## SEA ISLE CITY BEACH CLEAN-UP REPORT APRIL 14, 2024



Sea Isle City Environmental Commission Chairperson Annette Lombardo (front, right) is shown at the 2024 Spring Beach Clean-Up with fellow commission members Abby Powell, Steve Ahern and Sue Williamson.

> 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 April 14, 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
First Bank of Sea Isle
Girl Scout Troop 20113 Medford Lakes, NJ

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

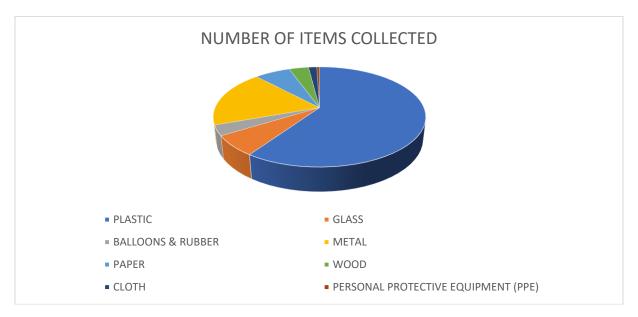
#### BEACH CLEAN-UP SUMMARY – April 14, 2024

The Sea Isle City April 2024 Beach Clean-Up took place on April 14. Here are some of the highlights:

More than 60 volunteers showed up to clean our beaches. The weather was mostly cloudy with a temperature range of 60°F early in the morning to 65°F by noon and a breeze with wind speed of 15 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 1,408 pieces of trash and debris. They turned in 20 data cards, the compilation of which was sent to Clean Ocean Action for inclusion in their state-wide totals. Beach access along streets 75th through 94th was temporarily unavailable due to the ongoing beach replenishment project in Sea Isle City by the U.S. Army Corps of Engineers. Additionally, the planned beach clean-up originally set for Saturday, April 13th was rescheduled to Sunday, April 14th, due to adverse weather conditions and strong winds.

Number of items collected based on categories displayed below:

CATEGORY	NUMBER OF ITEMS COLLECTED	PERCENTAGE %
PLASTIC	839	60
GLASS	93	7
BALLOONS & RUBBER	47	3
METAL	260	18
PAPER	91	6
WOOD	50	4
CLOTH	21	1.5
PERSONAL PROTECTIVE	7	0.5
EQUIPMENT (PPE)		
TOTAL	1,408	100



#### The most heavily reported categories:

-	Plastic Food/Candy Wrappers:	181
-	Plastic Bottles:	172
-	Plastic Bottles Caps/Lids:	92
-	Foam Plastic (all forms):	99
-	Plastic Bags:	69
-	Plastic Pieces:	56
-	Plastic Cigarette Filters:	43
-	Metal Bottle Caps:	118
-	Metal Cans:	224

These 9 categories account for 75% 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:

Roof shingles	2x4 piece of wood
Several balloons with attached ribbons and strings	Long heavy boat rope

SIC trash can lid Sneaker

Axe body spray Plastic Easter egg

Men's underwearTire pieceDryer ventEgg cartonConstruction debrisCO2 cartridge

#### Written volunteer comments:

<sup>&</sup>quot;Notice other volunteers picking up horseshoe crab shells-we think they should be left on beach"

<sup>&</sup>quot;Mostly alcoholic containers"

<sup>&</sup>quot;Much better than prior clean-ups"

<sup>&</sup>quot;Most of the trash was collected from the entrances to the beaches, not on the beaches themselves. The actual beaches were relatively free of trash"

<sup>&</sup>quot;Beach was pretty clean. Birds looked like they were preyed upon"

<sup>&</sup>quot;Thank you for organizing"

<sup>&</sup>quot;Beach pretty clean this year"

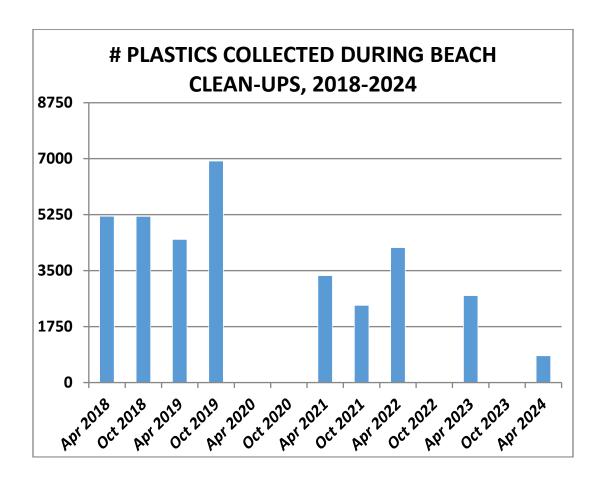
<sup>&</sup>quot;Much less trash than any other year? Storms blew stuff into ocean?"

#### Recommendations/Conclusion:

Based upon the data collected and the observations recorded by the volunteers, the overall number of plastic items collected during the April 2024 beach cleanup 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. Beach access was limited from streets 75th to 94th, and the event originally slated for Saturday, April 13th, had to be rescheduled to Sunday, April 14th, at the last minute due to high winds and inclement weather. These factors likely contributed to the reduced number of plastic items collected.

TABLE 1

CLEAN-UP	# PLASTICS COLLECTED DURING BEACH CLEAN-UPS,
DATE	2018-2022
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



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** 

Items of concern are plastic store bags, foam and plastic straws that are repeatedly found on our beaches. They pose an environmental damage to the beach and specially to marine life. As of May 4, 2022, New Jersey state law prohibits retail stores, grocery stores, and food service businesses from offering or selling single-use plastic carryout bags and polystyrene foam food service products. Single-use paper carryout bags are permitted, with the exception of grocery stores that are equal to or larger than 2500 square feet, which are required to provide or sell reusable carryout bags instead. This ban on plastic grocery bags, Styrofoam food containers, and plastic straws has played a significant role in preventing and reducing harmful effects on the beach environment and marine life.

Data gathered from the April 14, 2024 beach clean-up event indicates a decrease in the number of cigarette filters collected compared to the data from April 2023, signaling an encouraging overall decline in the presence of cigarette filters during beach clean-ups (refer to Table 2). However, cigarette filters, or butts, persist as a form of litter on Sea Isle beaches. They are composed of non-biodegradable toxic plastics. Various scientific studies have identified toxic heavy metals like arsenic, as well as harmful organic compounds such as nicotine and polycyclic aromatic hydrocarbons, which are released into the environment by discarded cigarette butts. These chemicals can leach from the butts, posing acute toxic effects on aquatic organisms.

In July 2018, the governor of New Jersey enacted a revision of the New Jersey Smoke-Free Air Act, which included a ban on smoking and vaping at public beaches and parks. This ban officially took effect on January 1, 2019. In alignment with state law, Sea Isle City implemented a prohibition on smoking across all of its beaches and parks. Enforcement and public education regarding the smoking ban are managed by the Sea Isle City Police Department.

The implementation of the smoking ban appears to have had a significant impact on reducing the presence of cigarette filters littered on the beach, dunes, and their surroundings, consequently leading to a decrease in associated toxic effects. The Sea Isle City Environmental Commission has been assessing the effectiveness of this ban by comparing data on plastic cigarette filters collected from beach clean-up events conducted before and after the ban was enforced (refer to Table 2 and Figure 2).

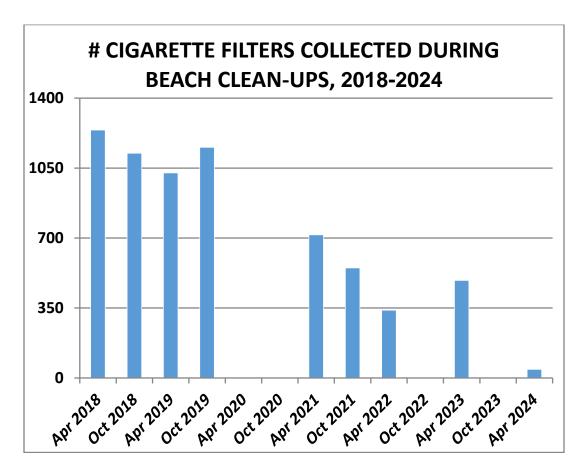
The most significant decrease in the number of plastic cigarette filters collected was observed over time, notably from the October 2018 beach clean-up event (1,154) to the April 2022 event (339), representing a substantial 55% decrease overall. Furthermore, a comparison between the number of plastic cigarette filters collected during the April 2021 beach clean-up event (716) and those collected in April 2023 (488) reveals a notable 19% reduction. However, data from April 2023 indicates an 18% increase when compared to the figures recorded in April 2022.

During the April 2024 beach clean-up event, the number of plastic cigarette filters collected was notably lower (43) compared to previous clean-up events. This decrease could potentially be attributed to the overall reduction in trash collected, likely influenced by a lower turnout of volunteers and beach access restrictions.

Continued evaluation of beach clean-up collection data will be conducted to further assess the effectiveness of the smoking ban, particularly in terms of the ongoing decrease in plastic cigarette filters found on Sea Isle beaches over time.

**TABLE 2** 

CLEAN-UP	# CIGARETTE FILTERS COLLECTED DURING BEACH
DATE	CLEAN-UPS, 2018-2022
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



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

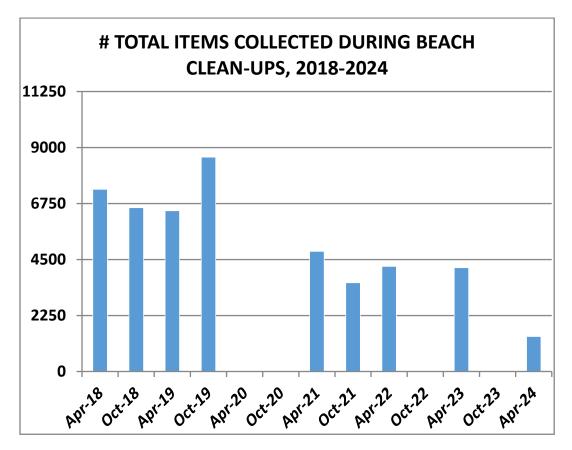
# FIGURE 2

The results presented in Table 3 and Figure 3 reveal a promising trend: the overall number of litter items identified and retrieved during beach clean-ups has consistently diminished from April 2018 to April 2024. This positive trajectory underscores the effectiveness of ongoing efforts to maintain the cleanliness of our beaches.

Such encouraging findings inspire us all to sustain this momentum and embrace our collective responsibility in preserving the cleanliness of our beaches.

**TABLE 3** 

CLEAN-UP	# TOTAL ITEMS COLLECTED DURING BEACH CLEAN-UPS,
DATE	2018-2022
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



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

### Photos of the Beach Clean-Up



When volunteers registered to patriciate in Sea Isle City's Spring Beach Clean-Up, they were greeted by the friendly members of the Sea Isle City Environmental Commission.



Members of the Tregear and Ottinger families participated in Sea Isle City's 2024 Spring Beach Clean-Up.



Some participants at the Spring Beach Clean-Up showed their love for Diamondback Terrapin Turtles by purchasing "Watch For Turtles" signs, which can be displayed on fronts yards during nesting season.



Neighbors Douglas Williamson and Kathy Callahan, of Sea Isle City's Townsends Inlet section, were among the Beach Clean-Up participants.



Hendrix Devlin, age 3, and his father, Matt, helped clean Sea Isle's beaches and dunes on April 14.



On most days of the year, people are not permitted to walk on Sea Isle City's dunes. However, during the Environmental Commission's annual Beach Clean-Ups, volunteers are permitted to gently walk on the dunes in search of trash and debris.



Employees of 1<sup>st</sup> Bank of Sea Isle City are regular participants at Sea Isle City's Beach Clean-Ups. Shown representing 1<sup>st</sup> Bank on April 14 are (from left) Joe Krajicek, Lauren Campbell Barnhart and Sebastian Barnhart.



During the Spring Beach Clean-Up, Sea Isle's 32<sup>nd</sup> Street beaches and dunes were cleared of trash and windblown debris, thanks to nearby property owners, who helped beautify their favorite stretch of shoreline with smiles on their faces.



Lt. Mike Farley, of the Sea Isle City Beach Patrol, donated his time to clean the beaches and dunes at 48<sup>th</sup> Street.

Photos by Katherine Custer, Sea Isle City Public Relations