



SoCal SWANA Annual Meeting & Workshop 2025

Southern California Solid Waste Association of North America

Raising awareness about soft plastic recycling and promoting its implementation at UC San Diego

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Background

Soft plastic: low-density polyethylene, a flexible type of plastic that can be scrunched and stretched (Plastic Beach, 2025).

- Examples: bagel bags, (non-compostable) produce bags, newspaper bags, online order packaging, bubble wraps, paper towel wraps, etc.
- It often goes unrecycled, filling up our landfills, contaminating the ocean, and polluting the atmosphere; resulting in human and non-human health effects (Avio et al., 2017; Karidis, 2022; Main, 2023; Martire, 2022).



Plastic Beach



Plastic Beach: a San Diego-based non-profit organization dedicated to promoting and facilitating the responsible recycling of soft plastic waste (Plastic Beach, 2025).

- Commercial collection: business partnerships
- Residential drop-off: monthly service subscription; 6 drop-off locations in SD - Encinitas, Carlsbad, Oceanside, North Park, Vista, City of SD (Plastic Beach, 2025)
- The collected soft plastic is converted, or “downcycled”, into decking material by the company Trex (Plastic Beach, 2025).
- Has diverted over 150,000+ lbs. of soft plastic from SD landfills in the past five years (Plastic Beach, 2025).

Research questions/objectives

How can I increase the public awareness of proper soft plastic recycling mechanisms and systems?

How can I increase the actual amount of soft plastic that gets physically recycled on the UCSD campus?



Tabling at Big Waste Event with Matthew Clough, Executive Director (right), and Lindsay Camins, Director of Communications (left), at Plastic Beach. Pilot soft plastic drop-off bin to the left of table.

Methods

Between November 2024 – March 2025, I planned and executed two events on UCSD campus in collaboration with Plastic Beach and the UCSD Student Sustainability Collective (SSC). At both of the events, I tabled for Plastic Beach to raise awareness about soft plastic recycling, and ran a pilot soft plastic drop-off bin.

1. Feb. 10, 2025: Big Waste Event
2. March 6, 2025: Soft Plastic Recycling Tabling Event

Data collection from the events:

- Amount of event participation
- Amount of soft plastic collection
- Survey data
- Conversations with attendees

Results

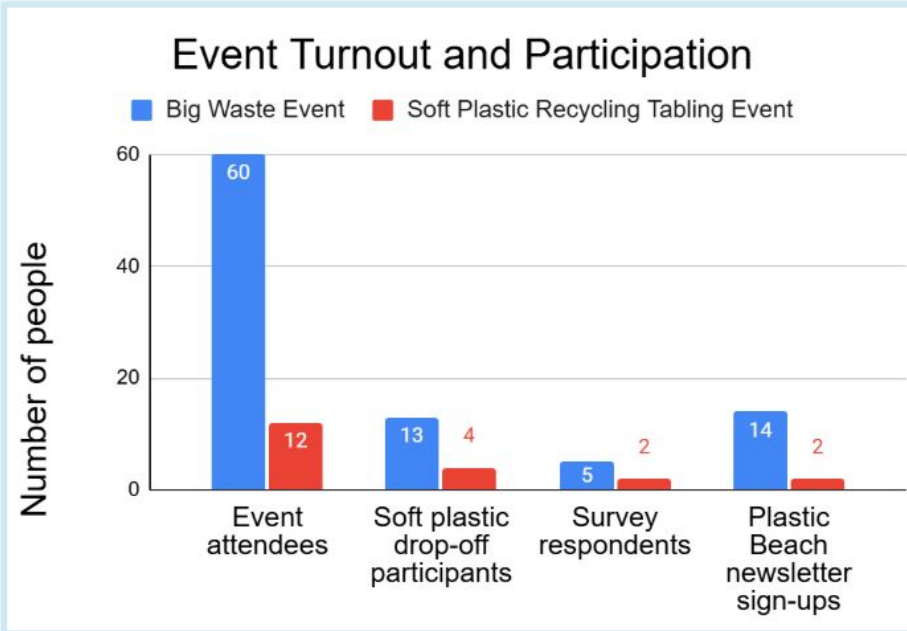


Figure 1: Different forms of participation observed at the two events.

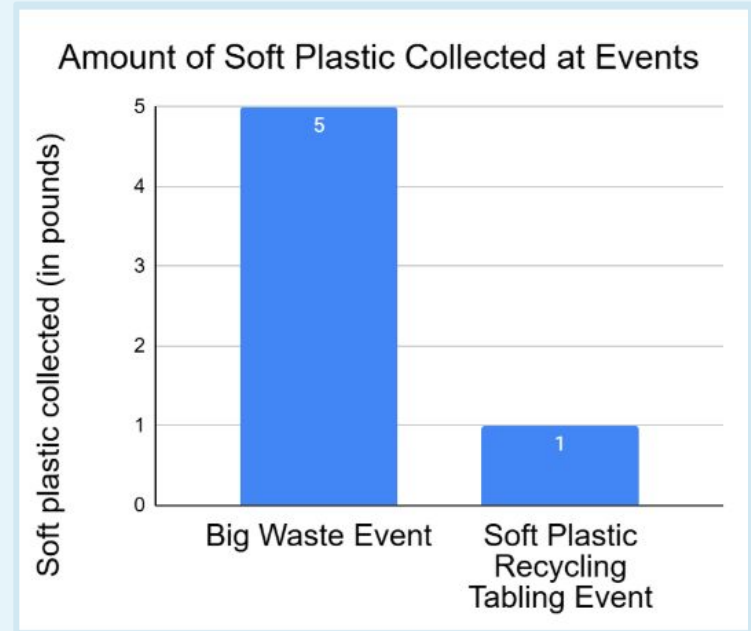


Figure 2: Amount of soft plastic collected via pilot soft plastic drop-off bins at the two events.

Main questions asked by event attendees had to do with what soft plastic is, what Plastic Beach does and how it operates, what happens to the soft plastic once it's collected, and whether there is a way to regularly recycle soft plastic at UCSD.

Limitations

Time: event planning took longer than expected, affecting effectiveness of event advertisement

Data collection mechanisms: surveys had low response rates → survey data not reflective of overall event attendees

Future proposals

I recommend that the UCSD campus set up a partnership with Plastic Beach and establish 2 types of properly run/monitored soft plastic recycling programs

1. Back-of-house collections: campus institutions as partners (e.g., library, bookstore, labs, departments)
2. Student drop offs: located in residential areas of multiple colleges

Progress since my project...

3 back-of-house collection sites established on UCSD campus:

1. Central Utility
2. Bookstore
3. Geisel Library

Student drop-off site at Bookstore

New UCSD student intern on boarded by Plastic Beach for the 2025-26 school year to continue UCSD campus soft plastic recycling efforts!

References

- Avio, C. G., Gorbi, S., & Regoli, F. (2017). Plastics and microplastics in the oceans: From emerging pollutants to emerged threat. *Marine environmental research*, 128, 2-11.
- Karidis, A. (2022, August 31). *Plastics Packaging Recyclers Attribute Low Recycling Rates to Lacking Collections*. Waste 360. <https://www.waste360.com/plastics/plastics-packaging-recyclers-attribute-low-recycling-rates-to-lacking-collections>
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THANK YOU!

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