SEA ISLE CITY BEACH CLEAN-UP REPORT APRIL 9, 2022



Sea Isle City Environmental Commission members during the Beach Clean-Up on April 9

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 9, 2022.

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 Scouts of America Coca Cola

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 9, 2022

The Sea Isle City April 2022 Beach Clean-Up took place on April 9. Here are some of the highlights:

More than 200 volunteers showed up to clean our beaches. The weather was mostly cloudy with a temperature range of 48°F early in the morning to 56°F by noon and a breeze with wind speed of 11 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 4,221 pieces of trash and debris. They turned in 50 data cards, the compilation of which was sent to Clean Ocean Action for inclusion in their state-wide totals.

CATEGORY	NUMBER OF ITEMS COLLECTED	PERCENTAGE %
PLASTIC	2,822	67
GLASS	111	3
BALLOONS & RUBBER	109	2
METAL	575	14
PAPER	437	10
WOOD	79	2
CLOTH	54	1
PERSONAL PROTECTIVE	34	1
EQUIPMENT (PPE)		
TOTAL	4,221	100

Number of items collected based on categories displayed below:



The most heavily reported categories:

-	Plastic Cigarette Filters:	339
-	Plastic Food/Candy Wrappers:	449
-	Plastic Bottles Caps/Lids:	233
-	Foam Plastic (all forms):	441
-	Plastic Bottles:	382
-	Plastic Pieces:	191
-	Plastic Bags:	243
-	Metal Bottle Caps:	72
-	Metal Cans:	407

These ten categories account for 65% of the total items reported.

According to the data shown above, plastic collected items were the most abundant among all of the categories collected. Within the plastic category, cigarette filters represented 12% of the total collected plastic items.

Some of the more unusual items collected:

Face masks Lipstick A seal sunning itself on the beach Golf ball Sandals Blunt wrapper Wig Chicken and spare rib bones 12 mini alcohol bottles Christmas tree with all of the light on it Flip flops Sunglasses Fishing line Boogie board U.S. Flag Beer funnel and tube White ghost crab Flag ribbon Yellow crime scene tapes Pacifier Underwear Vape pens Cell phone Bike seat Fish head \$20 bill Soccer ball Snake Building material Ironing board

Written volunteer comments:

"The dunes host the most trash"

"We did not find any cigarette butts. In prior years the cigarettes were the most noted piece of trash"

"Tell construction firms to pick up - much insulation & construction debris - they were messy"

"8th street had the most trash"

"This year there was less trash and construction debris"

"The dunes need repair. We fixed the fence as best we could"

"The entrance at 10th street is a hazard. It is almost gone and difficult to walk through"

"Not too bad around 33rd. Dune in good shape. Very little trash there. Plastic bottle caps seemed to be what I picked up the most"

"Construction trash"

"Thank you for organizing this"

"Beach was not plentiful"

"Not as bad as expected"

"Lots of horseshoe crabs"

"More balloons than I expected"

"Seemed dirtier that the last clean up in October but less cigarette butts"

"31,30,29 streets not too bad. Lots of building materials"

"Fix the fences"

"Not as much debris as last April but I also cleaned up a different beach area that time"

"A lot of Styrofoam and shoes"

"Lots of empty bottles/cans in shrubs between 61 and 62 Pleasure"

"Beach is neat and clean to start and even better now"

"Well organized"

"Surprised to not find a single cigarette butt!"

Recommendations/Conclusion:

Based upon the data collected and the observations recorded by the volunteers, the overall number of plastic items collected during the April 2022 beach cleanup shows an increase when compared to the data collected from previous beach clean-up events in 2021 (see Table 1). The largest decreasing trend from 2018 to 2022 can be observed from the data collected during the October 2019 beach clean-up event and the April 2021 beach cleanup event (see Fig.1). Beach clean-ups did not take place during April 2020 and October 2020 due to COVID-19 restrictions.

TABLE	1
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CLEAN-UP DATE	# PLASTICS COLLECTED DURING BEACH CLEAN-UPS, 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

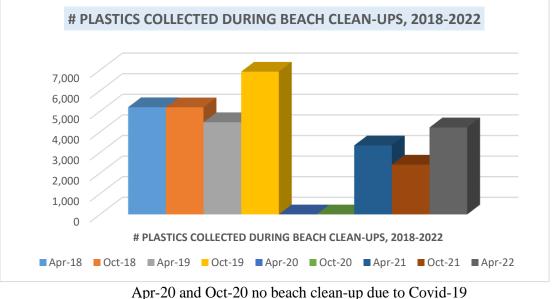


FIGURE 1

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. According to New Jersey state law, "Starting May 4, 2022, New Jersey retail stores, grocery stores and food service businesses may not provide or sell single-use plastic carryout bags and polystyrene foam food service products. Single-use paper carryout bags are allowed to be provided or sold, except by grocery stores equal to or larger than 2500 square feet, which may only provide or sell reusable carryout bags" (NJDEP). This ban on plastic grocery store bags, Styrofoam food containers and plastic straws will aid to prevent and minimize any harmful effects to the beach environment and marine life.

Data collection from the April 9, 2022 beach clean-up event, shows a significant and encouraging decrease in the number of collected cigarette filters compared to previous years beach cleanups (see Table 2). However, cigarette filters or butts are still a form of litter found in our Sea Isle beaches. Cigarette butts are non-biodegradable toxic plastics. Numerous scientific studies have found toxic heavy metals, such as arsenic, and toxic organic compounds, such as nicotine and polycyclic aromatic hydrocarbons released to the environment by cigarette butts litter. These chemicals can also leach out of the cigarette butt and pose acute toxic effects to aquatic organisms.

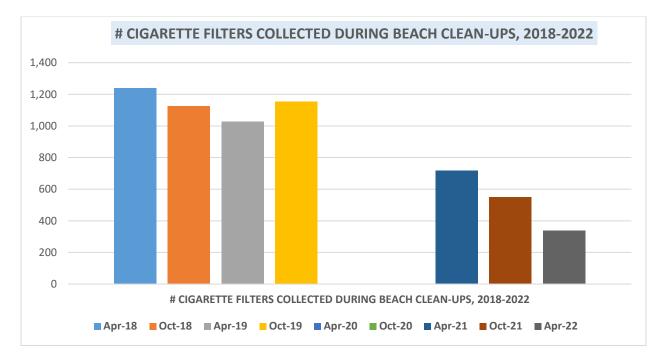
New Jersey's governor signed into law a revision of the New Jersey Smoke-Free Air Act in July, 2018 banning smoking and vaping at public beaches and parks. The ban went into effect in January 1, 2019. Sea Isle City, following New Jersey state law, banned smoking on all of its beaches and parks. Sea Isle City will not be designating any part of our beaches for smoking. The Sea Isle City Police Department is responsible for the enforcement and education for the public of the smoking ban.

This smoking ban can be correlated to the decrease in the number of cigarette filters littered on the beach, dunes and their proximity and this observed decrease should also provide a decrease in the toxic effects triggered by cigarette butts. Sea Isle City Environmental Commission has been evaluating the effectiveness of this ban by comparing the number of plastic cigarette filters collected from previous beach clean-up events that took place before the smoking ban went into effect to data collected after the smoking ban was imposed (see Table 2 and Figure 2). In that regard, the most pronounced decrease in the number of plastic cigarette filters collected has been taken place over time from the October 2018 beach clean-up event (1,154) to the April 2022 (339) beach clean-up event. This represents a 55% decrease overall. The decrease shown by comparing the number of plastic cigarette filters collected during the April 2022 beach clean-up event (339) signifies a 36% reduction.

Further beach clean-up collection data will be evaluated to continue to assess the effectiveness of the smoking ban shown as a decrease of plastic cigarette filters found on Sea Isle beaches over time.

TABLE 2

CLEAN-UP DATE	# CIGARETTE FILTERS COLLECTED DURING BEACH 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



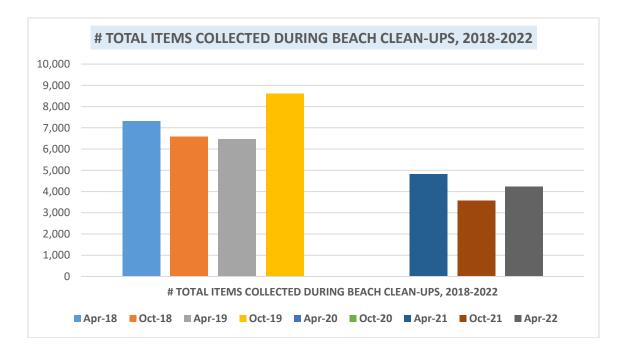
Apr-20 and Oct-20 no beach clean-up due to Covid-19 FIGURE 2

The findings reported in Table 3 and Figure 3. show an encouraging trend – the total number of litter items discovered and collected during beach cleanups has steadily decreased throughout the period of April 2018 to April 2022.

This shows a positive trend and invites everyone to continue this momentum and take ownership in the effort to keeping our beaches clean.

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

TABLE 3



Apr-20 and Oct-20 no beach clean-up due to Covid-19 FIGURE 3

Photos of the Beach Clean-Up



Environmental Commission volunteer Abby Powell (with white cap) is shown at the registration table during the Beach Clean Up on April 9.



People of all ages helped clear trash and debris from Sea Isle City's beaches and dunes on April 9.



Shown on April 9, employees from First Bank of Sea Isle City are familiar faces at the Beach Clean-ups.



Individuals, groups and representatives from local businesses and organizations participated in the April 9 Beach Clean-up in Sea Isle City – including employees from the Coca Cola Distribution Center in Marmora.



Ruth Brown, of Sea Isle City, was among the many people who donated their time during the 2022 Spring Beach Clean-up on April 9.



Members of the Organ family cleaned the dunes and beaches on April 9.

Photos by Katherine Custer, Sea Isle City Public Relations