### The Hon Penny Sharpe MLC

Minister for Climate Change, Minister for Energy, Minister for the Environment, Minister for Heritage, Leader of the Government in the Legislative Council



DOC23/1022019

Ms Helen Minnican Clerk of the Legislative Assembly Parliament House Macquarie Street SYDNEY NSW 2000

Dear Ms Minnican

Please find enclosed an erratum notice that corrects the NSW Litter Report 2021-2022 prepared under the *Protection of the Environment Operations Act 1997* and tabled in the Legislative Assembly on 12 September 2023.

The NSW Environment Protection Authority advises there are errors in the information presented in Figures 2, 3, 4, 5, 6, 7 and 9 and Table 2 of the NSW Litter Report that require amendment.

As requested by your office, the updated pages of the of Report, as amended by this erratum, are also enclosed.

I would appreciate your assistance in ensuring the erratum notice is tabled in the Legislative Assembly at the first available opportunity.

Sincerely

Penny Sharpe MLC Minister for Climate Change, Minister for Energy, Minister for the Environment, Minister for Heritage

Enclosure:

- 1. Erratum to the NSW Litter Report 2021-22
- 2. NSW Litter Report 2021-22 updated pages

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# Results: litter data 2022 snapshot

### 2022 snapshot – litter composition by density

The 2021–22 Key Littered Item Study indicates total litter densities in NSW estuaries is 198 items per 1,000 m<sup>2</sup>.

#### Most littered items

Figure 2 shows the top 10 most-littered items recorded by the study in 2021–22, by density.

Confectionary wrappers/snack bags and straws are the top two litter items, accounting for nearly a quarter of all litter.

The top 10 items account for 56% of all litter items.

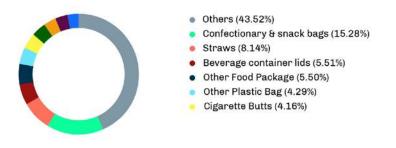


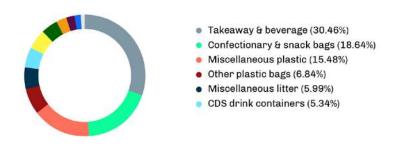
Figure 2 Composition of NSW litter density by individual item, 2021-22

### Litter by category

All items have been grouped into similar categories, often based on how the items are used and consumed. Using these categories helps inform program and policy responses.

Figure 3 shows the categories of litter recorded by the study in 2021-22.

The takeaway and beverage and confectionary and snacks categories account for almost 50% of all litter items.



- Cigarettes & packaging (5.31%)
- Personal effects, care & hygiene (4.34%) Checkout shopping bags (2.86%)
- Paper other (2.20%)
- Recreational fishing (1.64%)

Tape (4.11%)

Lollipop Sticks (3.32%)

• Other plastic lids (2.95%)

OH&S Items (3.22%)

- Glass other (0.50%)
- Non-CDS drink containers (0.41%)

Figure 3 Composition of NSW litter density by grouped category, 2021-22

#### Litter by material

Figure 4 shows the material makeup of litter recorded by the study in 2021–22.

About 82% of the litter is plastic. It should be noted that the study was carried out in estuaries. Plastic litter is likely to predominate in an estuarine environment because paper-based litter is

susceptible to breaking up, and heavy litter, such as metal and glass, is more likely to sink. Landbased litter measures such as the National Litter Index, indicate that paper items can make up to 40% of the litter stream.

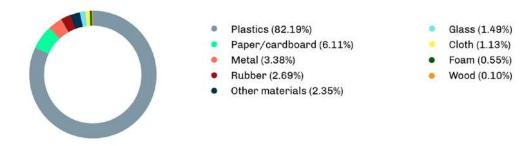


Figure 4 Composition of NSW litter density by material, 2021–22

## 2022 snapshot – litter composition by volume

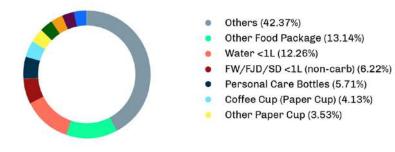
The 2021–22 Key Littered Item Study indicates the total volume of litter in NSW estuaries is 18.48 litres per  $1,000 \text{ m}^2$ .

#### **Most littered items**

Figure 5 shows the litter item types recorded by the study in 2021-22, by volume.

Other food packages, water bottles (under 1 litre) and flavoured water/fruit juice drink/soft drink bottles (under 1 litre) are the top three most-littered item types, accounting for over 30% of all litter volume.

The top 10 individual items account for 58% of all litter by volume.



- FW/SD (carb) <1 litre (3.23%)</li>
- Plastic Cup (3.19%)
- FW/SD (carb) all sizes (3.16%)
- White milk all sizes (3.07%)

Figure 5 Composition of NSW litter volume by individual item, 2021–22

### Litter by category

Figure 6 shows the litter categories recorded by the study in 2021–22, by volume.

The container deposit scheme drink containers and takeaway and beverage categories account for more than 70% of all litter items by volume.



Figure 6 Composition of NSW litter volume by aggregated category, 2021–22

### Litter by material

Figure 7 shows the material composition of the litter recorded by the study in 2021–22, by volume.

Over 67% of the litter was plastic. The next largest category was paper/cardboard (13%), followed by glass (10%).

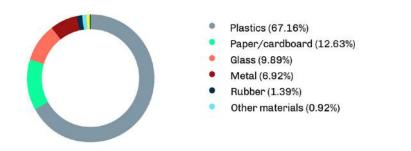


Figure 7 Composition of NSW litter volume by material, 2021–22

Foam (0.92%)

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- Cloth (0.17%)
- Wood (0.00%)

# Litter locations

The study monitoring sites are in mangroves in urban estuaries and are not associated with specific land-use sites such as retail precincts, parks or residential areas. Those land-use types will feature in the land-based Australian Litter Measure, which was piloted in 2021.

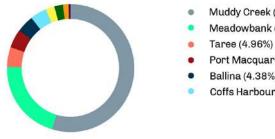
In 2021-22, there were 10 study survey locations:

- North Coast •
  - Ballina, Coffs Harbour and Port Macquarie
- Mid Coast
  - o Stockton, Taree
- Sydney
  - Muddy Creek (Arncliffe), Meadowbank (Ryde)
- South Coast
  - Batemans Bay, Merimbula, Narooma. 0

#### Location of litter by site

Figure 9 outlines the proportion of litter found across the different study survey locations.

As expected, areas with more people had more litter. The two Sydney sites accounted for over 75% of the litter. Table 2 shows the average levels of litter at each site per 1000 m<sup>2</sup>.



Muddy Creek (54.78%)

- Meadowbank (20.71%)
- Port Macquarie (4.79%)
- Ballina (4.38%)
- Coffs Harbour (4.02%)

- Merimbula (2.36%)
- Stockton (2.09%)
- Narooma (1.39%)
- Batemans Bay (1.52%)

Figure 9 Litter levels across the 10 KLIS count sites (by density), 2021-22

#### Table 2 Average levels of litter per 1000 m<sup>2</sup>, by site, 2021-22

Location	Average density (items per 1000m²)	Average volume (litres per 1000m²)
Muddy Creek	773.38	97.77
Meadowbank	292.47	38.60
Taree	70.09	14.84
Port Macquarie	67.65	13.23
Ballina	61.82	8.38
Coffs Harbour	56.75	9.49
Merimbula	33.29	1.93
Stockton	29.53	1.35
Narooma	19.60	3.46
Batemans Bay	7.28	0.95