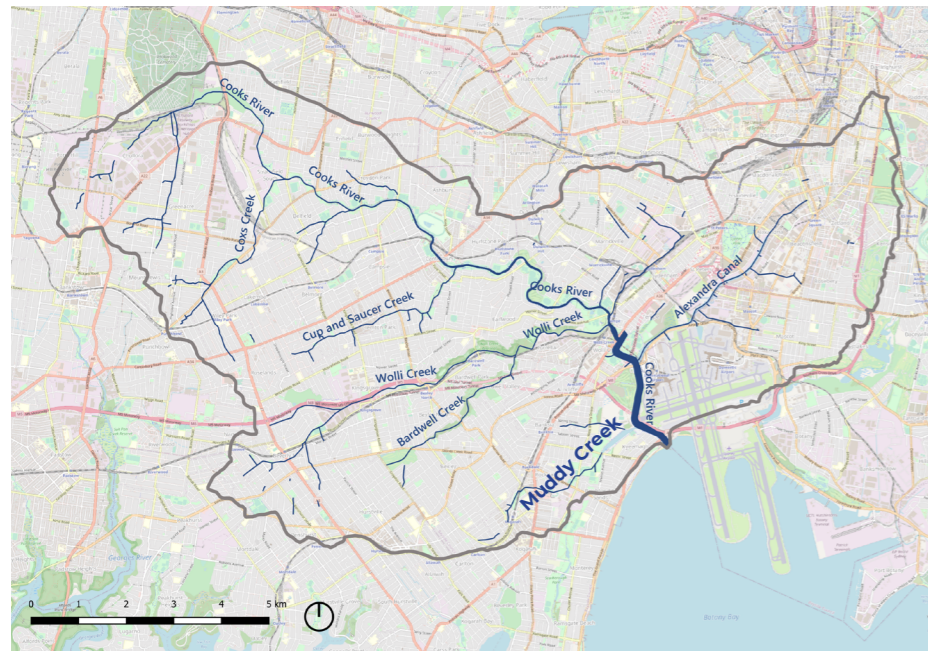


# KEY LITTERED ITEMS IN THE COOKS RIVER CATCHMENT

## The Key Littered items Study

The Key Littered Items Study (KLIS) is a long-term program for monitoring marine debris along the NSW coast which shows what types and quantities of marine debris can be found in our coastal and marine waters. Data has been collected quarterly since 2017.

One of the study sites is along Muddy Creek in the Cooks River catchment (see below). In this location, the waterway is tidal and litter that accumulates here would include litter from the whole Cooks River catchment as well as the local Muddy Creek catchment. It would also include some items that have travelled from more distant locations, however litter collected at Muddy Creek is expected to be reasonably representative of the litter that makes its way from the Cooks River catchment into the river.



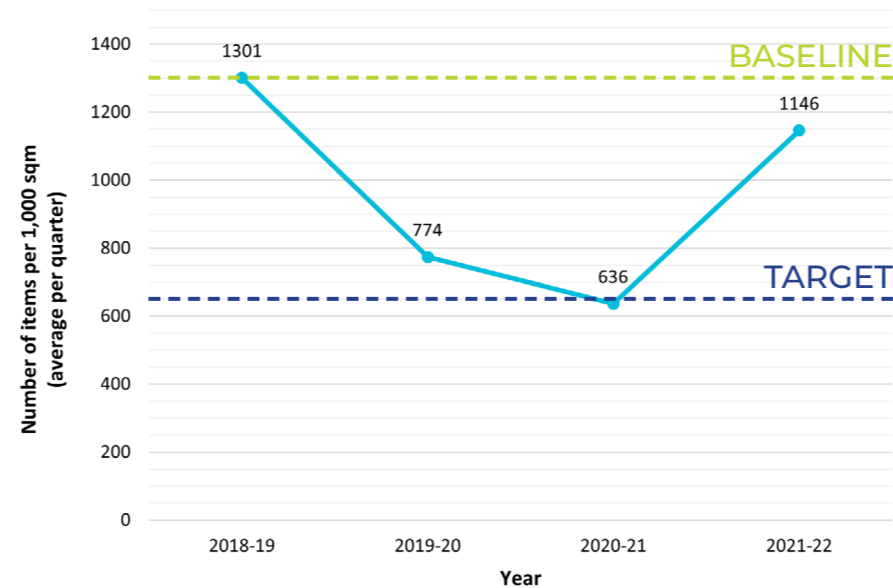
Location of Muddy Creek

NSW EPA is using the KLIS results for the state as a whole, to measure progress towards its targets of a 30% reduction in plastic litter items by 2025 and 60% reduction in all litter items by 2030. The Cooks River Litter Prevention Strategy has set a target for the catchment of a 50% reduction in litter by 2025 and the Cooks River Alliance will use the local (Muddy Creek) KLIS data to measure progress towards this Cooks River target.

The EPA is using 2018 and 2019 data (the combined eight quarterly counts across these 2 years) as the baseline for their 2025 and 2030 targets, so the same method will be used for the Cooks River.

Target	Baseline (2018 + 2019)	Target value
50% reduction in litter by 2025	1300 items per 1000 m <sup>2</sup>	650 items per 1000 m <sup>2</sup>

## Total number of litter items collected at Muddy Creek



Average quarterly item count each year

The chart above shows that the number of items recorded reached a low point in 2020-21 then increased in 2021-22. Results for 2021-22 show a **12%** decrease from the baseline. Litter data is inherently variable and recent figures should be treated with caution, as COVID-19 lockdowns may have changed littering behaviour in recent years. High rainfall and runoff in 2021-22 would also have had an impact on patterns of litter mobilisation, transport, and deposition. Long-term trend data will provide a more accurate picture.

## Litter types collected at Muddy Creek

Litter types collected at Muddy Creek in FY2021-22 are shown below.

In FY2021-22, the top 10 items (below left) account for 70% of all items recorded and the top 4 items account for 50%. The top 4 items were:

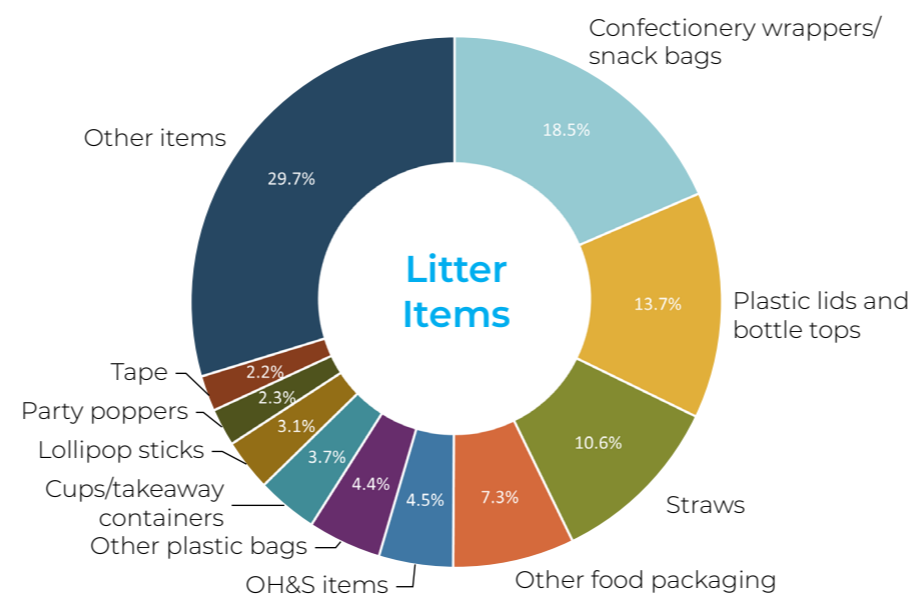
1. Confectionery wrappers and snack bags
2. Plastic lids and bottle tops
3. Straws
4. Other food packaging.

Items are also classified into categories (below right). Two categories of items account for more than half of all the litter recorded in FY2021-22:

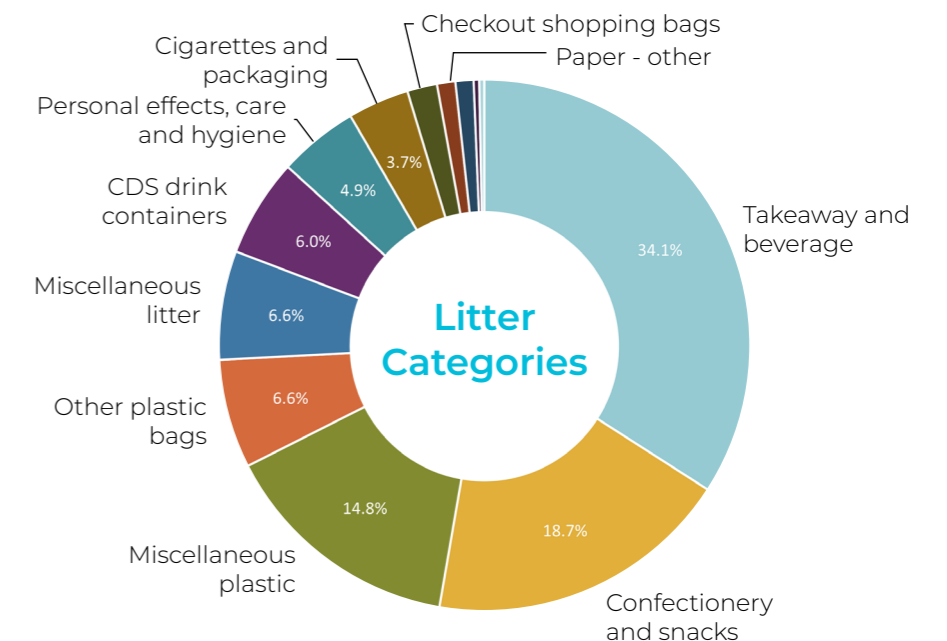
1. Takeaway and beverages
2. Confectionery and snacks.

This indicates where to focus litter prevention efforts in the Cooks River catchment: takeaway litter (particularly plastic lids and bottle tops), confectionery wrappers, snack bags and other food packaging.

Note that the new ban on single-use plastic straws, commencing November 2022, will hopefully reduce the quantity of straws at Muddy Creek next year. Some other takeaway items are also banned from 1 November 2022, including single-use plastic stirrers, cutlery, bowls and plates as well as expanded polystyrene food service items like containers and cups.



Top 10 litter items found in FY2021-22



Top 10 litter categories found in FY2021-22