



Beach Cleaning Trial: Progress Report 1

July - September 2024

From 1 July 2024 - 30 June 2025 we are cleaning Port Phillip Bay beaches from Portsea to Mount Eliza by hand as part of a trial.

The trial came about after investigations found that the mechanical rake only removed about 40 per cent of litter and sometimes broke plastic items into smaller pieces and buried them in the sand. The investigation also found 85 per cent of the material collected by the rake and taken for waste disposal was organic matter, such as seaweed. Removing seaweed from beaches means taking away a major food source for marine animals such as birds, crabs and fish.

Hand cleaning may offer environmental benefits by preserving seaweed on the beach, which supports a healthy marine ecosystem by providing food and shelter for shorebirds and other species. Additionally, seaweed helps stabilise erosion by trapping sand and enriching coastal vegetation. With coastal erosion being a growing concern for the Mornington Peninsula, we hope that hand cleaning will help address this issue.

We also want to reduce the amount of organic matter in landfill to limit dangerous methane gases that contribute to poor environmental outcomes.

The frequency of cleans has remained the same, with each Port Phillip beach cleaned fortnightly.

Turn of the seasons

We had some big storm events in September that brought more seaweed and debris onto our beaches than usual. In fact, it was the windiest September in seven years! With the storms and strong north to west winds, we copped more than just seaweed: litter and rubbish from other municipalities came onto our beaches from across the bay (including a large wheelie bin from the Bellarine Peninsula!).



In September we had 22 days of winds from a northerly to westerly direction, 16 of these days with gusts of 50km/h or more. These winds push rubbish and debris from across the bay towards our shores from Rosebud to Mount Eliza. This has increased litter and seaweed on our beaches.

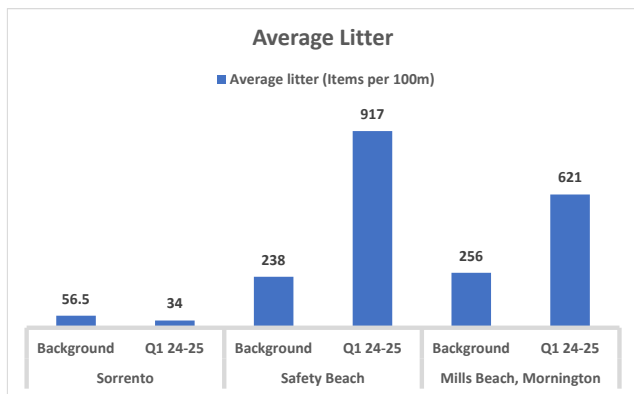


Beach audits

We expected this winter to be the most challenging, due to likely buried litter. Cleaning by hand should allow us to prevent the compiling effect of litter being buried and trapped in the sand when mechanically raked. However, with the dynamic nature of our coast, the beaches where we see erosion this year may not be the same again next year. We have been finding litter that is decades old (e.g. 2004) being exposed and removed from our beaches. It will likely be a multi-year process to remove buried litter.

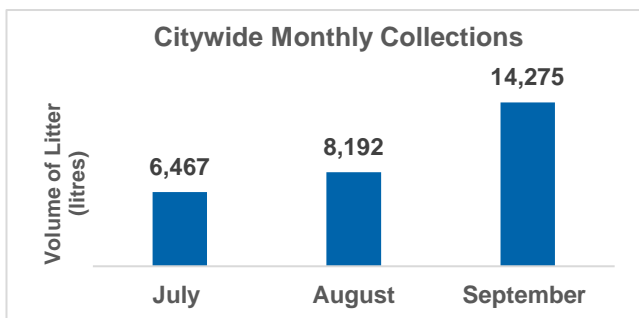
We have been routinely auditing a selection of beaches. Below is a summary of our findings.

Litter sampling across randomised 100m stretches of beach at Sorrento, Safety Beach and Mills Beach have reported an increase in litter at Safety Beach (285%) and Mills Beach (143%). Sorrento reported a reduction of 40%.



Micro-plastic sampling at a selection of beaches reported relatively stable results apart from Moondah Beach, Mt Eliza which has seen a 700% increase in micro-plastics.

The Citywide hand cleaning team collectively walked 536.88 km, collecting 28,934 litres of litter during the first quarter of the trial. Audits revealed the types and sources of waste, including 50 large items like damaged kayaks, wood planks, mattresses, and tires. September saw the highest volume, likely due to storm events washing more litter from the bay.



We thank the volunteers from the local Beach Patrol groups for their dedication and hard work. Their efforts collected over 5,000 pieces of litter from our beaches in August and September.

Community feedback

We value feedback from the community. Between 1 July and 16 September 2024, the online survey received 109 responses. The survey was closed from 17 September - 27 October in line with Council election protocols.

Shortly after the September storms, we observed an increase in survey responses. In these we heard concerns about the presence of seaweed and the associated rise in litter, particularly found within the seaweed itself.

82% of respondents have found the beach less enjoyable to visit than the same time last year. We expected this to be the case due to the buried litter and the severe storms.

At this stage, 80% of respondents do not support continuation of hand cleaning into the future.

We've also heard positive feedback from the community with observations of "More vegetation, birdlife, and natural treasures like shark eggs are appearing." Another respondent noted "The shoreline is taking on its own personality, with larger beach sections."

Conclusion

We've heard the community's concerns about the hand cleaning program, particularly regarding increased seaweed and litter on Port Phillip Bay beaches between Safety Beach and Mount Eliza.

It's important we let the trial run for the full 12 months to get an accurate understanding of the pros and cons of hand cleaning. This will allow the new Council to make an informed decision about how best to clean our beaches in the future.

We are gaining valuable data to better inform future beach cleaning programs and we remain committed to working with our community to achieve the best outcomes for Mornington Peninsula's coastal environment.



For more information and to provide your feedback, go to:

www.mornpen.vic.gov.au/beachcleaning