically present data showing the litter load composition for the entire monitoring period with the option to disaggregate data by Local Government Area, site type or specific litter item types. Litter loads were presented by both the number of litter items and estimated volume per 1000m².

Specific items of interest (beverage containers and single use plastics) were also reported separately in a manner that enables comparison between site types that may assist with determining the effectiveness of specific interventions.

There are other observations that should be noted as part of this report:

Absence of Container Refund Scheme in Tasmania

Container refund schemes incentivise the return of used beverage containers in exchange for a refund. While a Container Refund Scheme has not yet been introduced in Tasmania, the legal framework has passed through Government and now exists as the *Container Refund Scheme Act 2022*. It is likely that the scheme will be implemented in Tasmania during 2024. It will be interesting to assess the effectiveness of the scheme as part of future surveys.

Phasing out Problematic Single Use Plastics in Tasmania

Problematic single-use plastics (PSUPs) are plastic products designed or intended to be discarded after a single-use and which cannot be practically reused, recycled, or composted due to collection and processing options not being available. The Tasmanian Government has committed to phasing out the sale and supply of select problematic and single-use plastics and materials in 2025. This commitment includes the following items:

- Lightweight shopping bags (banned in Tasmania since 2013)
- Degradable plastics
- Plastic straws
- Plastic utensils and stirrers
- Plastic bowls and plates
- EPS consumer containers
- EPS consumer goods packaging
- Microbeads in personal care products

While single use plastics will continue to be captured and reported as part of the AusLM, it's important to note that there may be some inconsistencies between single use items defined by the Tasmanian Government and the AusLM.

Old vs new rubbish

As per the AusLM, litter is not collected at time of survey. DLC Spatial has allowed an exception to this rule and has collected litter at beach sites to prevent harm to the environment.

It was noted during the second survey (May 2024) that often, litter observed was considered as 'old litter', especially at main road and industrial sites. There is an opportunity for sites to be cleaned up following the third survey (Dec 2024), to allow a more representative survey to be performed which would only capture new litter. This would allow the introduction of initiatives such as the Container Refund Scheme to be effectively assessed.