

2021 | PROGRAM REVIVAL LEADS TO RECORD BREAKING RESULTS

Beach Cleanup Annual Report



Photo: Alexander Siegel

Contents

03 Introduction

04 National Overview

05 The Better Beach Alliance

08 Cleanup Database

09 Program Results

10 A Closer Look

11 Regional Overview

12 Regional Impacts

13 Regional Stories

21 Emerging Science

22 Ocean Plastic

24 Cleanups and Policy

25 Policy Success

26 Conclusion

Introduction

This report reviews how plastic impacts various coastal regions and shines a light on the items most often collected during Surfrider beach cleanups.

The Surfrider Foundation's Plastic Pollution Initiative aims to eliminate the impacts of plastic in the ocean by raising awareness about the dangers of plastic 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 instead of being burned or ending up in landfills and the environment. Surfrider's Plastic Pollution Initiative incorporates 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 reduce single-use plastics, in addition to the Better Beach Alliance cleanup program, which is a foundational step in reducing the amount of plastic ending up in the ocean.

As the U.S. began to reopen in 2021 due to COVID-19 pandemic guidance, our communities worked to navigate the realities of the new landscape. The Surfrider Foundation was partially able to return to in-person activities and reignite solid actions to protect our ocean, waves and beaches. We also emerged with some new ideas on how to keep our network of activists involved from afar. With opportunities to attend in-person cleanups and continue to host solo cleanups, we were able to engage people on every level. This led to a record-breaking year for Surfrider as we surpassed a long-standing goal of having 1,000 cleanups recorded in our database. We also increased our cleanup impacts across the board from 2020, nearly doubling the number of volunteers engaged and the total weight of trash collected during cleanups. As we continue to emerge from the pandemic, we are excited to expand our beach cleanup program and grow the positive impacts on our ocean, waves and beaches.

The 2021 Beach Cleanup Report highlights the success of Surfrider's network as our program has evolved to suit pandemic needs and challenges. This report reviews how plastic impacts various coastal regions and shines a light on the items most often collected during Surfrider beach cleanups. We explore the topic of ocean plastic as an emerging issue and why we need to be wary of greenwashing in marketing. Finally, we examine plastic policy as it relates to balloons and why cleanup data is critical for policy success.

Surfrider's Beach Cleanup program tackles trash, caused primarily by rampant plastic pollution, along our coasts through organized citizen action. The program also supports public education efforts and provides underlying data to bolster our plastic pollution advocacy campaigns. Beach cleanups are a gateway for volunteers to become grassroots activists and make tangible changes within their communities and beyond. For more information and to see beach cleanup data, visit Surfrider's beach cleanup database.

2021 was a record-breaking year for Surfrider as we surpassed a long-standing goal of having 1,000 cleanups recorded in our database.



1,230

Total Cleanups

563,215

Total Items Collected

15,864

Volunteers Engaged

170,000

Pounds Of Trash Collected

The Better Beach Alliance

Surfrider Foundation beach cleanups align with the larger structure of our Plastic Pollution Initiative, connecting our program work to our policy campaigns. We do this by removing trash from our environment while also helping to raise community awareness, collect valuable data on the items found on the beach and support Surfrider's fight against plastic pollution at the source through effective policy changes.

In 2018, the Better Beach Alliance was founded by Surfrider and surf lifestyle brand partner REEF to help grow the impacts of Surfrider's Beach Cleanup program by educating and inspiring new volunteers to get involved. Each year, the Better Beach Alliance seeks to bring together and empower businesses, communities and individuals to each play an important role in enacting meaningful change for our planet.

Critical support from Better Beach Alliance title sponsor REEF helped to ensure the program's continued growth and innovation in 2021.

With this support from the Better Beach Alliance, Surfrider encouraged individual submissions to our recently improved data reporting tool, in addition to information from the core chapter volunteers who regularly contribute data from Surfrider chapter cleanups. As a result of enhanced individual data reporting, Surfrider had an overall increase in direct program impacts throughout 2021. This allowed the Better Beach Alliance to achieve two major milestones by hosting more than 1,000 cleanups in one year, and removing over one million collective pounds of trash from beaches and waterways in the U.S. and Europe since the program's inception.

Each year, the Better Beach Alliance seeks to bring together and empower businesses, communities and individuals to each play an important role in enacting meaningful change for our planet.



CONNECTED BY ONE OCEAN

In 2019, the Better Beach Alliance supported the development of collaborative, international beach cleanup goals with our affiliate, Surfrider Foundation Europe, through their **Ocean Initiatives program**. In the years since, in conjunction with REEF and Surfrider Europe, we have collaboratively adapted our programs to embrace and encourage solo and small group cleanups in communities throughout North America and Europe. Additionally, REEF's support has expanded to include Surfrider Australia's beach cleanup program as part of the growing, global Better Beach Alliance.

OUR COLLECTIVE IMPACT

Together with Surfrider Europe and the support of title sponsor REEF, we removed 126,812 pounds of trash and recycling with 79,196 volunteers and 3,238 solo and group cleanups throughout the U.S. and Europe in 2021.

In Australia, the Better Beach Alliance contributed to the organization's success in fighting plastic pollution on beaches around Australia through community cleanups.

Together with Surfrider Europe and the support of title sponsor REEF, we were able to make a positive impact in 2021.



126,812

Pounds Of Trash Collected

79,196

Volunteers Engaged

3,238

Total Cleanups (U.S. + Europe)



BETTER BEACH ALLIANCE VIDEO SERIES

With REEF's support during the summer of 2021, Surfrider produced and presented a series of educational videos featuring REEF athletes and Surfrider staff experts. In this series, world-class athletes — from renowned beach volleyball player Alexa Strange to legendary surfers Rob Machado, Mick Fanning, and Griffin Colapinto — made appearances to ask Surfrider's Plastic Pollution Initiative team all of their questions about beach litter and beyond.

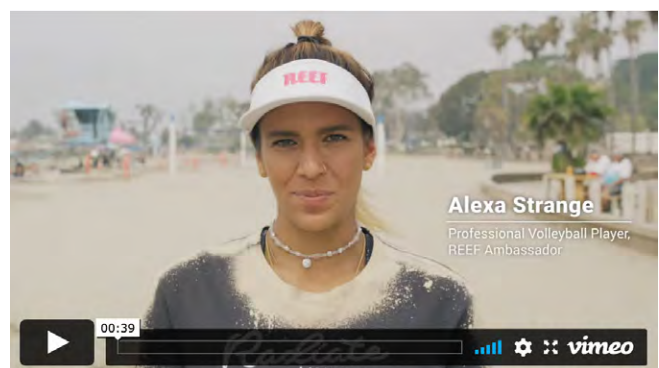
Each episode explored a new topic, from the lifecycle of plastic and its impacts on the environment to personal habit changes and ways to take action to fight plastic pollution on an individual level. By encouraging viewers to attend a beach cleanup and raising greater awareness around Surfrider's legislative efforts, the 2021 Better Beach Alliance video series demonstrated the power and importance of collective action in the fight against plastic pollution.

By encouraging viewers to attend a beach cleanup and raising greater awareness around Surfrider's legislative efforts, the 2021 Better Beach Alliance video series demonstrated the power and importance of collective action in the fight against plastic pollution.

1. How do our beaches get so trashed?



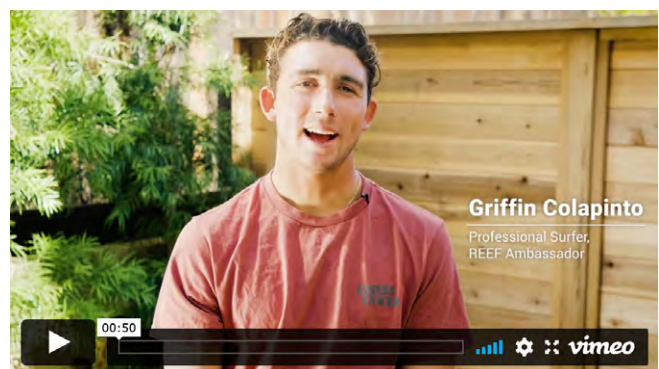
2. What is Surfrider doing to clean up our beaches?



3. What's wrong with recycling?



4. How can you make your life more Ocean Friendly?



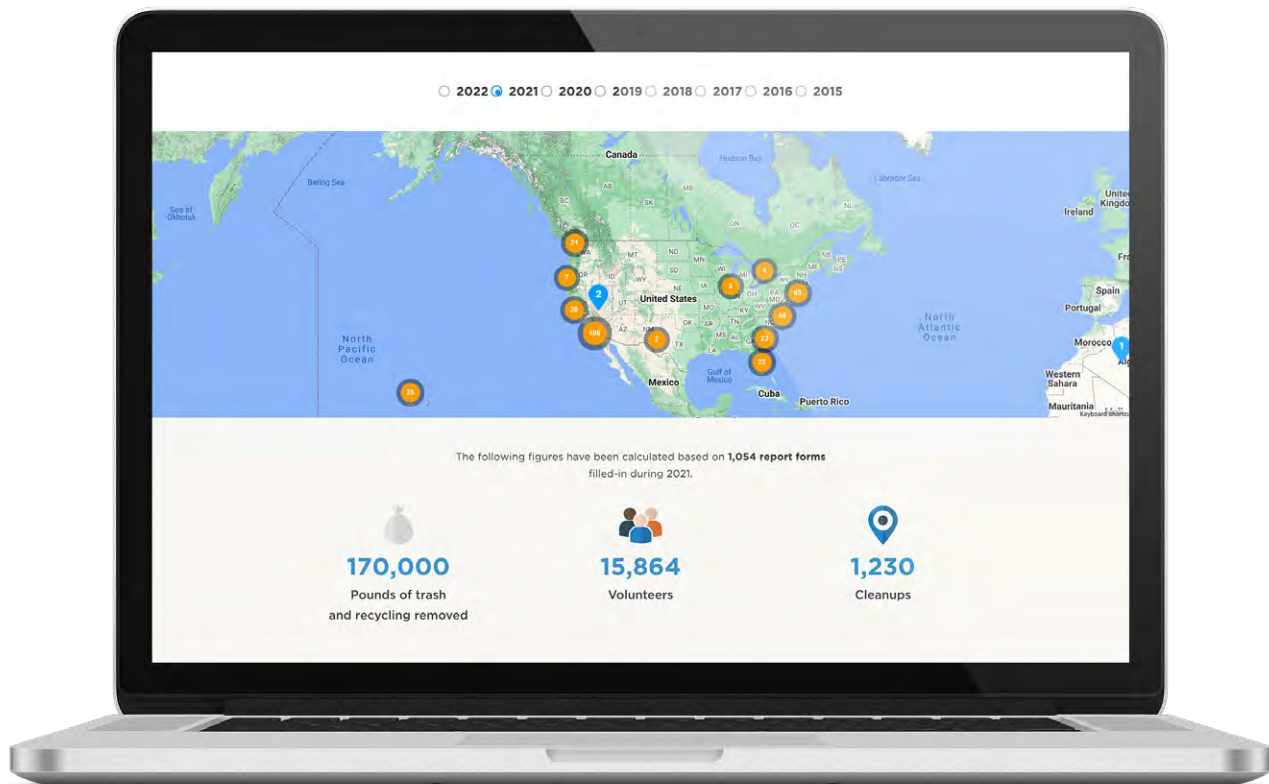
[VIEW THE FULL SERIES HERE](#)

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 has helped 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. Additionally, we created a permanent home for Surfrider's annual Beach Cleanup Reports in 2021 to help showcase our work across the years.

As Surfrider juggled the return to in-person activities and the growing popularity of solo cleanups, we worked to expand the Beach Cleanup program to better

accommodate all types of cleanups. Last year, we soft-launched a collaboration with the Marine Debris Tracker phone app. This helped the program to better engage Surfrider student clubs and also helped us to begin broadening the geographical range of Surfrider's data set. By using an app during a solo cleanup, our volunteers can collect data from cleanups, regardless of where in the country they are located. We recognize the importance of data from beach cleanups and strive to improve the ease and accessibility of data collection methods to better suit our growing Surfrider network. However, Surfrider maintains the notion that cleanups work differently for all people and continues to provide multiple forms of data collection, including the traditional paper data card.



We recognize the importance of data from beach cleanups and strive to improve the ease and accessibility of data collection methods to better suit our growing Surfrider network.

Program Results

Together, across 1,230 beach cleanups, 15,864 volunteers removed nearly 170,000 pounds of trash and recycling to ultimately reduce the flow of plastic pollution into our ocean. We are incredibly proud of our network of volunteers who have, for the first time, collected and reported data from more than 1,000 beach cleanups. This accomplishment is a huge feat, especially given the ongoing challenges of the pandemic, and we are overwhelmed with gratitude for everyone who helped to surpass this goal.

OUR 2021 IMPACT

1,230

Total Cleanups

563,215

Total Items Collected

15,864

Volunteers Engaged

170,000

Pounds Of Trash Collected

We are incredibly proud of our network of volunteers who have, for the first time, collected and reported data from more than 1,000 beach cleanups.

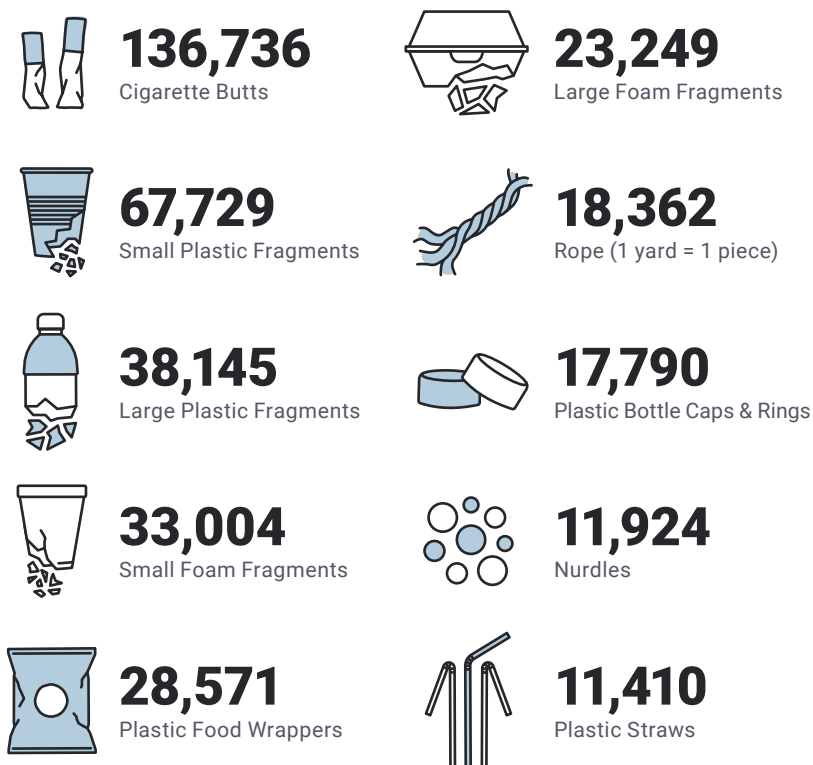


A Closer Look

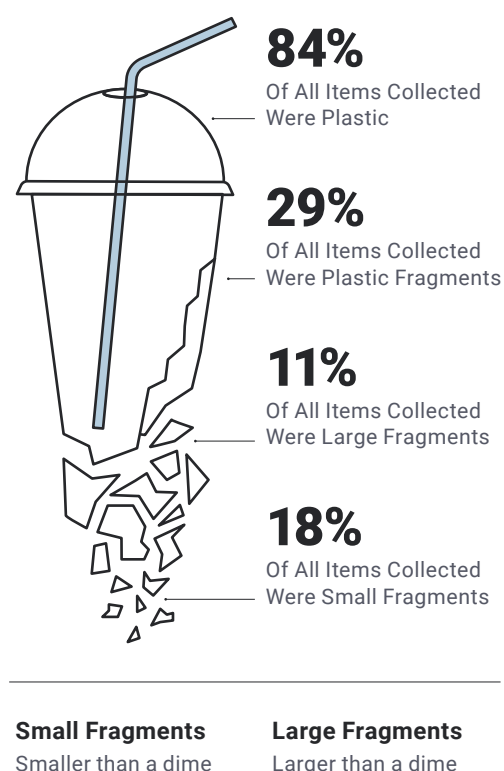
Every single one of the top 10 items found during cleanups were made of plastic. Out of all items collected, 84% were made of plastic, including plastic fragments, which made up 29% of the total. In fact, 18% were plastic fragments

smaller than a dime. These figures once again confirm that plastic is everywhere and it isn't going anywhere without large-scale legislative change.

TOP ITEMS COLLECTED



PLASTIC BREAKDOWN



BROAD USAGE CATEGORIES



These figures once again confirm that plastic is everywhere and it isn't going anywhere without **large-scale legislative change.**

Regional Overview

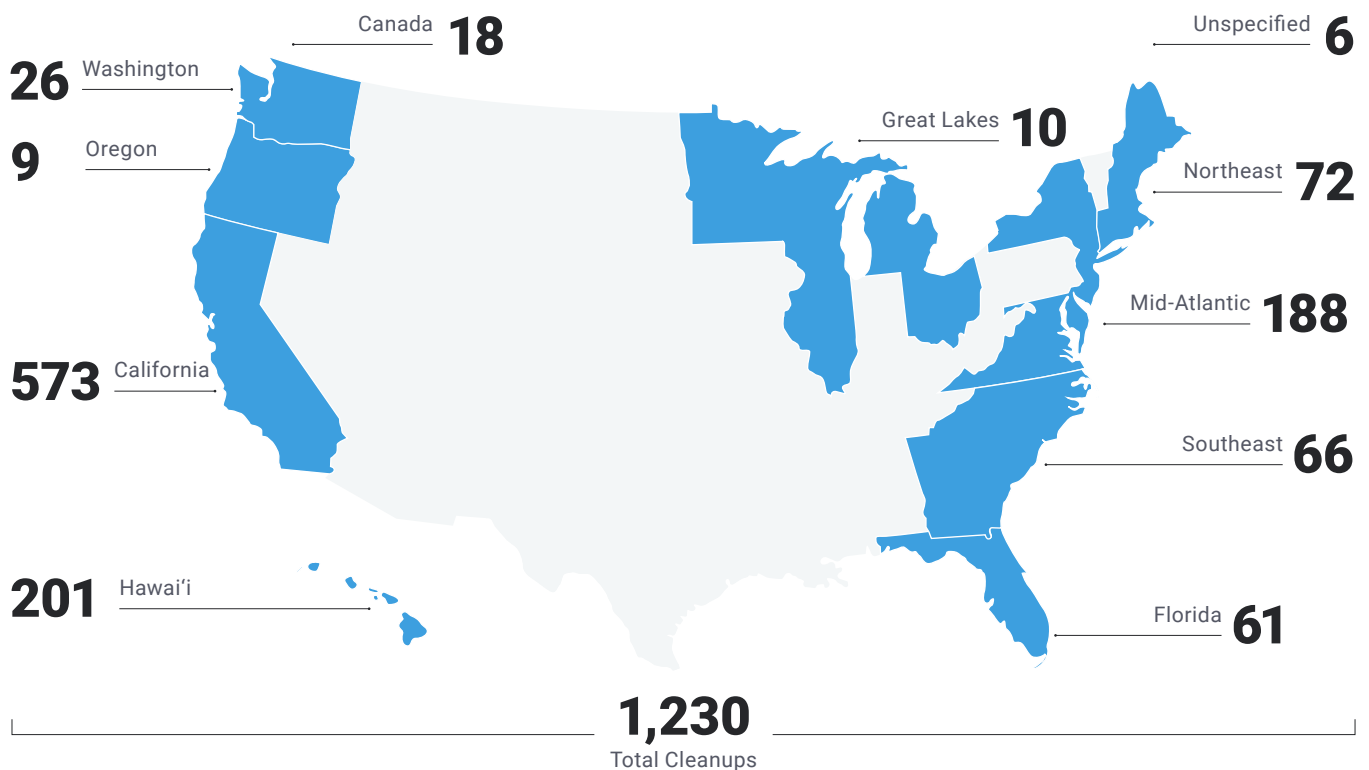


Regional Impacts

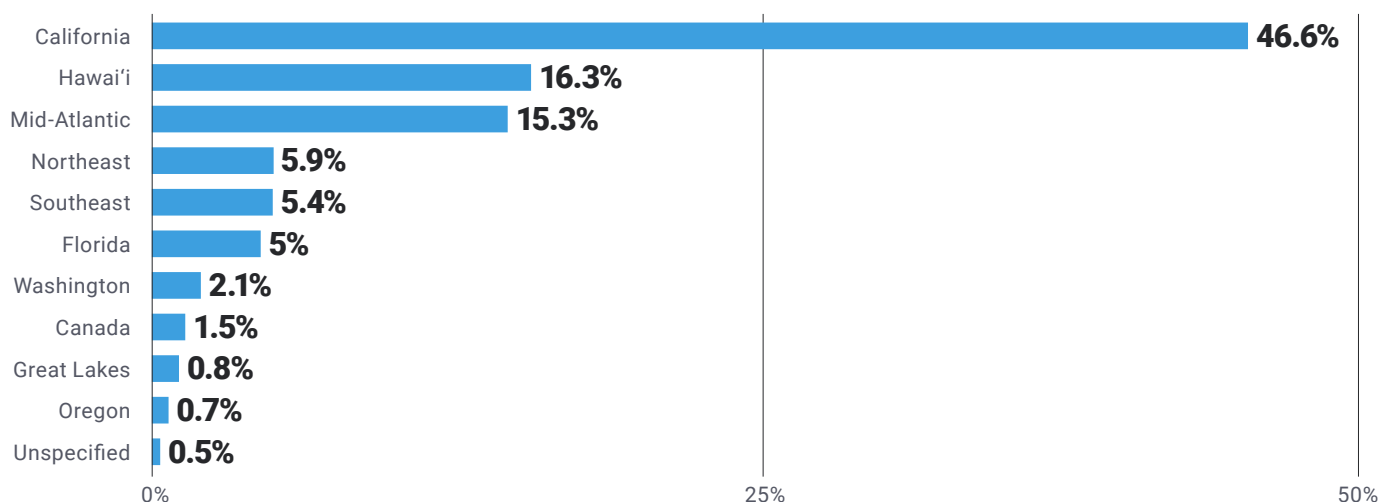
The Surfrider Foundation's grassroots network of chapters and student clubs serves as the first response to local threats in coastal communities across the U.S. With more than 200 chapters and student clubs, Surfrider

volunteers across the U.S. and Canada are working within their communities to create change. We caught up with Surfrider leaders about their work in 2021 and the impacts they are having in their regions.

CLEANUPS BY REGION



PERCENT OF TOTAL CLEANUPS



Regional Stories

HAWAI'I

In 2021, the Kaua'i Chapter launched the **North Pacific Hagfish / Eel Trap Project**, an international collaborative effort to develop options aimed at reducing the environmental impacts of hagfish / eel traps. The trap entrances (TE) originate from commercial hagfish and eel fisheries found on both the West Coast of the U.S. and East Asia, particularly in Korea, Japan and China. Despite the lack of commercial hagfish and eel fisheries in Hawai'i, TE are frequently found polluting the islands' coastlines. They also entangle ocean animals, including endangered Hawaiian Monk Seal pups. In 2021, Surfrider Foundation Hawai'i chapters, community members and local beach cleanup organizations documented and removed 6,400 TE from Hawai'i coastlines. Team members took photos of 4,336 TE and partnered with computer science students from the University of Hawai'i at Hilo to develop a computer model to sort TE based on specific characteristics.

By sorting TE, we can identify the most common types washing up in Hawai'i and eventually trace TE back to their origin. Beach cleanup organizations and community members are encouraged to get involved with the North Pacific Hagfish / Eel Trap Project by removing any hagfish traps found on the beach and taking a picture of the trap and emailing the picture to hagfish@surfrider.org.

– Lauren Blickley, Hawai'i Regional Manager

In 2021, Surfrider Foundation Hawai'i chapters, community members and local beach cleanup organizations documented and removed 6,400 TE from Hawai'i coastlines.



Photo: Rafael Bergstrom



Photo: Hawai'i Department of Land and Natural Resources

CALIFORNIA

As people began attending events again in late 2021, it was inspiring to see an increase in groups of friends joining beach cleanups together. We would often see some friendly competition among the groups to check who collected the most trash. Usually, the groups would want us to take pictures to commemorate the “winner” or just to document the day for them. At our cleanup on October 2nd at the Oceanside Pier, one group in particular decided to venture away from

the sand during the beach cleanup, focusing on cleaning the concrete band stage near the pier. There, they noticed lots of cigarette butts and decided to have a competition to see if they could fill an entire plastic drink cup (which they also found there) to the top. As you can see, they did a pretty good job! This was definitely a highlight from that cleanup.

– Ben Rubenson, Surfrider San Diego County Chapter

As people began attending events again in late 2021, it was inspiring to see an increase in groups of friends attending beach cleanups together.



OREGON

With COVID-19 regulations still in effect heading into the winter season when weather on the Oregon coast is less than ideal, we needed to come up with a unique way to engage with the local community for our monthly beach cleanups.

We wanted to do something fun to encourage volunteers to come out to our local beaches and do their own socially-distanced solo cleanups. The basic idea was to incentivize volunteers with prizes and to work with our local surf shops as neutral outlets instead of having group meetings. This concept came together when a 7'6" Lib Tech Pickup Stick surfboard was donated by 10 Barrel Brewing, which we used as a grand prize.

The concept built momentum and excitement from our local partners and grew into a three-month series with cleanups scheduled on one Saturday each month, from December through February.

We partnered with local surf shops in Lincoln City (Zuhg Life), Otter Rock (Pura Vida), Agate Beach (Ossies), and South Beach Surf Shop to be the conduits and points of contact for handing out bags and collecting trash. The shops also signed up volunteers for the prize drawings. In addition, we partnered with our local sanitary services companies (Thompson's Sanitary and North Lincoln Sanitary Service), which donated disposal services.



Photo: Charles Mitchell

Overall, we had more than 150 volunteers who collected thousands of pounds of debris.

The surf shop partners and the Surfrider Newport Chapter donated small prizes for a drawing each month. Everyone who volunteered throughout the three-month campaign was entered into a giveaway to win the grand prize surfboard. This encouraged participants to come back each month for a better chance to win. The surf shops gave out the small prizes and we announced the monthly drawings and grand prize surfboard giveaway through our newsletter.

The response was overwhelming. An additional trailer was needed to haul all the debris that had been washed up on our beaches during winter storms and King Tides. Overall, we had more than 150 volunteers who collected thousands of pounds of debris.

In the winter, when the beaches need it the most and the weather is the worst, this format was a great success. The Surfrider Newport Chapter plans to host this Winter Cleanup Series again. It turned out to be a great way to build community around the Surfrider mission.

– Bri Goodwin, Oregon Field Manager



NORTH CAROLINA

The Outer Banks Chapter administers Dare County's Adopt-A-Beach program in North Carolina. Through this program, the chapter is able to engage more people, build stronger coastal stewards and collect more litter than it would be able to do with just its cleanups.

The chapter curates a list of beach accessways in the county and solicits sign-ups from individuals, businesses and organizations in the community that wish to take responsibility for regularly cleaning the beach at a specific access location. Those adopting a location are asked by the chapter to commit to cleaning the beach at least six times a year, collecting cleanup data and entering it into Surfrider's Beach Cleanup database, and posting photos from cleanups. Each adopter gets their name and a graphic on a sign at the access point, and the signs are created and installed through the help of local government partners. A total of 92 beach accessways have been adopted, which is a testament to the efforts of the chapter and the care for the coast throughout the community!

– Sarah Damron, Southeast, Texas &
Great Lakes Regional Manager



GREAT LAKES

In April 2021, the North Shore Minnesota Chapter, Milwaukee Chapter, Chicago Chapter, and Northern Ohio Chapter banded together to host cleanups as part of the regional Great Lakes CleanUP event. The 2021 inaugural Great Lakes CleanUP was a sweeping success! Nearly 3,000 volunteers helped to clean up the shorelines of the Great Lakes. Over 72,350 pounds of litter across 4,500 acres were collected, preventing tens of thousands of cigarette butts,

plastic bags and pieces of foam from entering the lakes. For the chapters' parts, they collectively held cleanups on three of the five Great Lakes and removed over 150 pounds of garbage from local beaches with the help of 139 volunteers.

– Sarah Damron, Southeast, Texas &
Great Lakes Regional Manager

Over 72,350 pounds of litter across 4,500 acres were collected, preventing tens of thousands of cigarette butts, plastic bags and pieces of foam from entering the lakes.

GULF OF MAINE

Surfrider is excited to have received a grant through the Gulf of Maine Association from the U.S. National Oceanic and Atmospheric Administration's (NOAA) Marine Debris Program for our three Gulf of Maine chapters (in Maine, New Hampshire and Massachusetts). They will partner with NOAA, Gulf of Maine Council, Blue Ocean Society for the Marine Environment, Center for Coastal Studies, Huntsman Marine Science Centre in Canada, Maine Coastal Program, Urban Harbors Institute and the five jurisdictions bordering the Gulf of Maine. The group will work to create an international collaborative approach for addressing plastic and other marine debris in the Gulf of Maine watershed.

The two-year grant kicked off in October 2021, with our project team bringing together experts and volunteers from throughout the region to conduct over 100 coastal cleanups, track marine debris, and reduce the introduction of plastics, fishing gear and other sources of pollution before they damage the ocean, waves, and beaches in the Gulf of Maine.

This new partnership will enable us to increase beach cleanups in the region and expand our efforts to reduce single-use plastics and packaging through parallel campaigns and our innovative Ocean Friendly Restaurants and Rise Above Plastics programs.

A key component of our contribution to this grant is applied focus on environmental justice, authentic inclusivity, and intersectional activism. Communities of color and low-income populations have suffered disproportionately and for far too long from pollution generated in facilities needed to create and dispose of plastics. Our three state-based Gulf of Maine chapters and our Northeast Regional Manager are helping to address this disparity through cleanups and other direct engagement and relationship building with environmental justice populations and underrepresented groups within our Gulf of Maine communities.

The volunteer Vice Chair of our New Hampshire Chapter, Chris Grippo, noted that, "2021 was a good year for New Hampshire, with 203 cleanup volunteers and nearly 750 pounds of trash and marine debris collected from New Hampshire beaches."

The Massachusetts Chapter ran its Connecting the Coastline program throughout 2021, where the chapter urged group cleanup participation and worked to incentivize solo cleanups, with a goal of having at least one cleanup in each of the state's 66 coastal towns. Their final tallies for 2021 included 49 cleanup reports from 39 coastal communities, with more than 678 pounds of trash and 15,600 individual items logged. The good news for residents and visitors to Massachusetts is that **the program is back for 2022!**

The Maine Chapter focused on building its Ocean Friendly Restaurants program in 2021, adding four new restaurants and then working with each to make cleanup plans and other collaborations that are coming to fruition in 2022.

By the end of the first grant reporting period, Surfrider's Gulf of Maine chapters conducted an aggregated total of 37 beach cleanups, pulling a collective 1,113.5 pounds of debris from beaches.

Not only are beach cleanups a fun way to engage volunteers right at the beach, but they also provide us with itemized data that is instrumental in advancing our plastic pollution mitigation campaigns at every scale of government. We are excited to see where this two-year grant with NOAA will lead us next!

– Melissa Gates, Northeast Regional Manager

By the end of the first grant reporting period, Surfrider's Gulf of Maine chapters conducted an aggregated total of 37 beach cleanups, pulling a collective 1,113.5 pounds of debris from beaches.

DELAWARE

The Surfrider Delaware Chapter had a strong year in 2021. We managed to log 80 cleanups and based on our findings from the data collected, we planned a new Hold On To Your Butt program. Most of our cleanups were performed solo or in small groups due to COVID-19 restrictions but the larger group cleanups we were able to conduct were epic.

Before our busy summer season began, we partnered with the Ocean City Chapter in Maryland and cleaned up the Delaware / Maryland State Line Beach. Delaware volunteers headed north of the state line to pick up trash while the Maryland participants headed south. In total, 25 participants volunteered and we had so much fun working together with our closest chapter neighbor that we decided to make the joint cleanup an annual event.

The Surfrider Delaware Chapter had a strong year in 2021. We managed to log 80 cleanups and based on our findings from the data collected, we planned a new Hold On To Your Butt program.

We also organized three cleanup events with the Baker and Alison families who donated to the Delaware Chapter in memory of their sons who surfed the Delaware beaches. Their contributions helped us to work with our state senators and Delaware's Department of Natural Resources and Environmental Control to build an outdoor shower at the Surfrider Delaware Chapter's Adopt-a-Beach program in Cape Henlopen State Park. A bench made of recycled plastic with a plaque memorializing the two boys was installed near the shower. A cleanup was also performed during the dedication with both families in attendance.

After careful planning last year, Delaware will kick off our new Hold On To Your Butt program in 2022. Based on the high number of cigarette butts collected in 2021, we decided to do something about Delaware's number one pollutant. A partnership with the State Parks and Plastic Free Delaware was formed and we developed a media campaign to educate beachgoers about the harmful effects of cigarette butts to the environment and to encourage smokers to dispose of their cigarette waste responsibly. In addition, we were awarded a Temper of the Times Foundation Grant for Environmental Advertising to help promote our new program.

– Jana Johnstone, Beach Cleanup Coordinator,
Surfrider Delaware Chapter



SURFRIDER FOUNDATION FLORIDA INTERNATIONAL UNIVERSITY CLUB

The Surfrider Foundation Florida International University Club started in January, 2021. What began as a small gathering of students quickly grew into a large group with active volunteers. From our Club's Executive Board, we want to thank the entire network for making Surfrider what it is today. As a club, we have had many goals met and are very proud. From beach and mangrove cleanups to volleyball games and other events, we have been able to spread the Surfrider Foundation's mission widely at Florida International

University. In 2021, our club had five spring cleanups, six summer cleanups, and six fall cleanups for a total of 17 cleanups and about 230 volunteers. We've also had the chance to partner with Florida Public Interest Group (PIRG) for a spring presentation, in addition to Waste Connections for a summer cleanup and Archer Western Construction for a fall cleanup.

– Surfrider Florida International University Student Club

From beach and mangrove cleanups to volleyball games and other events, we have been able to spread the Surfrider Foundation's mission widely at Florida International University.



THE SURFRIDER FOUNDATION UNIVERSITY CITY HIGH SCHOOL CLUB

The Surfrider Foundation University City High School Club in San Diego dedicates young environmentalists to the health and wellbeing of our local beaches through beach cleanups and a growing number of volunteers. At the beginning of the year, our cleanups consisted of only five eager people. However, in recent months, the club swelled to a more substantial 20 people. We have conducted five beach cleanups this year (one per month), collecting more than 90 pounds of trash, and we hope to continue on this positive trend! After winning a \$150 grant, we used it to buy club buckets, trash grabbers and gloves to bolster our ability to clean up the beaches. Moving around to different San Diego beaches allowed for the discovery of those places that are most impacted and need our help. It has been a fantastic way to bring together like-minded environmental activists at our high school and we anticipate many more years of education and involvement.

– Surfrider University City High School Student Club



THE SURFRIDER FOUNDATION MALIBU HIGH SCHOOL CLUB

The Surfrider Foundation Malibu High School Club hopes to inspire like-minded high schoolers to demand environmental change by directly seeing how plastic pollution affects our local environment through beach cleanups. The club hosts a beach cleanup every other month at our local beach, Zuma Beach, where we have had an increasing amount of volunteers for every cleanup. In total, we have had more than 40 volunteers and partnered with the Malibu Rotary Club. We have collected over 2,000 pieces of trash, with the majority made up of plastic food wrappers and paper napkins. Beach cleanups

allow high school students to see the direct impact of plastic pollution on our local environment, inspiring individuals to take steps for change and demand action. The club has been rapidly growing as more and more students become interested in sustainability and taking action on environmental policy. As the ocean is such a big part of the Malibu lifestyle, we foresee many more years of active participation in creating environmental change and involvement in the club.

– Surfrider Malibu High School Student Club

Beach cleanups allow high school students to see the direct impact of plastic pollution on our local environment, inspiring individuals to take steps for change and demand action.

Emerging Science



Ocean Plastic

The terms 'ocean plastic' and 'marine plastic' have been popping up in news articles and corporate brand campaigns recently. By creating a commodity that uses plastics from the ocean, we are led to feel hopeful about the plastic pollution crisis because we can just collect plastic and use it again. Unfortunately, things aren't that simple.

Currently, up to **80% of debris in the ocean is plastic** with around **11 million metric tons of plastic** entering the ocean each year. Ocean plastic is, at its simplest definition, plastic that has been collected from the ocean. Given the abundance of plastic in the marine environment, it would seem that recycling would be a good use of trash while cleaning the ocean. To understand why this is an incorrect assumption, we have to examine what we currently know about how plastic behaves in the environment, the qualities of plastic that make it generally undesirable as recyclable material and the costs associated with traditionally recycled plastics.

The first issue with recovering ocean plastic for use is the size of most plastics in the ocean. Plastic is not biodegradable and will not simply break down over time. Instead, it breaks up into smaller and smaller fragments, eventually becoming **microplastics**. Around **94% of debris pieces floating in the Great Pacific Garbage Patch are microplastics**. The smaller that plastic becomes, the more difficult it is to recover and the less likely it is to be removed from the ocean.

The second issue with recovering ocean plastic for use is the quality of the plastic and the recyclability of it. To start, most plastic can only ever be recycled one time. It becomes significantly degraded during the recycling process and generally cannot be recycled again. Plastic found in the ocean will be degraded by sunlight and air and contaminated with sand, algae and other debris, so recovered plastic must be determined usable and cleaned before even beginning the recycling process. Plastic is



Currently, up to 80% of debris in the ocean is plastic with around 11 million metric tons of plastic entering the ocean each year

sorted for recycling by resin type, but currently, only three of the seven types of plastic resins are readily recyclable. With the use of multiple types of resins or colors on singular items, it has become increasingly difficult for recycling facilities to determine resin type and improper sorting of resin types can contaminate entire batches of potentially recyclable materials. These challenges exist in the attempt to recycle plastic collected in traditional waste management streams and are only amplified when handling plastic recovered from the ocean.

Aside from the complexities of removing and recycling recovered ocean plastic, a major factor in companies using ocean plastic in their products is the cost. Currently, it is **less expensive to use virgin plastic than conventionally recycled plastic**. While it is difficult to find exact numbers, these costs would only increase when taking into account the time and monetary costs of removing, cleaning, sorting and recycling ocean plastics. This is most likely why companies that currently market items made from ocean plastic do not share the percentage of ocean plastic used in their products – it often is minute.

One area of distinction that has come about in recent years is the term, 'ocean-bound plastic.' [Jambeck et. al.](#) was the first to conceptualize ocean-bound plastic as it relates to plastic pollution entering the ocean. [Zero Plastic Oceans](#) defines it as plastic within 50 km of coastlines that is at risk of entering the ocean. Typically, 'at risk' is in reference to areas that lack formal waste management systems, thus increasing the likelihood of the plastic entering the ocean. It is important to note that this does not include plastic that has been captured in a properly managed waste system.

The concept of ocean-bound plastic is incredibly helpful in estimating the amount of plastic entering the ocean each year from our coastlines. Currently, around **80% of all pollution in the ocean** has come from land-based sources and most of this is plastic. Being able to identify what and how much plastic is likely to end up in the ocean allows us to make predictions about future plastic pollution and use this information to support plastic pollution reduction legislation.

However, similar to ocean plastic products, some companies have started marketing plastic products made with ocean-bound plastic. While this could mean that companies are sourcing ocean-bound plastics from high-risk areas, it is often difficult to trace the exact source of these plastics and the percentage of ocean-bound plastic versus virgin plastic used in the products. Additionally, the fallacy that we can recycle our way out of the plastic pollution crisis continues with the marketing of ocean plastic and ocean-bound plastic products.

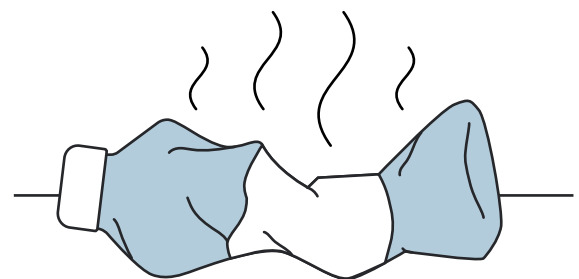
The terms 'ocean plastic' and 'ocean-bound plastic' are unlikely to decrease in popularity as awareness of ocean plastic pollution rises. On the science side of things, ocean-bound plastic is helpful in estimating the amount of plastic entering the ocean and identifying key areas in which infrastructure improvements can help to curb the flow of plastic into the ocean. For consumers, education about the differences between ocean plastic and ocean-bound plastic and the complexities of each one would help them navigate marketing strategies and misleading advertisements. While the recycling of these plastics may seem like a promising idea, often it is a greenwashing tactic that furthers our reliance on plastic. The Surfrider Foundation continues to fight for a plastic-free future by creating reusable systems and reducing overall dependence on plastic.

THREE MAJOR CHALLENGES WITH RECYCLING OCEAN PLASTIC

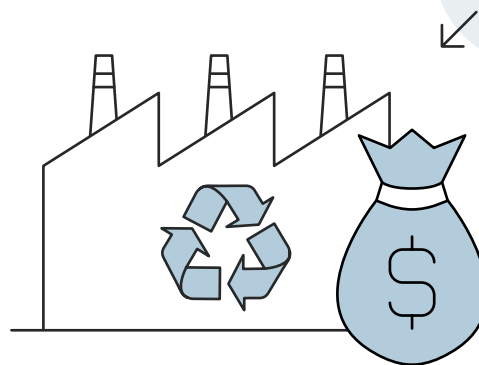
SIZE: Rather than biodegrading over time, plastic breaks up into smaller and smaller fragments that are too miniscule to be recovered for recycling.



QUALITY: Plastic found in the ocean is degraded by sunlight and air and contaminated with sand, algae and other debris making it unusable for recycling.



COST: Currently, it is less expensive to use virgin plastic than conventionally recycled plastic.



Cleanups and Policy

Beach 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. We have many success stories over the years of Surfrider activists leveraging cleanup data to aid our policy goals, from bag bans to smoking on beaches. But one item in particular has been gaining popularity recently and Surfrider is working to get ahead of the problem before it inflates.

Balloons may seem like fun and games, but these celebratory decorations are wreaking havoc on the environment. In the last six years, nearly 9,000 balloons have been collected during Surfrider beach cleanups. Balloons that are released to the skies are notorious for returning to the earth to litter marine and terrestrial environments alike. Whether released intentionally or not, airborne balloons can travel thousands of miles before they burst or deflate and begin their descent. Balloon pollution is a global issue that has no boundaries, harming many animals, both wild and domestic, which can mistake these balloons for food or find themselves ensnared in plastic ribbon, strings and materials associated with balloons. Similar to other [plastic pollution](#) items, an ingested balloon can block an animal's digestive tract, causing the animal to slowly starve to death.

Since 2016, the Surfrider Foundation has helped to pass [31 balloon release laws](#) across the country.

In order to prevent balloon pollution, Surfrider is encouraging local governments, state legislatures and the federal government to follow the [example](#) of dozens of state and local communities by adopting common sense laws prohibiting the intentional release of all balloons. Just as we've passed laws to reduce other plastic pollution items, such as straws, single-use bags and foam, we should do the same with balloons. To assist our network in crafting balloon release laws, Surfrider's Plastic Policy team has published a [Balloon Policy Toolkit](#). This toolkit contains resources, strategies and examples for Surfrider chapters and clubs to advocate for laws that mitigate the impacts of balloon pollution in their communities.

Since 2016, the Surfrider Foundation has helped to pass 31 balloon release [laws](#) across the country and we are continuing to fight against balloon pollution at local, state and federal levels. We encourage our network to be a part of the solution and find more sustainable ways to celebrate and commemorate life's special moments.



Policy Success

EASTERN LONG ISLAND BALLOON BAN

Most campaigns regarding balloons focus on banning the intentional release of balloons with lighter-than-air gasses in them. That was the case with the Eastern Long Island Chapter in 2019, but they decided to take a step further and used data collected in beach cleanups to support their case.

With guidance and support from East Hampton Town Trustee Susan McGraw Keeber, the chapter wrote a letter of support to the East Hampton Town Board and used cleanup data in an effort to ban the sale of balloons entirely. The cleanup data showed that since the chapter began collecting data at beach cleanups in June 2017, 11,806 pounds of debris have been removed from beaches between Westhampton Beach and Montauk. From the 84 beach cleanups held since June 2017, Surfrider volunteers have collected 1,428 balloons from our beaches. This is an average of 17 balloons per beach cleanup.

The chapter was heavily involved and spoke at town meetings, along with representatives from other environmental organizations. The ban on the sale of balloons passed unanimously in December, 2021 and took effect on January 1, 2022. This effort was largely successful because of the strong community support from dozens of environmental groups, local businesses, school groups and other activists, and it is one of the strongest policies preventing balloon pollution in the nation.

With guidance and support from East Hampton Town Trustee Susan McGraw Keeber, the chapter wrote a letter of support to the East Hampton Town Board and used cleanup data in an effort to ban the sale of balloons entirely.

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



Conclusion

Plastic pollution is a global crisis and the Surfrider Foundation's Beach Cleanup program is one fundamental way that we are working to address it. Despite the challenges of the last few years, 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, our work in 2021 shows the true strength of what can happen when we work together as One Surfrider.

Surfrider activists emerged from 2020 hungry to tackle plastic pollution. Our network surpassed a longtime goal and reported data from over 1,200 beach cleanups. We were able to nearly double many of our metrics from last year, engaging 15,864 volunteers and removing close to 170,000 pounds of trash and recycling from the environment. In addition to the on-the-ground work at the beach, we were able to effectively utilize beach cleanup data to enact legislative change and create a lasting impact. Our ongoing commitment to science and facts helps to grow our own knowledge and educate people

around plastic pollution. The achievements from 2021 are a testament to the dedication of Surfrider's grassroots network and show that we can face challenges head on, evolve and grow and continue to fight for a plastic-free tomorrow.

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.

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.



Photo: Adam Walker



SURFRIDER
FOUNDATION®

Surfrider.org

