SEA ISLE CITY BEACH CLEAN-UP REPORT OCTOBER 12, 2024



Volunteers from the Sea Isle City Environmental Commission are shown at the registration station on October 12.

Prepared by Maria Andrews Sea Isle City Environmental Commission

Acknowledgments

The Sea Isle City Environmental Commission is immensely grateful to the many volunteers who participated in the Sea Isle City Beach Clean-Up on October 12, 2024.

We extend a warm thank you to the following groups and city departments who also participated in the Beach Clean-Up:

Sea Isle City Public Works Department Department of Community Services: Public Relations/Recreation/Tourism

We would like to acknowledge Katherine Custer, Director of the Department of Community Services Public Relations/Recreation/Tourism City of Sea Isle City who provided all the photos and captions attached to this report.

We thank Clean Ocean Action for including the data collected from Sea Isle City in their state wide report.

Lastly, I would like to thank all my fellow Sea Isle City Environmental Commission members led by our President Annette Lombardo for their participation and organization of this successful Beach Clean-Up event.

Maria Andrews
SIC Environmental Commission

BEACH CLEAN-UP SUMMARY - October 12, 2024

The Sea Isle City Fall 2024 Beach Clean-Up took place on October 12. Here are some of the highlights:

More than 120 volunteers showed up to clean our beaches. The weather was mostly sunny with a temperature range of 62°F early in the morning to 70°F by noon and a breeze with wind speed of 13 miles per hour. The crowd was composed of a variety of ages and from different locations. All volunteers were enthusiastic, and eager to participate in the Beach Clean-up effort. They managed to collect 2,639 pieces of trash and debris. They turned in 34 data cards, the compilation of which was sent to Clean Ocean Action for inclusion in their state-wide totals.

Number of items collected based on categories displayed below:

| CATEGORY | NUMBER OF ITEMS COLLECTED | PERCENTAGE % |
|---------------------|---------------------------|--------------|
| PLASTIC | 1,629 | 61.73 |
| GLASS | 68 | 2.58 |
| BALLOONS & RUBBER | 95 | 3.6 |
| METAL | 607 | 23 |
| PAPER | 140 | 5.31 |
| WOOD | 51 | 1.93 |
| CLOTH | 43 | 1.63 |
| PERSONAL PROTECTIVE | 6 | 0.23 |
| EQUIPMENT (PPE) | | |
| TOTAL | 2,639 | 100 |



The most heavily reported categories:

| - | Metal Cans: | 533 |
|---|------------------------------|-----|
| - | Plastic Cigarette Filters: | 374 |
| - | Plastic Bottles: | 342 |
| - | Plastic Food/Candy Wrappers: | 306 |
| - | Plastic Bottles Caps/Lids: | 146 |
| - | Ballons and Rubber | 95 |

These 6 categories account for 68% of the total items reported.

According to the data shown above, plastic collected items were the most abundant among all of the categories collected.

Some of the more unusual items collected:

ribbon, sign cardboard bikini vape pens golf balls colored clay beach chair dirty diaper hoka sneaker heart shaped sunglasses lobster buoy Styrofoam

Written volunteer comments:

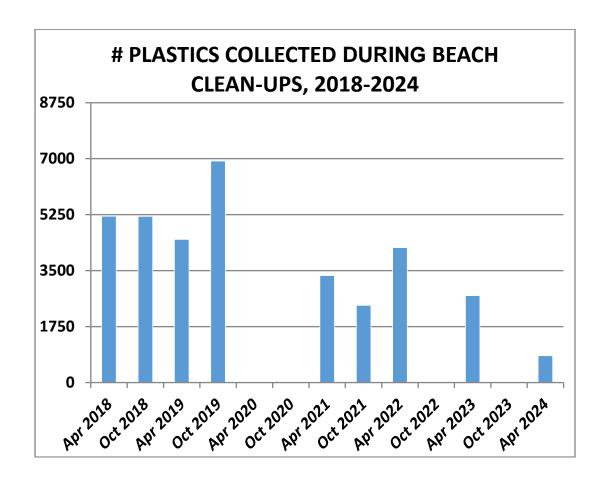
- "It was in dunes mostly. Much cleaner than the last cleanup"
- "Dead birds and horseshoe crabs"
- 'A lot of alcohol, beer, cigarettes, rope, ballon ties"
- "Main beach was clean overall, but dune area had a fair amount of trash"
- "Pretty clean beach"
- "Innumerable white plastic fragments of ribbon-like pieces"
- "A lot of white plastic tape like entangled in seaweed"
- "Planted dune grass"

Recommendations/Conclusion:

Based upon the data collected and the observations recorded by the volunteers, the overall number of plastic items collected during the October 2024 beach clean-up shows a decrease when compared to the data collected from previous beach clean-up events in previous years (see Table 1). The largest decreasing trend from 2018 to 2024 can be observed from the data collected during the October 2019 beach clean-up event and the April 2024 beach cleanup event (see Fig.1). Beach clean-ups were halted in April and October of 2020 due to COVID-19 restrictions. Additionally, unfavorable weather led to the cancellation of clean-up events in October 2022 and October 2023. In April 2024, the turnout was notably smaller, with only 60 volunteers compared to the usual 200 due to inclement weather and limited beach access. October 2024 shows an encouraging trend of decreased number of plastics collected over the last 6 years.

TABLE 1

| CLEAN-UP DATE | # PLASTICS COLLECTED DURING BEACH CLEAN-UPS, 2018-2024 |
|------------------|---|
| Apr-18 | 5,202 |
| Oct-18 | 5,197 |
| Apr-19 | 4,474 |
| Oct-19 | 6,928 |
| Apr-20 | 0 |
| Oct-20 | 0 |
| Apr-21 | 3,347 |
| Oct-21 | 2,416 |
| Apr-22 | 4,221 |
| Oct-22 | 0 |
| Apr-23 | 2,719 |
| Oct-23 | 0 |
| Apr-24 | 839 |
| Oct-24 | 1629 |



Apr-20 and Oct-20 no beach clean-up due to COVID-19, Oct-22 and Oct-23 no beach clean-up due to inclement weather **FIGURE 1**

A positive trend observed at Sea Isle City's beach clean-up events is the decline in plastic bags, foam containers, and plastic straws on the beaches. This improvement can be attributed to New Jersey's May 4, 2022, state law, which prohibits retail and grocery stores, as well as food service businesses, from offering or selling single-use plastic carryout bags and polystyrene foam food service items. Although single-use paper bags are still permitted, grocery stores over 2,500 square feet must provide or sell reusable bags. This ban has substantially helped reduce beach litter, limiting the harmful environmental impact on marine life.

Data gathered from the October 12, 2024, beach clean-up show a promising decline in cigarette filters compared to the data from April 2023, though cigarette litter remains a persistent issue (Table 2 and Figure 2). Cigarette filters are made from non-biodegradable plastics that release toxic chemicals, including heavy metals like arsenic and organic compounds such as nicotine and polycyclic aromatic hydrocarbons. These substances pose significant risks to marine life when they leach into the environment from discarded filters.

New Jersey took steps to address cigarette litter by revising the New Jersey Smoke-Free Air Act in July 2018, prohibiting smoking and vaping on public beaches and parks effective January 1, 2019. Sea Isle City enforced this regulation on all beaches and parks, with the

Sea Isle City Police Department responsible for enforcement and public education on the ban.

Since the smoking ban, cigarette filter litter has decreased significantly. Data from beach clean-up events demonstrate this decline; for instance, the number of filters collected dropped from 1,154 in October 2018 to 339 in April 2022, reflecting a 55% reduction. A comparison between the April 2021 event (716 filters) and the April 2023 event (488 filters) shows a further 19% reduction. However, a slight increase of 18% was noted in April 2023 compared to April 2022.

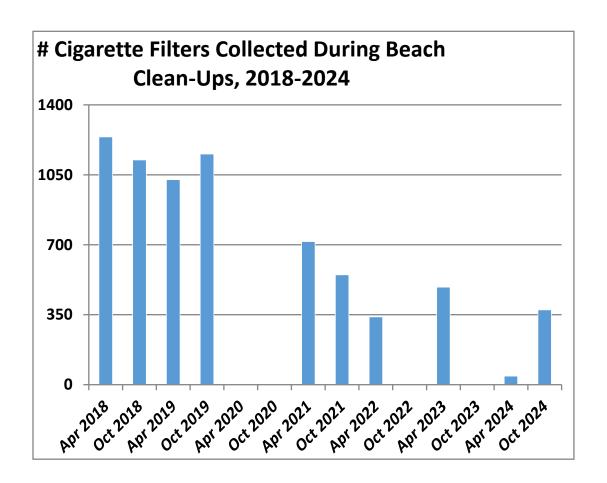
The April 2024 clean-up event recorded just 43 filters, a significant decrease from prior years. This reduction may be partly due to lower trash collection overall, likely influenced by reduced volunteer turnout and restricted beach access.

The most recent event in October 2024 reinforced this positive trend, suggesting a continuing decline in cigarette filter litter.

The Sea Isle City Environmental Commission will continue monitoring beach clean-up data to evaluate the ongoing effectiveness of the smoking ban and its role in reducing cigarette filter pollution on the city's beaches.

TABLE 2

| CLEAN-UP DATE | # CIGARETTE FILTERS COLLECTED DURING BEACH CLEAN-UPS, 2018-2024 |
|------------------|--|
| Apr-18 | 1,240 |
| Oct-18 | 1,124 |
| Apr-19 | 1,026 |
| Oct-19 | 1,154 |
| Apr-20 | 0 |
| Oct-20 | 0 |
| Apr-21 | 716 |
| Oct-21 | 550 |
| Apr-22 | 339 |
| Oct-22 | 0 |
| Apr-23 | 488 |
| Oct-23 | 0 |
| Apr-24 | 43 |
| Oct-24 | 374 |



Apr-20 and Oct-20 no beach clean-up due to COVID-19, Oct-22 and Oct-23 no beach clean-up due to inclement weather

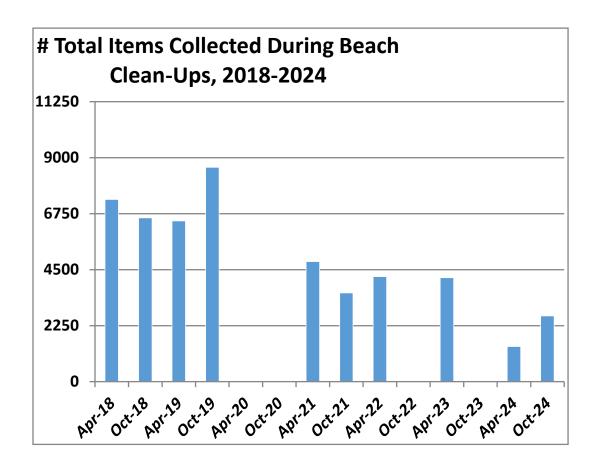
FIGURE 2

As shown in Table 3 and Figure 3, there is a clear and promising trend: the total number of litter items collected during beach clean-ups has steadily decreased from April 2018 to October 2024. This positive trajectory highlights the effectiveness of ongoing efforts to keep our beaches clean.

These encouraging results motivate us to continue this progress and emphasize our shared responsibility in maintaining the cleanliness and health of our beach environment.

TABLE 3

| CLEAN-UP DATE | # TOTAL ITEMS COLLECTED DURING BEACH CLEAN-UPS, 2018-2024 |
|------------------|--|
| Apr-18 | 7,318 |
| Oct-18 | 6,580 |
| Apr-19 | 6,458 |
| Oct-19 | 8,615 |
| Apr-20 | 0 |
| Oct-20 | 0 |
| Apr-21 | 4,826 |
| Oct-21 | 3,563 |
| Apr-22 | 4,221 |
| Oct-22 | 0 |
| Apr-23 | 4,173 |
| Oct-23 | 0 |
| Apr-24 | 1,408 |
| Oct-24 | 2,639 |



Apr-20 and Oct-20 no beach clean-up due to COVID-19, Oct-22 and Oct-23 no beach clean-up due to inclement weather **FIGURE 3**

During the October 2024 beach clean-up event, volunteers were not only involved in litter collection but also participated in dune restoration efforts. Each volunteer received stacks of dune grass to plant along the dunes, raising awareness about the importance of dune restoration for shoreline stability and ecosystem health. This hands-on activity highlighted the role of dune vegetation in preventing erosion, providing habitats for local wildlife, and acting as natural barriers against storm surges. The combined efforts of cleaning and planting reinforced the community's commitment to preserving both the cleanliness and resilience of Sea Isle City's beaches.

Photos of the Beach Clean-Up



Beach Clean-up participants are shown being greeted by Environmental Commission volunteers at the registration tables on JFK Boulevard.



Members of the Wieler family are shown with stacks of dune grass that were planted during the Fall Beach Clean-up.



Pre-registration is not required during Sea Isle City's Beach Clean-ups. Volunteers simply show up, and then they are given supplies and a specific area to clean.



The Dagrosa family proved that people of all ages can make a positive impact on the environment during Beach Clean-up events.



Members of the John family helped clear trash and windblown debris from Sea Isle's shoreline during the 2024 Autumn Beach Clean-up.



Walking on the dunes is usually prohibited; however, during the Sea Isle's Beach Cleanups, volunteers are permitted to tread lightly on the dunes while in search of trash.



Marie and Jamie Mulholland were among the many volunteers who were eager to show Mother Nature that they care on October 12.

Photos by Katherine Custer, Sea Isle City Public Relations