

2022 | POWERED BY PEOPLE

Beach Cleanup Annual Report



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Contents

03 Introduction

04 National Overview

05 The Better Beach Alliance

07 Cleanup Database

08 Program Results

09 A Closer Look

10 Regional Overview

11 Regional Impacts

12 Regional Stories

22 Science and Policy

23 Expanded Foam, Expanded Problems

25 Picking Up (and Banning) the Pieces

26 Conclusion



Introduction

The 2022 Beach Cleanup Report highlights the success of Surfrider's network as our program continues to expand into different places with new people, building our community of ocean advocates.

The Surfrider Foundation's Plastic Pollution Initiative aims to eliminate the impacts of plastic in the ocean by raising awareness about the dangers of pollution and by advocating for the reduction of single-use plastics. This includes decreasing single-use plastics at the source and helping to ensure that all existing plastic is reused or recycled rather than being burned or ending up in landfills and the environment. Surfrider's Plastic Pollution Initiative includes both programmatic and policy work. The policy arm focuses on campaign efforts, which have led to hundreds of successful plastic pollution reduction laws. The programmatic aspects include Surfrider's Ocean Friendly Restaurants program, which recognizes direct action to decrease single-use plastics, in addition to the Better Beach Alliance beach cleanup program, which is a foundational step in reducing the amount of plastic ending up in the ocean.

With everything going on in the world in recent years, retreating into whatever comfort and safety that we can find may feel easier than facing challenges head on. But the Surfrider Foundation emphasizes community and connection in everything that we do: We fight together to protect our ocean, waves and beaches. With that in mind, we identified ways in which we could be more inclusive, and create support and space for all people. And although there is still more work to be done, reflecting back on 2022 reveals that the work we are doing brings people together. We nearly doubled the number of volunteers who attended Surfrider beach cleanups, compared to the previous year, while capturing valuable data from over 1,000 cleanups. As we continue to work to ensure all interested people have a place at Surfrider, we are excited to grow our beach cleanup program and include everyone in our shared mission to fight for ocean protection.

The 2022 Beach Cleanup Report highlights the success of Surfrider's network as our program continues to expand into different places with new people, building our community of ocean advocates. This report reviews how plastic impacts various coastal regions and shines a light on the items most often collected during Surfrider beach cleanups. We dive into expanded polystyrene (EPS) foam and explore what it is, why it is so harmful to people and the planet, and how our policy experts and grassroots activists are passing monumental bans to reduce our dependence on single-use plastics.

Surfrider's Beach Cleanup program tackles ocean and coastal trash, caused primarily by rampant plastic pollution, through organized community action. The program also supports public education efforts and provides underlying data to bolster our plastic pollution advocacy campaigns. Beach cleanups inspire volunteers to become grassroots activists, creating a ripple effect of positive changes in their own consumer behavior, within their wider communities, and beyond. For more information and to see beach cleanup data, visit Surfrider's [beach cleanup database](#).

We nearly doubled the number of volunteers who attended Surfrider beach cleanups, compared to last year.



1,201

Total Cleanups

580,126

Total Items Collected

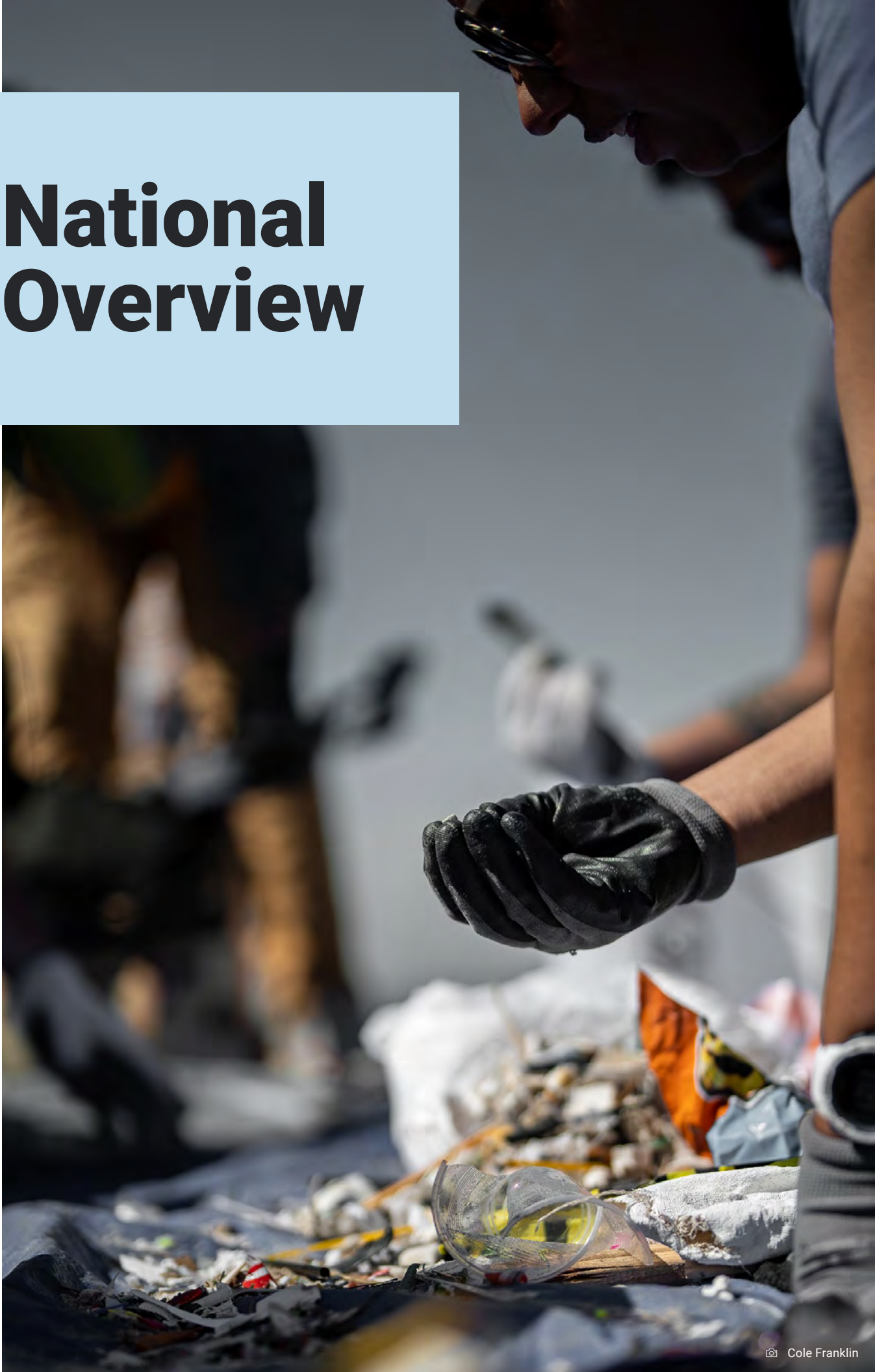
30,183

Volunteers Engaged

143,070

Pounds Of Trash Collected

National Overview



The Better Beach Alliance

The Better Beach Alliance was founded in 2018 by the Surfrider Foundation and our Surf Industry Coastal Defender partner, REEF, to increase the effectiveness and overall impact of Surfrider's national Beach Cleanup program through standardization and improved tools. The intent of the Better Beach Alliance is to encourage participation from individuals, community organizations, local businesses

and global companies and to build a lasting coalition of coastal defenders working toward one shared and ultimate goal, which is to rid our ocean, waves and beaches of plastic pollution. This support from REEF in 2022 enabled Surfrider to continue to aggregate the collective impact of our grassroots cleanup efforts and to drive the local, state and federal policy efforts of our Plastic Pollution Initiative.

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For three years, REEF's financial commitment to the Better Beach Alliance has expanded internationally to also support Surfrider Foundation Europe. In 2022, REEF set out to extend the engagement in multiple countries for our first global cleanup campaign with Surfrider's many international affiliates.

Under the Better Beach Alliance, to honor and celebrate International Coastal Cleanup Day on September 17, 2022, REEF and Surfrider cohosted beach cleanups and volunteer celebration events in San Diego, California; Biarritz, France with Surfrider Europe; Tofino with Surfrider Canada; Buenos Aires with Surfrider Argentina; Playa los Lances with Surfrider Spain; Ericeira with Surfrider Portugal; Tuscany with Surfrider Italy; Torquay with Surfrider Australia; and a cleanup event with Surfrider Japan.

The core goal of the Better Beach Alliance is the execution and fulfillment of community-driven cleanups that reflect the unique topographies and pollution concerns of respective locations. Engaging hundreds of volunteers, removing thousands of pounds of trash and plastic pollution and

Engaging hundreds of volunteers, removing thousands of pounds of trash and plastic pollution and then amplifying this impact through virtual storytelling efforts demonstrates how seemingly small actions can contribute to a larger, global movement.

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We are incredibly honored to have REEF's continued support of the Better Beach Alliance and look forward to seeing where the program brings us in the years to come.



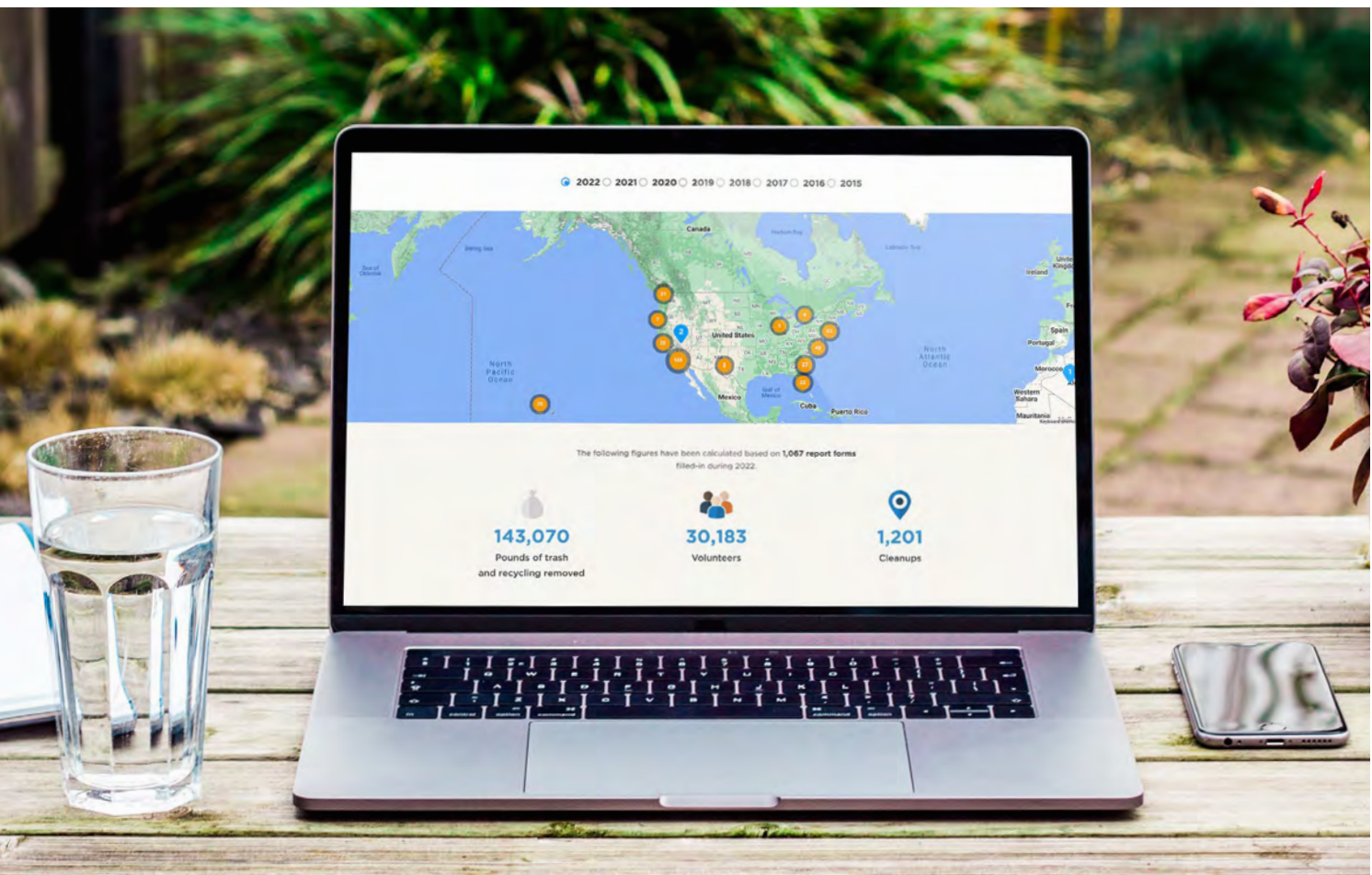
Cleanup Database

Created in 2019, Surfrider's beach cleanup database continues to elevate the Beach Cleanup program by allowing easy data reporting across our network of chapters and student clubs. It helps to amplify the work of Surfrider staff and volunteers by providing an accessible platform to showcase our collective impacts. The database serves as an excellent visual aid to understand the geographic reach of Surfrider cleanups and to easily identify commonly-found items.

As a result of the many changes during the last couple of years, we experienced new cleanup leadership among Surfrider chapters. In 2022, we launched a three-part spring training series for our beach cleanup leaders. These trainings covered an array of topics from basics, such as how to use the database and why data collection is important, to how to use cleanup data to pass successful policies. The series

involved speakers from both Surfrider staff and chapter volunteers who work tirelessly toward the success of the beach cleanup program. We even featured a presentation from a town trustee who championed a 2021 balloon ban on Eastern Long Island. The spring cleanup webinar series helped to set the groundwork for our chapters to thrive with their cleanup programs and aided in the overall programmatic success we had in 2022.

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Program Results

Working together across 1,201 cleanups, 30,183 volunteers removed over 140,000 pounds of trash and recycling from the environment to ultimately reduce the flow of plastic pollution into our ocean. We nearly doubled the amount of volunteers engaged in beach cleanups with an additional 14,319 activists cleaning our coasts compared to last year. This is a huge accomplishment and speaks volumes to the work Surfrider is doing on the ground to engage local communities and prove that the beach belongs to everyone.

1,201

Total Cleanups

1,316

Miles of Beach Cleaned

30,183

Volunteers Engaged

7,049

Volunteer Hours

580,126

Total Items Collected

143,070

Pounds Of Trash Collected

We nearly doubled the amount of volunteers engaged in beach cleanups with an additional 14,319 activists cleaning our coasts compared to last year.

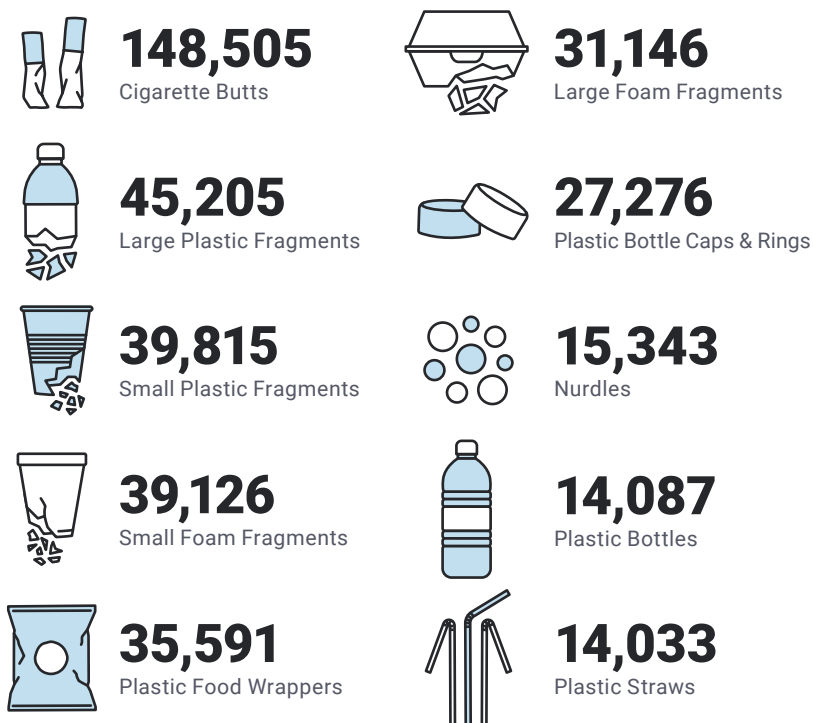


A Closer Look

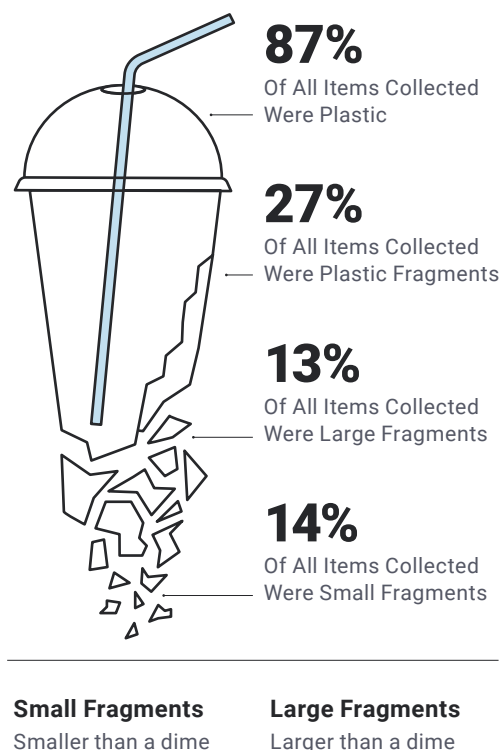
Of all the items collected and recorded during beach cleanups in 2022, 87.33% of them were plastic. About 13.6% of all items collected were plastic fragments smaller than a dime and 13.2% were plastic fragments larger than a dime. This means that out of the 580,126 items found during beach cleanups, over one quarter of them (26.8%) were plastic fragments.

Once again, every single one of the top 10 items found during cleanups were made of plastic and nearly 90% of all items collected were plastic. These figures continue to confirm, year over year, that plastic is everywhere and it isn't going anywhere without large-scale legislative and industry change shifting away from single-use plastic products.

TOP ITEMS COLLECTED



PLASTIC BREAKDOWN



BROAD USAGE CATEGORIES



These figures continue to confirm, year over year, that plastic is everywhere and it isn't going anywhere without large-scale legislative and industry change shifting away from single-use plastic products.

Regional Overview

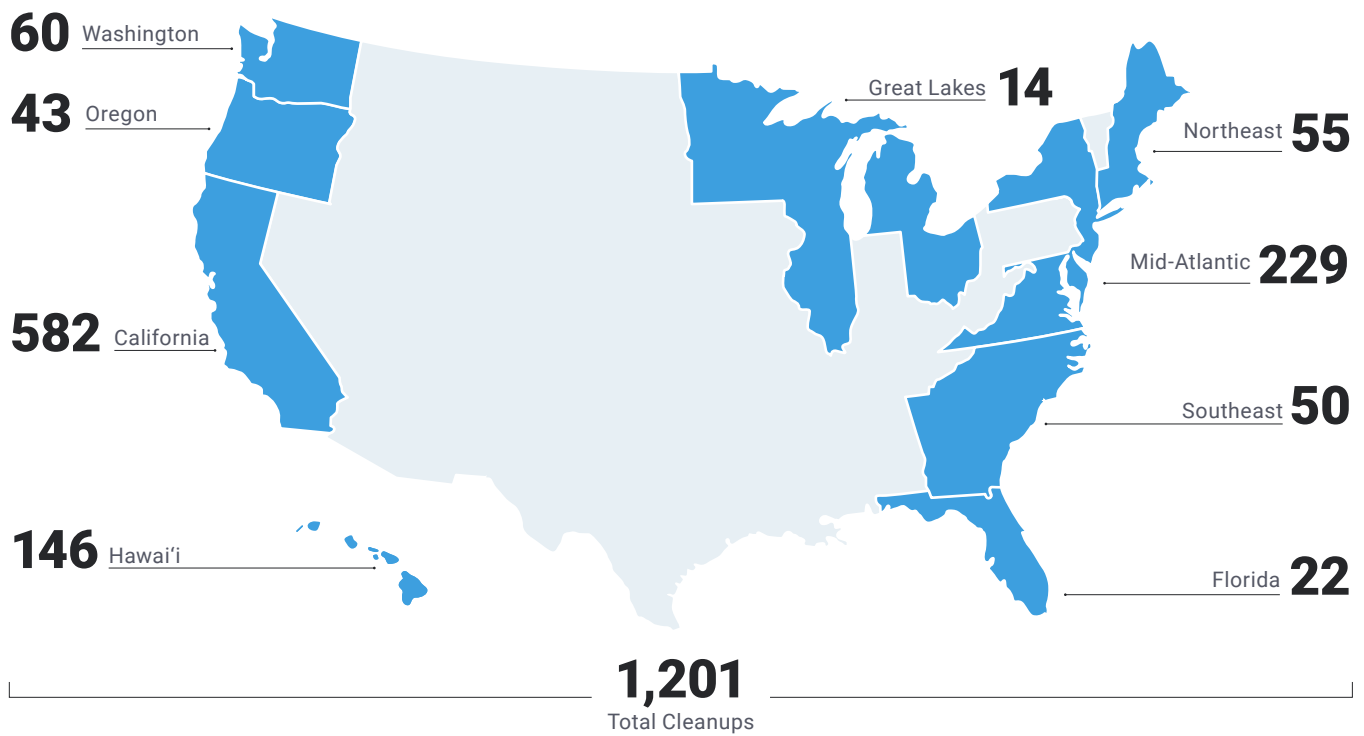


Regional Impacts

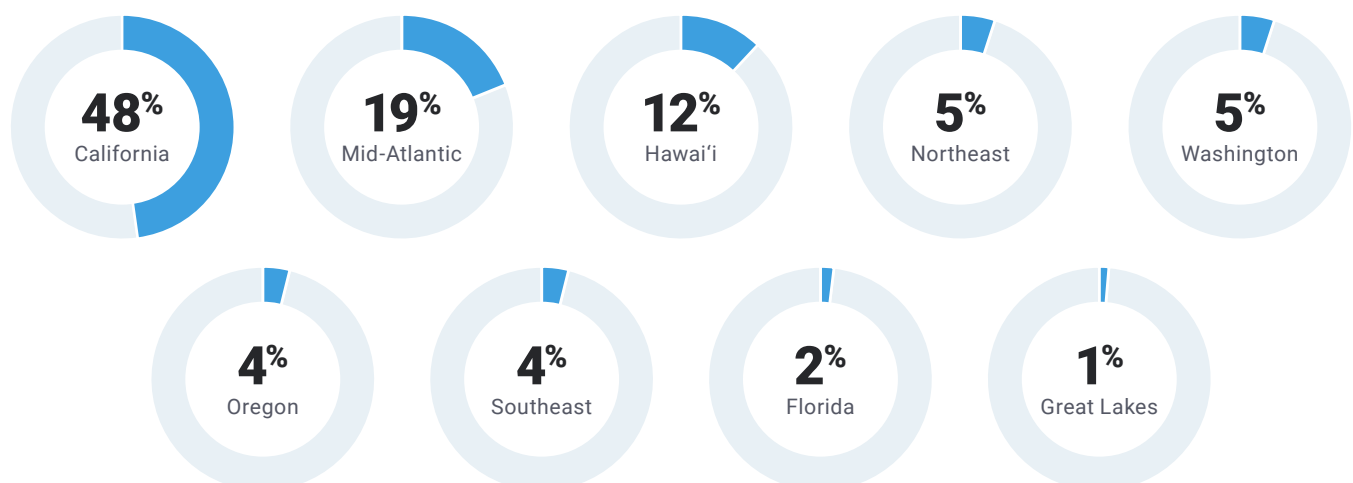
The Surfrider Foundation's grassroots network of chapters and student clubs serves as the first response to local threats in coastal communities in the U.S. With more than 200 chapters and student clubs, Surfrider volunteers

across the nation are working within their communities to create change. We caught up with Surfrider leaders about their work in 2022 and the impacts they are having in their regions.

CLEANUPS BY REGION



PERCENT OF TOTAL CLEANUPS BY REGION



Regional Stories

HAWAI'I

March 22, 2022 marked 15 years since the Kaua'i Chapter's first 'Net Patrol' at Nukoli'i Beach. Surfrider volunteers – Sheri Saari, Barbara Wiedner, Lisa Bright – joined three local beachgoers – Jamiee Makiano and Marc Udarbe of Kaua'i High School and Jasmine Makiano of Chiefess Kamakaheile Middle School – to team up and remove a large tangle of fishing nets that washed up on the East Shore beach. From 2007 to 2013, the Kaua'i Chapter's Net Patrol program model was to go out to targeted nets as needed by small groups of volunteers. We typically went out two to three times per month.

In 2013, the wonderful Scott McCubbins joined the team and committed to lead groups weekly to clean Kaua'i's coastlines from nets and plastics. Due to the location of Hawai'i in the Pacific Ocean, islands like Kaua'i receive high amounts of ocean-based pollution that floats on currents from as far away as Asia and North America. Since the chapter started collecting more specific data in 2013, volunteers have removed an average of 85,500 pounds of debris per year.

– Lauren Blickley, Hawai'i Regional Manager

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CALIFORNIA

Prior to the Huntington / Seal Beach Chapter and the Newport Beach Chapter joining together in early 2023, the two North Orange County chapters were already combining forces and tackling trash together. In 2022, the Newport Beach Chapter held 27 cleanups and removed 8,500 pounds of trash with the help of 2,500 volunteers, while the Huntington / Seal Beach Chapter held 47 cleanups and removed over 18,000 pounds of trash with the help of 5,373 volunteers. Both former chapters have a long history of impactful beach and harbor cleanups before taking it further inland with Santa Ana River Channel cleanups.

In 2020, the Newport Beach and Huntington / Seal Beach chapters 'adopted' a 1.5 mile portion of the Santa Ana River through the Orange County Public Works Adopt-A-Channel (AAC) watershed cleanup program and have been conducting cleanups there ever since. The AAC area adopted by North OC is located 3.5 miles upstream from the mouth of the Santa Ana River, and has been dubbed the "last line of defense" before the trash that accumulates in the river gets flushed into the ocean after a significant rain. The AAC program is also a great educational program for the volunteers that participate, as the reality really sets in about how all communities, coastal and inland, are responsible for the marine and beach pollution issue.

We host beach, harbor and river cleanups each year and what we have learned in our area is that each type of cleanup shows a different striation of trash. Beach cleanups are some of the most common and easiest events for all people to attend. The most frequent comment from volunteers is that while they sometimes don't collect much in terms of weight, they do find a lot of single-use plastic and polystyrene. I call those pieces turtle food bags because people get a visual to make them feel better about picking up little bits of plastic. The average per person weight of these cleanups is light at 1.95 pounds, but all of that together is over 9,000 pounds of trash removed from our beaches. Harbor cleanups allow people to find semi-buoyant items that get picked up and moved when the tide rises and sets down along the banks of Huntington Harbor. These cleanups have resulted in the removal of over 2,200 pounds of trash. On April 23, 2022, 117 volunteers removed 2,804 pounds of trash in two hours in one of our river cleanups. The weight was high due to being in a dried out section of a river. All the items were forced downstream to our adopted section of the river during a storm that flushed out drains and upper sections of the waterway. All in all, we removed over 7,000 pounds of trash, with an impressive 21.07 pounds per person during river cleanups.

– Richard Busch and John Wadsworth, Co-Chairs,
Surfrider Foundation North Orange County Chapter



CALIFORNIA

Los Angeles

In 2022, the Los Angeles Chapter orchestrated 49 beach cleanups between Marina del Rey and Malibu, collecting a whopping 4,517 pounds of trash and generating \$103,000 in donations. None of this work would have been possible without the hundreds of dedicated volunteers who lent their time and energy to these efforts.

The core volunteer team is composed of a group of former strangers who continually return to these events on the basis of community-centric environmental work. This autonomous and successful team has organically grown from the seeds of accountability, accessibility and friendship within the framework of this program.

Attendees are attracted to this inclusive energy and we have seen many cleanups surpass a head count of over 200. Beyond the communal aspect of these beach cleanup events, the educational component of sorting through trash is eye-opening for many participants. Each time, volunteers are surprised with how many cigarette butts, microplastics and other objects are found. It intrigues them and it calls them back to assist with future events, and take action beyond the sand in their daily lives.

– Sarah Plenge and Mel Bautista, Beach Cleanup Coordinators, Surfrider Foundation Los Angeles Chapter

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PACIFIC NORTHWEST

At last year's International Coastal Cleanup Day on September 17, Washington Coastsavers connected the Surfrider Foundation's Olympic Peninsula Chapter (OPC) to the Hoh Tribe to receive permission to host a cleanup along the Hoh River and beach. The Hoh River (chalak'At'sit, meaning 'the southern river') is focal in Hoh tribal identity, folk history, and traditional economic patterns. The Hoh River mouth is a sacred site; according to the tribe, the Hoh people were created along the river, and their ancestors and relatives were laid in and under the trees on the bluff. The reservation had been closed for three years to mitigate the COVID-19 pandemic and protect their tribal members, and this area is the site of their original village on the ocean.

Four OPC members spent several hours at the beach removing more than 280 pounds of debris, and over 95% of it was debris that had washed ashore. This was yet another powerful example of how marine debris is a global problem, and demonstrated that what gets dumped in one place washes up in another. One tribal member (Lester) went out of his way to welcome us and bring his truck for us to use, even though he was organizing a potlatch with 150-200

people that afternoon. He was preparing steamer clams, elk stew, king salmon, and halibut for his community and the neighboring tribes to celebrate the life of his grandfather, one of their tribe's elders. Various tribal members also came to say hello, invited us to the potlatch, and brought us a beautiful gift of delicious homemade smoked salmon.

It was an incredible opportunity to learn more about tribal history, sacred sites, and the current issues that impact tribal communities today. The livelihood of the Hoh Indians is primarily fishing, although some residents make traditional decorative baskets, carvings, and canoes for navigating both rivers and the Pacific Ocean. The local people dip for smelts on the beaches and continue to use smokehouses for preserving food for future use, and the tidelands are abundant with razor clams, butter clams, crab, and perch. We are incredibly grateful for the opportunity to visit and participate in the stewardship of this sacred and special place.

– Tania Ellersick, Volunteer, Surfrider Foundation
Olympic Peninsula Chapter

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GREAT LAKES

Community-building and gratitude were the themes of the Earth Day cleanup that the Northern Michigan Chapter and partner, For Love Of Water (FLOW), held at North Bar Lake, which lies within the Sleeping Bear Dunes National Lakeshore.

About 68 passionate people of all ages from as far north as Petoskey and as far south as Ann Arbor came out to attend the cleanup. The Traverse City Central girls tennis team even chose to participate as their team bonding activity! Staff from the National Parks Service welcomed cleanup attendees with an educational orientation to the lakeshore, and our partner FLOW punctuated the orientation with powerful remarks about the vital necessity of protecting our Great Lakes. Friends of Sleeping Bear Dunes supported by bringing trash grabbers and gloves.

To make the event even sweeter, Jody at local business **Grocers Daughter Chocolate** brought delicious chocolate bars for the volunteers, and her sweet boys handed them out to everyone in attendance. What an absolute treat!

The event also received support from friends from afar. Patty Marando of **S'well** organized 22 days of action for Earth Day, promoted through their social media platforms. Their **final day of action post on Instagram** highlighted the importance of small actions, shared tips on how to hold community cleanups, and highlighted the event and partner organizations. S'well also made a remarkably generous

donation to both the Surfrider Foundation Northern Michigan Chapter and FLOW. In addition, the event was supported by photographer Beth Price, who beautifully captured the event and shared her work.

The trash collected from participants weighed in at 89 pounds! This does not include the weight of the sacks the trash was weighed in, nor does it include the many chunks of nail-filled treated wood we carted out. For primarily being small plastics and expanded polystyrene, that's a high volume of trash. A wire basket was also retrieved from the shoreline and was repurposed to protect the trunk of a new tree. The most prominent items found were plastic bottle caps, plastic combs, plastic cigar end tips, plastic shotgun shells, big and little chunks of foam, and just so many plastic pieces of all sizes, including lightweight plastics such as cup lids, flip flops and even a plastic boat that were retrieved.

The cleanup trends scream for a serious need for an end to single-use plastics! There is something so meditative about sitting in the sand picking up plastics, but it'd be so much more merry if the only thing found on the beach was pebbles and Petoskey stones. But coming together as a community to make a positive impact on the ecosystem is such a rewarding experience.

– Ella Skrocki, Vice Chair, Surfrider Foundation
Northern Michigan Chapter



NORTHEAST

Beach cleanups are one of the best ways to engage with our community and volunteers. The beach cleanups are one of, if not the most, visible activities that we do as a chapter. In New Hampshire, we 'Dream of Cleaner Beaches' and take 'Get Your Hands Dirty And The Beaches Clean' to heart. We are so committed to making our beaches better that we ran 17 beach cleanups in 2022. Our goal was to run one cleanup per month, but we certainly surpassed that. Across all the cleanups, we had more than 400 volunteers equating to over 800 volunteer hours. That led to more than 730 pounds of trash being removed from our beaches.

It is one thing to move the needle with lots of volunteers but in 2022, we did something even better. We engaged young people to join our quest to protect our ocean, waves and beaches. A couple of the beach cleanups were organized for middle schools where a mix of students from a special education program joined with students from the student government and from the Eco Club. Talk about teamwork! We continued to engage the younger audience with high school students from service clubs of local high schools. These high school students were highly committed and joined nearly all the monthly cleanups and in all sorts of weather conditions, including rain, snow, wind and sunshine. The weather did not discourage our young audience. The young people clearly see the environmental problems we face and want to be part of the solution rather than contribute to the problem.

Some other interesting highlights from 2022 range from braving the elements to huge numbers of participants and interesting finds. We ran our coolest beach cleanup ever on a very cold Saturday in January. It was -4°! Our friends from NOBL Beverages were there with hot coffee to keep us warm and energized. It was so cold that the coffee dispensers would freeze up and we had to keep thawing them out just to pour more coffee. We ran two of our most widely attended cleanups, one in May for Hands Across the Sand and one in October for a beach cleanup and Halloween-themed surf event. Each event had over 50 participants. We launched a DIY beach cleanup bucket program with our friends at Cinnamon Rainbows Surf Company and Summer Sessions Surf Shop. Now people do not need to wait for a chapter beach cleanup; they



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can do it solo or with a friend. Over the season, we have found lots of interesting things. But the most unusual was a big plastic gorilla that has turned out to be our chapter mascot. Our gorilla friend is always ready to smash out marine debris and beach trash!

On a final note, all of our beach cleanup success would not be possible without all the great support we have from our local business friends. NOBL Beverages has kept all of us caffeinated and energized with their cold brew coffee, Load Question Brewing has provided us with a place to hang out and chat and gave us a ton of barley bags that we use to collect trash during our beach cleanups. We now can offer a This-or-That / Bucket-or-Bag to our participants. Our local surf shop friends, Cinnamon Rainbows, Pioneers and Summer Sessions always helped promote our events to drive even more participation.

So to close out 2022, it was a great year to 'Dream Of Cleaner Beaches' and then make it a reality when we 'Got Our Hands Dirty And Our Beaches Clean.'

– Chris Grippo, Chair, Surfrider Foundation
New Hampshire Chapter

MID-ATLANTIC

Eastern Long Island

In 2022, the Surfrider Foundation Eastern Long Island Chapter partnered on a massive cleanup competition that ran through the entire month of September. Volunteers cleaned up 3,063 pounds and contributed all the data to the Surfrider Foundation database!

This effort was originally started by the creator of a local media outlet known as fotográfico (formerly, Greenport Gazette). The idea was born out of the pandemic and a desire to bring the community together to give back to the environment.

When the Eastern Long Island Chapter heard about this huge effort, we wanted to collaborate and support the third annual competition. The chapter purchased supplies for over 13 competing teams, which included more than 60 people. The teams had to attend weekly weigh-ins outside a local distillery and the chapter assisted in the sorting and recording of trash. We rebranded our data sheet to show all the sponsors, but it matched the Surfrider Foundation data card so it could be added to our database.

The cleanup competition has steadily grown year after year. From 2020 to 2022, the amount of trash collected was 1,670 pounds, 2,478.5 pounds, and 3,063.53 pounds, respectively. This year's winning team brought in over 1,000 pounds of debris by themselves, and more than 700 of those pounds were collected in just one week! The top six teams won prizes donated by local businesses, including a group sailing tour, an educational seal cruise, a chocolate-making class and more. All participants were invited to celebrate their efforts at "The Unceremonious Trash Party" hosted at a local oyster spot.

We are excited to collaborate again in 2023, with a goal of collecting 4,000 pounds. Since volunteers are focused on collecting the largest, heaviest forms of marine debris, we hope to offer bonus prizes to the volunteers who collect the highest numbers of smaller debris like cigarette butts and bottle caps. While these might not add the most weight to a beach cleanup collection, these pieces are still pervasive in our environment so we want to offer extra incentives to pick them up.

– Jenna Schwerzmann, Chapter Coordinator,
Surfrider Foundation Eastern Long Island Chapter



MID-ATLANTIC

Jersey Shore

The Jersey Shore Chapter partnered with Surfrider Foundation Surf Industry Coastal Defender, Jetty, on a beautiful day, Earth Day, 2022. Jetty is Surfrider's only such partner based on the East Coast.

About 20 employees of Jetty and the related Jetty Rock Foundation came out on April 22, 2022 to clean the empty beaches of High Bar Harbor. This is part of Long Beach Island is tucked behind the Barnegat Lighthouse so they are Barnegat Bay beaches. Interestingly, we had

to stick to the sand because venturing off into the marsh grasses and bushes would leave us covered in ticks! It's a popular dog beach, but we think there may be a population of deer that frequent this wooded beach peninsula.

The Jetty crew had a great time and we solidified our relationship with this partner. Thank you Jetty!

– John Weber, Mid-Atlantic Regional Manager

The Jetty crew had a great time and we solidified our relationship with this partner. Thank you Jetty!



SOUTHEAST

Cape Fear extended their reach beyond the immediate vicinities of Wrightsville, Carolina, and Kure Beach to neighboring county's Topsail Island. Since then, a total of five cleanups have been completed with 179.9 pounds of trash removed from the beaches along the island by 63 volunteers.

– Keni Rienks, Chair, Surfrider Foundation
Cape Fear Chapter



FLORIDA

It's hard these days to avoid hearing about the issue of plastic pollution in the world's ocean. With more than an estimated 200 million tons of plastic in the ocean and over 10 million tons more added every year, it's no wonder why an overwhelming number of people are looking at their daily lives to reduce (or skip) the waste of single-use plastics.

But there is another, slightly larger issue in our ocean's plastic crisis - commercial industry. A little more than 40% of the ocean's plastic comes from everyday people and small businesses, while the bulk is created by shipping and other large-scale industries at sea.

Florida's Treasure Coast Chapter just had a reminder on how bad but unseen this pollution can be first-hand. In late March 2022, the Treasure Coast Chapter received an email from a concerned resident living just north of Sebastian Inlet, a world-famous surfing spot, critical sea turtle nesting grounds and even a known nursery area for the North Atlantic Right Whale.

The resident had found a 7 foot long, half-inch thick polypropylene rope from a commercial fishing vessel exposed on the beach. Assuming there must be more to the debris buried under the sand, he contacted several city and county groups to no avail until finding our local Surfrider chapter.

Upon several hours into an attempt to dig up and remove the rope by Leisa and Annelise, Chapter Chair and Secretary, they discovered this was a massive tangle and would need a significant amount of help.



Florida's Treasure Coast Chapter just had a reminder on how bad but unseen this pollution can be first-hand.

A week later, they returned with volunteers from the Surfrider Palm Beach Chapter, Keep Indian River Beautiful and Helping Hands Community of the Treasure Coast Inc. to get the job done. While all the previous work was undone by the waves and sand, this time the group was successful in removing this rope and hauling it off the beach before it could harm our critically endangered wildlife that use this area of Florida. It was estimated that this tangle of rope was around 600 pounds!

– Evan Orellana, Florida Regional Manager

STUDENT CLUBS

University of North Carolina Wilmington Student Club

In 2022, the UNCW Surfrider Club renewed their adopted stretch of Lumina Ave on Wrightsville Beach and collected 22.04 pounds of trash between Wrightsville Beach accesses 1-15 back in November. We hosted an executive board cleanup with staff sponsor Dr. Backstrom, secretary at the time Amanda Scheiern, Treasurer Matt Diamantis, Vice President Riley Cannady, and myself Jess Kotrick. This cleanup was one of four cleanups required on our adopted highway plot (two cleanups on Lumina Ave. each semester in order to follow NCDOT requirements). While Wrightsville Beach is known to be kept up with and more clean than most beaches, we always find trash hidden on our highway, especially after the summer and storms. We found some cool things like our new mascot, Lumina the elephant!

– Jess Kotrick, President, Surfrider Foundation
University of North Carolina Wilmington Student Club

Los Osos High School Student Club

In November 2022, our club collected 480 pounds of trash in the area surrounding Huntington Harbor Boat Rentals. The students kayaked out to the marshes along the strait leading to the ocean and found a large variety of plastic items (including a lost shoe)! The club leader, Isabella Mensik, said, “I absolutely love bringing my friends from my club along to the cleanups. I have been doing them for about four years now, and they are such an important part of my life that I get to share with others!”

– Isabella Mensik, President, Surfrider Foundation
Los Osos High School Student Club

University of Hawaii Manoa Student Club

In February 2022, the UH Manoa Club cleaned up 23 pounds of trash at Ala Moana Beach Park, including things like foam plates, plastic items, glass bottles and cigarette butts. The club also invited other students from the Greek Life community on their campus to teach them about Surfrider’s initiatives and spread our mission to new audiences.

– Mattison Priest, President, Surfrider Foundation
University of Hawai’i Manoa Student Club



Science and Policy



Expanded Foam, Expanded Problems

With a rise in takeout and online ordering, we have all seen the various types of plastic packaging that accompany our favorite food and deliveries. One of the most common types of consumer packaging is expanded polystyrene (EPS) foam, such as foam takeout food containers or packing peanuts. Unfortunately, EPS foam wreaks an expansive range of negative impacts on the environment, wildlife and human health. In this section, we're going to explore what EPS foam is, why it is an issue and what Surfrider is doing to solve the problem.

Often mistakenly referred to as the brand name Styrofoam™, EPS foam is a form of polystyrene, a type of plastic made from fossil fuels and synthetic chemicals, that is heated and molded into different shapes. According to the British Plastics Federation, "These expanded cells occupy approximately 40 times the volume of the original polystyrene bead," which means the same amount of polystyrene materials can produce much larger quantities

of plastic when expanded into EPS foam versus rigid polystyrene. The result of this is an inexpensive plastic material that, due to its low cost, is a tempting purchase option for businesses. One wholesaler of takeout containers lists a case of 200 EPS foam containers for around \$32 versus a case of 100 polypropylene containers for over \$47. However, the low price of EPS foam does not take into account its external costs. The manufacturing of polystyrene is an intensive process, resulting in a large amount of greenhouse gas emissions and waste generation, making it a major contributor to climate change. It may be cheap to manufacture and buy but the cost of damages that EPS foam causes far outweighs its low price.

**13% of all items found during
Surfrider beach cleanups in
2022 were made of EPS foam.**



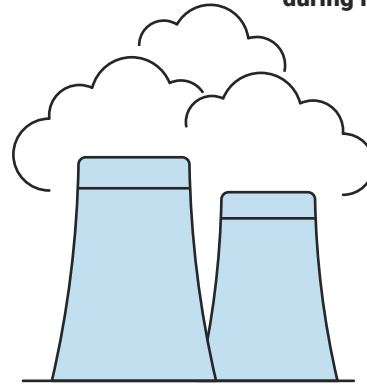
Products made with EPS foam are often single-use, easily littered and will not biodegrade within our lifetimes. Since EPS foam is inexpensive, it is often only used once before being disposed of. **EPS recycling is not possible** and generally not economical, so it most often ends up in landfills or in the environment. The expanded nature of the foam means that it is **composed of about 95% air**, making it very lightweight and susceptible to being picked up by the wind and blown into the environment. In fact, 13% of all items found during Surfrider beach cleanups in 2022 were made of EPS foam. Once it's in the environment, it photodegrades and breaks down into smaller and smaller pieces, becoming more bioavailable to wildlife. Out of the foam items found during Surfrider cleanups last year, 12% were foam fragments. If you have ever tried to clean up the small foam balls that break off of protective packaging or a foam cooler, imagine that cleanup on a global scale.

Despite our best efforts, we cannot clean up all the EPS foam that ends up in the environment. Sadly, wildlife can often **mistake EPS foam for food** and consume it, which can also cause a choking hazard or lead to starvation as the animal's digestive tract fills up with plastic. Additionally, toxic chemicals leach from the original styrene monomer, including **likely carcinogens**. These same chemicals can even leach out of EPS foam when exposed to heat or acidity, such as the hot foods that are often served in foam containers, making EPS foam detrimental to human health.

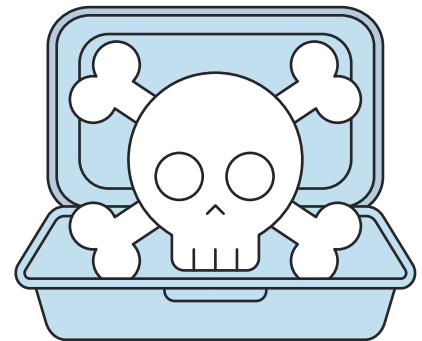
EPS foam has negative impacts at nearly every stage of its life, from emitting greenhouse gases during manufacturing and leaching carcinogens during use to being easily littered, disrupting feeding habits of wildlife and breaking up into hard-to-cleanup pieces. When it comes to EPS foam, the only solution is to use less of it. But with its inexpensive price and support of the plastic industry, how can we do that? This is where Surfrider's multi-pronged approach comes in. Members of the Ocean Friendly Restaurants program don't use any EPS foam and are proof that businesses can ditch single-use plastics and continue to thrive. Alongside that, our network is working to pass plastic legislation to ban single-use plastics, including EPS foam. The Surfrider Foundation continues to work tirelessly to fight for a plastic-free future where reusable systems are the norm and overall dependence on plastic is reduced.

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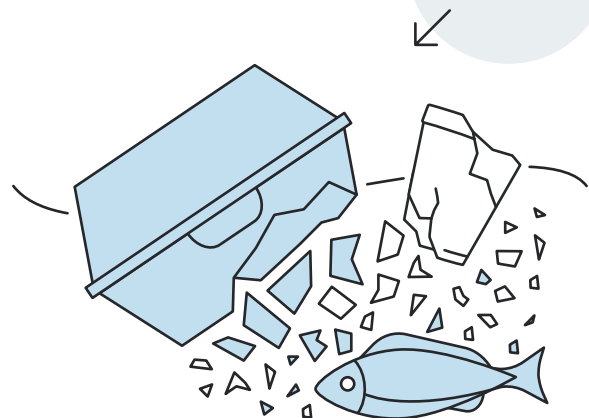
Greenhouse gases are emitted during manufacturing.



Toxic chemicals are leached during use when exposed to heat or acidity, such as the hot foods that are often served in foam containers.



Due to its light weight, it is easily littered and broken down into hard-to-cleanup pieces that disrupt feeding habits of wildlife.



Picking Up (and Banning) the Pieces

Cleanups do more than clean the beach. When we collect data during cleanup events, we gain insights into what items are being found on our beaches. We can then use this data to support Surfrider's plastic pollution reduction policy efforts to keep trash from entering the environment in the first place. In 2022, our chapters worked hard on expanded polystyrene bans to mandate change and eliminate this harmful type of single-use plastic.

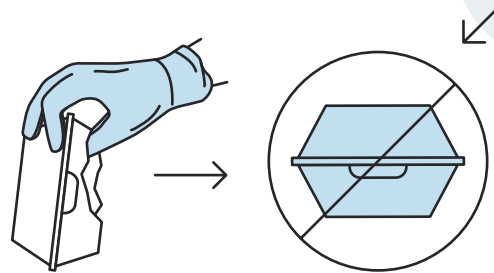
SAN DIEGO EPS BAN

In December 2022, the San Diego City Council gave final approval to a plastic reduction ordinance to phase out expanded polystyrene (EPS) foam foodware, which went into effect in April 2023. This is the second victory in the fight against EPS foam in San Diego, with an initial ordinance passing in January 2019. Unfortunately, implementation was stalled by a plastic industry-funded lawsuit. The 2022 victory shows that people and cities want this harmful material out of our businesses and beaches. The ordinance not only phases out EPS foam, but it also prevents restaurants from distributing single-use cutlery and straws without the customer's request. Mitch Silverstein, San Diego Chapter Policy Coordinator, reflected on the victory by saying, "Our chapter has celebrated several important victories this year, but speaking personally as our chapter's policy coordinator, this one tastes the sweetest. Like many of you, I've seen first-hand the devastating effects that single-use [EPS] foam has on our coastal environment and I am elated to see San Diego address it."

LOS ANGELES EPS BAN

On the same day that San Diego voted in favor of phasing out EPS foam, city council members in Los Angeles did the very same thing and passed their own ban on expanded polystyrene foam, becoming the largest city in California to do so. In a unanimous vote, the LA City Council acted to ban expanded polystyrene foam at local restaurants, prohibit all single-use plastic bags, and ban single-use plastics from city

Data collected through beach cleanups allows us to advocate for better legislation to fight plastic pollution at the source.



facilities and events. Los Angeles Chapter Manager, Newara Brosnan-Faltas, wrote, "Among all the debris that we find in our local Los Angeles waterways and beaches, single-use foodware and expanded polystyrene products always manage to top our list... Advocates have been working on banning expanded polystyrene for more than a decade. Foam foodware accessories, including takeout containers and cups, can leach toxic chemicals and pose a threat to human health and the environment."

Both of these major victories mean that San Diego and Los Angeles are now among eight states and countless other cities to pass expanded polystyrene foam bans and regulations. This all goes to show that the public is becoming fed up with EPS foam and is ready to fight for more sustainable solutions that are better for people and the planet. It is time to push for a single-use, plastic-free future and we are excited to see cities and states join the movement.

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Conclusion

Plastic pollution is a global issue and Surfrider's Beach Cleanup program is one foundational way that we are working to address it. Over the last decade, Surfrider has proven itself as a force to be reckoned with when it comes to fighting plastic pollution. From engaging thousands of volunteers to actively removing hundreds of thousands of pounds of trash and passing strong legislation that reduces single-use plastic, our work in 2022 shows the true strength of what can happen when we work together as One Surfrider.

Surfrider activists and cleanup leaders wholeheartedly embodied our mission statement through their dedication to the protection and enjoyment of the world's ocean, waves and beaches, for all people, through a powerful activist network. Nearly doubling the number of volunteers over last year, more than 30,000 people joined over 1,200 Surfrider beach cleanups and together, removed

143,000 pounds of trash and recycling from our beaches. In addition to this on-the-ground work, our network successfully utilized beach cleanup data to pass plastic reduction legislation to keep harmful single-use plastics out of our environment – laying the groundwork for other cities and states to follow. These achievements of 2022 are a testament to the grassroots model that Surfrider has built upon and proven that together, we can make a bigger impact than we ever thought possible. Cheers to a plastic-free future!

Thank you to all of our supporters of the Beach Cleanup program, including our Better Beach Alliance partners, chapter leaders and especially all of the volunteers who have taken part in beach cleanups. Only by working together can we win the fight against single-use plastics and continue working toward our collective vision of a more sustainable future.

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