



Semi-Annual Success Story ("Section C") April 2024

Prevent Balloon Litter Campaign: Expanding a Change in Social Norm Beyond Virginia to the Entire Mid-Atlantic

THE PROBLEM:

Balloon litter is of immediate concern to the Atlantic Coast because of its potentially severe impact on marine life. Experts ranked released balloons among the top five most deadly forms of marine debris due to the likelihood of balloon litter entanglement or ingestion by seabirds, sea turtles and marine mammals.

Released balloons can drift hundreds of miles and out over our oceans. Latex balloons burst in the atmosphere, so that when they fall into the water, they resemble jelly fish, a favorite food of sea turtles like the critically endangered Kemp's ridley. Birds are also easily entangled in the balloons and their ribbons. Foil balloons that become entangled in power lines can cause wide-spread power outages.

In 2016-2017, volunteers participating in the International Coastal Cleanup (ICC) found and reported more than 14,700 littered balloons in Mid-Atlantic states - New York, New Jersey, Delaware, Maryland and Virginia. Of these, 7,383 balloons were found in New York. New Jersey volunteers reported 2,832 balloon litter items, and Virginia volunteers found 2,414 balloons. ICC data in one mid-Atlantic state—Virginia—reveals that most of the balloon litter is found on its beaches, demonstrating that balloon litter accumulates in coastal environments.

In August 2018, Clean Virginia Waterways published a balloon debris monitoring report, [Balloon Litter on Virginia's Remote Beaches](#), documenting balloons as the most abundant type of waste on five beaches surveyed between 2013 and 2017 (funded by the Virginia Coastal Zone Management Program (CZM) Program with grants from NOAA Office for Coastal Management).



These are some of 176 littered balloons that were recorded and removed from the shoreline of Cedar Island on October 31, 2014 during a survey. Cedar Island is an uninhabited barrier island on Virginia's Eastern Shore. Photo by Christina Trapani.



All released balloons become litter, yet many people planning balloon release events to celebrate and memorialize life events do not think about it as littering or consider the many impacts to marine habitat and wildlife.

THE FIX:

*A project launched in Virginia, with funding from the NOAA Office for Coastal Management and NOAA Marine Debris Program, demonstrated the effectiveness of Community-Based Social Marketing to change behaviors associated with balloon litter. The **Mid-Atlantic [Prevent Balloon Litter](https://www.PreventBalloonLitter.org) CBSM strategy** was successfully designed to be transferrable to the Mid-Atlantic and is available to other coastal regions in the US. Messaging and multi-media has already been used by partners in the interior states.*



The **Mid-Atlantic Prevent Balloon Litter campaign leverages previous funds from the NOAA Office for Coastal Management** and Marine Debris Program for CBSM research and strategy to reduce balloon litter.

With a FY2014 grant from the NOAA MDP, the Virginia CZM Program and Clean Virginia Waterways partnered to conduct extensive research in Virginia to better understand who plans balloon release events—and, most importantly, why. This research informed the design of [Joyful Send-Off](#), a CBSM campaign to reduce mass balloon releases at weddings. This *pre-campaign research, conducted with OpinionWorks, was carefully comprehensive so that it not only informed the Joyful Send-off campaign strategy, but laid the foundation to expand implementation of CBSM to reduce balloon releases at other celebratory and memorial events.* Accordingly, another goal of the project was to **build capacity among partners in the Mid-Atlantic to develop and implement CBSM campaigns**. In June 2017, Virginia CZM funded a CBSM training with Dr. Doug McKenzie-Mohr for MARCO and other marine debris partners.

Following the success of this campaign and the CBSM training, the Mid-Atlantic Regional Council on the Ocean (MARCO) was awarded a 2018 NOAA Marine Debris Prevention grant to enable broad-scale implementation of the Joyful Send-off campaign across the Mid-Atlantic.

The first step was to validate the earlier research and determine if the key themes surrounding releases in Virginia were also attributable to balloon release behavior in the rest of the Mid-Atlantic. The findings of this initial research showed that mass balloon releases occurred at only 7% of wedding venues engaged in the study, indicating that the venue-based strategy from *Joyful Send-Off* was too narrow for the region.

To better understand the broader public audience to be targeted by the Mid-Atlantic CBSM project, an attitudinal survey also was conducted in the Fall of 2019. Results of 1,120 responses showed that 51% to 62% of the public identified as having participated in a balloon release, with a high incidence of informal and private releases. The releases also were mostly celebratory in nature.

Parallel to the Mid-Atlantic research, Virginia CZM contracted with Dr. Doug McKenzie-Mohr, CBSM expert and author, for Master Coaching to ensure the efficacy of a Mid-Atlantic Prevent Balloon Litter campaign. With the guidance of McKenzie-Mohr, MARCO partners pursued a **campaign strategy that focuses on a one-to-many, social normative strategy** emphasizing the use of balloon release alternatives during celebratory, memorial, and other events to honor individuals and groups. The campaign *reaches a variety of audiences well before they are involved in any type of balloon release events.*

Based on the need to reach a public audience, partners from aquariums in the region were invited to collaborate on this project. *To ensure that the diversity of the region was represented in the development of the campaign messaging, the aquarium partners engaged people within their local community programs to conduct an initial test of draft messages and imagery.* The results of the message testing showed that seeing the impact on animals who have ingested or become entangled in balloons, along with alternative ways to celebrate, deeply moved and motivated participants in the study to stop participating in balloon releases and to help prevent releases.



Informed by this research, a Mid-Atlantic Prevent Balloon Litter campaign strategy took shape, which uses CBSM tools and techniques proven to change behavior when they are implemented in concert with one another: 1) Persuasive Messaging, including posters which display balloon impacts and alternatives to be displayed by partners in publicly visible areas; 2) Visible Public Commitments, including pledge collection and a series of pledge decals as a reminder and prompt to follow through; and, 3) Social Diffusion/Social Norming, including a social media plan, a selfie station, and pro-bono ads in publications.

Just as did the *Joyful Send-off Campaign*, the *Prevent Balloon Litter Campaign* strategy includes colorful, vivid, and captivating imagery and multi-media. **Virginia CZM Program staff played a key role in crafting the campaign**



messaging and strategy design and a central role in producing the campaign's multi-media.

Multimedia materials, previously produced by Virginia CZM and Clean Virginia Waterways, with funding from the NOAA Office for Coastal Management, also are being leveraged for the campaign, including fact sheets, animated videos in English and Spanish, and the [PreventBalloonLitter.org](https://www.preventballoonlitter.org) website, which offers many alternatives to balloon release along with an on-line pledge, a Teacher Kit, and Media Room.

In October 2021, the Mid-Atlantic Prevent Balloon Litter Campaign was officially launched at all three partner aquariums (Virginia Aquarium, National Aquarium, and New York Aquarium), with a second pilot phase implemented in spring 2022 to test the campaign. To facilitate engaging more partners

in the campaign, Virginia CZM Program and Clean Virginia Waterways staff carefully designed a campaign exhibit kit to reflect the campaign CBSM strategy to engage the public and lead them through awareness of the impacts of balloon litter, and the actions that they can take to help reduce balloon litter and its impacts, including an activity and stickers for children. In the end, the combined efforts of aquariums and MARCO partners led to over 100,000 conversations held.



THE IMPACT:

A survey to 651 of people who pledged not to release balloons during the fall 2021 and spring 2023 at the aquariums and through [PreventBalloonLitter.org](https://www.preventballoonlitter.org) was circulated via email in late December 2022, with a reminder in mid-January 2023. The aquariums each donated 4 tickets to a raffle as an incentive to respond to the survey. Although our response was low at 44 returns, the results were very encouraging. Most of the respondents (31.1%) said that they have used an alternative to release, 17.8% are planning to use an alternative, and 57.8% indicated although no event has occurred, they will remember their pledge. No respondent reported that they took part in a release, or that they do not remember taking the pledge.

Some who commented back to the survey explained that they are helping spread the message – and change the social norm – about balloon litter and use of alternatives, such as:

It made me want to educate others when I see them doing balloon releases that there are other ways to celebrate that won't affect our surrounding community.

I feel like not many people think about how this impacts marine life and how it pollutes the ocean waters. So, I've made suggestions to family and friends of alternatives instead of letting balloons go. I post this story in my social media trying to affect more people.

It never occurred to me the litter that would occur from balloon releases which was naive on my part. I now make sure to tell others the consequences of these releases along with lantern releases. I also include how bubbles make a wonderful alternative.

Survey comments illustrated that the campaign was successful in removing one barrier to changing release behavior:

It made me want to better the environment. I did not realize how harmful releasing balloons into the sky was before the pledge.

A lot of people just don't think of about causes and harms of something as simple as releasing balloons can be... spreading knowledge is key.

After seeing the harm that releasing balloons does, I will use alternative methods in the future. This information is vital for each member of the community. Together we can create change.

Survey comments showed that learning about balloon litter made the pledgee think about how we impact the environment, and other plastic consumption and waste reduction actions:

It made me aware of my consumption of party supplies. For years growing up my family and I used glitter, balloons and plastic cutlery in parties. Now, I prohibit our consumption of any of these products. We go with reusable and biodegradable/compostable materials.

I've started picking up litter that I see while out hiking with my family.

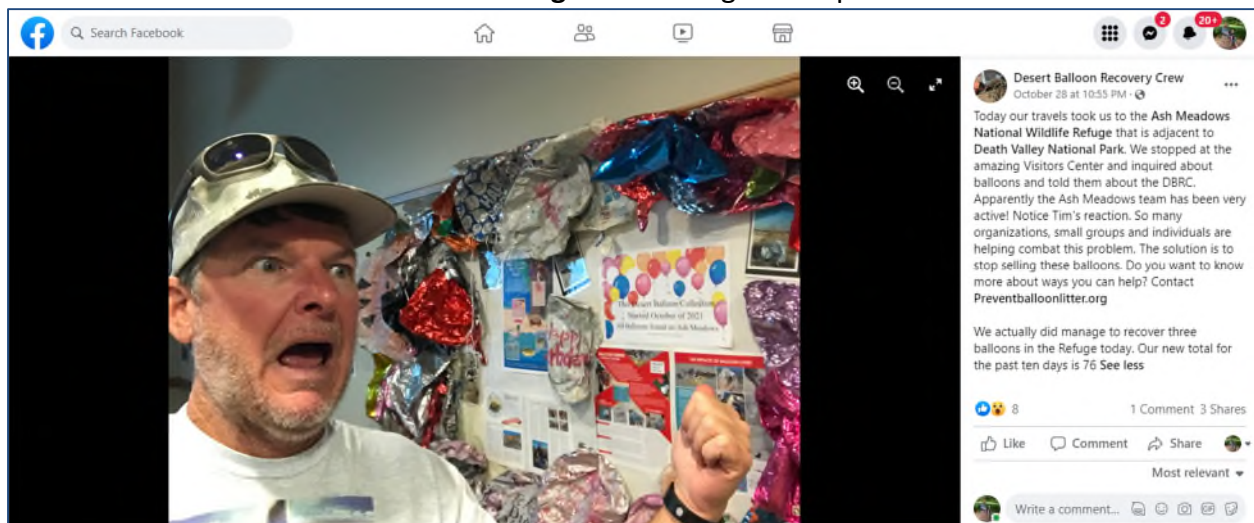
It made me think of all the other things I could change within my household. I now do not use plasticware for events, stopped buying heavily packaged products, etc.

Personal stories shared by those who pledged included:

My grandfather recently passed away and we held a service at his home, located directly on the bay. There were suggestions being made of releasing balloons, but with a simple explanation, we all decided not to. Instead, we sprinkled seeds along with his ashes. It was very nice.

Throughout the 5 years of this project, each Mid-Atlantic state conducted monitoring of 1-mile beach segments to count the amount of balloon litter along with other debris. **This monitoring work was supported in Virginia by Virginia CZM and Clean Virginia Waterways using grants from NOAA Office for Coastal Management.** While many factors influence the balloons that make it to Mid-Atlantic beaches, including the social norms explored by this project, fortunately there are encouraging signs that over the last five years, the amount of balloon-related litter appears to be decreasing. To view these results and the quantities of other debris on a map, check out the layer on the [MARCO Mid-Atlantic Ocean Data Portal](#).

A fact sheet compiling the results of research on balloon litter in Virginia and conveyed to legislators, was considered instrumental in the Virginia General Assembly's decision to ban the intentional release of balloons in Virginia. To mitigate the problem of balloon debris and



protect wildlife, a bill was passed that as of July 1, 2021, it is illegal to intentionally release balloons outside that take longer than five minutes to degrade after contact with air or water.

The Virginia CZM Program and Clean Virginia Waterways hosted a second training with Dr. Doug McKenzie-Mohr in early 2023. During this training, *Dr. McKenzie-Mohr highlighted the Mid-Atlantic Prevent Balloon Litter campaign* as an example of the use of social norming to change behavior. Dr. McKenzie-Mohr invited Virginia CZM and Clean Virginia Waterways staff to describe the *Joyful Send-off* and *Mid-Atlantic Prevent Balloon Litter* campaigns and incorporated a slide into his deck showing one of the Prevent Balloon Litter pledge decals. We have not yet learned whether Dr. McKenzie-Mohr has continued to mention of the campaign in his presentations, but we would certainly be honored if he did!

While the NOAA Marine Debris Program grant for this project officially closed in April 2023, the **aquariums and other project partners plan to continue implementing the campaign in perpetuity**, with the aquariums integrating it into their plastic pollution programs. Mid-Atlantic partners also continue to monitor balloon litter.



An animation video and a video of interviews with marine debris experts titled *Balloon Litter: A Conversation* – are downloadable from www.PreventBalloonLitter.org and from YouTube at <https://www.youtube.com/channel/UC79VQJ1IkeGbKJDT-6owRyw>

One partner in New Jersey reached out to share: *“Your work has been an inspiration and provided the need to create a Balloon Mission outreach, collection, and recycling program,”* shared Cynthia Seibold, Balloon Mission. *“Balloon Mission shares the Prevent Balloon Litter Teacher Toolkit, signs, and videos with schools, and three schools and the public library are using them as part of the STEM program.”*

THE PARTNERS:

Virginia CZM staff support for the research, campaign design, production of materials and implementation of the Mid-Atlantic Prevent Balloon Litter campaign grants from the NOAA Office for Coastal Management and Marine Debris Program. Funding for the Mid-Atlantic Prevent Balloon Litter campaign, particularly funding for research and printing of media, was possible through a grant from the NOAA Marine Debris Program to MARCO, with matching support from numerous partners in the Mid-Atlantic states – Virginia, Delaware, Maryland, New Jersey, and New York – and those serving on the Mid-Atlantic Marine Debris Work Group.

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