

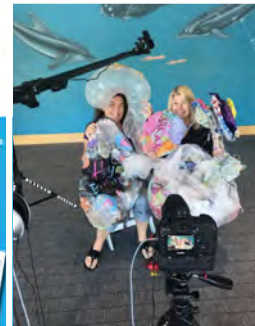
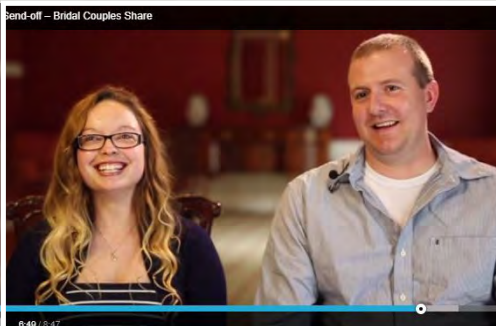


# Balloon Release Research in Virginia & Reducing Balloon Debris through Community-Based Social Marketing

Report to the NOAA Marine Debris Program

*Submitted by:*

Virginia Coastal Zone Management Program  
Clean Virginia Waterways of Longwood University







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November 2017

*Submitted by:*

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**Cover photos:** top row - Clean Virginia Waterways; C. Trapani; Florida Fish & Wildlife; C. Trapani; Fran Baer. Bottom row - Dragon Studios; VA CZM program; Misty Prewitt; Coastal Virginia Bride

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### **Reproduction of campaign strategy and materials:**

All materials produced through this campaign are available for use by partners. Contact the Virginia Coastal Zone Management Program or Clean Virginia Waterways for details.

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## Executive Summary

One of the near-term actions identified in the Virginia Marine Debris Reduction Plan, published by the Virginia Coastal Zone Management Program, is to design and implement a social marketing campaign targeting behaviors that will reduce balloon litter in the marine environment.<sup>1</sup> In the plan, balloons, and their attachments (often made of non-biodegradable plastics), were identified as one of the most harmful items to wildlife. Incidental and mass balloon releases are often used as a way to celebrate special occasions such as weddings, birthdays, festivals, fundraisers, graduations, store openings and sporting events. They are also released to commemorate the loss of loved ones at funerals and memorials. These balloons and their attachments can end up in streams and rivers and ultimately the ocean where endangered marine animals can ingest them or become entangled in them, causing great injury and even death.

Virginia has 112 miles of ocean-facing coastline much of which is either protected or restricted from public use. These areas are the northernmost nesting beaches for sea turtles. They also are an important migratory stop-off and nesting area for several species of endangered and/or protected shorebirds. This made Virginia an ideal location to study the quantities and sources of balloons released into the environment.

There is documentation of several species of birds and sea turtles impacted by balloon litter in Virginia through ingestion (balloons look like food items) and entanglement in the ribbons attached to balloons. Moreover, recent beach cleanup data have shown that nesting beaches used by threatened loggerhead sea turtles and endangered shorebird species are severely impacted by balloons. This project will benefit habitats in Virginia that are critical to these species. As the social marketing campaign is replicated throughout the Mid-Atlantic region and nationally, other critical habitats will benefit from a reduction in the numbers of released balloon and accumulation of balloon debris.

Partners in Virginia conducted extensive research to better understand who plans balloon release events—and, most importantly, why. Researchers followed the methods of Community-Based Social Marketing as presented by Dr. Doug McKenzie-Mohr. Developing effective Community-Based Social Marketing strategies means avoiding making premature assumptions about your audience(s): who



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.

<sup>1</sup> Virginia Marine Debris Reduction Plan.

<http://www.deq.virginia.gov/Programs/CoastalZoneManagement/CZMIssuesInitiatives/MarineDebris.aspx>

they are; their attitudes, awareness and knowledge; the barriers to the behavior you want them to engage in (real or perceived); the benefits they would receive in engaging in the alternative behavior; and, the avenues to reach or communicate with them. Conducting this qualitative and quantitative research is the important first step in developing a social marketing strategy that is most effective in reaching and altering the behavior of your audience(s).

This report provides an overview of the research conducted and needed to inform design of a social marketing campaign to reduce mass balloon releases. Research included an analysis of media reports of balloon releases, analysis of wedding blogs and other social media, a public survey, interviews and focus groups.

Campaign partners—working with the research firm, OpinionWorks—identified key themes regarding balloon releases:

1. A lack of knowledge—many people do not understand that no balloon is “environmentally friendly,” and that every released balloon becomes litter and can be harmful.
2. Some who are aware that balloons are litter and of their impact, justify or rationalize their actions.
3. People assume “biodegradable” means “harmless”.
4. Events are primarily planned by associations, families and schools, with women planning about 85% of releases.
5. Balloons are released mainly in parks, outside of schools, churches and wedding venues.
6. Some rural residents think their distance from the ocean makes balloon releases acceptable.
7. Spring has the highest number of balloon releases, followed by the fall.
8. The majority of balloon releases are at “sad” events (e.g., funerals, memorials), are organized to raise awareness, or are at “happy events” (e.g., weddings, graduations).
9. The sight of balloons rising into the sky provokes strong emotions.
10. Although balloon releases illicit strong emotional responses, if balloon releases are not done as part of a ceremony, participants find a release lacking any meaning—indicating that the ceremony may be the more important part of the balloon release for those participating.
11. Sky lanterns present a potential harmful litter item that is similar to helium-filled balloons.
12. Electrical outages caused by foil balloons contacting power lines is a concern to many.

An overview of how this research was then refined, a primary target audience was selected and a Community-Based Social Marketing campaign designed to reduce mass balloon releases at weddings and, by extension, other celebratory events is then provided.

The campaign—*Joyful Send-off*—“sells” memorable, joyful, picture-perfect, and litter-free send-off alternatives to balloon releases. The goal is that brides and grooms will learn that all released balloons become litter, and will not organize or participate in a balloon release in the years to come. Before





designing the pilot *Joyful Send-off* campaign strategy, Virginia partners spoke with and listened to brides about what a wedding send-off ceremony means to them, and then conducted message testing to refine a strategy that would be effective at reaching couples. The strategy also engages and educates venues, planners and other wedding businesses who influence the decisions of couples.

This report highlights the components of the *Joyful Send-off* campaign strategy—the Community-Based Social Marketing tools and techniques applied—and initial results of the effectiveness of a pilot of the campaign strategy. The *Joyful Send-off* strategy includes behavioral prompts at the time and place couples are making a decision about what type of send-off their ceremony will include, a request for a commitment from couples to select an alternative to balloon releases, and colorful, vivid, and captivating multi-media, including videos, with other couples sharing their own personal experiences. The *Joyful Send-off* message is positive, and also conveyed by wedding experts, a credible source for engaged couples, through personal contact.

The pre-campaign research was carefully comprehensive so that it not only informed the *Joyful Send-off* campaign strategy, but has laid a foundation for development and implementation of additional strategies to reduce balloon releases during other “celebratory” and “memorial” events—engaging other non-traditional audiences, including funeral directors, car dealership employees, sports team managers and school administrators.

Another goal of the grant project was to build capacity among partners in developing and implementing social marketing campaigns to target common, persistent, and harmful marine debris items such as single-use plastic, derelict fishing gear, crab pots, microplastics, and cigarette butts. Virginia partners also considered the transferability of the *Joyful Send-off* campaign to other mid-Atlantic states in the research and design of the campaign.

### **Support for the Campaign**

Staff support for the research, campaign design, and implementation of the pilot was provided in large part by the Virginia Coastal Zone Management Program and Clean Virginia Waterways of Longwood University. Financial support was provided by the NOAA Marine Debris Program, Virginia Coastal Zone Management Program and Clean Virginia Waterways. Extensive in-kind support was provided by OpinionWorks, other partners who served on the Balloon Campaign Advisory Team, and provided services (such as photo and video shoot models, locations and props), as well as the people who participated in our surveys, interviews and focus panels. The Virginia Coastal Zone Management Program also provided a two-day “Introduction to Community-Based Social Marketing” workshop with Doug McKenzie-Mohr to partners in Virginia and other Mid-Atlantic states.

## Introduction

### *Environmental Problem: Balloon-related Litter*

One of the near-term actions identified in the Virginia Marine Debris Reduction Plan, published by the Virginia Coastal Zone Management Program, is to design and implement a social marketing campaign targeting behaviors that will reduce balloon litter in the marine environment.<sup>2</sup> In the plan, balloons, and their attachments (often made of non-biodegradable plastics), were identified as one of the most harmful items to wildlife.

As volunteers around the world participate in cleanups to remove trash, litter and discarded waste that accumulates on beaches and along rivers and streams, they make no distinction between picking up an empty soda beverage bottle, a cigarette butt, a tire, or a deflated balloon. All these items meet the definition of marine debris or litter as defined by NOAA and the United Nations. However, balloons are unique among all the man-made litter and debris found in the ocean and on the land. Helium-filled balloons (and their attachments including plastic valves, disks and ribbons) are a form of litter that people actually purchase with the intent to release them “on purpose” into the environment. According to the NOAA Marine Debris Program, marine debris is any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally disposed of or abandoned into the marine environment or Great Lakes.



Many balloon attachments are found during cleanups and monitoring. Photo by Christina Trapani.

### SKY LANTERNS

There is another type of litter that shares many attributes with helium-filled balloons: sky lanterns (sometimes referred to as Chinese lanterns). These small hot-air balloons are made of paper around a frame made of metal or bamboo. A source of heat—a candle or a fuel cell made of flammable material—is attached to the bottom of the lantern to provide lift. Like balloons, sky lanterns are completely out of control after launching, and all return to Earth where they present a threat to animals and habitats. Too frequently, sky lanterns cause fires and can be a threat to air traffic. According to *Balloons Blow* (which posts information about fires that are caused by sky lanterns), the use of sky lanterns is banned in many countries. As of February 2016, 30 states, including Virginia, have banned the release of sky lanterns, according to the Feb 2016 issue of *Wildfire Today*. In Virginia, the law states, “No person shall release or cause to be released an untethered sky lantern.” (Virginia Code - § 308.1.6.3 Virginia Statewide Fire Prevention Code)

<sup>2</sup> Virginia Marine Debris Reduction Plan.

<http://www.deq.virginia.gov/Programs/CoastalZoneManagement/CZMIssuesInitiatives/MarineDebris.aspx>

### Amount of Balloon-related Litter

The amount of balloon debris found in the US and overseas is staggering. While the International Balloon Association downplays the threat from balloon litter, saying that “...balloon litter has never been a significant part of the list of debris...” data collected by volunteers during the Ocean Conservancy’s annual International Coastal Cleanup (ICC) tell a different story. Ocean Conservancy’s volunteers all around the world have worked together to help identify this wildlife threat by tracking balloons (along with other ocean trash) for more than 31 years through the International Coastal Cleanup. During the 2016 ICC in Virginia, 492 balloons were found at Chincoteague National Wildlife Refuge in Accomack County, and another 117 balloon litter items were found on other beaches in the same county.<sup>3</sup> During a survey of False Cape State Park (Virginia Beach) on September 5, 2017, researchers recorded 125 balloons and an additional 42 ribbons in approximately 2 miles.<sup>4</sup>



More than a dozen deflated balloons, tied together, present a potentially deadly threat as they drift about 3 miles off the coast of Virginia Beach. Photo by Christina

As seen below, more than 630 thousand balloons were found worldwide during the ICC in the nine year period 2008 through 2016. Of these, 44.5% (N=280,293) were found in the US.

#### Balloons recorded by volunteers in the International Coastal Cleanup, 2008-16

Year	Worldwide	USA	Virginia	Percentage of balloons found during the ICC that were in the USA
2008	77,705	38,181	590	49.1%
2009	82,902	39,744	836	47.9%
2010	75,207	32,153	874	42.7%
2011	93,913	38,535	808	41.0%
2012	69,614	29,582	690	42.5%
2013	52,918	25,282	924	47.8%
2014	62,226	27,070	1,620	43.5%
2015	61,876	24,597	942	39.8%
2016	54,029	25,149	1,472	46.5%
<b>9-Year Totals</b>	<b>630,390</b>	<b>280,293</b>	<b>8,756</b>	<b>44.5% (9 year avg)</b>

Sources: Ocean Conservancy and Clean Virginia Waterways, 2008 - 2017

<sup>3</sup> Clean Virginia Waterways (2016). International Coastal Cleanup in Virginia, 2016 Data Report

<sup>4</sup> Trapani & O’Hara, pers. comm.

Data collected during the ICC—while illuminating—are basically “one-day snapshots.” Additional data about litter on Virginia’s coastal beaches are being collected using NOAA’s protocols for marine debris monitoring. In addition, several grants from the Virginia Coastal Zone Management Program to Clean Virginia Waterways are funding balloon litter surveys on the barrier islands of Virginia’s Eastern Shore. As balloon monitoring continues, partners will share the results, which will hopefully show reduction in the number of balloons found along the coastal Virginia beaches monitored prior to the start of the campaign.

### What Happens to Balloons After Release

As they rise, helium-filled balloons may or may not burst, but eventually all balloons and their attachments return to Earth as litter, landing in the ocean, inland waterbodies, or on land.

Once airborne, balloons can travel long distances and have an impact in an area from the point of release. A balloon can travel hundreds of miles before bursting or deflating and land in a forest, a field, river, lake or ocean. They often end up joining the flotsam riding the world's oceans, washing up on beaches thousands of miles away. A balloon that was released during the opening ceremony of the Olympic Games in Nagano in 1998 was found in Los Angeles, California just 49 hours later—that is a distance of approximately 5300 miles.<sup>5</sup> In 1990, ICC volunteers picked up an astounding 30 pounds of balloons along Virginia’s Assateague Island on the Atlantic Ocean on just one day. Analysts found that the balloons—many imprinted with the names of businesses or events—came from 52 sources in six states. A blogger writes in a June 30, 2012 entry about an offshore fishing trip near the eastern end of Long Island, New York: *“The most abundant sight throughout the day were party balloons. We must have seen more than 200 of different shapes and sizes. Who knows how far this terrible flying garbage had traveled to end up on the ocean where they poison the ecosystem.”*<sup>6</sup>



Balloon litter presents risks to terrestrial animals as well as marine animals. These deflated balloons present ingestion and entanglement risks to animals that live in this forested area. Coincidentally, this image was taken recently by the campaign’s research consultant as he traveled in Northern Virginia. Photo by Steve Raabe.

<sup>5</sup> Ecology – Eco Friendly Balloons FAQs. (2017). Retrieved from <http://www.ecology.com/english/faq/index.html>

<sup>6</sup> OceanWanderers.com <http://oceanwanderersnews.blogspot.co.nz/2012/06/sowerbys-beaked-whales-and-very-early.html>





Latex or rubber balloons burst in the atmosphere and they resemble jelly fish—a favorite food of sea turtles, like this Kemp’s ridley who ingested a balloon and ribbon. Kemp’s ridley are the most endangered of all sea turtles. Photo courtesy of Florida Fish and Wildlife.

### Impacts of Balloon Litter: Wildlife

Many of these airborne balloons or their fragments will end up in the oceans where they can be mistaken as food by marine animals and ingested, or the string, ribbon or other material can wrap around fins, flippers, and limbs—leading to starvation, infection, amputation or drowning. Latex balloons can take years to degrade—long enough to pose entanglement and ingestion dangers to turtles, seabirds and marine mammals. Birds of prey, farm animals including cows and horses, and other inland animals can also be impacted by balloon litter.

Due to the negative impacts of balloon litter on animals—terrestrial and marine— the Virginia Marine Debris Reduction Plan identified balloons and their attachments as a priority issue. When marine debris experts were asked to estimate which common litter items posed the greatest entanglement and ingestion risk to marine animals, balloons were ranked in third place after fishing gear and plastic bags and utensils.<sup>7</sup>

Scientists who work with stranded whales, dolphins, seals and sea turtles have found balloons, parts of balloons and balloon string in the stomachs of many of these dead animals. *“Like many other forms of synthetic debris, balloons can resemble prey and pose a threat to all kinds of marine organisms around the world, many of which are threatened or endangered,”* says Ocean Conservancy Marine Debris Specialist Nicholas Mallos. A 2006-2011 Queensland study of stranded sea turtles found that of the 41 pieces of rubber eaten by turtles studied, 32 pieces (78%) were balloon fragments.



More than 270 experts in marine debris—averaging 12 years of experience in their field— were asked to rank the severity of impacts of marine debris on seabirds, sea turtles and marine mammals. As seen in this summary, balloons were ranked in the number three spot. Chart by Ocean Conservancy.

<sup>7</sup> Wilcox, C., Mallos, N. J., Leonard, G. H., Rodriguez, A., & Hardesty, B. D. (2016). Using expert elicitation to estimate the impacts of plastic pollution on marine wildlife. *Marine Policy*, 65, 107-114.



A royal tern entangled in a balloon ribbon was seen flying in the Virginia Beach area in the summer of 2015. Photo by Fran Baer.



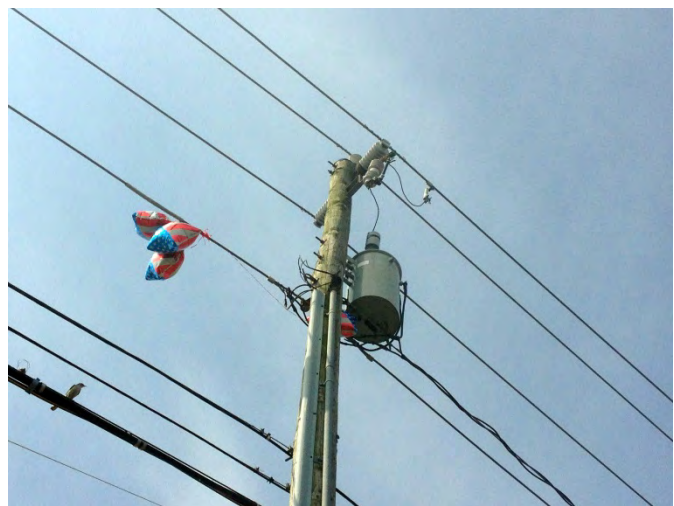
After becoming entangled in the ribbons of several deflated balloons, a puffin was rescued by boaters. The car dealership that released the balloons vowed to never use balloons in future promotions. Photo by Jill Fraser-Smith Photography.

## Impacts of Balloon Litter: Power Outages

While there is no nationwide collection of data on the topic, Clean Virginia Waterways gathered evidence that up to 20% of electrical power outages are caused by balloons making contact with power lines.<sup>8</sup> For example, according to Dominion Power in Virginia, there had been 40 power outages in the first 8 months of 2015 caused by balloons. A representative of Dominion told Clean Virginia Waterways, *"We found that since 2011, each year we have anywhere from 14-40 events caused by balloons, impacting from 1,200 to 16,000 customers. It's a widely varying range because outages occur based upon the location and type of power line that the balloon touches."* One power outage in Virginia in April 2015 left 14,600 families without power. On September 5, 2015, more than 2,000 customers in Virginia Beach lost power due to balloons that caused an outage, and in October of 2014, nearly 2,000 customers in Richmond, VA were without power due to metallic balloons that were tangled in a power line.

Southern California Edison reported that in 2014, they had 656 power outages caused by balloons. Data kept by Glendale, CA indicate that 16% of their outages are caused by balloons over a five year period ending in 2012. According to Pacific Gas and Electric, metallic balloons caused more than 300 outages in Northern and Central California in 2013, cutting service to 165,000 homes and businesses.

According to the Los Angeles Department of Water and Power (LADWP), 9% of their power outages were due to metallic balloons in 2014.



<sup>8</sup> Balloon Litter. Clean Virginia Waterways. <http://www.longwood.edu/cleanva/OurWorkBalloonLitter.html>

In 2015 alone, LADWP reported 519 outages caused by metallic balloons, compared with 393 power outages caused by storms or falling trees. According to one employee of a utility company, balloons released on Valentine’s Day, Mother’s Day, Easter, graduations and at weddings bring outages, “almost without fail”.

Several electrical providers’ websites include “don’t release balloons” messages for this reason. In addition to education, some have tried legislation. Because of power outages, and potential injury to firefighters and electrical workers, a bill calling for a ban on the sale of all balloons that conduct electricity (including foil) was considered in California in 2016. While the bill died, it was supported by firefighter associations, electrical providers, local governments, public-safety groups, and wildlife conservation organizations. It was opposed by The Balloon Council, which was formed to oppose legislation that would limit or ban the release of balloons into the atmosphere.

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## Targeted Litter Behavior Identified - Mass Balloon Releases

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### Sources of Balloon Litter

Who purchases helium-filled balloons, and then releases them into the atmosphere? Families, schools, businesses and sport venues across the globe continue to purchase mass quantities of helium-filled latex balloons or foil-covered plastic balloons (often mistakenly referred to as Mylar), transport them to a selected site, and then release them into the air. These mass releases of balloons have become part of various social and marketing events such as weddings, funerals, memorials, athletic events, birthdays, festivals, political rallies, store openings, car sales and fundraisers. These balloons often have plastic ribbons, plastic valves and plastic disks attached.

### Why This Research is Needed

Virginia has 112 miles of ocean-facing coastline much of which is either protected or restricted from public use. These areas are the northernmost nesting beaches for sea turtles. They also are an important migratory stop-off and nesting area for several species of endangered and/or protected shorebirds. This made Virginia an ideal location to study the motivations of releasing balloons into the environment.



Often a piece of balloon litter provides information on the intent behind its release. This “She’s Just Away” balloon ended up on a barrier island in Virginia. Photo by Christina Trapani.

## LAWS & BEHAVIOR CHANGE

The Commonwealth of Virginia currently has law in place that bans, and imposes a fine, on releases of 50 or more balloons in a one-hour period. (Virginia Code - § 29.1-556.1) This law, however, was unknown to a majority of those interviewed and participating in focus groups during research for this project. Although this information was an eye-opener, and could affect the decision to release if a citizen is law-abiding, many balloon releases can include fewer than 50 balloons and, to the best of the authors' knowledge, no fine has ever been imposed for balloon releases. To change the social norm, and make balloon releases and debris a thing of the past, regardless of where people live and what variances there are in state and local laws, requires a change in behavior.

The findings and results of this project can ultimately have a far-reaching impact on balloon releases and the environment. Virginia's coastal zone is an area of high population density and diversity, including many balloon distributors and people purchasing, and possibly releasing balloons, either accidentally or intentionally. As described in more detail below, this project focused on gathering qualitative and quantitative research in Virginia's coastal zone, prior to designing a Community-Based Social Marketing strategy. This research was necessary to identify and get to know our audience to ensure that the messages developed and the means by which the message was delivered to this audience(s) will be effective in changing the actions of this audience(s), and would also be transferrable to other coastal areas in Virginia and in the Mid-Atlantic. Engaging partners in this project has had the added benefit of building the capacity of these partners to conduct future Community-Based Social Marketing campaigns to address other sources of marine debris.



These balloons – all with long plastic ribbons attached – were released during a ceremony on Virginia Beach. Photo by Jacqueline Thornton.

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### *Community-Based Social Marketing: Why It Works for Environmental Issues*

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Although many people make the connection that when balloons go up they come back to Earth later as potentially harmful litter, too many other people—even those who would never think of littering by discarding a newspaper—will release balloons either accidentally or participate in a mass release of balloons without making this connection.

Why is this?

### **Using Community-Based Social Marketing to Change Behavior**

This project focused on this question and on changing this harmful behavior through the use of Community-Based Social Marketing to help “sell” alternative positive behaviors to balloon releases.



Community-Based Social Marketing draws heavily on research in social psychology, which indicates that initiatives to promote behavior change are often most effective when they are carried out at the community level and involve direct contact with people. Doug McKenzie-Mohr, author and expert in Community-Based Social Marketing, writes

*“The cornerstone of sustainability is behavior change...to date, most initiatives to foster sustainable behavior have relied primarily upon large-scale information campaigns that utilize education and/or advertising to encourage the adoption of sustainable actions. While education and advertising can be effective in creating awareness and in changing attitudes, numerous studies document that behavior change rarely occurs as a result of simply providing information as information alone cannot address the diversity of barriers that exist for most sustainable behaviors. In contrast, community-based social marketing has been demonstrated to be an attractive alternative to information-intensive campaigns for the design of programs to foster sustainable behavior.”*

As described in the recent book *“Social Marketing to Protect the Environment: What Works”*, it involves

*“...developing a strategy that addresses both the behavior we wish to promote and the behavior we wish to discourage. For the behavior we wish to promote, we want to reduce its barriers while simultaneously increasing its benefits. In contrast, we wish to do the opposite for the behavior we want to discourage—we wish to increase its barriers while also reducing its benefits.”<sup>9</sup>*

This project follows the first four of five steps of Community-Based Social Marketing:

1. Selecting the behavior
2. Identifying barriers & benefits
3. Developing a strategy(ies)
4. Conducting a pilot
5. Broad-scale implementation

This project drew from Community-Based Social Marketing “tools” which have been identified as being particularly effective in fostering behavior change:

- Commitment—good intentions to action
- Social norms—building community support
- Social diffusion—speeding adoption
- Prompts—remembering to act
- Communication—creating effective messages
- Incentives—enhancing motivation to act
- Convenience—making it easy to act

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<sup>9</sup> McKenzie-Mohr, D., Lee, N. R., Kotler, P., & Schultz, P. W. (2011). *Social marketing to protect the environment: What works*. Sage Publications.

## Pre-Campaign Research: Identifying and Getting to Know Our Targeted Audiences—A Critical First Step

Developing an effective Community-Based Social Marketing strategy means avoiding making premature assumptions that we know who should be our primary audiences, the attitudes, awareness and knowledge of these audiences and what messaging and strategy will work to change the behavior of these audiences. In the initial stage of this grant, we conducted qualitative and quantitative research to carefully explore the barriers and benefits to our selected behavior—the accidental and purposeful release of balloons—prior to designing a strategy to reduce the barriers to the behavior we want to promote, while simultaneously increasing the benefits to be gained in exchange for not engaging in balloon release.

Project staff conducted formative research during 2015 and 2016. This research, detailed in this report, included:

- A literature review about the impacts of balloon litter on wildlife and examples of effective social marketing campaigns on environmental behavior issues
- Mass and social media analysis (especially wedding blogs)—see [Appendix A and B](#)
- Public survey (with more than 800 responses)—see [Appendix C](#)
- Interviews with Individuals Who Organized or Participated in a Balloon Release —see [Appendix B](#)
- Interviews with retailers who sell helium-filled balloons
- Initial research on balloon release policies at venues (e.g., parks, churches, schools)
- Initial research on the number of electrical outages caused by balloons contacting power lines
- Focus groups (five held with the general public in Richmond, Virginia Beach and Roanoke and another virtually with school principals from other areas of the state.

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### *Balloon Campaign Advisory Team*

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Project staff from the Virginia Coastal Zone Management Program and Clean Virginia Waterways of Longwood University consulted with a Balloon Campaign Advisory Team, which included representatives from the Virginia Aquarium & Marine Science Center, NOAA Marine Debris Program, Ocean Conservancy, Virginia Department of Game and Inland Fisheries, and the Virginia Department of Environmental Quality.

Project staff provided webinars and in-person meetings in July 2015 and June 2016 for the Balloon Campaign Advisory team partners highlighting research findings to date and next steps in July 2015 and June 2016.<sup>1</sup>

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<sup>1</sup> Partners updates: <https://drive.google.com/open?id=0B95MAcp2XlsmWUhyY3ZoX29xOFk> and <http://www.deq.virginia.gov/Portals/0/DEQ/CoastalZoneManagement/Reports/MarineDebris-RegisterRaabe-CPW16.pdf?ver=2016-12-16-101950-943>

Project staff engaged additional partners and informed the public about Virginia’s marine debris reduction efforts and the balloon pre-campaign research, including presentations at the 2015 Hampton Roads Alliance for Environmental Education Conference, 2015 Virginia Water Monitoring Council Conference, NOAA Marine Debris Program regional Webex in December 2015, EPA Region III Citizen Monitoring Summit, Virginia Marine Debris Summit in March 2016, Virginia Coastal Zone Management Program Partners Workshop in November 2016 and at the Virginia Water Monitoring Council Conference in March 2017.

Project staff designed a two-page fact sheet that highlights the balloon debris issue.<sup>2</sup> This fact sheet was distributed to various audiences including the 2015 Virginia State Fair and at speaking engagements. It is downloadable from the marine debris page on the Virginia Coastal Zone Management Program web site. Staff also produced a three-panel display and a panel for an exhibit at the 2015 Virginia State Fair and the 2017 Back to the Bay event including a station where visitors could pledge not to release balloons.



Project partners Katie Register (Clean Virginia Waterways), Christina Trapani (researcher) and Virginia Witmer (Virginia Coastal Zone Management Program) share the Joyful Send-off message with hundreds of attendees of the 2017 Garden Club of Virginia Annual Meeting in Richmond, VA. Photo courtesy of Garden Club of Virginia.

### *Pre-Campaign Research Methods*

The audience targeted for this research were participants at gatherings such as weddings, graduations, memorials, and awareness raising events. In other words, people who attend such events and release individual balloons. This research also targeted a “midstream” audience of people who might authorize or influence balloon releases, such as wedding planners (including the bridal couple planning their own wedding), school principals, and directors of event venues.

Several research techniques were employed to understand the behaviors and motivations of these audiences, and they are described below.

<sup>2</sup> Balloons as Litter Fact Sheet.

<http://deq.state.va.us/Programs/CoastalZoneManagement/CZMIssuesInitiatives/MarineDebris/MarineDebris-Balloons.aspx>.



## Quantitative Research:

- *Analysis of news accounts of balloon releases, and social media and blog posts by brides.* This work was conducted directly by project staff at the Virginia CZM Program and Clean Virginia Waterways. This research helped identify several key facts about balloon releases which have helped shape the other formative research conducted. *See Appendix A & B.*
- *A statewide survey of Virginians* was conducted between March and June 2015, both online and in-person. The link to the survey was propagated through multiple means, and a hard-copy version of the questionnaire was distributed in target areas of Hampton Roads and the Richmond area. Though not a true random sample of the Commonwealth's population, the survey was completed by 893 people statewide and provided a good picture of balloon release activity and attitudes among Virginians. *See Appendix C for survey tool and responses.*
- *Survey input from Maryland for comparison and additional context.* A question about participation in balloon releases was added to a randomly sampled statewide survey of 594 Marylanders conducted by OpinionWorks February 26 - March 8, 2015. These survey results, indicating that 20% of Maryland residents had taken part in a balloon release ceremony during the previous 10 years.

## Qualitative Research:

- *Seven probing telephone interviews* were conducted by OpinionWorks among organizers of balloon releases in order to understand their motivations and influences. *See Appendix D for interview data.*
- *In-person interviews were conducted among retailers* who sell helium balloons to gain insight into customer and retailer motivations. These interviews were conducted by project staff at the Virginia CZM Program and Clean Virginia Waterways.
- *Focus groups* were conducted in Richmond (2 groups, July 20, 2015), Virginia Beach (2 groups, December 15, 2015), and Roanoke (1 group, January 20, 2016). Four of these five groups were conducted among people who had participated in balloon releases, with one of the Richmond groups conducted among school principals who had experienced a balloon release on their school property; that group was conducted virtually, using shared-screen technology, so that principals from across Virginia could take part. The Richmond focus groups were moderated by OpinionWorks' staff and the succeeding groups were facilitated by project staff at the Virginia CZM Program and Clean Virginia Waterways based on a discussion guide developed by OpinionWorks. *See Appendix E & F for moderator script and image testing conducted with participants.*
- *Message boards were tested at bridal shows* in Hampton and Virginia Beach in January and February 2017. *See Appendix G.*



## Key Findings of Formative Research

The qualitative and quantitative pre-campaign research identified the following themes:

1. A lack of knowledge—many people do not understand that no balloon is “environmentally friendly,” and that every released balloon becomes litter and can be harmful.
2. Some who are aware that balloons are litter and of their impact, justify or rationalize their actions.
3. People assume “biodegradable” means “harmless”.
4. Events are primarily planned by associations, families and schools, with women planning about 85% of releases.
5. Balloons are released mainly in parks, outside of schools, churches and wedding venues.
6. Some rural residents think their distance from the ocean makes balloon releases acceptable.
7. Spring has the highest number of balloon releases, followed by the fall.
8. The majority of balloon releases are at “sad” events (e.g., funerals, memorials), are organized to raise awareness, or are at “happy events” (e.g., weddings, graduations).
9. The sight of balloons rising into the sky provokes strong emotions.
10. Although balloon releases illicit strong emotional responses, if balloon releases are not done as part of a ceremony, participants find a release lacking any meaning—indicating that the ceremony may be the more important part of the balloon release for those participating.
11. Sky lanterns present a potential harmful litter item that is similar to helium-filled balloons.
12. Electrical outages caused by foil balloons contacting power lines is a concern to many.

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### *How Widespread Are Balloon Releases?*

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The percentage of the public that participates in ceremonies or events where helium balloons are released appears to lie between 20% and 29%, offering a sense of how widely balloon releases involve the general public. Specifically, we can make these observations from the survey:

As illustrated below, based on the statewide survey of Virginia residents, more than one-quarter (29%) of the population said they have “taken part in an event or ceremony where balloons were released, for example at a wedding, at school, at a memorial service, to call attention to a cause, or something like that.”

For comparison, in the scientific statewide telephone survey conducted in neighboring Maryland, 20% of the state’s population said they had taken part in such a balloon release event.

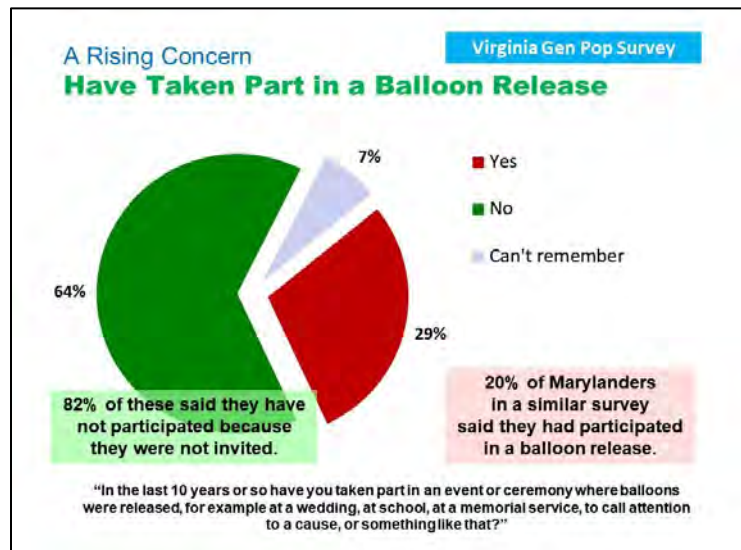
Based on segmented results from the Maryland survey, participation in balloon releases is significantly higher in the state’s 14 rural counties, reaching 27% of the public, compared to 20% statewide.

There is evidence in both surveys that balloon releases are less frequent in heavily urbanized areas, as well as areas that adjoin the ocean or the Chesapeake Bay. Balloon releases appear to be

somewhat more frequent in suburban and rural areas upstream and in the Piedmont.

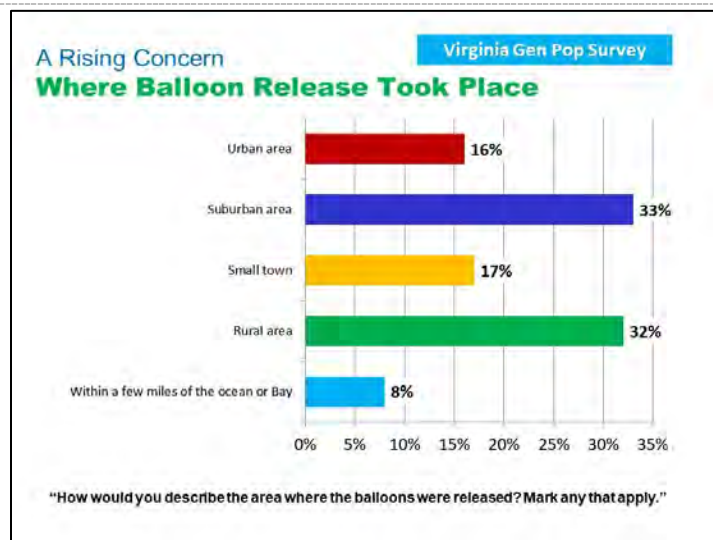
According to the Virginia survey, 16% of balloon releases took place in urban areas, 33% in suburban areas, 17% in small towns, and 32% in rural areas. Only 8% of balloon releases took place within a few miles of the ocean or Chesapeake Bay. Focus group comments affirmed that people felt more comfortable releasing balloons in places where they felt the balloons may not have as much impact.

Significantly, among the almost two-thirds of Virginians who said they had *not* participated in a balloon release in the prior 10 years, 82% said that was because “I have not been invited or have never been present to take part in one.” Only 15% of non-participants (in other words 9% of Virginians overall) said they had been invited to a balloon release but did not *want* to participate. That 9% compares to the 29% who said they *have* participated in a balloon release. In addition to what a person wants to do, one can imagine the subtle social pressure to take part in a balloon release at a wedding or a memorial service. These findings indicate that for many Virginians, balloon releases are still a social norm.



### Where Balloon Releases Are Taking Place

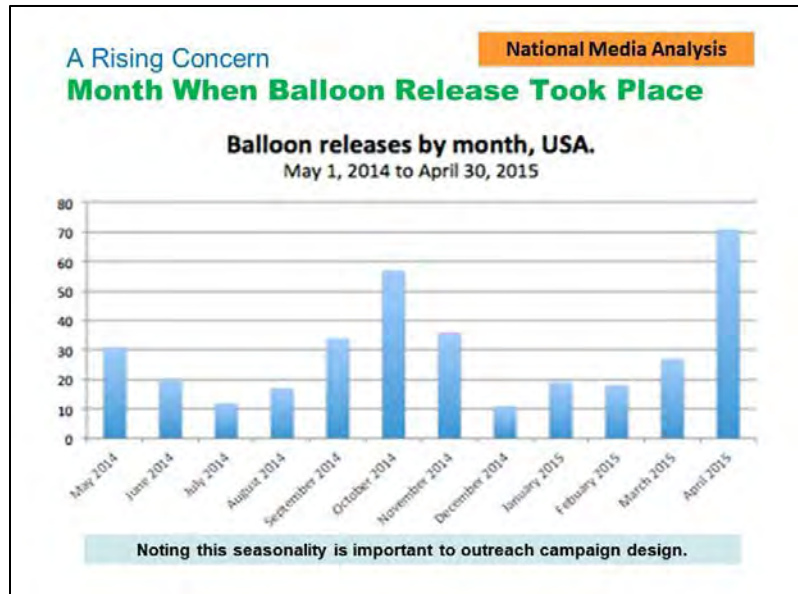
Knowing the venue where balloon releases take place is helpful to prioritizing outreach where it will have the most impact. Based on the Virginia statewide survey, balloon releases are most likely to take place at schools, with 23% of the people who said they had taken part in a balloon release recalling that their most recent balloon release took place at a school. The next most common venues were parks (17%), followed by churches and other houses of worship (15%), homes or private property (10%), cemeteries (8%), and community centers (7%).



### Seasonality of Balloon Releases

Another important finding was the time of year when balloon releases are most likely to occur. What emerged was a seasonality to balloon releases focused on the spring and the fall. A nationwide analysis of balloon releases mentioned in the news media showed a spike in April, and another spike in October, with somewhat lower but notable numbers in the adjoining months of May, September, and November.

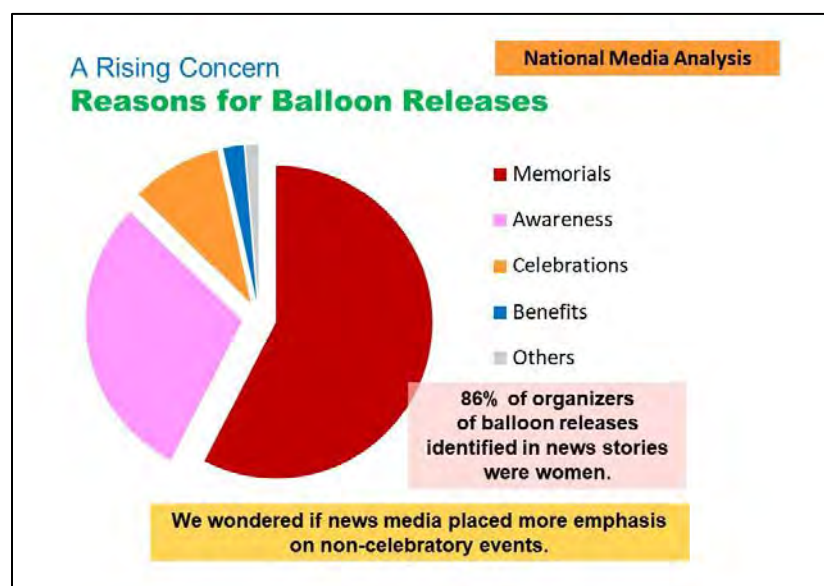
This finding offers an opportunity for staging campaign implementation in the months prior to these spikes, as event organizers and other specifiers are planning their commemorations and events. Given the high number of releases at schools, parks, and houses of worship, one could anticipate that many of these release events relate to commemorations such as graduations, major sporting events, and the like, as well as milestones such as weddings.



### Why Balloon Releases Take Place

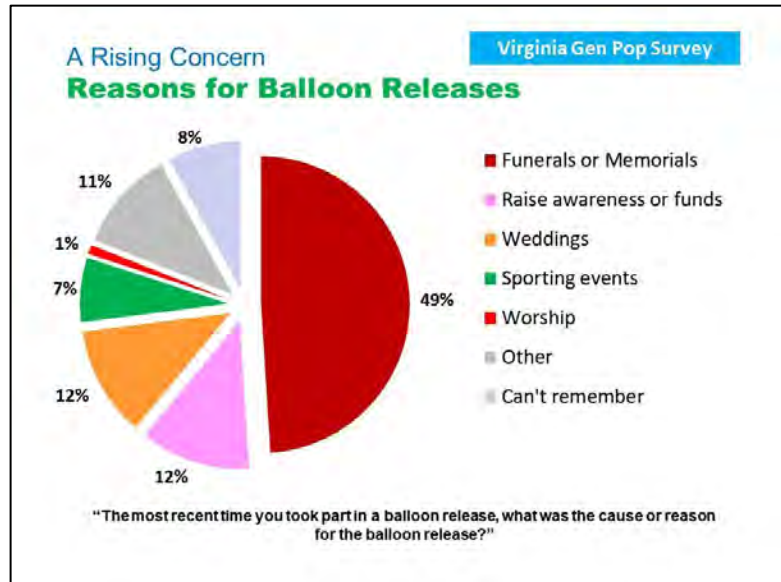
The national media analysis was conducted before the Virginia general population survey took place. The media analysis provided an early look at why balloon releases take place—with the known limitation that some types of balloon release events may be deemed by editors as more newsworthy than others, notably memorials, missing persons, cause-related and awareness-raising events, or events connected to prominent local institutions.

With that limitation in mind, the media analysis revealed a very strong



incidence of memorials, accounting for more than half of balloon release events covered by the media. Awareness-raising events accounted for approximately one-third of all events.

As an important footnote to the media analysis, 86% of all balloon release event planners, coordinators, and spokespeople identified in the media were women, giving a very strong clue to one characteristic of those who specify balloon releases, and who should be a primary target audience of the campaign.



The Virginia statewide survey provided a more stratified accounting of the reasons for balloon release events, based on respondents’ recollection of their most recent balloon release experience. Funerals and memorials remained the most important reason by far, accounting for half (49%) of all balloon releases. Raising awareness or funds for an issue or cause was second at 12%, tied with weddings at 12%. Sporting events followed at 7%, and worship at 1%, with a smattering of other individual reasons offered.

### Emotional Reactions to Balloon Releases

Ultimately, it is the human emotional reaction to balloon releases that is driving participation in these events. As was known anecdotally, and as this research made clear, the emotional response to a mass release of balloons is often palpable, stirring, and sometimes cathartic. These emotional stimuli are so strong that they represent a significant barrier to preventing balloon releases.

Several key ideas emerged from the interviews with balloon release organizers, as illustrated in the visual below:

- For the bereaved, the release of balloons often symbolizes a sense of peace,

**A Rising Concern**  
**Reasons for Balloon Releases**  
Interviews

“When I lifted my eyes to see the balloons going up to the sky, I felt a peaceful emotion of hope in my sorrow as a widow. Through that wonderful experience, I remembered that my help to pass that painful moment will come from heaven.”

“Faculty and students were excited. The autism speech and the release of the balloons resulted in a very thought-provoking moment.”

“My 5-year-old son died one year ago and we had a balloon release at his funeral and at a 5k held in his honor. I feel like I am sending them to him and it gives us peace.”



release from sorrow, and even communication with the departed person. Accounts of this emotional response can be very moving.

- For causes such as autism awareness, a balloon release coupled with knowledgeable speakers can lead to a very thought-provoking moment, as described below.

On the general population survey of Virginians, people who had experienced balloon releases described similar feelings, using words found in the visual below. Once again, a strong sense of sense of gratification, stimulation, and well-being comes through in these descriptions.

When it comes to event organizers, particularly brides who are planning their own weddings, comments indicated a combination of rationalization and a little bit of defiance. According to prior research conducted by OpinionWorks, when it comes to littering, people tend to rationalize their own contribution as small and insignificant, even benign. The issue of releasing balloons appears to be no different.

A Rising Concern Virginia Gen Pop Survey

### Reasons for Balloon Releases

“Serenity”  
“A sense of togetherness”  
“Awesome!”  
“Beautiful tribute to a life lost”  
“Excitement”  
“Freedom”  
“Connected to the woman who had left us”  
“A sense of peace”  
“Release”  
“Relief/Closure”  
“Touching”  
“Wonderful”

“What were the feelings that you experienced as the balloons were being released?”

A Rising Concern Interviews

### Reasons for Balloon Releases



“I will do what I want on my wedding day – it is my day!”

“...just because I’m doing a balloon release doesn’t mean I don’t care.”

“...I personally don’t see 3 balloons causing much of an issue.”

“Do what you want to do. The animals will be fine. I’m sure all these people telling you not to (release balloons) still drive cars and use hairspray or other chemicals dangerous to animals.”

### *The Role of Ceremony in Balloon Release Events*

Research and input from focus group participants indicated that although balloon releases illicit strong emotional responses, if they are done in conjunction with a ceremony, participants find a release lacking any meaning—indicating that the ceremony may be the more important part of the balloon release for those participating.

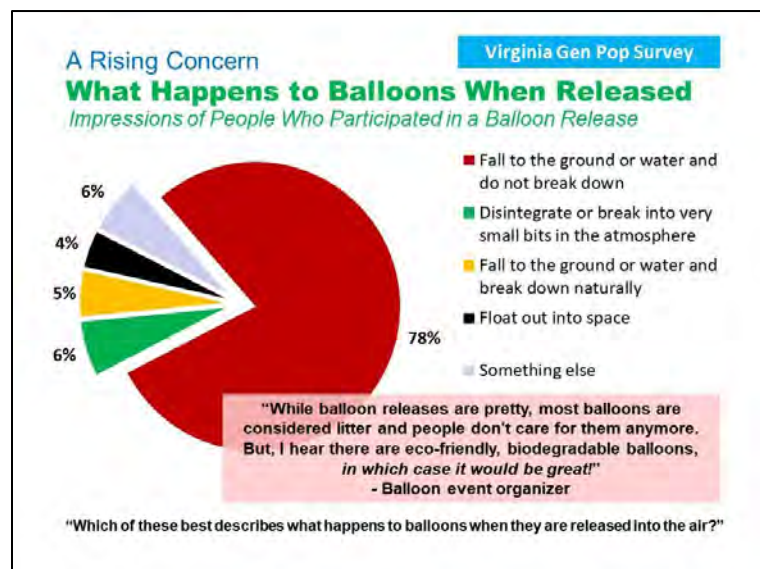
Sky lanterns present a potential harmful litter item that is similar to helium-filled balloons. One focus panel woman who participated in a balloon release told us that the event did NOT include a ceremony—that the organizers did not provide context, so the release was meaningless. Other focus group participants spoke at length about the words that were said, and the feelings that were shared prior to the balloon release.

### *Impressions of What Happens to Balloons Once They Are Released*

Entering this project, there was some anecdotal evidence that people believe that balloons disintegrate harmlessly in the atmosphere, or even continue floating off into space. In fact, this research strongly disproved that such ideas are widespread. Almost four out of five people (78%) responding to the Virginia statewide survey, when given four specific options, affirmed that balloons released into the air *“fall down to the ground or water and do not break down.”*

Only 6% said balloons *“disintegrate or break into very small bits in the atmosphere.”* Five percent said balloons *“fall to the ground or water and break down naturally,”* and 4% said they *“float out into space.”*

It was clear in focus group discussion that some balloon release participants are aware of the conflict between their knowledge of balloon litter, and their own desire to take part or plan a balloon release event. It is when confronted with that conflict that rationalizations and even defiant reactions occur, as demonstrated in this work. From a behavior change standpoint, this collision of negative realizations and positive gratification offers an opportunity to make headway with the audience, assuming campaign organizers can provide meaningful and compelling alternatives to balloon releases, and avoid slipping into a preachy, dogmatic mode of messaging.



## Connecting With Our Audience

Considerable attention was spent in the focus groups exploring counter-measures that would have an impact on participants. Images of balloon impacts were tested as a means of identifying wedges that could move people to think and act differently about releasing balloons. These fell into four categories that were initially tested in the July 2015 (Richmond) focus groups, and later refined in the testing that occurred in December 2015 (Virginia Beach) and January 2016 (Roanoke).

### Category 1: Wildlife impact

A variety of images were tested and discussed as seen [Appendix F](#). These featured marine life and birds that were entangled or perhaps had consumed balloon parts. It emerged that some focus group participants were strongly moved by wildlife impacts, while others were virtually unmoved. For those who were impacted, the emotional power in this messaging was strong. For most participants, though, it became clear that particular species were more motivating than others, depending on regional affinities or personal

Focus Groups

**A Rising Concern**  
**Wildlife Impact**



**Mixed impact on audience.**  
**Some strongly moved. Others not.**  
**Species affinities come into play.**

preferences. Sea turtles, for example, appeared somewhat less motivating upstream in Richmond than in Virginia Beach. Attention must be paid to species selection in imagery, both making an effort to localize the impact, and showing a variety of species impacted.

### Category 2: Litter Impact

Showing real images of balloons as litter in natural settings can make an impact on people. In particular, in the series pictured below, the dramatic image on the left, which stemmed from a massive balloon release in Cleveland in the 1980s, raised curiosity and concern. But as has been observed, many people are quick to rationalize, and images that appear to be exaggerated lose their impact as people consider their own contribution—one balloon perhaps, or a single release by their wedding party—to be relatively benign.

Focus Groups

**A Rising Concern**  
**Litter Impact**



**High impact for some in audience.**  
**But remember, they tend to minimize**  
**their own contribution: "I just did it once."**  
**"It was only five balloons."**




### Category 3: Electricity Outages

Understanding that errant balloons can damage or interrupt the transmission of power was an unexpected message for focus group participants, who imagined mostly environmental impacts from balloon releases. Perhaps as a result of that, the specter of power interruptions proved to be a surprisingly potent message. The impact was heightened by facts about the incidence of power interruptions, making this a real, not a theoretical discussion. In part, this imagery and messaging had potency because participants could imagine an impact on *them*, not just on a distant animal or beach.

A Rising Concern  
**Unexpected Impact: Electricity Outages**

Focus Groups



**16-20% of Power Outages Due to Balloons**  
**Unexpected Level of Concern by Audience**

### Category 4: The Law

To a person, those interviewed did not know about a Virginia law prohibiting release of 50 or more balloons in a single event. For well-meaning, law-abiding citizens of the Commonwealth, this information was an eye-opener. We found that it was particularly impactful in the focus group of school principals, who said they would not want their school connected with an activity that was prohibited by law. One can extrapolate that reaction to event organizers in many other venues and anticipate how impactful this message could be across Virginia.

In the second round of focus groups in Virginia Beach and Roanoke, this exploration was narrowed and refined to home in on themes and images that would truly impact the target audiences. A detailed analysis of focus group reactions (*Appendix F*) leads to several observations.

Focus group participants in Virginia Beach and Roanoke were asked to score “How much this image or idea makes me pause and think about the impact of releasing balloons” on a scale of 1 to 5 where “5” means “very much” and “1” means “not at all.” A total of eleven images and messages were tested in this way. Only four of them achieved an average score above “4” on the scale, falling into two categories.

A Rising Concern  
**Self-Restraint: Obey the Law**

Focus Groups



Courtesy of GospelGrabBag.com

**It is illegal to release 50+ balloons in Virginia.**  
**Just knowing that deters many law-abiding citizens.**

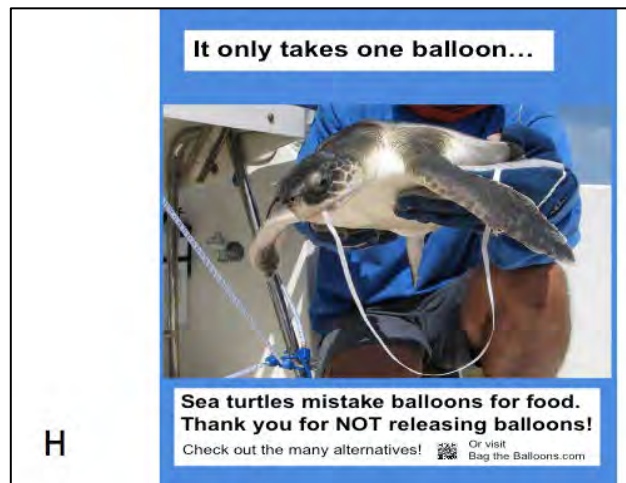


Most impactful were images of wildlife impact. The most impactful images and their scores are shown below. The full range of scores and comments can be read in *Appendix F*.

Highest scoring: 4.31



High-scoring: 4.29



High scoring: 4.09



Cartoon images of animals did not score as high. Participants had a strong preference for realistic images that could help them imagine the distress felt by the animals. Scoring much lower were images of balloon litter without animals present or with only humans encountering balloon litter.

Also scoring highly was this image of balloons caught in power lines, which brought to mind the personal impact of unintended consequences.

High scoring: 4.18



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## *Implications and Recommendations Stemming from This Research*

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As a result of this work, it appears that three ingredients must be present to lay the foundation for a successful campaign:

1. **Focus on shifting the social norm:** This activity is still a social norm in Virginia. Relatively few people in this research said they were opposed to balloon releases, and others demonstrated that they would have trouble overcoming the social pressure or emotional gratification that is part of balloon release events. Over time, this campaign needs to focus on shifting the social norm.
2. **Planners and participants must be confronted:** To some extent, both planners and participants must be confronted with the negative impacts of balloon releases. These are threefold: wildlife impacts (with attention to varying the species and showing authentic impacts), the unintended consequence of power outages, and for event organizers, just knowing that mass releases are against the law in Virginia.
3. **Emotional gratification must be replaced:** Finally and importantly, the emotional gratification drawn from a balloon release event must be replaced with alternative practices that offer their own, different gratification and meaning for participants. While the colorful release of balloons is a visual spectacle, other forms of gratification can be found for participants. The campaign should promote compelling alternatives as part of its campaign strategy.

## Exploration of Alternatives



Research showed that, as a campaign grounded in the practice of Community-Based Social Marketing, this effort will need to concentrate on creating a new norm. From the research, we know that balloon releases are emotionally compelling. Therefore, a focus on both the negative consequences of balloon releases, and the positive gratification offered by alternatives, will be needed. Given the many venues where balloon releases take place and the niche audiences

participating, it seems most practical in the immediate term to focus on midstream event planners and people who work at venues as well as the people who influence them. For weddings, this means the target audiences would include couple (who are decision makers) as well as the vendors and people who work for venues where weddings are held.

An array of social marketing tools are available to help with this task. One can imagine well-timed interventions delivered in-person at bridal expos or school administrator meetings, or delivered electronically to event decision-makers. On a limited budget, this may be effectively backed by evocative social media content aimed at target audiences with the intent to go viral.



## Refinement of Research and Selection of Primary Target Audience

In June 2016, project staff met with and briefed the Balloon Campaign Advisory Team on the research findings and engaged the team in deliberation of the target primary audience(s) for the first pilot campaign strategy. During this meeting, the team agreed it would be best to first focus on reducing balloon releases at celebratory versus memorial events. Based on the research findings, the team also agreed with OpinionWorks that the best path forward would be to focus our first pilot strategy on balloon releases at universities and colleges and/or weddings. While there was interest in working with the K-12 community, members of the team identified a number of potential barriers to working with them as one of our first target audiences.

It became clear that additional audience research was needed to refine our knowledge of the target audiences associated with releases on college campuses and during weddings, and to ensure development of a campaign that would be successful and transferrable. A survey was administered to college students on two campus (Longwood University in Farmville and George Mason University in Fairfax). A significant finding was that greater awareness of balloons as litter could have a

significant impact on whether students engage in releases. Based on responses from students,

awareness alone might lead many (if not most) students to pledge to never release helium-filled balloons. We encountered obstacles that made additional on-campus research unfeasible given our time and limited resources. For this reason, partners selected engaged couples as the audience for our first Community-Based Social Marketing pilot. Completing the research focused on college campuses should be a future goal of continued work on reducing, or eliminating, balloon releases.

To refine the campaign messaging and strategy focused on wedding send-off alternatives, campaign partners developed and tested a series of message boards at two wedding shows in January and February 2017. Imagery was provided by Dragon Studies. A series of boards were designed with images that were positive—happy couples engaged in a positive send-off behavior—as well as images showing the impact of balloon debris. Overall, couples responded more favorably to positive images and messages as opposed to images that showed the negative impacts of balloon litter. For



*Joyful Send-off* messaging testing at bridal show in Virginia Beach. Photo by Laura McKay.

example, couples liked photos of happy couples paired with a series of messages that were positive (e.g., “*Love Is In the Air*” and “*Your Send-off should be joyful, memorable and picture perfect*”). Couples did not like images that were negative, (e.g., burst balloons in the water and a sea turtle that ingested a balloon and ribbon) that were paired with a message that was focused on the negative effects of releasing balloons. Some of the “Don’t Do This” messaging we tested included “*And you thought your cousin’s wedding date getting trashed was a problem*” and “*Picture-Perfect?*” next to a photo of littered balloons. Although the negative imagery grabbed attention and was impactful, it did not illustrate or convey the positive behavior or “ask”, leaving couples with a negative impression without informing them what they can do. Importantly, couples indicated that they were curious about what the campaign was trying to achieve, and they wanted to understand the “Why?” or our “Ask.” In response to this, campaign communications—ads, articles and website—also convey that the campaign is encouraging litter-free send-off alternatives and explaining that balloons are litter and they have negative impacts.

The message testing confirmed that the *Joyful Send-off* campaign strategy should:

**1. Use imagery that is -**

- positive - in behavior and emotion
- clearly shows joy in faces of bride and groom and guests
- has color and depth
- includes guests engaged in positive behavior as well as bride and groom
- alternatives clearly demonstrated

**2. Messaging that is -**

- positive
- conveys action couples can take
- what not to do and what to do - don’t let balloon go, do this instead
- use “litter-free” and “eco-friendly” in the message (or at base of ads)

*See Appendix G for message board testing data sheets.*

## Design and Pilot of *Joyful Send-off* Campaign Strategy

With these research findings in hand, the Balloon Campaign Advisory Team designed a Community-Based Social Marketing strategy, *Joyful Send-off*, to pilot in the Hampton Roads region of Virginia.

The messaging developed for this campaign, and efficacy of the method of communicating this message(s), was based on what our research told us about

our primary target audience—engaged couples. Feedback and insights gained during our surveys, interviews and focus panel sessions informed every element of our campaign strategy. We also know that in order to successfully engage and connect on a personal level with the engaged couples whose behavior we hope to change, our campaign strategy needed to focus on “selling” alternatives to balloon releases in an attention-getting, persuasive, credible, and memorable way. This report outlines and describes the Community-Based Social Marketing tools and techniques we selected as components of the *Joyful Send-off* strategy, which are often most effective when used in combination with one another.

The *Joyful Send-off* strategy, described in the next section, uses the Community-Based Social Marketing tools the partners determined would be likely to significantly reduce balloon releases during weddings. The campaign was officially launched on August 9, 2017. Partners are currently implementing and evaluating the effectiveness of the pilot strategy for the *Joyful Send-off* campaign. Preliminary results of each component of the campaign strategy are also provided.



A picture-perfect ending to a picture-perfect wedding day.

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### *Joyful Send-off Campaign Strategy Components*

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#### **Captivating Communication, Prompts, Social Diffusion, Credible Sources**

In this section, we outline the components of the *Joyful Send-off* campaign strategy, which focus on using some of the Community-Based Social Marketing tools and techniques that have been proven to be effective, especially when used in tandem and as part of a comprehensive Community-Based Social Marketing campaign strategy. Doug McKenzie Mohr also provides guidelines for applying these tools and techniques effectively. Below we illustrate the tools and techniques applied through the *Joyful Send-off* campaign strategy, and how the campaign partners followed these guidelines.

**Captivating Communications:** The *Joyful Send-off* campaign uses the following methods to enhance the effectiveness of our communications:

- The *Joyful Send-off* messaging was informed through research with engaged and married couples, which uncovered the barriers and benefits, attitudes and behavior of this audience, and also the communication outlets to best deliver this message.
- The *Joyful Send-off* campaign message is vivid, personal and concrete.
- The message is being delivered by **trusted sources**—wedding providers, who will influence the couples’ decisions about how they will conduct their wedding, e.g., venues and wedding magazines—as well as through other couples, **who have credibility with our audience**.
- The *Joyful Send-off* campaign emphasizes how the alternative send-off activities encouraged provide the same memorable, beautiful and picture-perfect send-off that have compelled couples to release balloons.
- *Joyful Send-off* focuses on the use of two-sided messages through social media, which is also in response to learning that couples go first to social media for ideas when planning their wedding.
- The *Joyful Send-off* communications convey clear and specific instructions to engage in the desired behavior—identifying the many simple and easy to plan send-off alternatives to balloons.
- *Joyful Send-off* worked with real couples to share their personal experience and to model the positive alternative behavior.
- *Joyful Send-off* enhances social diffusion through use of social media and encouraging couples to share their experience.
- Where possible, *Joyful Send-off* partners personally contacted and delivered kits to venues to encourage them to partner in the campaign and help convey the message to couples.
- As balloon monitoring continues, partners will share the results, which will hopefully show reduction in the number of balloons found along the coastal Virginia beaches monitored prior to the start of the campaign. This feedback to the community is important to show the positive impact of their positive behavior, and reinforce the awareness of the direct consequences of balloon releases.
- As the *Joyful Send-off* campaign continues, partners will provide how-to videos, as well as additional ordering and do-it-yourself instructions, to make it easier for couples to know how to engage in alternative send-offs.

**Prompts:** The *Joyful Send-off* campaign conveys clear and specific alternative behaviors at the point where couples are making a decision about how they will exit their wedding, following these guidelines:

- Couples are prompted when visiting venues to plan their weddings to use *Joyful Send-off* ideas, through posters noticeably displayed at the venue and through an information sheet and sample send-off materials.
- *Joyful Send-off* materials provide colorful imagery that is self-explanatory and clearly model couples using alternative send-offs.



- *Joyful Send-off* prompts focus on and encourage a positive behavior—wedding send-off alternatives— rather than focusing on employing couples not to engage in the harmful behavior of releasing balloons.

**Social Diffusion:** The *Joyful Send-off* campaign has partnered with real couples who have used alternative send-offs and consciously chose not to release balloons. These couples are the campaign’s early adopters who are helping to foster social diffusion of the campaign’s message.

- The stories of the campaign’s partner couples is visible, and told through their own words, through video.
- Other couples are being encouraged to share their own stories through the campaign’s social media.

With these tools and checklists in mind, the *Joyful Send-off* campaign is reaching out to our target audience through the following strategy components:

### Compelling Photography and Videography

To provide the vivid, compelling imagery needed to convey the campaign message, Clean Virginia Waterways contracted with Dragon Studios. The Dragon Team consisted of the professional photographer, a videographer and a wedding marketing consultant who worked with project staff to conduct photo/video shoots and to assist in developing and tracking of social media to spread campaign messages. The imagery produced was critical in generating multi-media materials for the wedding campaign

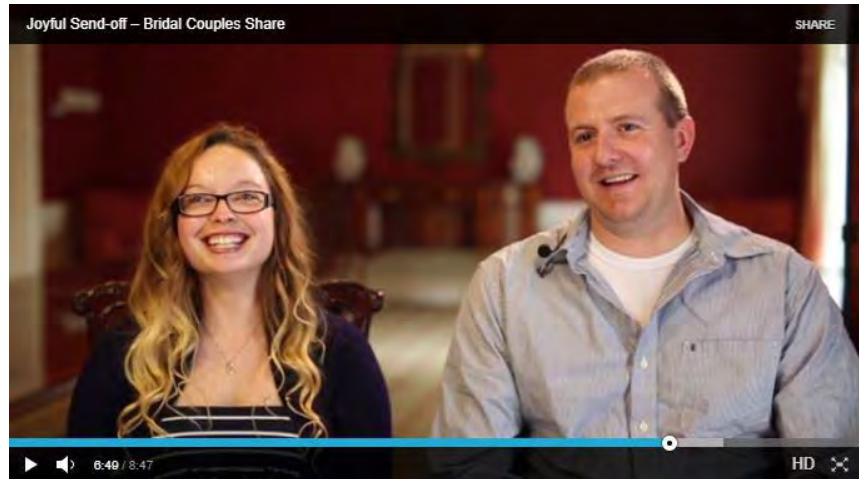


Mike Dragon of Dragon Studios at a *Joyful Send-off* photo shoot. Photo by Katie Register.

strategy, including magazine ads, giveaways and prompts distributed through partnerships with venues and vendors and targeted at couples during wedding planning. These videos are downloadable from [www.JoyfulSendoff.org](http://www.JoyfulSendoff.org) and have been shared via social media. Still and video imagery was also captured for future strategies discouraging balloon releases at other celebratory events, such as birthday parties, and at memorial events. The *Joyful Send-off* logo was designed by campaign partners, and tested through a survey to couples, and to campaign partners.

Seven photo/video shoots between November 2016 - June 2017 were used to produce numerous still images and a series of eight videos. The videos include:

- 40-60 second snippets that highlight wedding send-off alternatives to balloons
- 9-minute video with interviewed couples sharing the celebratory choices they made and why they did not release balloons
- 9-minute video of interviews with wedding venues and vendors describing what they allow and encourage
- 15-minute video of interviews with environmental professionals and volunteers about the impacts of balloon debris and why they should not be released
- Approximately 3-minute video highlighting some alternatives for memorial ceremonies



Researchers Christina Trapani and Kathy O'Hara pose with some of the balloon litter items they have found over the years. This was part of a video shoot for a video that explains the impacts of balloon litter. Photo by Misty Prewitt.

## Print Ads and Articles in Magazines

Ads and articles were placed in the following regional bridal magazines to drive traffic (couples) to the *Joyful Send-off* website for alternative send-off ideas:

- VOW Bride Magazine - Spring/Summer 2017 - ¼ page ad
- Coastal Virginia Wedding Magazine - Fall/Winter 2017  
<http://www.coastalvirginiamag.com/Bride-Virtual-Magazine/>



An article was published in the Fall 2017 Virginia Beach Hotel Association newsletter encouraging members to partner with the campaign—<http://files.constantcontact.com/511b18e6301/e5c084c9-1cc7-44d6-b9e2-9adc36e2df1a.pdf?ver=1506710518000>.

An article on the problem of balloon debris and the campaign appeared in the September 2017 issue of Chesapeake Bay magazine—<https://www.chesapeakebaymagazine.com/columns/2017/9/15/a-ballooning-problem?rq=balloons>.

### Next Steps:

Project staff have compiled a chart of information about bridal magazines for future ads and articles, to submit when funds become available, which includes: deadlines, prices, regional vs national, scope of reach, on-line option, e-newsletter options, and editorial options.

## Social Media—Facebook, Instagram, Twitter, Pinterest

Social media accounts were established on Facebook - <https://www.facebook.com/joyfulsendoffva/> - and on Instagram, Pinterest and Twitter to capture the attention of couples, who according to our wedding consultant look first to social media sites when looking for wedding planning ideas. The *Joyful Send-off* social media sites share alternative and litter-free send-off ideas and also drive traffic to the campaign website. In August and September 2017, posts were made to the Facebook page on a daily basis.

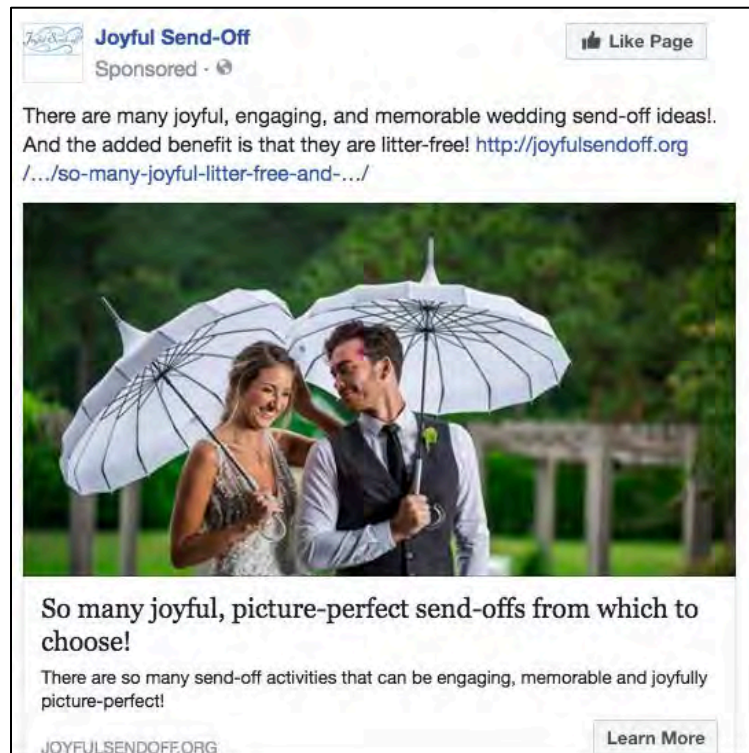


### Results/Feedback-to-Date:

In August and September 2017, posts were made to the Facebook page on a daily basis. Selected posts were also boosted, where we paid a fee to reach a larger audience. In total, 49,115 people saw the boosted posts, and 2,913 engaged. Generally speaking, engagement on Facebook is when people perform actions on your page. For example, they may like a post, click on a link to a website, comment on an image, or share the post with their friends. With Facebook Insights, engagement is defined as post clicks, likes, shares and comments.

### Next Steps:

Project staff will continue adding content to the *Joyful Send-off* social media sites (under open Virginia CZM Program grants for outreach and implementation of the Virginia Marine Debris Plan), including posting new photography and videos as they are available. The Dragon Team will continue helping populate and sharing the social media sites through 2017-2018. Couples are being encouraged to share photos of their wedding send-offs. As wedding providers, especially venues and planners, agree to help distribute the campaign message (through venue/vendor kits—see below) and pledge not to allow release at their facilities, they will be recognized through the social media sites. Project staff will also continue to encourage partners—including members of the balloon campaign advisory team—to help further promote the *Joyful Send-off* social media resources to expand the campaign’s audience.



### Joyful Send-off Website

A website was established at [www.JoyfulSendoff.org](http://www.JoyfulSendoff.org). This site is focused on wedding send-off alternatives to balloon release, and also includes a page on the impact of balloon releases. The website immediately pivots to the positive, while educating visitors about the problem of balloon debris, and shares a background story about why campaign partners created the *Joyful Send-off* campaign. This is in part a direct response to feedback from couples during campaign message testing at wedding shows. Many couples wanted to know the “why” of the campaign’s “ask.”

Printed campaign materials are downloadable from this site, including an info sheet for couples highlighting wedding send-off alternatives.



**Results/Feedback-to-Date:**

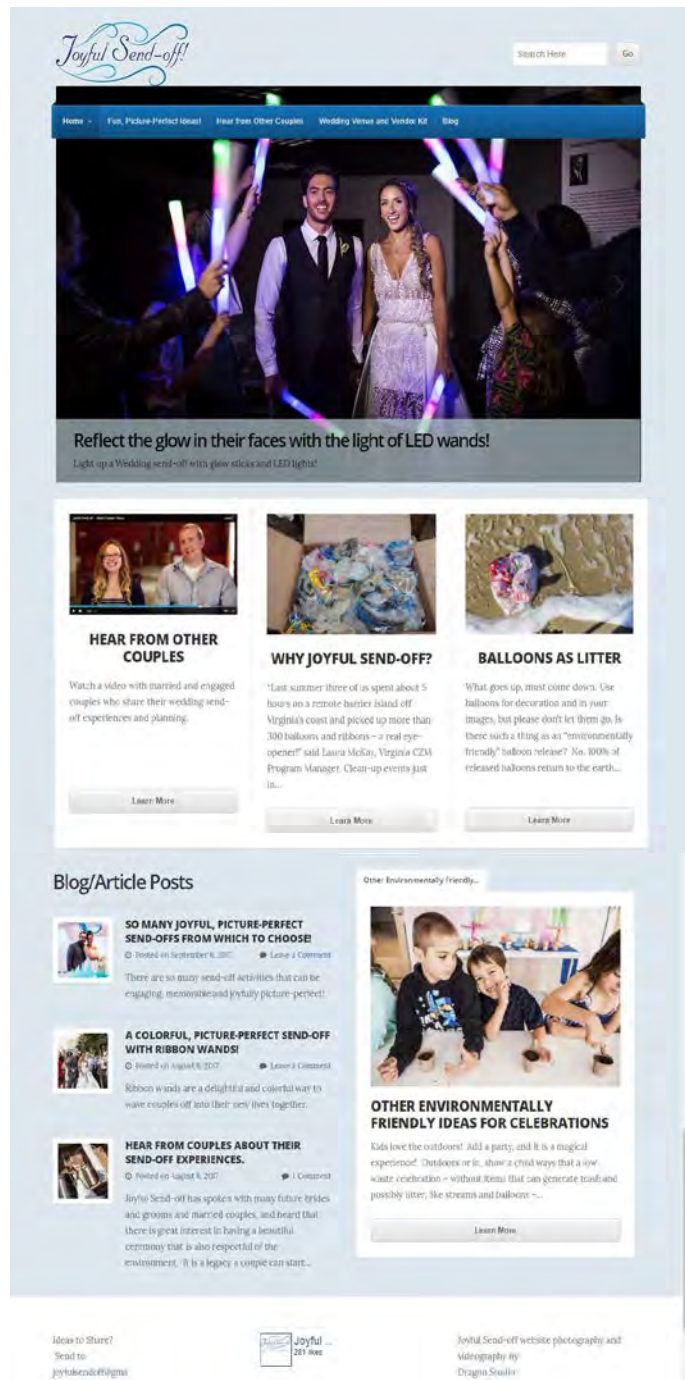
A pop-up survey on the *Joyful Send-off* website was established to collect pledges from visitors to forgo balloon releases at weddings and other events. To-date, this approach does not appear to be as effective as hoped.

Campaign partners are tracking visitors to the website using WordPress Jetpack and Google Analytics.

**Next Steps:**

Project staff will continue adding content to the *Joyful Send-off* website (under open Virginia CZM Program grants), including posting new photography and videos as they become available. Campaign staff will continue to encourage couples to share their stories, which may be posted as Blog entries on the website. As wedding providers—especially venues and planners—agree to help distribute the campaign message (through venue/vendor kits—see below) and pledge not to allow release at their facilities, they will be added to the partner page of the website.

The campaign will also provide feedback to the community on the results of their efforts to help reduce balloon debris through the website.



## Prompts

### Wedding Show Exhibits: Where the Action Is

Speaking with brides/grooms at 2017 wedding shows in the Hampton Roads region (Hampton in January and Virginia Beach in February) was instrumental in testing campaign messages and imagery. Campaign partners were also able to get a commitment from brides and grooms to provide additional input after the shows, and contact information for all attendees for further survey work, as needed. During these shows, partners also distributed two handouts for testing which encourage use of wedding send-off alternatives. Bubbles in a champagne shaped bottle imprinted with the campaign website address were offered to all couples visiting the exhibit.



Hundreds of brides (and a few grooms) visited the Joyful Send-off booth at bridal shows in Virginia Beach and Hampton, VA. Partners gave away small champagne bottles full of bubbles, and asked the brides for their input on Joyful Send-off campaign images and messages. Photo by Katie Register.



During these shows, partners also distributed two handouts for testing which encourage use of wedding send-off alternatives. Bubbles in a champagne shaped bottle imprinted with the campaign website address were offered to all couples visiting the exhibit. A magnet listing many send-off alternatives was included in a bridal bag distributed to all brides participating in the two events.

#### Results/Feedback-to-Date:

- Survey all brides who attended the Virginia Beach and Hampton Bridal Shows. As an exhibitor, *Joyful Send-off* was provided the contact information for every bride. Some couples visiting the *Joyful Send-off* exhibit also expressed an interest in being “consultants” to the campaign.
  - What did you do for your sendoff?
  - What was your decision-making process
  - Were there any ideas that you rejected? If so, why?
  - Did you visit our website? If so, did it influence you?

#### Next Steps:

Campaign partners plan to pursue the possibility of wedding show coordinators showing the *Joyful Send-off* videos on the big-screen at future wedding shows, and to provide vendor partners exhibiting at these shows with a tabletop campaign poster and campaign calling cards.

**Magnet distributed in bridal bags at wedding shows.**

## Partnering with Wedding Venues and Providers: Trusted Messengers

The *Joyful Send-off* campaign strategy also engages and educates venues (hotels, resorts, botanical gardens, museums and other places that host weddings and other celebrations), planners and other wedding businesses who influence the decisions of engaged couples. Venues in the Hampton Roads region were identified through personal visits to exhibitors at the Virginia Beach and Hampton Bridal Shows and through show exhibitor listings, and recommended and prioritized by the Dragon Team, who are familiar with these wedding providers due to their work in this area.



These small bottles of bubbles – in attractive “champagne” bottles-- featured the *Joyful Send-off* web site address. They were given out at the bridal shows, and are also given to engaged couples by hotels and other venues that are partnering with *Joyful Send-off*. Photo by Katie Register.

## Venue Video

Working with the Dragon Team, campaign partners interviewed wedding providers, an important mid-stream audience, who will help convey the *Joyful Send-off* message to engaged couples. These providers share why they are partnering in the *Joyful Send-off* campaign. Once edits are made to this video, it will be shared via the campaign website and social media.

## Venue Kits

To reach engaged couples at the point in time they are making decisions about their wedding planning, including what send-off activity they select, campaign partners are soliciting partnerships with wedding venues in the Hampton Roads region through Venue Kits. These kits provide a number of materials for the venues to display and distribute as decision-making prompts targeted at engaged couples. Displaying the campaign poster provided in the kit also recognizes the venue as a partner in the *Joyful Send-off*. These Venue Kits were hand-delivered to each venue by campaign partners.



*The Venue Kits contain:*

1. Colorful campaign poster for display on counter or desktop (8 ½ X 11” in acrylic photo frame). A poster option is also provided that allows the venue to add their name and logo to the poster.
2. Colorful one-page (8.5’ x 11”) information sheet to provide to engaged couples highlighting “joyful, memorable, picture-perfect” wedding send-off alternatives. This sheet might be inserted into a packet of information that the venue provides to the couples. Even if a couple does not choose this venue, they will receive the *Joyful Send-off* campaign message.
3. Campaign calling cards with the campaign logo and web address, as well as a prompt for couples to share their *Joyful Send-off* on the campaign Facebook page, and to prompt wedding providers interested in partnering to contact the campaign.
4. Champagne bottle bubbles (20 bottles) as samples to display and distribute to interested couples. The bottles are labeled with the *Joyful Send-off* logo and website address.
5. Colorful ribbon wand sample to display next to the campaign poster.
6. Thumbdrive with *Joyful Send-off* logo (PNG) for venue website



Colorful ribbon wands—handmade for this campaign—are an eye-catching part of these Joyful Send-off kits that were distributed to venues (e.g., hotels, museums and other wedding locations). Photo by Katie Register.

An effort to publish ads and articles about the *Joyful Send-off* campaign in provider newsletters, resulted in an article in the October 2017 issue of the Virginia Beach Hotel Association on-line newsletter.<sup>1</sup>

VBHA

October 2017

**JoyfulSendoff.org Offers Picture-perfect Send-off Ideas**

As you know, there are a myriad of details that come together to create the perfect wedding day. Even relatively small decisions can leave a lasting and memorable impact. A wedding or reception send-off is one of those decisions.

The *Joyful Send-off* campaign is committed to providing couples with send-off ideas that capture a joyous and picture-perfect moment, but do not result in harmful litter. Balloons released outdoors become litter and can be harmful to wildlife, as well as cause other damage — such as power outages when the balloons are trapped in powerlines. All *Joyful Send-off* ideas engage family and friends in a memorable celebratory send-off. Our goal is that couples choose not to release balloons on their wedding day or at anytime in their new lives together.

Would you help us reach engaged couples as they visit your site to plan their big day? Although your establishment may already ban release of balloons or sky lanterns — knowing what harmful effects they can have — we hope that you will share the *Joyful Send-off* message with engaged couples.

Visit the Venue and Vendor Partners tab at [www.joyfulsendoff.org](http://www.joyfulsendoff.org) for materials to share with couples at your establishment. For more information or questions about the campaign, please contact us at [joyfulsendoff@gmail.com](mailto:joyfulsendoff@gmail.com).

Thank you for your partnership in the *Joyful Send-off* campaign!



Hotels and other wedding venues can download fun litter-free send-off ideas offered by JoyfulSendoff.org. (Photo by Dragon Photography Studio. Location: Sheraton Virginia Beach Oceanfront)

<sup>1</sup> <http://files.constantcontact.com/511b18e6301/e5c084c9-1cc7-44d6-b9e2-9adc36e2df1a.pdf?ver=1506710518000>



**Results/Feedback-to-Date:**

*Joyful Send-Off* Kits containing a framed tabletop flyer, informational handouts, calling cards, bubbles and a ribbon wand were distributed to 25 wedding venues selected to pilot the campaign in southeastern Virginia. Overall, the response from the venues at the time of visits has been very enthusiastic. Notable comments and suggestions obtained from the point of contact at each venue are given below.

- *“We really like this. It is especially important for us because we are a green destination, and we also have geese and wildlife on the premises.”*
- *“Love this campaign. We are a garden and this goes with our overall green policy that we make couples sign. Can add balloons to this.”*
- *“We are totally onboard.”* (Immediately put up the tabletop poster.)
- *“Great! Love this. We don’t have a no balloon policy and wish we did. Will put Joyful Send-Off in my binder that I show to brides—brides take pictures of the pages they like and keep all this information on their phones these days.”*
- *“Great. We are a green destination and are currently revamping our wedding program information to meet this so this will be great to incorporate.”*
- *“Great information. We will put this on our website referral list.”*
- *“Awesome.”* (No present policies about balloons, so she will look at *Joyful Send-Off* website and come up with one.)
- *“Perfect. Brides are looking for ideas.”*

Two weeks after distributing *Joyful Send-Off* Kits, follow-up calls were made to the 25 wedding venues selected to pilot the campaign in southeastern Virginia. Each contact was asked the following questions:

1. Have you shared the *Joyful Send-off* materials with engaged couples?
2. If so, how many couples over the last 2 weeks?
3. What did the couples say when they saw the materials?

Contacts were encouraged to provide feedback and/or suggestions. They were also asked if they would be willing to provide additional feedback in order to help us grow this campaign in the future. Sample of the responses received to date include:

- *“Everyone really likes the information and likes the idea of protecting the environment.”*
- *“Couples think it is ‘cool’”.*



Upon receiving a *Joyful Send-off* vendor kit, one partnering hotel immediately put the Joyful Send-off desktop display on a table in their waiting room. Photo by Kathy O’Hara.

- “Brides are saying `thank you for the information, it is important to know.’”
- “It makes sense to them (couples) because we are a garden and we don’t allow balloons or sparklers.”

#### Next Steps:

Campaign partners plan to pursue the possibility of showing *Joyful Send-off* videos on the big screen at future wedding shows. The shows all include fashion walks, and videos are shown just prior to walks as the models prepare. We also plan to contact the companies that exhibit at the wedding shows to learn if they are interested in partnering with *Joyful Send-off*, and if so, to provide them a tabletop campaign poster and calling cards. Campaign partners will also pursue opportunities to speak with, and present to, many venues through attendance at meetings of planning and venue associations. Campaign partners will also pursue ads and articles in additional provider publications and newsletters.

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### *Implementation of Joyful Send-off Campaign Pilot*

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The geographic focus of the *Joyful Send-off* pilot is on the Hampton Roads region, with specific emphasis on the cities of Virginia Beach and Norfolk. The *Joyful Send-off* campaign pilot was officially launched on August 9, 2017, including the campaign website, a social media blast with daily posts and boosted posts, an article in a regional wedding magazine, presentation to the Virginia Beach Hotel Association, and distribution of kits to venues encouraging them to partner with the campaign.

## Future Broad-Scale Implementation and Measurement of Campaign Strategy Effectiveness and Behavior Change

As the pilot campaign moves into full implementation in other coastal areas of Virginia, campaign partners will continue to focus on collecting data on the following desired outcomes:

1. A significant and measurable number of commitments from our targeted audience(s)—individuals and organizations—to switch from the mass release of balloons to a more environmentally sensitive activity, ultimately leading to a decrease in balloon releases,
2. A measurable number of balloon releases that were cancelled and the number of balloons that were subsequently NOT released, and
3. A significant and measurable number of commitments from our targeted audience(s) to prevent the accidental release of balloons.
4. In the long-term we hope to see, and attribute to the campaign, a measurable reduction in balloon litter in Virginia.

## Discussion

### Why Virginia took the lead

There are many reasons why Virginia continues to be in a strong leadership position to take on this source of marine debris. In 2011, the Virginia Coastal Zone Management Program developed a Section 309 5-Year Ocean Resources Strategy funded by NOAA's Coastal Programs Division, which includes spatial planning for the ocean and reduction of marine debris. Through that effort, in February 2013, the Virginia Coastal Zone Management Program (working with several partners including Clean Virginia Waterways and the Virginia Aquarium) convened the first *Marine Debris Summit* on the East Coast. During the two day summit, attendees heard from experts about the various sources, impacts and possible solutions to marine debris. There were two concrete outcomes from the Summit: first, the Virginia Coastal Zone Management Program received strong endorsement and support from the many partners at the summit to develop a Virginia Marine Debris Reduction Plan, with an analysis of key marine debris issues, prioritization of these issues, and development of a plan to address the high priority issues. The Virginia Marine Debris Reduction Plan has been published through work with guidance and input from numerous partners. Development was coordinated by Clean Virginia Waterways of Longwood University with funding from the Virginia Coastal Zone Management Program. Second, in 2013, Virginia's Governor Robert F. McDonnell signed a proclamation recognizing June as Marine Debris Reduction Month in Virginia, encouraging all Virginians to take action to reduce trash and litter that makes its way into our waterways, the Chesapeake Bay, and the ocean.

Another unique strength is that Virginia's balloon litter problem mirrors the entire US problem; on average, balloons are the 17th most commonly found litter item in Virginia as well as the US. The similar ranking of balloon litter suggests that Virginia was an appropriate state to research and create an educational and outreach program that could be scalable to other states.

Two partners on this project had already demonstrated leadership on balloons as marine debris. Clean Virginia Waterways has conducted the International Coastal Cleanup in Virginia since 1995. At the time this grant was awarded, Clean Virginia Waterways was in its 20th year of data collection about the quantities and locations of balloons found as litter. In addition, Clean Virginia Waterways, in collaboration with the Virginia Aquarium & Marine Science Center, has been conducting a Balloons as Litter Study since 2012 to better understand littered balloons and their attachments (see <http://www.longwood.edu/cleanva/BalloonResearch.html> for details). Citizen scientists of all ages are asked to help collect data about balloons found in Virginia in order to help scientists better understand the sources and impacts of this type of litter. Thus far, the data base for this study has more than 2500 data points. This study will help researchers answer questions including:

- What percentage of helium-filled balloons shatter compared to those that deflate?
- What percentage of found balloons have attachments, and what are the attachments made of?
- What percentage of found balloons are made of latex, and what percentage are made of metalized nylon, or foil materials (sometimes called "Mylar" balloons)?
- Do the colors of found balloons vary seasonally?
- Are balloons more likely to be found in one type of environment than another?

The Virginia Aquarium & Marine Science Center along with Clean Virginia Waterways is also using NOAA's protocols for monthly monitoring of four coastal beaches: Back Bay National Wildlife Refuge in Virginia Beach; Grandview Nature Preserve in Hampton, Fisherman Island National Wildlife Refuge in Northampton County, and Chincoteague National Wildlife Refuge in Accomack County. Support for this monitoring comes from the NOAA Office for Coastal Management through the Virginia Coastal Zone Management Program. This systematic monitoring of marine debris will help us better understand sources, locations, amounts, movement, impacts, and accumulation rates. It also supports evaluation of the effectiveness of educational outreach, pollution prevention strategies, and social marketing campaigns like *Joyful Send-off*.

### **Building Partner Community-Based Social Marketing Capacity**

An added outcome of this campaign was to train partners involved in developing and implementing this campaign in the use of Community-Based Social Marketing—as well as build expertise, capacity, partnerships and resources—that can be applied to other campaigns addressing marine debris related issues and behaviors. The research conducted during this project about attitudes, beliefs and behaviors will be valuable in future social marketing or educational efforts to reduce helium balloon release. As we have people thinking in terms of “Balloons are marine debris and harmful to the environment. I do not release balloons”, the next “ask” will be easier, based on social research that





once someone takes action, they perceive themselves differently - as the kind of person who does or does not engage in littering ANY plastic debris items. Practitioners of social marketing are moving more towards the concept of packaging “associated behaviors”.

Virginia project staff have shared all research protocols and materials, such as moderator scripts developed for interviews and focus groups, with the other states represented on the Mid-Atlantic Region Council on the Ocean (MARCO) – Delaware, Maryland, New Jersey and New York. If the states secure funding to conduct audience research in their coastal zones, they can then identify similarities and differences between the audiences in Virginia and their state. We expect there likely will be common themes in the audience assessment findings, which will increase the likelihood that the campaign strategy developed in Virginia can be successfully transferable, with some modification, to coastal regions in the other Mid-Atlantic states. If the messages and campaign strategy are highly successful in Virginia, and likewise in the other Mid-Atlantic states, this approach could set a model for expansion on a national level.

### **Did we meet our short term objectives and goals for this project?**

The short term goal of this FY14 NOAA Marine Debris Program grant was to conduct pre-campaign research and to design and begin implementing a pilot social marketing campaign that will initiate behavior change and reduce balloon releases in Virginia’s coastal zone. This has been accomplished. As part of the campaign strategy development process, Virginia project staff worked with a multi-organization advisory team, including staff from the NOAA Marine Debris Program, to set campaign goals and identify the measures that will help us evaluate whether the campaign strategy is effectively changing behavior. This evaluation and measurement is ongoing.

### **Challenges, Lessons Learned and Next Steps**

Reflecting on the three years of research undertaken as part of this grant, the campaign partners offer the following observations.

#### ***Targeting the College/University Audience***

As mentioned earlier, we identified schools, particularly colleges, as an important target audience for a balloon release Community-Based Social Marketing campaign strategy. We were able to conduct on-campus interviews with students at George Mason University and Longwood University, during which we learned that balloon releases by college students might be reduced by addressing one major barrier: lack of awareness. Students indicated that simply becoming aware that 100% of released balloons return to Earth as potentially harmful litter was enough to have them commit to not releasing balloons. But many universities have significant barriers to effectively reach students. For example, three universities required that outside researchers complete an application to their Institutional Review Boards (IRB) and submit a copy of the survey or interview script in order to obtain permission to interview students. We explained that this research already had the approval of Longwood University’s IRB, and that Longwood is a state university, but they still required a new IRB application. We filled out IRB forms at two state universities, but despite repeated attempts to learn

the status of the applications, we heard nothing. Staff at another university told us we would have to book (and pay) for meeting space through their conference services department, and another told us that we would have to find a professor on their campus to be a co-researcher. One Dean of Students told us that he saw his role as a gatekeeper to protect students from too many distractions; outside researchers were not welcome. Of the universities we contacted, only George Mason University considered itself an “open campus” as state property, and allows researchers to survey students as long as it is done peacefully and is voluntary on the part of the students. These barriers led the partners to re-assess an earlier plan to develop and pilot two social marketing strategies—one focusing on universities. Working with this demographic might be the subject of a future Community-Based Social Marketing campaign. Given that the student body at universities change dramatically every year with each incoming freshman class, the best way to reach college students might be to reach out to staff and faculty who are in the position to influence the behavior of students.

### ***Addressing the Use of Sky Lanterns***

As we interviewed engaged couples, many wondered if sky lanterns might be a good alternative to the release of helium-filled balloons. Since sky lanterns also all become litter (and can be a source of wildfires), this might be another behavior to address in a future campaign.

### ***“Happy” vs. “Sad” Events: A Very Important Distinction***

Given the emotions that are invested in the sight of balloons rising into the air, one of the biggest challenges in this campaign was finding acceptable, available and affordable alternatives to balloon releases. Engaged couples and wedding vendors informed us that one of the most important aspects of a wedding send-off was that it would be “picture perfect.” This led us to test many visually-attractive alternatives to balloon releases including ribbon wands, bubbles, and the other activities that are offered on the *Joyful Send-off* website. Of course, alternatives to balloon releases that are acceptable at a wedding may not be transferable to other ceremonies. Finding acceptable alternatives to the balloon releases that are part of a memorial ceremony—especially for children—will be more challenging. For that reason, our pilot focused on the “happy” wedding-related balloon releases rather than the “sad” memorial releases. As a next step, project partners will, if and when funding permits, build off the video produced through this grant that features alternatives to balloon releases for memorial tributes to develop an additional Community-Based Social Marketing approach. Project partners will test messaging and images, possibly through focus groups, prior to designing a strategy that considers the extremely high degree of emotion that surrounds these events.

### ***Changing a Social Norm: The End Goal***

Of course, changing social norms takes time—it can take many years before you can begin to measure results. Balloon releases are commonly illustrated on wrapping paper, on birthday and graduation greeting cards, and in printed and digital ads. In our society balloon releases are a metaphor for celebrations, releasing of grief, sending messages to heaven, and other emotionally-charged moments. If you type “congrats” on a Facebook post, a small animated balloon release is shown. Media regularly covers balloon releases. In fact we learned that some nonprofit groups interested in raising awareness for their cause decide to conduct a balloon release just so reporters

will cover the event. Asking media outlets to stop giving coverage to balloon releases could be one way to help change this social norm. As a next step, project partners will share the video highlighting the impacts of balloon release produced through this grant with print and television media to begin a dialogue about the issue with the goal of changing the story. This might be done by airing segments of the video during a news story, or in a PSA, about our campaign efforts.

### ***Engaging the Balloon Industry***

In the long term, more progress can be made by engaging the balloon industry (on both the wholesale and retail levels) and working with them to find innovative alternatives to balloon releases. There is a public perception that is being perpetuated by the balloon industry that because latex is biodegradable and eventually breaks down, it is not to be considered litter. In fact, many focus group participants and people who talked about balloon releases on blogs thought that biodegradable balloons were fine to release. The International Balloon Association (IBA) compares latex balloons to an oak leaf, "Research show that regardless of the latex balloon's ultimate form when it lands, it will decompose, forming a natural soil nutrient at the same rate as that of an oak leaf." The research cited by the IBA was conducted by a balloon industry leader and was not peer-reviewed. A study published in the scientific journal "Soil Biology and Biochemistry" found that about 54% of oak leaves decomposed in a two-year period, and it takes about four years for oak leaves to completely degrade under natural conditions. Hence, (if the balloon industry's study is valid), balloons take up to four years to fully degrade—too long a time for them to be found and eaten by an unsuspecting animal.

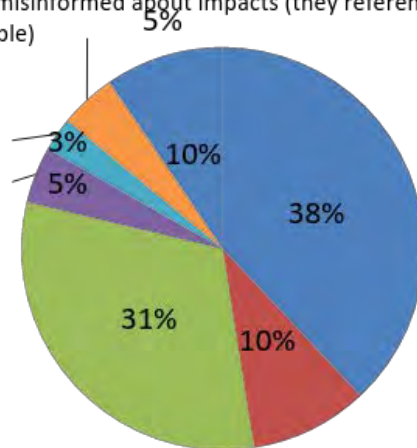
## APPENDIX A

### Balloon Community-Based Social Marketing Research Tool: Additional Summary Details of Mass and Social Media Analysis

Posts on the wedding blog and Pinterest where the subject of the inquiry was balloon release and alternatives, and remembering loved ones at the ceremony, were reviewed. 215 of the 457 posts were specifically referenced balloon release.

#### Posts Related to Balloon Release

- N1 = aware – tries to help educate others that release is not good for the environment/animals
- N2 = will not release for other than environmental reasons, e.g., “tacky”, more for a child’s party
- G = may or may not be aware – but attitude is to go for it, do what you like, a release is “picture perfect”, “beautiful” etc.
- R = may be aware – but if it is in remembrance or memoriam, this takes precedence
- A = not aware – but attitude quickly altered with facts about environmental impact
- J = aware - but engages in or encourages release – justifies actions, it may be bad to release balloons however what I am doing is okay because...
- M = aware - but misinformed about impacts (they reference environmentally safe, biodegradable)



**38% (#84 – N1) of the balloon release related posts - brides understood that “bio-degradable” did not mean “environmentally-friendly”:**

- *I have to agree with Barbara, latex balloons are considered bio-degradable but are still not eco-friendly. Also tying a string to balloons is very dangerous to the animals that get caught and strangled in them. I live in a beach community where an endangered sea turtle resides (loggerhead) and any kind of balloon or string is strictly prohibited here.*
- *The biodegradable balloons still take a considerable amount of time to break down, plenty of time for a bird to think its food and eat it up. Not to mention that helium is actually a limited (non-renewable) resource, and besides filling balloons, it's actually required for really useful things like medical imaging.*

**31% (#70 - G) of the balloon release related posts - brides have/or planned to release balloons:**



- *Balloons released after ceremony with bride and groom kissing outside church would make a beautiful, fun photo.*
- *Another great party - best ideas: serve food from iron skillets, release balloons with lights inside for "lanterns"*
- *Idea for vow renewal: Burn a note that says "here's to the past", and release a note that says "here's to the future" tied to a balloon. Secure it in a ziplock bag and ask who ever found it to mail it back to us so we know how far it went :)*

**9% (#21 – N2) of the balloon release related posts - brides planned not to release balloons or discouraged release due to rules and laws, helium shortage or other reasons:**

- *Please also think about if anyone has allergies. If this were going on at a wedding I was at, I would stop breathing and probably be hospitalized (or dead) as I have a severe latex allergy that affects my breathing.*
- *Even if you don't find any ordinances regarding releasing balloons, your venue may not like it. You could lose your deposit.*
- *I don't really like the balloons – wildlife animals or not, I just don't like the way it looks.*
- *There's a worldwide helium shortage so I'm not even sure a local place would be able to fill that many for you.*
- *Looks more like a Child's birthday party than an elegant wedding....*

**9% (#21 - M) of the balloon release related posts – brides mentioned that “environmentally safe or friendly” balloons are available and therefore okay to release:**

- *Well. They do make Eco friendly, biodegradable balloons that shatter into tiny pieces at a certain altitude when filled with helium. When the little pieces (made from natural ingredients) reach the ground they degrade faster than an oak leaf on the ground.*
- *While balloon releases are pretty. most balloons are considered litter and people don't care for them anymore. But, I hear there are eco-friendly, biodegradable balloons, in which case it would be great!*
- *I once had a balloon release in a wedding as a memorial gesture. It can be lovely, but does depend upon the type of balloon as to whether it's advisable or not. Make sure you get the environmentally friendlier ones. Some are just dreadful on the environment.*

**5% (#11 – R) of the balloon release related posts - brides have/or planned to release balloons in memorial to family or friends:**

- *We did a balloon release immediately after our ceremony in honor of my mother who passed away a few years ago... sending the celebration up to the heavens. Nobody thought it was tacky. Even people that never knew my mother were touched by the gesture and tearing up. It was beautiful. I can see why some of you ladies might think that balloons at a wedding might be tacky, but I know that they can be incorporated in a beautiful way.*

**5% (#10 - J) of the balloon release related posts - brides appeared to understand the impacts of balloon litter but tried to justify their decision to release:**

- *Anyway just because I'm doing a balloon release doesn't mean I don't care. I have been to my council and asked what I am allowed to do and am following the guidelines I have been given. You guys have your opinion and I have mine which I am entitled to. I trust people to make their own decisions and consider the implications rationally not emotionally. I personally don't see 3 balloons causing much of an issue.*

- *The littering is a downfall but I'm debating if 10 balloons is something to worry about.*
- *We would only be releasing 3 or 4 balloons*
- *We are having 3 balloons to release in memory of my 2 grandads and my nan. We are not using string which 'can' get caught on animals as per the guidelines we have been given. FYI balloons only reach a couple of hundred feet before they pop and fall. biodegradable balloons break down into tiny fragments. There are no rivers lakes water etc near my venue and i have never seen a turtle on dry land in the UK. I'm interested to know however if people plan on using confetti or rice which are bad for birds. Also whoever said butterflies- this is much crueler as many of the butterflies die before being released.*
- *I don't think your 10 balloons will cause global warming I think you're good.*
- *10 is nothing to worry about!*

#### **Some brides responded that these attempts to justify were misguided:**

- *Ten balloons may not cause global warming, but the strings, and the pieces of balloons, can really harm animals. While it might be pretty, it just kind of seems thoughtless when you know this can happen and you might still consider it. Not to mention, if every bride said "Oh it's just 10 it won't harm anything" multiply that by ten brides that say that, you have 100 balloons floating around, and THAT does add up.*
- *A popped balloon looks like food to birds and other wildlife. They eat it, and it can't be digested so it blocks their digestive track, causing them to starve to death. It only takes ONE balloon.*

#### **3% (#6 – A) of the balloon release related posts - brides stated that prior to reading the blogs, they had no knowledge of the environmental impacts of balloons and were thankful to learn from the brides who did:**

- *I've never given much thought to the environmental aspects before until today. Everybody around here does balloon releases (i.e. schools, churches, nonprofit organizations) it's something that is very common around this rural area.*
- *I changed my mind thanks to Andrea R. who was NICE and offered an alternative suggestion of a bubble machine, no litter, no wildlife being injured, ALL GOOD!!! Plus with the TONS of kids being there it will be a HUGE hit!*
- *Oh my! I have never thought of that! Thanks for posting ladies! Yea I'm sure the balloon thing isn't too good: /*
- *Awe, I love the idea.... and then I saw everybody's responses :( Anybody have any alternative ideas?*

#### **Other Observations:**

- Helium Balloons containing light sticks and battery-powered candles seem to be a trend.
- Chinese lanterns were suggested repeatedly as an alternative to balloons.
- Although some brides suggested that balloons were juvenile and would be tacky used at a wedding, there was a prevalent attitude that balloons are a picture perfect and beautiful way to celebrate marriage.
- The Balloon Council website was mentioned more than once but so was the CVW website!
- On Pinterest many photos posted show balloons released with attachments.
- Clearly venues have a big impact on what activities take place, and some may be – perhaps inadvertently – encouraging balloon releases when they restrict all or most other exit activities, as throwing confetti and birdseed, due to clean-up, safety issues, and environmental concerns, like littering.
  - *Balloons are a great option for venues that won't allow rice or flower petals.*
  - *I am still going to do a balloon release regardless and my venue has agreed it is fine so long as I use biodegradable balloons and no string. Just check with your venue. FYI my venue is in the*

*countryside and they were perfectly happy for me to do this so long as proper precautions were taken.*

- *Just b/c a venue allows something, that doesn't mean it's legal. Most places don't bother to know or follow the law.*
- *Whatever you decide on though, check that your venue allows it! Some have restrictions!*
- *Every idea sounded dangerous for our venue (slipping, tripping, getting poked in the eye). A balloon release sounds beautiful!*
- *My church is not letting us use anything that can harm the environment, or fall to the floor.*
- **A vendor called “Celebrations” posted on almost every blog to assure brides that balloon releases, if done “properly,” would not cause any environmental harm.**
  - *I would first like to address the comment Sunsand made about balloons and the environment. Recently, during a U.S. Coastal Cleanup, balloons/balloon pieces accounted for less than 0.7% of the total debris collected. Latex balloons will decompose, forming a natural soil nutrient at the same rate as that of an oak leaf. Latex balloons are made from the sap of the rubber tree, a higher demand for latex balloons will actually help preserve the rainforests. Go to <http://www.savetheballoons.com/myths-facts.html> for more information. There are certain rules and laws that you need to follow for a balloon release and they vary by state and even city. Hiring a balloon professional will help eliminate any potential problems. One way to make a balloon release more special is to have the bride and groom each release a larger balloon in a different color. Your guest will stand and watch them drift out of site and they will know which ones were yours. It's truly beautiful!*

Regretfully, Celebrations achieved its goal with one bride responding:

- *Celebrations that is great information. Thanks for sharing! Might just have to look into a balloon release now that I know it's safe because I do think it looks amazing.*

**These two posts clearly showed that the brides had some knowledge of how far a balloon can travel:**

- *Such a cute idea! Guests write a message on a postcard (pre-stamped and preaddressed) to the couple and it is tied to a balloon filled with helium. At some point in the reception, all the guests go outside to release the balloons. The idea is that whomever finds the postcard after the balloon is grounded will stick it in a mailbox to return to the newlywed couple. When you make the postcard, be sure to include an explanation and instructions to the person who finds it. This keeps the good thoughts coming for weeks or possibly even months after the wedding is over. Create a special scrapbook of the postcards as they arrive in the mail.*
- *Do something special with just your bridal party. Give your best friends some TLC with a special “something” just for you and them. We love the idea of a balloon release. How cute that someone many moons away will stumble upon a personalized “I Do” balloon?!*

**The tone and language of posts illustrated the very strong emotions connected to wedding planning – “I will do what I want on my wedding day – it is my day”, or “You should do what you want on your wedding day”:**

- *I posted on here about doing a balloon release and got bombarded with replies about how bad it is for the environment. I am still going to do a balloon release regardless and my venue has agreed it is fine so long as I use biodegradable balloons and no string. Just check with your venue. FYI my venue is in the countryside and they were perfectly happy for me to do this so long as proper precautions were taken. Do what you want to do. The animals will be fine. I'm sure all these people telling you not to still drive cars and use hairspray or other chemical dangerous to animals.*

- *these damn animals ruin everything...1st we can't throw rice cuz it chokes the birds...now we can't release balloons cause dogs will choke...LOL I'm having balloons at my reception. They will be dangling above the dance floor. We will probably release them after the countdown for a photo opp*
- *Just do what you originally wanted to do...Unless you are really worried about the airport thing. But don't let other people's opinion change what you want to do.*

**And, equally strong responses these posts – “why if you are being told that it is environmentally damaging would you be so selfish”:**

- *Do what you want, it's your big day!! Really? Doing damage to the environment is fine, so long as it's YOUR BIG DAY?! Just because it's your wedding day doesn't give you a right to do something harmful to wildlife. People from zoos and wildlife rehabilitation centers have asked that this not be done because they've seen firsthand the damage that this can do to animals. But screw that, it's YOUR BIG DAY! \*sigh\**
- *omg balloons on the beach, how many animals had to die for those photos?!*
- *Not the same thing. Cars and hairsprays have pretty extensive environmental policies, and no animal is going to choke on your hairspray. Your attitude of 'it's my day! screw the birds they'll be fine' is incredibly selfish and says a lot about you. You can keep telling yourself that animals will be fine, but it's 100% false. This is one of those things that is so simple to prevent harm to the environment. And just because it says 'biodegradable' does not make it okay. 6 months it takes for a balloon to biodegrade does not mean you aren't still littering. I can throw my Wendy's bag from lunch on the side of the highway and is it okay because it's biodegradable? Nope. Is it okay for smokers to toss cigarettes all over because it will biodegrade? Nope. For the OP, sparklers, ribbon wands, bells are also stunning and make great pictures.*
- *Why anyone would want litter, and animals choked to death, to symbolize their marriage is beyond me.*
- *It doesn't matter that they biodegrade if animals choke to death on them 20 minutes after they land. My brother is a ranger at park in Florida and has literally pulled balloon pieces out of animal's throats. Your post doesn't address the issue in the slightest – we all know they biodegrade eventually – that's not the problem. Hawks see them in the sky and swoop in to grab them while they're still floating and choke to death on them. Romantic, right? 3 balloons very well could mean 3 dead animals. I just don't understand – with the gazillions of ecofriendly options out there – why it would possibly be worth hurting a living thing for a wedding prop.*

**Repeated Language – words and phrases – Against Release**

- synchronized littering
- what goes up, must come down

**Repeated Language – words and phrases – In Support of Release**

- Safe for the environment, biodegradable, eco-friendly
- Safe if properly done
- Great for a picture or picture perfect
- Beautiful or gorgeous effect
- Celebration to the heavens

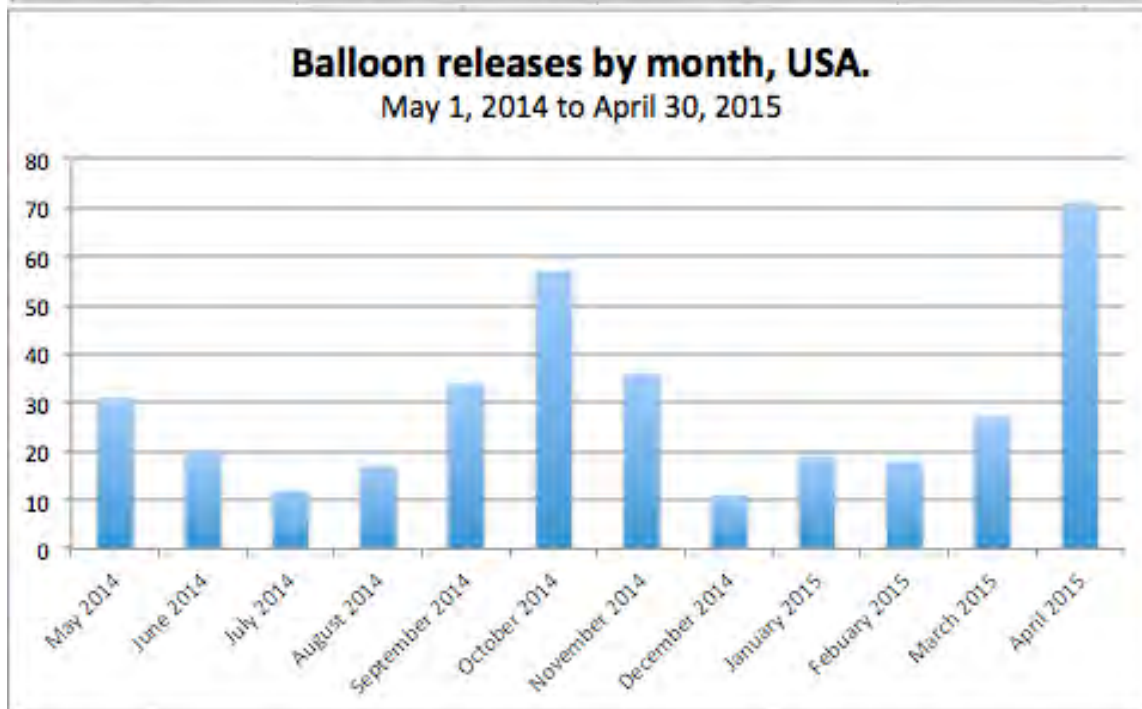
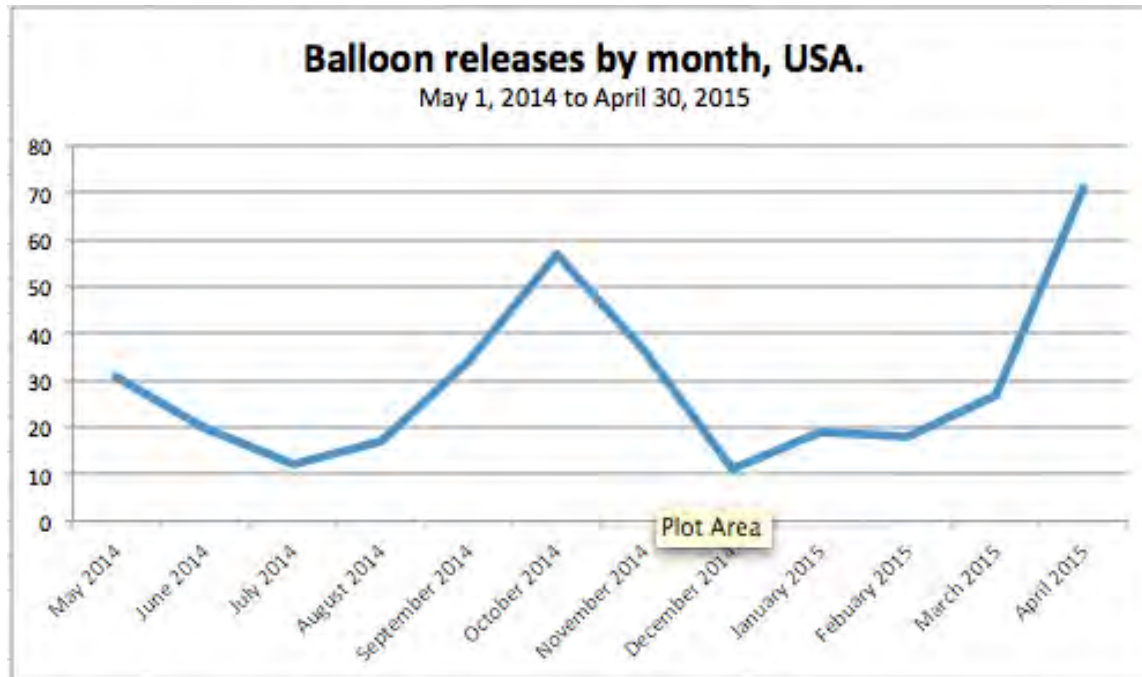
**Balloon Alternatives Suggested/Mentioned**



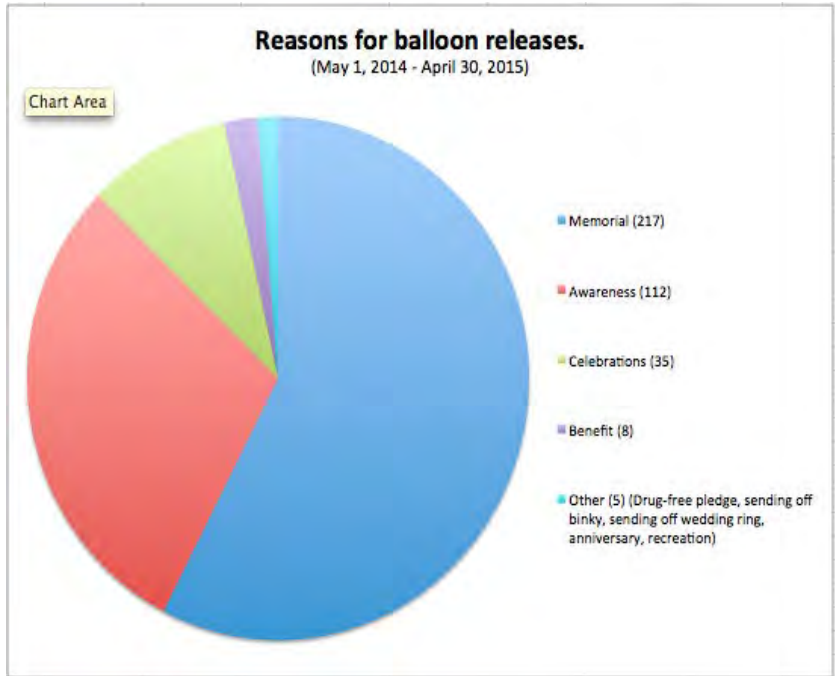
- kazoos
- bubbles
- bells
- butterflies
- flower petals
- handkerchiefs in wedding colors
- little signs that say “yay!” and stuff
- ribbon wands
- sparklers
- tinsel wands
- glow sticks
- bouquet

## APPENDIX B

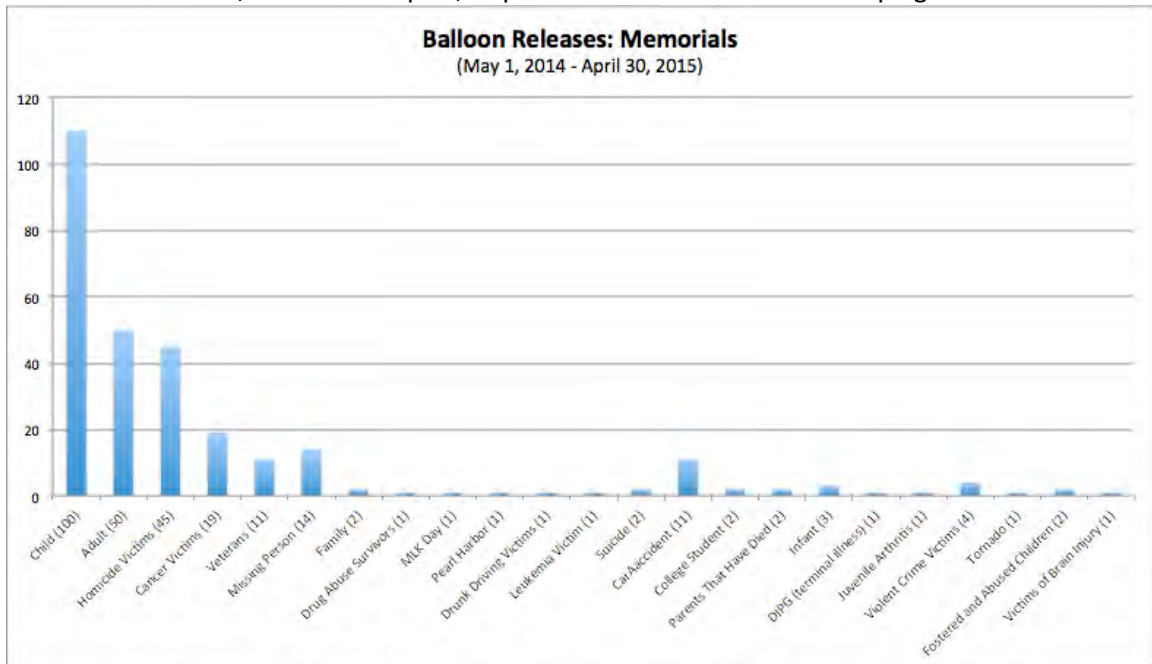
### Balloon Community-Based Social Marketing Research: Additional Summary Details of News Media Analysis

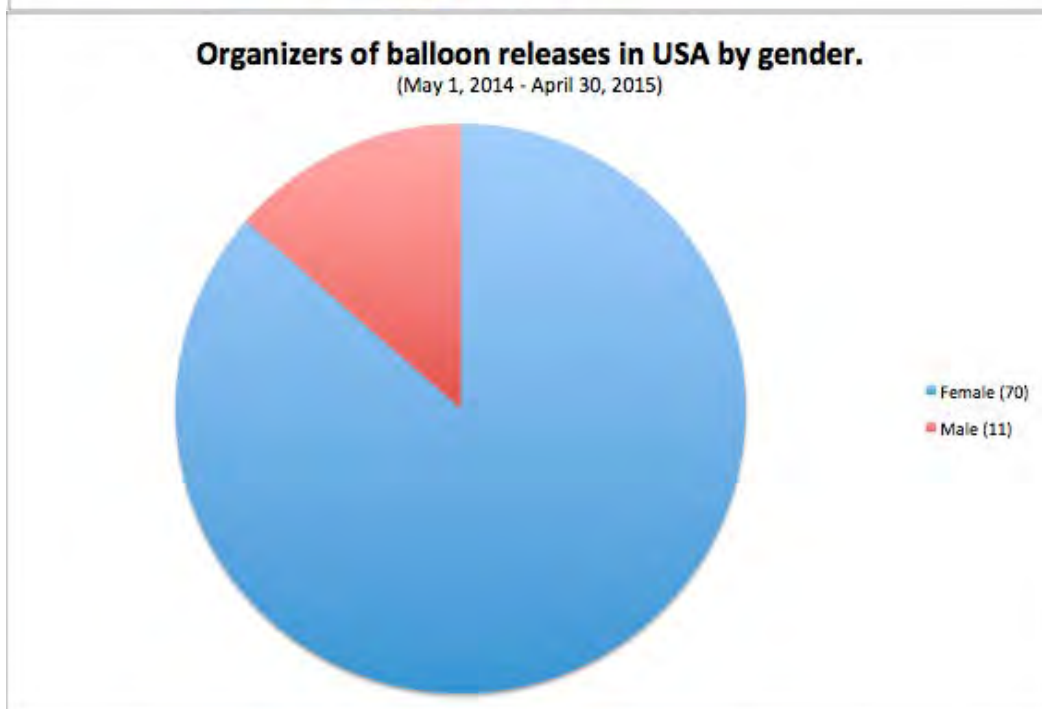
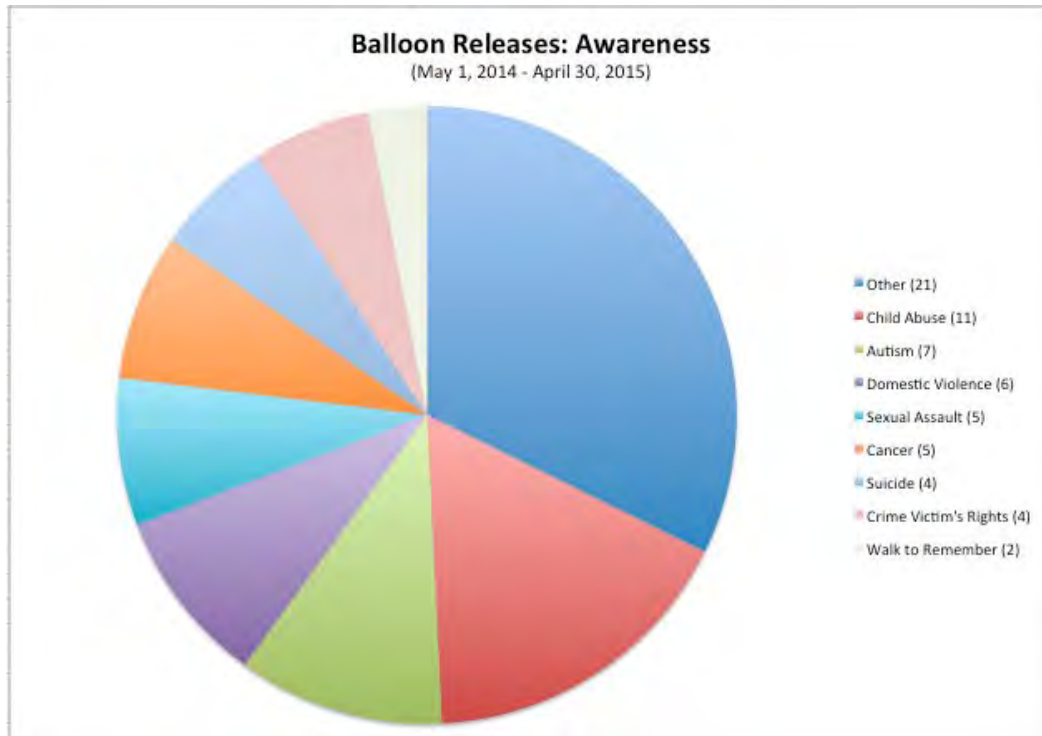


April was the #1 balloon release month with 71 releases, followed by October (57 releases), November (36 releases) and September (34 releases).



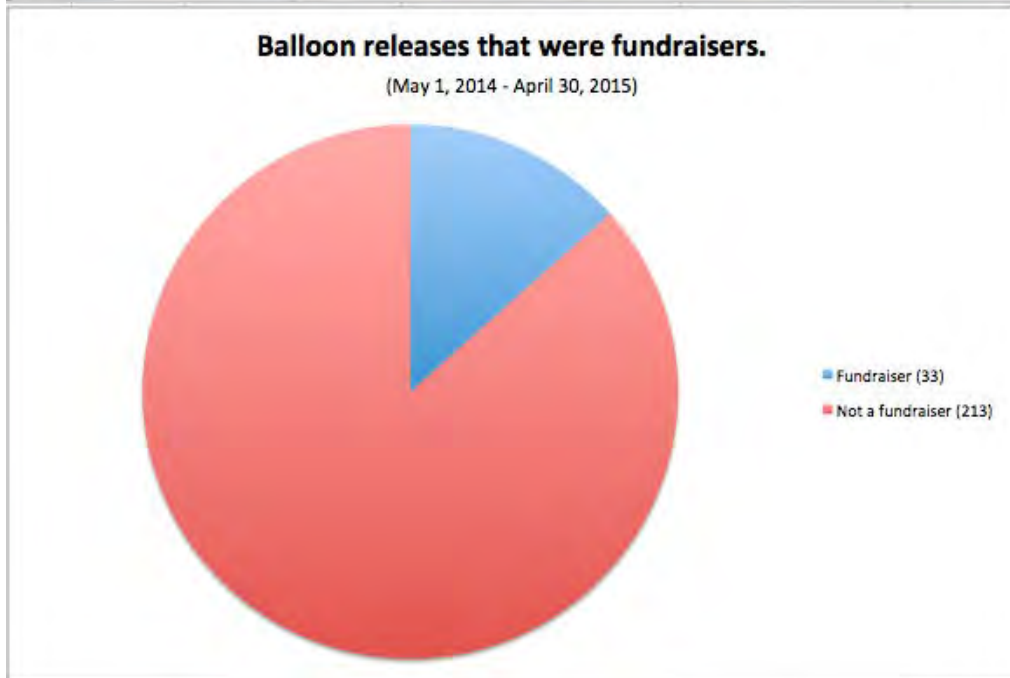
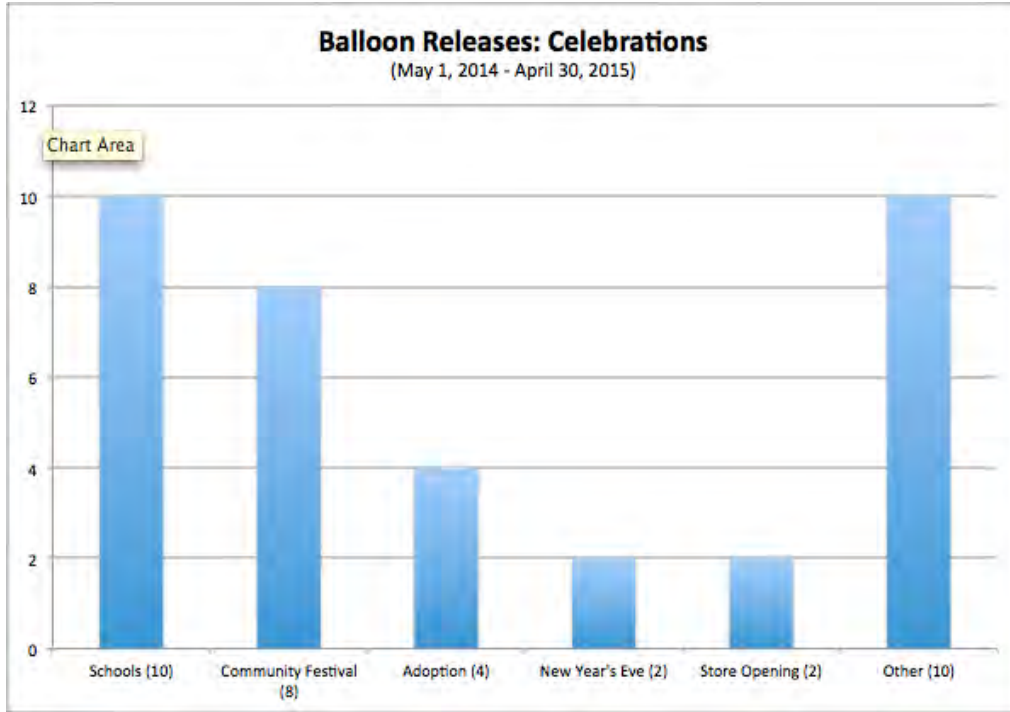
The memorials were mainly planned by small groups, families, co-workers, etc. The awareness-related balloon releases were done, for the most part, as part of national awareness campaigns.

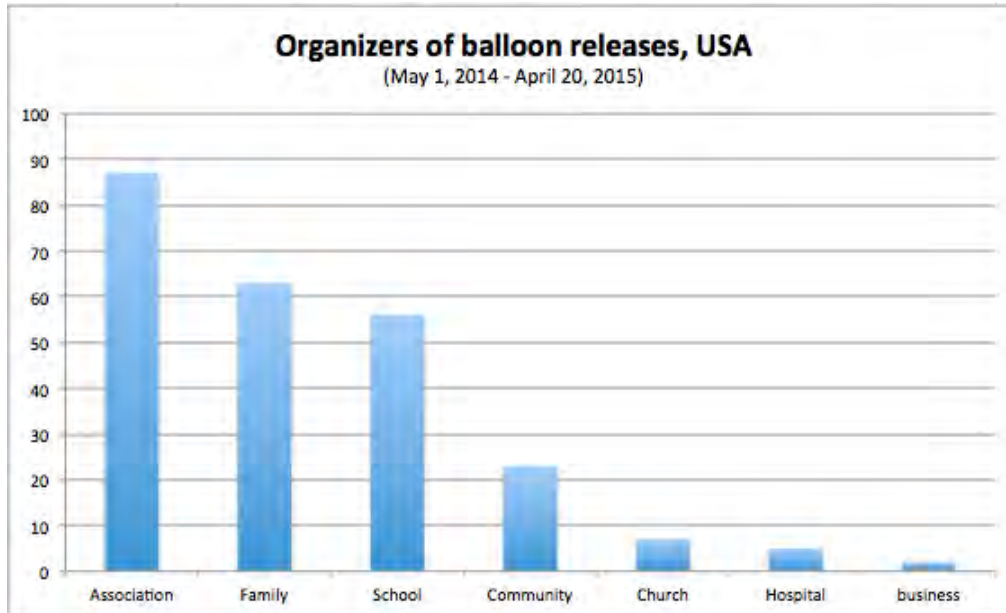




86% of the people who organized balloon releases were women (when we could determine the gender of the organizer). Many times, press articles just said the releases were planned by friends, family, or co-workers.







About these charts: the data represented in these charts were gathered from Google Alerts that were sent daily to Clean Virginia Waterways. CVW staff & interns coded all balloon releases that were reported by the media in the USA. For information, contact Katie Register, Clean Virginia Waterways 434-395-2602 or [registerkm@longwood.edu](mailto:registerkm@longwood.edu)

# APPENDIX C

## Balloon Community-Based Social Marketing Research: Public Survey Tool



Thank you for taking part in this study for Longwood University about the use and release of helium balloons. This survey is voluntary and confidential. You will not be asked for your name or other personal identifying information, and your responses will not be connected back to you in any way.

1. In the last 10 years or so have you taken part in an event or ceremony where balloons were released, for example at a wedding, at school, at a memorial service, to call attention to a cause, or something like that?

Yes (if "Yes" continue with Q3)  Can't remember (continue with Q12)  No (if "No" continue with Q2)

3. About how many times in the last 10 years have you taken part in an event or ceremony where balloons were released?  
Enter a number:

4. During what months of the year have you taken part in a balloon release? Mark any that apply.

Spring (Mar, Apr, May)  Summer (Jun, Jul, Aug)  
 Fall (Sep, Oct, Nov)  Winter (Dec, Jan, Feb)  
 Can't remember

5. The most recent time you took part in a balloon release, what was the cause or reason for the balloon release? Mark one:

Wedding  Funeral or memorial service  
 Sporting event  Religious worship  
 To raise awareness for an issue or cause:  Some other reason:  
 Can't remember

6. That most recent time, where did the balloon release take place? Mark one:

School  Church or other house of worship  
 Park  Hospital  Community Center  
 Some other place  Can't remember

7. How would you describe the area where the balloons were released? Mark any that apply:

Urban area  Suburban area  
 Small town  Rural area  
 Within a few miles of the ocean or Chesapeake Bay

8. Was the balloon release event in Virginia or outside Virginia?

In Virginia  Outside Virginia

9. As far as you know, was this part of an annual or a one-time event?

Annual  One-time  Don't know

10. What were the feelings that you experienced as the balloons were being released?

11. As the balloons were being released, did you think about where the balloons would end up after they went out of view?

No  Yes a little  Yes a lot  
(Continue with Q12)

2. Why haven't you taken part in a balloon release event or ceremony?

I have not been invited or have never been present to take part in one  
 I have been invited and would have taken part, but was not available  
 I have been invited to take part but did not want to  
(Continue with Q12)

12. Which of these best describes what happens to balloons when they are released into the air? Mark one:

Disintegrate or break into very small bits in the atmosphere  
 Float out into space  
 Fall to the ground or water and break down naturally  
 Fall to the ground or water and do not break down  
 Something else:

13. If you are invited to take part in a balloon release in the future, or if you attend an event where one occurs, how likely are you to take part?

Very likely  
 Somewhat likely  
 Might or might not  
 Somewhat unlikely  
 Very unlikely

14. Do you have any other comments you would like to make about balloon releases?

Yes (please write comments on other side)  No

15. What is your age?

Less than 18  50 to 64  
 18 to 34  65 or older  
 35 to 49

16. What is the last grade in school you completed?

Up to 11<sup>th</sup> Grade  
 High school diploma or GED  
 Attended college or technical school  
 Bachelor's degree  
 Graduate degree

17. What is your gender?

Female  Male

18. What is your home zip code?

*N=893 conducted online and in-person among the general public in Virginia, March – June 2015*

## **General Public**

### **Introduction**

Thank you for taking part in this study for Longwood University about the use and release of helium balloons. This survey is brief – about 5 minutes – and it is voluntary and confidential. You will not be asked for your name or other personal identifying information, and your responses will not be connected back to you in any way.

### **Survey Questions**

1A. Do you live inside or outside Virginia? *(Required)*

Live in Virginia	94%
Live outside Virginia	6%

1. In the last 10 years or so have you taken part in an event or ceremony where balloons were released, for example at a wedding, at school, at a memorial service, to call attention to a cause, or something like that? *(Required)*

Yes <i>(Skip to Q3.)</i>	29%
No <i>(Ask Q2, then skip to Q12.)</i>	64%
Can't remember <i>(Skip to Q12.)</i>	7%

*(If no):*

2. Why haven't you taken part in a balloon release event or ceremony?

I have not been invited or have never been present to take part in one	82%
I have been invited and would have taken part, but was not available	3%
I have been invited to take part but did not want to	15%

*(Skip to Q12.)*

*(If yes in Q1):*

3. About how many times in the last 10 years have you taken part in an event or ceremony where balloons were released? *(Number box)*

1	40%
2	28%
3	9%
4	4%
5	12%
6+	6%
Median	2 times

4. During what months of the year have you taken part in a balloon release? Mark any that apply.

Spring (March, April, May)	53%
Summer (June, July, August)	42%
Fall (September, October, November)	19%
Winter (December, January, February)	11%
Can't remember	14%

5. The most recent time you took part in a balloon release, what was the cause or reason for the balloon release?



Funeral or memorial service	49%
To raise awareness or funds for an issue or cause	12%
Wedding	12%
Sporting event	7%
Religious worship	1%
Some other reason	11%
Can't remember	8%

5A. If there is a "cause," "issue," or "other reason" from above, please specify here:

100th Day of School
80th birthday
80th Birthday celebration
A memorial of a student.
A woman who used to go to my college was killed a year ago. This was a fundraiser for a scholarship in her name
accidental release
American cancer society
Autism Awareness
baby
Beat cancer funeral
camp comfort zone
Cancer
Cancer
cancer - memorial service
cancer awareness
celebration
Childhood cancer
children send messages to recently deceased grandparents at Christmas time
childhood cancer
Christmas party
college graduation party
counseling
every year on the birthday of my wife's niece who was killed by a drunk driver when she was 18
Family Reunion - in honor of lost family members
flee market
Graduation
Graduation
Graduation
Graduation
Graduation
Graduation
Great grandmas b-day
I did not take part but witnessed young people releasing left over balloons from Harris Teeter. I actually cautioned against it because of harm to wildlife.
It had to do with a children's book where a character went up in a balloon and we did it at Xmas time when giving the book as a gift.
Lung cancer
Megasmiles memorial
Memorial scholarship fund
motivation for students before SOL testing
Rabies Day fun run

Relay for Life
Relay for Life
Relay for Life
school celebration
School Reunion where the balloons were released but I didn't take part in it.
send birthday balloon to heaven, send baby shower balloon to heaven

6. That most recent time, where did the balloon release take place?

School	23%
Church or other house of worship	15%
Park	17%
Community center	7%
Hospital	0%
Some other place (Text box)	31%
Can't remember	8%

A barn (now a wedding venue)
At a cemetery
At the deceased's home in Maine
at the scene of an accident
Backyard
Backyard
backyard
backyard
Backyard of a home
Ballpark
beach
beach
beach
blowing rock, NC
burial grounds
Burial Site
camp
cemetery
cemetery
Cemetery
cemetery
Cemetery
cemetery
cemetery
cemetery
cemetery
cemetery
cemetery
cemetery
cemetery
cemetery
cemetery
cemetery
cemetery
cemetery
cemetery
cemetery
cemetery in Portsmouth VA
Community Event
Fairgrounds
Family house

Family's home
farm
farm
Funeral
Grave site
Grave site
Grave site
Grief camp for children
Harris Teeter, Virginia Beach
home
home
Home
home
home
home
home, fire station
Hospice office
House
House
House
it always takes place at home and it is one single balloon
Kroger Grocery Store
Little league field
Location of event
Music festival
neighborhood
Outdoor sporting venue-Indianapolis Motor Speedway
Park
parking lot
Place of reception was the parking lot of the fire station.
private home
private home
Private property
Restaurant
restaurant
Shoulders Hill Road Cemetery, Suffolk VA
stadium
Stadium
The home of the hostess
The outside of the house where the recipient of the book lived
Wedding venue on the Eastern Shore

7. How would you describe the area where the balloons were released? Mark any that apply.

Rural area	32%
Suburban area	33%
Small town	17%
Urban area	16%
Within a few miles of the ocean or Chesapeake Bay	8%

8. Was the balloon release event in Virginia or outside Virginia?

In Virginia	79%
Outside Virginia	21%

9. As far as you know, was this part of an annual or a one-time event?

Annual	15%
One-time	69%
Don't know	16%

10. What were the feelings that you experienced as the balloons were being released? (Text box)

A feeling of relief
"What a waste of money!...I wonder if that helium is bad for the environment>" I didn't know at the time that balloons were dangerous to sea creatures.
A celebratory joy
A feeling of serenity
A sense of togetherness
a showing of love and a wave to the person that had passed on
Actually thought it was lovely at the time
anger
Anger. I refused to release a balloon because I know the harmful effects to the ocean/sea life.
As if they were following my nephew spirit to heaven
At first it was pretty then realizing it had to land somewhere
At the time I did not understand the consequences to our environment and animals. My only focus was the remembrance of the person lost at that memorial.
Awe
awe, curiosity
awesome!
Beautiful tribute to a life lost
calm, happy
Celebrating a remembrance.
Comfort. My 5 year old son died one year ago and we had a balloon release at his funeral and at a 5k held in his honor. (where more than 5 balloons were released) We have also sent him a balloon on holidays, etc. but these have been a single or at times, 5, for his age. I feel like I am sending them to him and it gives us peace.
Concern for birds and wildlife.
concern for what damage they may cause
Delight... then concern. I realized that the balloons would eventually pop or deflate then fall to the ground and cause pollution or worse, death to an innocent animal.
Didn't really think about it
Do not like
do not recall
elation, reverence
Elation, sorrow and felt close to those that were there with us.
Emotional
excited
Excitement
Excitement
excitement
Faculty and students were excited. The autism speech and the release of the balloons resulted in a very thought provoking moment. Made you really think about what had been said as the balloons drifted off. The silence and



balloons drifting made you think of the students in the school who were affected with this disability. The autistic students were very excited to release the balloons.
Fear that they would harm environment
felt it was wrong...worried about wildlife getting tangled in string or even the balloon debris. Litter as well
Freedom
Fun
fun
fun and joy
gone but not forgotten
good
grief, and peace
Grief, had just lost a very important person in my life.
Guilt because I knew it was wrong but I didn't want to offend the individuals who had just lost their child.
Had no feeling
Happiness
Happiness
happiness
happiness
Happiness, joy, excitement
happiness, sadness
Happy
happy
Happy
Happy
Happy thoughts of the person who had died filled my mind.
hope
Hope, peace
Hope... Love....
hopeful
I did not directly participate as I do not believe in damaging the environment. However, I was very uncomfortable and wished there were a way to have the family choose a better option.
I did not support the release, but it was done by an outside agency.
I didn't like the idea especially being so close to the Bay
i do not like releasing balloons because they end up as litter. I don't know how long it takes them to break down. so i was not happy
I don't agree with it being done.
I don't like that sort of thing, but the kids liked it and some of the grown-ups
I enjoyed it. I liked watching the balloon fly up into the sky in remembrance of a close friend.
I feel as though it gives you some sort of burden release from the stress or whatever is causing.
I felt that it was a meaningful activity for the loved ones. I did excess concern about effects of wildlife (quietly to another friend) She said that those were Mylar gallons and not a problem.
I hate it. I try not to go to events that do it.
I hated it and didn't want to be there. I thought nothing of the person who passed and only about the trash and harm everyone was doing.
I hated it. I chose not to release a balloon. I couldn't think of the person everyone was remembering and only about the trash and harm the balloons would cause.
I hoped that the balloons (that contained messages) we were sending up got to our loved ones.
I hoped that this activity would be helpful to those who were grieving.
I know that releasing the balloons is bad for the environment and i felt uncomfortable participating. I didn't want to make an issue of it at the time, but i did mention this to the hostess after the event, in case she hosts

another one. She was unaware of the environmental issues.
I thought it was pretty
I thought it was environmentally irresponsible.
I wanted to stop them
I was against it all along because I am part of a turtle rescue team. I COULD NOT convince my family any different so I went along because it was my brother's memorial
I was angry. They were inadvertent releases, but the organization that kept accidentally letting them go showed no concern whatsoever that they were littering the air and sea.
I was concerned about the effect the release would have on wildlife.
I was concerned because the balloons were being released. Most other attendants were exhibiting a mix of sorrow and joy due to the nature of the release.
i was excited. The kids were excited.
I was thinking that we should have biodegradable balloons.
I wondered where they would land.
I wouldn't release one, but out of respect for the grieving parents I didn't say anything to stop them.
I, personally, opt not to participate in balloon releases due to the negative impact on animals and the environment. I have been at weddings and school functions where they have been released and I always cringe at the thought.
Indifferent
It is very pretty and seems to help release things inside of you. Also we always send up prayers. I have got a balloon land in my front yard from Texas for a death of a family member and actually we send messages back and forth some.
It was a beautiful moment. We felt connected to the woman who has left us.
It was a celebration so happy.
It was a nice remembrance
It was beautiful - It was about 5 balloons.
It was beautiful but would like to know what happened to the balloons
It was fun at first but then not so fun when the balloon got stuck up high on a tree branch...It stayed stuck up there for months and finally got blown away during a strong wind storm
It was in memory of a dear friend that died too soon - for her Birthday - it was inspirational.
It was pretty, and I hoped it helped the woman who had just lost her husband.
It was pretty, but I know the dangers of balloons on sea life and birds. Thank goodness the balloons did not have ribbon.
it was wonderful seeing them fly up, but i did wonder where they would go
It's a sense of peace
It's beautiful and has a feeling of freedom to it.
It's beautiful but a waste.
it's pretty but bad for the environment
Joy
joy
Joy
Joy and emotional
Joy and excitement.
Joy, and happiness
Joy, excitement, worry for environment
joy, happiness, optimistic.
knowing what I know about debris from balloons, i was wishing they weren't doing it
Letting go of the person taken so young too breast cancer
looked cool
Looked nice
Loss of family member, sadness.

Love, pain, acceptance, hope
Loved it! Felt like I was sending a message to heaven
Mixed. Beautiful spectacle, but what goes up must come down--and potentially cause big problems.
nice feeling
No opinion
No problems
No special feelings
none
not a fan
NOT A FAN
Not good for the environment
nothing
peace
Peace
Peace
peace
Peaceful
Peaceful and reflective.
Poor animals who get a hold of the balloons when they come down deflated.
positive
Pretty sight
Reflective since it was a memorial but mixed feelings that balloons were released as part of the ceremony.
Regretful, but did not want to spoil the family's joy so I did not say anything negative about the release.
release of sadness
Relief/Closure
remembrance of cancer victims
Remembrance. It was in honor of murder victims
sad
Sad
Sad
sad
Sadness
Sadness
Sadness
sadness
sadness and love, for an infant family member who passed from cancer
Sadness at remembering the loss of a teenager
Sadness at the loss of four year boy. The son of a very close friend.
Sadness because my grandmother passed away.
Sadness for the loss of the child
sadness, peaceful, letting go
Sadness. And thinking how this could be harmful for wildlife animals
Sadness--related to the cause of the event--cancer
sentimental
Since it was a memorial event I understood, but I also know it's bad
Somber
Some concern about where they would end up
spiritual
Stress
The looked pretty.

The symbolism at this memorial event for a child was heart-wrenching, at the same time as I was concerned about the effect of the balloons and ribbons once they fell back to earth.
They looked nice but i had to wonder how far they would go and where they would end up
This is a danger to animals.
Thought it unnecessary. Could have done something else to celebrate.
Thoughts of the person that had passed
touching! It was a great tribute to a little girl who had passed away suddenly. Her classmates sent them to her
very upset
was emotional
We released only one per classroom instead of one per child as we were asked to do. We did this in memory of a custodian who passed away. This was 30 balloons.
What a waste of terrible plastic! Definitely thought it was a bad idea
When I lifted my eyes to see the balloons going up to the sky, I felt a peaceful emotion of hope in my sorrow as a widow. Through that wonderful experience, I remembered that my help to pass that painful moment, will come from heaven. Balloons means a lot to me.
where were they going??
While I love the beauty of it, I am concerned about what happens to all of the balloon parts when they float away and fall to the ground
Wondered where they would end up
Wonderful!
Worried about the environment, impact on marine life since we are very close to the Bay
Worry
YAY!!

11. As the balloons were being released, did you think about where the balloons would end up after they went out of view?

No	22%
Yes, a little	41%
Yes, a lot	38%

(All):

12. Which of these best describes what happens to balloons when they are released into the air?

Fall to the ground or water and do not break down	78%
Disintegrate or break into very small bits in the atmosphere	6%
Fall to the ground or water and break down naturally	5%
Float out into space	4%
Something else (Text box)	6%

And fall into bodies of water
Animals eat them and can die
Balloons have a detrimental impact on wildlife, balloons land on your beaches and in the seas. This causes animals to eat and get caught up in the balloons and tangled in the string, which often results in an animal's death.
Burn away
cause havoc for planes, bird and such
Could cause injury to birds and other wildlife.
deliver messages to heaven
Depending on material turtles or fish eat & die confusing them with jellyfish
depends on the type of balloon and environmental conditions as to if it will break down



Do not break down AND harm and injure wildlife and pollute streams, rivers, etc.
don't know
Don't know
end up in the bellies of seagulls
Fall into the Bay and turtles eat them!
Fall to ground/water and break down eventually, but it takes a very, very long time.
fall to the ground , do not break down and often kill wildlife.
fall to the ground or the water and break down eventually into very tiny pieces that remain for a very long time.
Fall to the ground or water and break down very slowly...hundreds of years!
Fall to the ground or water and may or may not break down depending on the material the balloons are made of
Fall to the ground or water, do not break down, and may be ingested and harm wildlife
Fall to the ground, but decay rate depends on construction of balloon, i.e., rubber, vs Mylar
fall to the water and kill animals that ingest them
Fatal to the ground to be ingested by animals
Get eaten by small animals.
have always heard they posed a pollution risk to animals, but have recently heard they do not
hurts animals
I believe it depends on the material the balloon is made of.
I don't honestly know.
I don't know!
I don't know.
I don't know. I never thought about where they go
I have no idea!
I'm not really sure. I would think that they would bust at some point due to the pressure?
I'm not sure
It depends on the type of balloon. Latex balloons travel upward if unobstructed and freeze at a certain altitude. They do not return to earth intact. They may return in pieces. There are biodegradable balloons that should be used for air release.
litter and cause harm to our environment
Not really sure
our sea life and birds eat them and die
pollute the land or water
stuck on trees
The temperature inside the balloon decreases there by decreasing the volume of the balloon which causes it to fall to the earth.
These can remain in the environment for such a long time, and they have great potential to harm wildlife that may ingest the balloon or become entangled in the ribbon that so often accompanies balloons.
They are litter.
They become litter...breaking into smaller pieces and endanger wildlife.
They can stay stuck somewhere for a long period of time. They may not fall to the ground and they will not break down naturally...
They do not disintegrate and end in in wild or aquatic habitat where they are ingested by or entangle wildlife
They fall to the ground or into water sources. They may get eaten by local animal life which is not quite healthy for them.
They pop and then pieces fall
What a leading question!!!! Clearly there is an agenda that you are trying to build data for.
What is the process?
Where I live, the balloons can fall to the ocean or bay and be consumed by sea life and suffocate.

13. If you are invited to take part in a balloon release in the future, or if you attend an event where one occurs, how likely are you to take part?

Very likely	10%
Somewhat likely	11%
Might or might not	21%
Somewhat unlikely	11%
Very unlikely	47%

14. Do you have any other comments you would like to make about balloon releases? (Text box)

A balloon got caught in the power lines and caused a major power outage in Lake Ridge, VA last week. Pictures show it tangled in the lines. :(
Against all balloon releases
As a charter captain & beachcomber on the eastern shore, I find a discouraging number of balloons on the beaches & in the ocean. I always pick them up and would NEVER allow them to be released if I could help it.
As a school leader I do what I can to discourage/prevent balloon releases.
As you can see, I haven't done it but this one time. I know it's not good for our environment, but the reason was more important to me at the time than the potential harm the balloons could do.
At the time of the release, I just thought the balloons just floated into space. Now I am better educated and try to encourage others not to release balloons for any reason.
awareness programs by the Virginia Aquarium have changed my opinion of this activity
Bad
Bad for environment and water life birds, etc
bad for the environment and animals
Bad idea.
Bad.
Balloon release should be banned. No amount of balloons released is okay.
Balloon releases are deadly to all marine life and some land animals who ingest them.
Balloon releases are illegal and for good reason. They fall back to the land or water and become a plague for wildlife and nuisance litter.
Balloon releases are simply littering with dangerous consequences to wildlife! What if, at a wedding or party, people were encouraged to throw "rubbers" on the ground???? SAME THING! Eventually those balloons come down. Stupid, stupid, stupid
Balloon releases should be banned. I must find and pull at least a dozen of them out of the Chesapeake Bay each summer.
Balloon releases should be illegal. Even single balloons can cause significant damage.
Balloon releases should be outlawed. It's littering.
Balloons are a threat to marine life.
Balloons are very dangerous to birds and other wildlife, so I prefer not to take part in these types of release activities.
Balloons can only hurt the environment.
Balloons kill/maim/harm many animals including marine mammals and sea turtles.
Balloons should not be released into the air. Nothing makes me more angry than when I see this happening. Marine animals think this is food and it kills them. If the balloons don't fall in the water, they get stuck in trees or fall to the ground and can take years to decompose. It is a form of littering and should not be permitted. If I had it my way, non-biodegradable balloons would not be manufactured. This world has enough trash as it is that does not decompose and is filling up our landfills, natural places and waterways.
Ban balloon releases
Ban them in VA, save our wildlife and oceans!
BANG-- Balloons are Nasty Garbage

Bubbles not balloons.
Change law to prohibit release and do something legal to prohibit plastic bags from floating in trees. Charge large fees to companies that manufacture items that don't break down and cause environmental damage. (Styrofoam that is so cheap to buy). Should be illegal.
Dangerous for animals-choking hazard.
Definitely not at all.
Depends on the reason and significance
Don't do it! It ends up in our oceans! Let's educate Virginia!
Don't do it.
Don't let them go!!
Don't like them
Eco-friendly alternatives should be used instead.
Educate people about what really happens to balloons--plastic or Mylar. Helium is a whole other issue.
Education of the public is critical, especially of those who sell helium balloons and tanks. Don't know what types of regulations there are on this issue.
either the balloons need to disintegrate without doing harm or we need to find another way to express feelings
Environmental Damage
Establishments that inflate balloons should be required to notify the buyer of the possible negative results
Extremely bad for the environment and harm animals, especially in the ocean.
From what I understand, balloons pose a threat to wildlife on land and in the oceans and waterways. While I have nostalgia for the balloon release events of my childhood, I do not wish to contribute to the pollution of our environment, nor to the demise of fish, birds, and mammals.
given what we now know, they should be banned.
Good for you for studying this. Hopefully, it will create awareness!
Hate them
Hate them and do everything to prevent them by spreading message
Haven't given it much thought but it's probably not good for the environment or ecologically responsible.
Helium is rare and we are running out! Save the helium!
I actively oppose balloon releases and have worked for a change in state law to prohibit balloon releases.
I admonish anyone I know who is contemplating not to use balloons, give them the rationale behind why not to and ask them to please reconsider...There are alternatives!
I always think of how harmful it is to the environment. However, I also feel, as a society, we enable our citizen to view littering as a norm. We simply send people to clean up the mess. People do not view littering as harmful to the environment and hazardous to wildlife. That being said, over the past few years I feel people have gotten away from releasing balloons at weddings
I am a huge fan of sea turtles and I feel like balloons landing in the ocean are no different that plastic bags which can harm sea turtles.
I am absolutely not a fan. While the two events I've attended were planned without my knowledge, I would not plan an event with a balloon release.
I am against balloon releases. It is just another way of littering....it eventually falls down in the water or on someone else's property and becomes garbage.
I am not sure why I was sent this survey.
I am personally very aware of the negative environmental consequences that are possible due to balloon litter. However balloon releases are apparently an accepted activity for many families to honor loved ones. My concern is much greater with regular releases of large numbers of balloons such as the Clemson University home game balloon release. <a href="http://www.clemson.edu/academics/programs/creative-inquiry/projects/spotlight/balloon-release.html">http://www.clemson.edu/academics/programs/creative-inquiry/projects/spotlight/balloon-release.html</a>
I am under the impression that the balloon release events are use more-so for closure of a traumatic event. I have thought of where the balloons go but I see it doing more psychological good as a whole. For weddings and other celebrations, I guess it has the symbolic reverence of eternity.
I appreciate the sentiment, but the impact to our environment isn't worth it. Why not release some butterflies

instead?
I approve.
I avoid helium balloons because of the shortage, but also worry about environmental impact. Balloon release is something I used to do but don't anymore.
I didn't take part as it happened and I was attending my husband's 50th class reunion.
I do make a strong effort to discourage this and so do most of my friends
I do not agree with them and I feel they are bad for the environment. there are ways to remember/memorialize etc
I do not like to see balloons released to the environment, in my opinion, it's a form of littering. Mylar balloons don't degrade and it's also a waste of helium.
I do not think anyone thinks about what happens to balloons when they are released into the air, the focus is on the event.
I do not think we should have balloon releases. Sea turtles and other marine life are injured by balloons.
I do often consider what happens to the balloons and what effect it has on wildlife and the environment.
I don't agree with releasing balloons because I believe it to be bad for the environment.
I don't agree with them at all. The pieces of the balloon fall to the earth as litter that is then eaten by wildlife which is a big problem.
I don't have a problem with them. My family found a balloon last year with a note in it and we emailed the address on the note. Found out that it traveled half way across the country in a few days. My children were so impressed and learned so much that it has been a story we have told over and over. I know that the balloons are not that great for the environment, but are there environmentally-safe balloons out yet?
I don't think it's great for the environment. I appreciate the visual, but I worry about the impact on wildlife. If there was some way to guarantee they disintegrated without harm, I'd be interested in that.
I don't think most people are aware of how detrimental they are to marine life.
I feel like it hurts the environment.
I feel that a balloon release should be for a particular reason. Latex balloons should be used rather than the Mylar type which do not break down. I realize that balloons are a hazard to wildlife and aquatic animals.
I feel that balloon releases should be illegal due to the impact on the environment and the wildlife both on land and sea!
I feel that releasing balloons into the environment is environmentally negligent.
I find balloons on my property and it is garbage. People don't realize that they come down somewhere else after they are released into the air.
I find the act of releasing balloons a regional practice. Growing up in New England, we had balloons at events, but never released them to release them.
I had not ever thought about this concern before, thank you for the survey and making me aware of the issue
I have always thought that this is a bad practice for our environment. It seems to me to be littering.
I have been made aware of how dangerous this has become. I am more mindful about doing this now than I was before.
I have found balloon litter at the beach
I have heard of balloon releases being used to help people who are grieving the loss of a loved one. Notes are written, placed inside and then released into the air. I think this is a nice gesture. However, I believe only biodegradable balloons should be used.
I have little to no knowledge about the effects that the release of such balloons have on the environment.
I have only attended balloon releases for the memorial service for children. These services have been planned by other children.
I have recently seen a lot about the damage between animal deaths and balloon releases and I AM an animal lover. I just think that I would rather focus on getting the communist president out of the white house or keeping rapist behind bars longer that I care about one animal dying because of my balloon that made my kids feel so good to release to their granny in heaven.
I have seen balloons at least 120 miles out to sea. Cannot stand it.
I have seen many balloons snagged in trees on the lawn at UVA --- graduation ceremonies would be a good

focus area
I just think they are dumb. I don't think people realize what they end up as.
I know that they can float into the ocean and sea turtles think they are jelly fish and will eat them and then they can die since they are stuck in their stomachs
I know the environmental problems with this practice, especially the danger to marine life. I try to educate people of this danger.
I know they aren't safe for the environment and I wish there balloons that would break down
I know what balloons do to the environment and the wildlife we share that environment with. I wish people would understand the consequences of balloon releases and STOP doing it.
I live in the Chesapeake Bay Watershed. I do not support the release of balloons for any reason.
I love the idea of balloon releases but hate the fact that they aren't biodegradable.
I realize balloons do not break down and they pose a threat to wildlife
I recently visited Metompkin Island to go treasure hunting and ended up finding and picking up 1/2 dozen of these balloons. When will people start to understand the impact they have on our environment....
I stress that we do not release balloons for environmental reasons.
I support release of balloons for a very limited and special events
I supported the Virginia effort in 2014 to give VA municipalities the ability to ban balloon releases.
I think balloon releases should be against the law
I think blogs on wedding planning, memorial services, etc. make people more aware about the dangers of release balloons and throwing rice. They also offer alternative ideas. I think this is a contributing factor on why I have not been invited to an event in which I have seen this take place.
I think in the olden days, people tried to release a hundred flying white doves but in the advent of Mylar balloons, this at first seemed to be a nice alternative than capturing and freeing all those birds. I think the world should think of something new---no captured animals and no mylar or plastic! The environmental considerations for habitat and ecology need to be 21st century models of reduce frivolous waste of resources, re-use environmentally safe items into the air, and re-cycle.
I think it is harmful and should not be allowed.
I think it kills birds and other animals that might ingest the deflated balloon.
I think it should be illegal to release balloons as a part of a public gathering, celebration or ceremony. I do think we would need to write a law so as not to arrest or fine people who accidentally release a balloon or two. I support a law that would pose a steep fine for any group that releases balloons for the reasons mentioned above.
I think people are becoming more aware of the detrimental effects of these releases and are less likely to do so than in the past. But more PDAs are needed.
I think there needs to be another option to releasing Balloons. Releasing Doves or Homing Pigeons. I think it is all about the symbolism of the release. There needs to be a campaign educating about not releasing balloons and an option is releasing a bird that flies back to its home. I think once people are educated, there way of thinking will change.
I think they are a lot of fun.
I think they are bad not only for the planet but for the wildlife as well. Although I attend I do not release a balloon. Your survey does not specify whether or not the balloons are rubber or Mylar. I am not aware of the effects Mylar balloons have on the environment so I cannot comment on that. However I would not release them into the air for that reason alone.
I think they are terrible for the environment and there are many other ways to remember a loved one or celebrate an event besides destroying the environment.
I think they can be replaced with other options that might not harm environment as much.
I think they should be outlawed. I find balloons on the beach every day and they cause invaluable damage to wildlife. Littering is not allowed anywhere else, and that is what this is
I think they should be outlawed. I support the measure that was recently voted down in the last Virginia congressional session.
I thought they were a danger to marine life and were illegal..



I try to be vocal about not releasing balloons, even individually.
I was in a youth program for my church in 1989 and convinced them to not release ;)
I was unaware there would be a balloon release, nor did I physically release any balloons. It was unsettling to watch.
I watched but did not release a balloon. It felt somewhat anti-social.
I wish it was illegal.
I wish people could find another way to celebrate that doesn't cause damage to the environment or animals.
I wish people would realize balloons don't go to heaven. Regardless of someone's religious beliefs, it should be clear that what goes up comes back down!
I wish people would stop doing it or it be outlawed. It is very harmful to animals and the environment.
I wish that more people knew about or thought about the negative effects to the environment.
I wish that they were illegal
I wish the legislation that was brought to vote wasn't taken as a joke.
I wish they were biodegradable. They are lovely to watch floating into the heavens. But seeing them tangled in trees and wires is dangerous and sad.
I would be in favor of legislation regulating the release of balloons which can end up in the bay or ocean which surrounds a large part of the border with the city I live in. I see balloons caught in some of the waterway areas as well as being incorporated into bird nests. It's not necessary. We don't have to outlaw balloons.....just the bulk releases.
I would do it more if the balloons were 100% biodegradable
I would no more take part in a balloon release than I would throw trash out my car window!
I would not release balloons into the air on purpose. It doesn't seem like it would be good for the environment although I'm not sure exactly what happens.
I would really like to see balloon releases band. I would also like to see environmentally friendly options promoted. I think providing information to funeral homes, wedding vendors, etc. would be useful.
I would recommend that people do not do balloon releases. They unnecessarily pollute the environment.
I wouldn't encourage them not to use balloons beforehand, and most of my friends do not.
I'd like to have credible scientific information on this subject.
I'd take part; and bring pictures of marine life choking on balloons! I'd bring pins and ask that the balloons be popped when we're done, rather than released.
If it's a funeral again, and I'm there, it will happen with or without my participation, just as it did.
If you get the word out, they will become socially unacceptable. Few people want to kill wildlife.
If you're going to release anything into the environment, make sure it's biodegradable for the animals sake.
I'm against it and try to tell people the harmful environmental effects of releasing balloons
In regards to question #12, I have no real knowledge of whether the balloons are biodegradable or not. I do not know the environmental impact of balloons. I believe further research would need to be done on that, rather than asking the general public of their opinion on the matter.
Isn't helium running out also? Isn't it needed for MRI's ?
it has come to my attention how damaging this can be to our animal friends, i probably will not partake in this practice myself any longer
It is a form of ugly litter. Pleasure at the release only lasts a few moments. The end result is litter, danger and death to wildlife. There is nothing uglier than an old balloon stuck in a tree or washed up on the beach. Helium balloon release should be illegal.
It is important for people to understand alternatives to balloons. Most people want their celebrations to be festive & care about the environment as well. Without knowing safe alternatives for decorations / activities they may choose to use balloons regardless.
It is my understanding that balloon launches are prohibited, especially in areas where flight paths could be impacted.
It is not an environmentally safe practice. Balloons cause health risks for animals and fish. It is nothing more than a legal form of littering.
It is of no interest to me.

It is so bad for birds and sea life. Balloon releases should be illegal.
it is very harmful to animals and the environment and I will never participate
It kills sea turtles and should be stopped!
It must be stopped
It seems like a pointless thing to do, regardless of the consequences to nature.
It should be illegal
It should be illegal at least until they are made out of biodegradable substance or something edible.
It should be illegal to intentionally release balloons.
It should be made illegal if not already!! Federal law!!
It would be wonderful to have balloons made of a material that breaks down faster and has a smaller impact on the environment.
It's a bad idea.
it's a crime against nature and our planet and should be made illegal
It's about all I have right now to comfort me and I will continue to do them. As mentioned earlier it is usually just one or at times, 5, and I realize this does not make the issue any better, but when they go out of sight I imagine he gets them and I need him to know I am thinking of him. It'd be difficult to explain or expect a grieving mother to think any differently.
It's cool to find one.
It's disappointing that more people don't realize the devastating effects balloons (and other trash) can have on wildlife.
It's littering!
It's very bad to release balloons!
Just wonder about the safety of the balloon release for animals.
Latex balloons get much publicity, but I assume the latex eventually breaks down. I have never found a latex balloon on a roadside litter pick-up. What I find ALL the time during trash pick-ups is the MYLAR type of balloon. I wish they were banned!
Let's get them banned!
Longwood University Student
Longwood university student
Longwood University Student
Longwood university student
Longwood university student
Longwood university student
Longwood university student
Longwood university student
Longwood university student
Longwood university student
Longwood University Student
Longwood University Student
Longwood University Student
Longwood University Student
Longwood University Student
Longwood university student. "i feel that balloon release should be replaced with an alternative methods of celebration because they are ultimately harmful to animals and the environment."
Longwood university student. "i know balloons being released is very bad for the environment but i know an event right here on campus released balloons last week. i wish there was a safer alternative for people wanting to express the symbolism that they do when releasing balloons."
Luckily the friends I have gathered in my life are like me, and we are well aware of the dangers of releasing any type of balloon.
Many of these balloons kill wildlife upon returning to the ground. Eastern Shore Wildlife has an excellent presentation on this.

More education needs to be available to the public.
More education needs to be given to the public about how harmful it is to the environment and wildlife.
Most people are not aware of the dangers of balloons. Public service announcements may help (but I would avoid watching graphic footage of animals killed or injured by balloons).
My concern is for wild life that may ingest the balloon or get caught in it. Swallowing a balloon is a choking hazard for humans and could be for other animals.
My sister is a marine biologist and I have a degree in biology. We have pulled balloons out of dead marine mammals. It should be illegal to release balloons into the environment. Period.
N/A
Need to promote releasing butterflies instead.
No
No
no
No
no
No
no
no
no
no
no
No
no
no
no
no
no
no
no
no
No
no
no
no
no
No
no
no
No
no
no
no
no
no
no
No
No.
No.
No.
none
Nope
Not a big fan

Not at this time
Not really sure what happens to latex balloons but know that I've seen Mylar balloons stuck in various different places along with the curly ribbon still attached.
Now I am interested in finding out what happens to the balloons.
Of all of the environmental issues that need to be dealt with, this is a big deal??? How about the weather balloons released multiple times daily around the country.
Only one balloon was released.
Pawn to King 4
People are so ignorant. Why not just tie plastic bags and beverage rings that hold a six pack to them as well. Very non-environmentally friendly!!!
People must be educated about the environmental hazards. Most people don't really stop and think about the consequences of their actions.
People should choose a way to commemorate event that is more environmentally friendly.
Place a tag on the balloon to request the finder to email the person who released the balloon to track the wind currents in the upper atmosphere.
Pollution
Public awareness works
Putting so many different species at risk, aside from the detrimental effects balloon releases can have on the natural environment
rain barrel workshop attendee
rain barrel workshop attendee
rain barrel workshop attendee
rain barrel workshop attendee
Released balloons endanger wildlife and become trash which effects the environment.
Released balloons wreak havoc on wildlife. Balloon releases should be made illegal.
Releasing a balloon is like throwing paper out of your car window. It is littering and I would not do it.
Releasing balloons into the environment is irresponsible – they injure and kill wildlife and contribute to polluting our waterways. I hope to see a ban on balloon releases in the future.
Releasing balloons should be profited by city state and federal law
Releasing latex balloons is dangerous to the environment and to animals that mistake them for food. Anyone who says otherwise is misinformed.
See so many balloon releases on TV, can't believe people still think that's OK.
Seems to me like it's just like littering, except the people releasing balloons don't see the effects of their actions
Should be banned/restricted due to animal health concerns
Should be discouraged because of problems with marine life ingesting the balloons and clogging their digestive systems, among other things.
Should be outlawed. They are so harmful to our environment and can cause transformers to blow.
Should be stopped!
Should use something like paper lanterns instead since paper breaks down and is natural (wood).
Someone needs to invent biodegradable balloons.
Stop the balloon releases just like there is an alternative to wedding rice.
Thank you for doing this research. I hope this helps make a difference.
Thank you for this research. Help educate!
The balloon release was at a college football game so there was nothing I could do. I would not purposely participate in an event that released balloons, but you never know when it will be done.
The Virginia law allowing up to 49 balloons to be released at a time is appalling, and needs to be changed. I hope legislation will be approved soon, allowing municipalities to make this decision at a local level, or changing it at a state level.
There are far more appropriate ways to show appreciation than the waste balloon cause. Pick up litter, plant a tree, restore a habitat, ride a bike
There are other ways to perform a ceremony without balloons and risking the balance in our environment.

There is a state law concerning the number of balloons that can be released at one time. Please check the Code of Virginia prior to a release ceremony.
They are bad for the environment.
They are fun!
They are horrible for the environment and animals. Cannot fathom why people do it.
They are horribly thoughtless and damaging. And using up helium is also wasteful.
They are illegal in certain quantities in the state of Florida, but this is not generally enforced.
They are illegal in Virginia, should remain so, and there should be both rewards for those who make other choices and punishment for those who do not. Something creative, like having to conduct extensive litter cleanups on beaches, or assisting with coastal animal rescue efforts.
They are not appropriate
They are not good for the environment therefore I do not participate
They are pointless.
they are super bad for the environment and should be considered as littering
They are very harmful to the environment and I would not participate. It is also illegal.
They create pollution that rarely impacts those who release those who release the balloons
They hurt wildlife and the environment. Horrible practice
They should be against the law.
They should be banned.
they should be banned. people should be fined same as littering!
They should be illegal
They should be illegal (unless someone can design a truly compostable balloon).
They should be illegal due to environmental impacts to wildlife.
They should be illegal everywhere.
They should be illegal.
They should be made illegal unless the balloons released are QUICKLY biodegradable and there is no ribbon. I don't think that biodegradable balloons exist, but they would be a great invention for this purpose.
they should be outlawed
They should be outlawed because they are harmful to the environment.
They suck
This makes me think about where balloons go. I truly never once thought about it.
This should be a "tradition" outlived. No need for the Balloons.
Totally against
Very detrimental to marine life.
Very unkind for the environment...
We need to get the message out! I suggested releasing butterflies as an alternative to the hostess of the last instance. There must be other ways to commemorate something or someone besides balloons, so they need to be put forward so people can make a better choice.
We need to provide alternative suggestions that can have the same emotional impact as a balloon release
Well intentioned, but a bad idea.
What really happens to balloons after they are release into the air?
Why release balloons in rural areas where there are trees?
Wish they were outlawed!
Worst thing ever! Stop them now!
Would like to see laws passed banning helium balloons!
Yes. They are a disaster to wildlife, but no one seems to realize that helium is a finite resource that is running out. When it is gone, there won't be anymore. Helium is vital to many critical functions such as the operation of MRIs. The waste of this precious resource, coupled with the environmental effects makes me want a law that prices a single helium balloon at least \$100.

15. These last questions are just to help classify the survey. What is your age?



Less than 18	1%
18 to 34	21%
35 to 49	36%
50 to 64	34%
65 or older	9%

16. What is the last grade in school that you completed?

Up to 11th Grade	0%
High school diploma or GED	4%
Attended college or technical school	16%
Bachelor's degree	30%
Graduate degree	49%

17. What is your gender?

Female	78%
Male	22%

18. What is your home zip code? *(Required) (number box)*

Thank you for your participation in this survey. Your responses have been recorded.

## APPENDIX D

### Telephone Interviews with Balloon Release Planners

#### Interview Script

Hello, my name is \_\_\_\_\_. May I please speak with \_\_\_\_\_?

I am helping to administer a study for Longwood University in Virginia about the use and release of helium balloons. May I speak with the store manager please? We saw in a news article that you were involved with a release of balloons (details of event).

I would like to ask you a few questions about your experience with planning or participating in that event. Please know that my questions are for research purposes only and will not be shared beyond the small team that is conducting the study. This is the first step in a much larger effort to interview many people who have participated in balloon release events.

Is it all right if I ask you a few questions right now? *(Pause briefly. If necessary, schedule another time to conduct the survey.)*

Thanks very much for your time. Your responses have been very helpful.

#### Interview 1

**Interviewer:** Thuli

**Date:** 4/20/15

**Organization:** Funeral Home

**News citation:** Hannibal Courier-Post

**Location and date of event:** Mt. Olivet Cemetery Hannibal, MO Sunday, Oct. 26 2014

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#### Telephone Interview Question Responses

1. Tell me a little bit about the event in which you participated. What was the purpose of the event?  
The event is All Saints' Day which is celebrated all over the world to remember loved ones who have passed away. The purpose (for us) was to gather at the cemetery and decorate the graves of family members as a way of remembering them. Last year we included a balloon release for the first time.
2. Where was the event held?  
The event was held at Mt. Olivet Cemetery
3. How many people participated?  
Probably about 150 people came out to celebrate.
4. What was your own role in planning or inspiring the event?  
I was the organizer and promoter of the event I also helped facilitate the partnership with the cemetery where the event was held.
5. Was there one person – or a small group – most interested in including a balloon release in your activities that day? *(If yes):* How would you describe their role in the planning process?  
The balloon release was actually something a few of the families suggested to me while we were planning the event. So I guess you could say that their role was giving us the idea and we just went with it. Last year was the first time that we incorporated a balloon release.

6. What were some of the reasons why organizers of the event felt that releasing balloons would be appropriate or meaningful?

Like I said I hadn't thought about it till I got a few calls suggesting we hand out balloons to be released. I think people felt that the event needed something a little more tangible. There's also a spiritual element to releasing balloons and watching them rise to the heavens. I feel like that was the most emotional part of the event because people stopped decorating, eating and talking to focus on the balloons as they went up and remembered their loved ones.

7. During the planning process, was there any discussion about where the balloons would end up after they went out of view? *(If yes):* What sort of discussion took place?

There wasn't really discussion about where the balloons would end up, the discussions focused more on what the balloons symbolized as they went up but we (internally) were intentional about using balloons that were friendlier (that would degrade over time) to the environment.

8. Were any alternatives to a balloon release considered? *(If yes):* What were they, and in the end, why was a balloon release chosen?

Yes, we have another event that we host during the fall and for that one we use lanterns that we release over the river. We considered lanterns for this event too but eventually chose balloons since so many people kept calling and suggesting them to us. Plus this event was during the day so we felt like balloons would make a greater impact visually.

9. Do you have any other comments you would like to make?

No. That's all.

## **Interview 2**

**Interviewer:** Thuli

**Date:** 4/25/15

**Organization:** March Elementary School

**News citation:** Lehi Valley Live

**Location and date of event:** March Elementary School 09/08/2014

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## **Survey Question Responses**

1. Tell me a little bit about the event in which you participated. What was the purpose of the event?

Our school was celebrating its 100<sup>th</sup> anniversary.

2. Where was the event held?

The event was held here on school grounds.

3. How many people participated?

Oh I'm not sure, everyone in the school and many people from the community who attended the school in the past. We even had a lady come who was 83 years old.

4. What was your own role in planning or inspiring the event?

I'm part of the office staff so we helped organize and plan the whole event.

5. Was there one person – or a small group – most interested in including a balloon release in your activities that day? *(If yes):* How would you describe their role in the planning process?

It came up, I don't remember how, we all agreed though that it would be a beautiful way to celebrate.

6. What were some of the reasons why organizers of the event felt that releasing balloons would be appropriate or meaningful?  
We wanted to do something that would be unique and fun for everyone.
7. During the planning process, was there any discussion about where the balloons would end up after they went out of view? *(If yes):* What sort of discussion took place?  
Yes, that's why we took special care to release balloons that were biodegradable. We definitively thought about the impact balloons would have on the environment and we took steps to make sure that our release would be environmentally friendly.
8. Were any alternatives to a balloon release considered? *(If yes):* What were they, and in the end, why was a balloon release chosen?  
We tried to brainstorm about other ideas (I don't remember them all at this point) but we eventually went with the balloon release. We thought it would be more impactful during the day and more festive.
9. Do you have any other comments you would like to make?  
No. That's all.

### **Interview 3**

**Interviewer:** Thuli

**Date:** 4/23/2015

**Organization:** Dutch Haven Assisted Living in Maurertown

**News citation:** The Northern Virginia Daily

**Location and date of event:** Maurertown August 26 2014

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### **Telephone Interview Question Responses**

1. Tell me a little bit about the event in which you participated. What was the purpose of the event?  
Well I had been taking care of a lady, she was my best friend, and her 82<sup>nd</sup> birthday was coming up. I wanted to do something really special for her, something that she would enjoy and remember because she suffers from Alzheimer's.
2. Where was the event held?  
Here at Dutch Haven.
3. How many people participated?  
The whole building participated about 40-50 people.
4. What was your own role in planning or inspiring the event?  
I planned the event with a little help from Helen's daughter.
5. Was there one person – or a small group – most interested in including a balloon release in your activities that day? *(If yes):* How would you describe their role in the planning process?  
It was my idea to do the balloon release.
6. What were some of the reasons why organizers of the event felt that releasing balloons would be appropriate or meaningful?  
I wanted to do something that Helen would really enjoy and remember which is hard to accomplish with Alzheimer patients.
7. During the planning process, was there any discussion about where the balloons would end up after they went out of view? *(If yes):* What sort of discussion took place?

Yes, we talked about where we thought the balloons would end up and we were surprised that one ended up about 700 miles from here.

8. Were any alternatives to a balloon release considered? *(If yes):* What were they, and in the end, why was a balloon release chosen?

Yes, I thought about posting an ad in the paper and invite people to shower Helen with birthday cards. I also thought about leaving notes in different places (like Walmart) for people to find and write to Helen for her birthday.

In the end I chose to do a balloon release because I felt like it was something that she could participate in. She really enjoyed herself, she cried the whole time. When I went to place her birthday cake in front of her she didn't even wait for me to feed her, she just fed herself and got it all over her face. It was a really special day. Even after that day she remembered the balloons.

9. Do you have any other comments you would like to make?

No, thank you for calling me. If you need anything else, you know the number to call.

#### **Interview 4**

**Interviewer:** Thuli

**Date:** 4/20/2015

**Organization:** Compassionate Friends (River valley chapter)

**News citation:** The Times (IL)

**Location and date of event:** Sunday, Sept. 28 2014 Baker Lake in Peru

#### **Telephone Interview Question Responses**

1. Tell me a little bit about the event in which you participated. What was the purpose of the event?  
We planned a walk that ended in releasing balloons to fundraise for Compassionate Friends. Compassionate Friends is a support group for people who have lost children. I guess you could say the purpose was twofold, first to remember the children that we have lost and also to raise money for the River Valley Chapter of Compassionate Friends.
2. Where was the event held?  
The event was held at a park here in Illinois called Baker Lake, it's on Airport Road.
3. How many people participated?  
A couple hundred people showed up for the event. It was a really successful event.
4. What was your own role in planning or inspiring the event?  
I lead the River Valley Chapter of Compassionate Friends so I wore many hats in planning the event. I helped with planning, promoting, advertising and I did a lot of different things on the actual day. I had the help of many volunteers but it was my job to oversee the event and make sure every detail was in place.
5. Was there one person – or a small group – most interested in including a balloon release in your activities that day? *(If yes):* How would you describe their role in the planning process?  
A group of us planned the event and the idea just kind of came up. I don't really remember how exactly, sometime during all the discussion someone must have mentioned it and we all liked the idea.
6. Can you tell me more about how the idea came up, if you remember?



I think it came up because we looked into what other chapters of our organization were doing for their events and a couple of them had done balloon releases so we decided to do one too. I don't think we're going to do a balloon release this year though.

7. Oh really? What makes you say that?  
Well after the last event we got a lot of negative responses on the Facebook page we used to promote the event. A lot of people were concerned that balloons were bad for the environment and we hadn't thought of that so we're thinking of doing something different this year. Plus helium is so expensive so we are considering doing something different.
8. You mentioned two reasons why you might not do balloon releases in the future, you said some people responded negatively to the idea of a balloon release and also that the cost of helium is really expensive. What would you say is the most compelling reason to change from releasing balloons to something else? I think that helium being so expensive and bad for the environment is the main reason we are looking into different options this year. We also don't want to alienate people by not caring for the environment so we're looking into different options.
9. What have you considered instead of balloons?  
We haven't really met yet to discuss anything in depth but bubbles were mentioned in passing, I don't remember if anything else was suggested.
10. What were some of the reasons why organizers of the event felt that releasing balloons would be appropriate or meaningful?  
Well we saw how successful a balloon release had been for other chapters and we decided to do one ourselves. We also found the idea very peaceful and beautiful.
11. Tell me more about why your team felt it would be peaceful and beautiful?  
Is there anything more peaceful than watching a balloon float away as you remember a child you lost, and then doing that while surrounded by other families who understand exactly what you are feeling. It was a very emotional event.
12. During the planning process, was there any discussion about where the balloons would end up after they went out of view? *(If yes):* What sort of discussion took place?  
No, we didn't think about it until people wrote to us on Facebook about balloons being bad for the environment. We just wanted to do something special in memory of the children who have died.
13. Were any alternatives to a balloon release considered? *(If yes):* What were they, and in the end, why was a balloon release chosen?  
No. It's only this year that we're thinking about doing something different, so far we've only thought of bubbles or balloons.
14. So balloons are still on the table for this year's event?  
Possibly but like I said, helium is really expensive and we haven't really met to discuss things in depth yet so we will see.
15. Do you have any other comments you would like to make?  
No. I can't think of anything.

### **Interview 5**

**Interviewer:** Thuli

**Date:** 4/21/15

**Organization:** Bender Woods Senior Apartments

**News citation: IndeOnline.com Massillon, OH**

**Location and date of event: Oct. 6 2014 Massillon, OH**

### Telephone Interview Question Responses

1. Tell me a little bit about the event in which you participated. What was the purpose of the event?  
I work as a social worker at an independent housing facility for senior citizens and every year I have to do an event of some kind. Last year I chose to do a balloon release for breast cancer awareness in October. The event ended up being a cancer awareness event-not just focused on breast cancer. We had so many people lose loved ones from various types of cancers so we bought white balloons for them and pink balloons for those who had family members survive or pass from breast cancer.
2. Where was the event held?  
The event was held here at Bender Woods.
3. How many people participated?  
I would say about 120 people came out for the event. Quite a few people showed up from the community.
4. What was your own role in planning or inspiring the event?  
I was the point person for the event.
5. Was there one person – or a small group – most interested in including a balloon release in your activities that day? *(If yes):* How would you describe their role in the planning process?  
n/a
6. What were some of the reasons why organizers of the event felt that releasing balloons would be appropriate or meaningful?  
I think that it's meaningful for the deceased to watch the balloons float away to heaven and, actually, something really special happened that day. It was a rainy day when we went out with the balloons but just before we released the balloons the rain suddenly stopped and the sun came out. I'm not a very spiritual person but even I had to admit that there was something very beautiful and symbolic about that moment.
7. What do you feel like it symbolized?  
I think it symbolized that our loved ones were aware of us in that moment. It was very emotional. People were happy and sad at the same time. Everyone talked about it for a long time after it happened. It felt like a response, it was a special moment.
8. During the planning process, was there any discussion about where the balloons would end up after they went out of view? *(If yes):* What sort of discussion took place?  
I did think about the impact of the balloons on the environment, obviously, but I help the environment in other ways all the time in other ways.
9. Can you tell me a little more about that?  
Well with one hand I do my bit for the environment (I recycle and avoid littering for the most part) and so I felt like a few balloons at one event would be ok. I did worry that someone finding the balloons would call to complain but that didn't happen.
10. Were any alternatives to a balloon release considered? *(If yes):* What were they, and in the end, why was a balloon release chosen?  
No.
11. Do you have any other comments you would like to make?  
No. It's funny to me that we're talking about this and tomorrow is earth day. [laughter]

**Interview 6****Interviewer:** Thuli**Date:** 4/23/2015**Organization:** Cumberland Hope Community**News citation:** Harland Daily**Location and date of event:** Joe Gilley Memorial Athletic Complex, Harlan. 9/26/14**Telephone Interview Question Responses**

1. Tell me a little bit about the event in which you participated. What was the purpose of the event?  
I work for Cumberland Hope Recovery Center and we planned the event to raise awareness and money for women recovering from drug and alcohol abuse. September is recovery month so we always do something for awareness.
2. Where was the event held?  
The event was at Harlan Independent High School, we used their football field.
3. How many people participated?  
About 200-250 people participated in the event.
4. What was your own role in planning or inspiring the event?  
I planned the event together with our coordinator Heather Mullins.
5. Was there one person – or a small group – most interested in including a balloon release in your activities that day? *(If yes):* How would you describe their role in the planning process?  
Heather thought the balloon release would be a good idea. She is the coordinator here at the center. Her and I were the main planners for the event.
6. What were some of the reasons why organizers of the event felt that releasing balloons would be appropriate or meaningful?  
Well we got the idea from a funeral we attended for one of our volunteers who passed. Releasing balloons at her funeral was very emotional and so we thought we would try it at our event. We thought we could capture the same emotion we saw at the funeral.
7. During the planning process, was there any discussion about where the balloons would end up after they went out of view? *(If yes):* What sort of discussion took place?  
No we didn't really talk about that.
8. Were any alternatives to a balloon release considered? *(If yes):* What were they, and in the end, why was a balloon release chosen?  
Yes, we usually light candles around the field and let people walk around remembering those that they have lost to addiction abuse. We went with the balloon release because we wanted to try something different.
9. Did you find the balloon release more impactful than the lighting of the candles?  
Yes, people were more emotional about seeing the balloon float away to heaven. I think because you have to let a balloon, it's kind of like saying goodbye all over again.
10. Do you have any other comments you would like to make?  
No, I really enjoyed our talk. Call me again with any questions.

**Interview 7****Interviewer: Thuli****Date: 4/23/2015****Organization: Tri Delta Sorority****News citation: News 2****Location and date of event: Clemson SC Sept 28 2014****Telephone Interview Question Responses**

1. Tell me a little bit about the event in which you participated. What was the purpose of the event?  
The purpose of the event was to raise money and the community's awareness on behalf of a child who has leukemia. We were trying to help support his family in funding and finding a match because he needed a transplant.
2. Where was the event held?  
We held the event here at Clemson.
3. How many people participated?  
I would say about 80 people turned up for the event.
4. What was your own role in planning or inspiring the event?  
I'm part of the event team at the sorority.
5. Was there one person – or a small group – most interested in including a balloon release in your activities that day? *(If yes):* How would you describe their role in the planning process?  
About 8 of us were involved in planning the event and we all thought it would be a good way to encourage participation.
6. What were some of the reasons why organizers of the event felt that releasing balloons would be appropriate or meaningful?  
I'm not really sure I remember, we probably were thinking about what kids would enjoy and we figured balloons were a good idea.
7. During the planning process, was there any discussion about where the balloons would end up after they went out of view? *(If yes):* What sort of discussion took place?  
No, though now that you mention it we should have thought about that. Our focus was on helping the family get through a very difficult situation.
8. Were any alternatives to a balloon release considered? *(If yes):* What were they, and in the end, why was a balloon release chosen?  
No, I don't think so.
9. Do you have any other comments you would like to make?  
No, I don't have anything more to add.

# APPENDIX E

## Focus Group Moderator's Guide

Richmond, VA; July 20, 2015

### MISSION:

**DETERMINE MESSAGES AND TECHNIQUES THAT WILL PENETRATE THE AUDIENCE AND PERSUADE THEM NOT TO PLAN OR TAKE PART IN BALLOON RELEASES.**

### A. Introductions (:10)

1. Moderator introduction and ground rules:
  - Market research/No right or wrong answers.
  - Speak one at a time; being recorded and people observing.
2. Respondents introduce selves/ice breaker.

### **B. Experience with Balloon Releases (:15)**

1. Tell me about your experience participating in or hosting a balloon release. (Each person in turn.)
  - a. What was the reason or cause?
  - b. Describe the scene: Where did it take place? How many people were there?
2. What feelings did you experience when the balloons went up?
  - a. What about other people there? What kind of a reaction did they have to the event?
  - b. What reaction or experience do you think the organizers were going for when they planned the balloon release?
3. As the balloons were going up – or since then – did you think about where the balloons went when they went out of view?
  - What do you think happens to them? (Probe all group members.)

### **C. Motivators and Barriers (:30)**

1. What are some of the reasons why people might want to have a mass release of balloons? (Brainstorm list.)
2. What are some of the reasons people would not want to have a balloon release? (Brainstorm list.)
3. Do you know what the word bio-degradable means? (Explore understanding of that word.)
  - If I were to tell you that bio-degradable means the object breaks down quickly and becomes part of the soil or water, do you think a helium balloon is bio-degradable?
4. Now let's discuss each of the reasons not to have a balloon release, and I'd like to get your reaction to them. (Discuss one at a time and understand how much people agree or disagree that this is a valid or persuasive reason not to release balloons.)
5. (Worksheet.) We are going to read some statements and determine how motivating they are to you.
6. What are some alternatives to a balloon release that people might consider?
  - (Brainstorm list.)
  - Show examples and get reactions.

### **D. Testing Campaigns and Messages (:30)**

(Worksheet.) Let me show you some posters, images, words and get your reaction to them. We will rate each one on this worksheet, recording how effective it is in motivating you not to participate in a balloon release in the future.

## APPENDIX F

### Balloon Release Social Marketing Research 2015-2016 Input from Focus Groups

During three Focus Groups, participants were shown several images and asked to re-act and fill out worksheets. This document records the participants' comments and "rating" of the images.

Key to Focus Group numbers:

- 1: VA Beach Focus Group #1, afternoon of Dec 15, 2015
- 2: VA Beach Focus Group #2, evening of Dec 15, 2015
- 3: Roanoke Focus Group on Jan 20, 2016

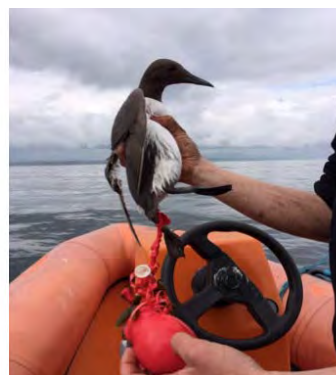
Compiled by Clean Virginia Waterways.

#### Image A

Bird tangled in balloon

Key to Focus Group numbers:

- 1: VA Beach FG #1, afternoon of Dec 15, 2015
- 2: VA Beach FG #2, evening of Dec 15, 2015
- 3: Roanoke FG on Jan 20, 2016



A

	How much this image or idea makes me pause and think about the impact of releasing balloons.					
Focus Group Number ↓	Very much (5)	(4)	Some (3)	(2)	Not at all (1)	Average score ↓
1	5	1	2	1	0	3.556
2	4	2	1	1	0	4.125
3	2	2	2	0	0	4.000
						3.894

Average Impact of this image:

Number of people who gave this image a "Star": 1, 0, 2.

#### Image description (written by participants)

- 1-1. (Angel) A penguin being held over top of a red balloon on a boat.
- 1-2. (Joe) Bird leg tied
- 1-3. (Shavedra) A penguin trapped by a balloon string.
- 1-4. (Raheem) Water bird with feet wrapped in balloon.
- 1-5. (Rhonda) Bird.
- 1-6. (Randall) Bird.
- 1-7. (Terrell) Bird tangled up with a balloon.
- 1-8. (Marisol) A duck wrap with balloon.



- 2-1. (Jamel) Balloon stuck to bird's leg.  
 2-2. (Catinna) Poor little birdy trapped on a balloon.  
 2-3. (Vickie) Help bird  
 2-4. (Daniel) Bird tangled in balloon  
 2-5. (Lauren) Seabird with a ribbon from a balloon wrapped around his ankles.  
 2-6. (Doretha) Bird feet tangled in a balloon  
 2-7. (Christina) Balloon caught on a bird leg  
 2-8. (Noel) Bird is stuck on balloon  
 3-1. (Unknown #1) Gull-bird with balloon on boat  
 3-2. (Unknown #2) Bird in boat with balloon string tied around legs  
 3-3. (Patrick)  
 3-4. (Michael)  
 3-5. (Amy)  
 3-6. (Terry) Loon entangled  
 3-7. (Raphael) Bird caught  
 3-8. (Darrin) Duck

### First Impressions

- 1-1. (Angel) The helium release may give and cause a reaction but no harm to the animal.  
 1-2. (Joe) Bird don't care. It may be cool to him. It's just something we don't want to see.  
 1-3. (Shavedra) The poor bird is trapped by a balloon that has been released.  
 1-4. (Raheem) Sad.  
 1-5. (Rhonda) I wonder if the bird was impacted by oil slick or something in consumed.  
 1-6. (Randall) Must animals die for our pleasure?  
 1-7. (Terrell) Not to participate in a balloon release.  
 1-8. (Marisol) It hurts me to see it.  
 2-1. (Jamel) How did it get stuck?  
 2-2. (Catinna) Reminds me of my dog © Thank god they found h in .  
 2-3. (Vickie) Help animal  
 2-4. (Daniel) Sad for the animal.  
 2-5. (Lauren) It's good he's being helped, but it's really sad h has to be.  
 2-6. (Doretha) Bird could've drowned  
 2-7. (Christina) Sad, animals can't help but get trapped and if there is no one thereto rescue them, they suffer.  
 2-8. (Noel) Terrible, that could have killed the bird  
 3-1. (Unknown #1)  
 3-2. (Unknown #2)  
 3-3. (Patrick) Harmful!  
 3-4. (Michael) It's awful that an animal could get tangled  
 3-5. (Amy) This image made me feel sad for the bird caught in the balloon.  
 3-6. (Terry) Disappointed, sorry  
 3-7. (Raphael) Terrible  
 3-8. (Darrin) Sadness

**Image B**

Pile of balloons on beach

Key to Focus Group numbers:

1: VA Beach FG #1, afternoon of Dec 15, 2015

2: VA Beach FG #2, evening of Dec 15, 2015

3: Roanoke FG on Jan 20, 2016



B

Focus Group Number ↓	How much this image or idea makes me pause and think about the impact of releasing balloons.					Average score ↓
	Very much (5)	(4)	Some (3)	(2)	Not at all (1)	
1	2	3	0	1	1	3.571
2	3	1	1	2	1	3.375
3	2	1	2	1	0	3.667
						3.538

Average Impact of this image:

Number of people who gave this image a "Star": 0, 0, 0.

**Image description (written by participants)**

- 1-1. (Angel) Can't see so good at this distance. My glasses are off.
- 1-2. (Joe) Litter
- 1-3. (Shavedra) A pile of balloons on the beach.
- 1-4. (Raheem) Balloons party at the beach.
- 1-5. (Rhonda) Balloons that have popped and are on the beach
- 1-6. (Randall) Trash on the beach.
- 1-7. (Terrell) Popped balloons.
- 1-8. (Marisol) Pop balloons
- 2-1. (Jamel) A bunch of old balloons on a beach
- 2-2. (Catinna) Balloons in beach sand
- 2-3. (Vickie) A mess trash
- 2-4. (Daniel) Balloons on beach garbage
- 2-5. (Lauren) Many little balloons and looks like condoms in a pile on shore
- 2-6. (Doretha) Pieces of balloons, trashy
- 2-7. (Christina) Balloon litter
- 2-8. (Noel) Killing the environment
- 3-1. (Unknown #1) Burst balloons on ground
- 3-2. (Unknown #2) Balloon pieces on beach
- 3-3. (Patrick)
- 3-4. (Michael)
- 3-5. (Amy)
- 3-6. (Terry) Popped balloons
- 3-7. (Raphael) Mess
- 3-8. (Darrin) Debris on beach

**First Impressions**

- 1-1. (Angel) N/A  
 1-2. (Joe) We just need to clean it up. Not make a big deal.  
 1-3. (Shavedra) The balloons have washed up on a beach and are cause of pollution to the water ways.  
 1-4. (Raheem) Found art/litter  
 1-5. (Rhonda) The notion that balloon segments are washed up on beach could affect environment.  
 1-6. (Randall) Man makes a mess  
 1-7. (Terrell) Popped balloons from a balloon release.  
 1-8. (Marisol) So much trash for no real reason.  
 2-1. (Jamel) It looks like a really cool album cover  
 2-2. (Catinna) So familiar, dogs, sad, we live at the beach, no comfort  
 2-3. (Vickie) A dump  
 2-4. (Daniel) Shocked  
 2-5. (Lauren) Wondering if all collected and put into a pile or if washed ashore like that?  
 2-6. (Doretha) Seagulls eat pieces and die  
 2-7. (Christina) Gross – Once the balloons return to the ground they turn into garbage  
 2-8. (Noel) Trashy  
 3-1. (Unknown #1)  
 3-2. (Unknown #2) “Looks like laundry”  
 3-3. (Patrick) Trash  
 3-4. (Michael) Harmful to the environment  
 3-5. (Amy) Disgusted at the trash strewn across.  
 3-6. (Terry) Ugly, trash on beach, not biodegradable  
 3-7. (Raphael) The filth, garbage  
 3-8. (Darrin) Litter

### Image C

Balloons on lake with boat

Key to Focus Group numbers:

- 1: VA Beach FG #1, afternoon of Dec 15, 2015  
 2: VA Beach FG #2, evening of Dec 15, 2015  
 3: Roanoke FG on Jan 20, 2016



C

Focus Group Number ↓	How much this image or idea makes me pause and think about the impact of releasing balloons.					Average score ↓
	Very much (5)	(4)	Some (3)	(2)	Not at all (1)	
1	2	2	1	1	1	3.429
2	6	1	0	1	0	4.500
3	3	0	3	0	0	4.000
						3.976

Average Impact of this image:

Number of people who gave this image a “Star”: 0, 0, 2.

### Image description (written by participants)

- 1-1. (Angel) Hard to see.  
 1-2. (Joe) It’s a boat driving through a sea of balloons.

- 1-3. (Shavedra) A boat floating through the water trying to get balloons.  
 1-4. (Raheem) Balloon boat ride  
 1-5. (Rhonda) Multitude of balloons surrounding a boat.  
 1-6. (Randall) Boat  
 1-7. (Terrell) Boats in the water with a bunch of balloons  
 1-8. (Marisol) It's a boat with lots of balloons  
 2-1. (Jamel) Ocean full of balloons  
 2-2. (Catinna) Balloons all over a lake  
 2-3. (Vickie) Can not get through  
 2-4. (Daniel) Lots of balloons on ocean  
 2-5. (Lauren) Looks like hundreds of balloons floating in the sea  
 2-6. (Doretha) Balloons may get caught on motor  
 2-7. (Christina) Sea of balloons  
 2-8. (Noel) Too much, unnecessary  
 3-1. (Unknown #1) Boat surrounded by balloons  
 3-2. (Unknown #2) Boat in water surrounded by balloons  
 3-3. (Patrick)  
 3-4. (Michael)  
 3-5. (Amy)  
 3-6. (Terry) Tons of balloons at lake  
 3-7. (Raphael) Balloons all over  
 3-8. (Darrin) Lake event

### First Impressions

- 1-1. (Angel)  
 1-2. (Joe) It's majestic.  
 1-3. (Shavedra) The boat is trying to get all the balloons up before they pop and cause harm.  
 1-4. (Raheem) Cool visual/ Lots of cleanup  
 1-5. (Rhonda) Although pretty to look at, think of the after effect.  
 1-6. (Randall) We often act without thinking.  
 1-7. (Terrell) Maybe a celebration/wedding or something.  
 1-8. (Marisol) Looks like a lot of fun but I feel sorry for the fishes.  
 2-1. (Jamel) That can't be safe for the ocean  
 2-2. (Catinna) Horrible, overwhelming, the clean up, photosynthetic ocean life depends on sunlight  
 2-3. (Vickie) A mess.  
 2-4. (Daniel) Lots of balloons  
 2-5. (Lauren) Seems to be a small space, why did they all end up there?  
 2-6. (Doretha) Don't release balloons in water  
 2-7. (Christina) Shock – all the balloons must land somewhere and it's now the burden of those residents to clean it  
 2-8. (Noel) Scary  
 3-1. (Unknown #1)  
 3-2. (Unknown #2)  
 3-3. (Patrick) Celebration or event  
 3-4. (Michael) Could get into engines of boats  
 3-5. (Amy) Pollution of the waters  
 3-6. (Terry) Crazy, embarrassed, catastrophic  
 3-7. (Raphael) Danger  
 3-8. (Darrin) Wow

### Image D

Balloon release & child wondering where they



go.

Key to Focus Group numbers:

- 1: VA Beach FG #1, afternoon of Dec 15, 2015
- 2: VA Beach FG #2, evening of Dec 15, 2015
- 3: Roanoke FG on Jan 20, 2016

	How much this image or idea makes me pause and think about the impact of releasing balloons.					
Focus Group Number ↓	Very much (5)	(4)	Some (3)	(2)	Not at all (1)	Average score ↓
1	3	2	0	0	2	3.571
2	4	2	1	0	1	4.000
3	2	2	1	1	0	3.833
						3.801

Average Impact of this image:

Number of people who gave this image a "Star": 1, 0, 0.

**Image description (written by participants)**

- 1-1. (Angel) Hard to see.
- 1-2. (Joe) People releasing balloons, and balloons floating on water.
- 1-3. (Shavedra) The cause and effect.
- 1-4. (Raheem) Dad? What's up with the balloons?
- 1-5. (Rhonda) A crowd of people releasing balloons.
- 1-6. (Randall) Balloon release
- 1-7. (Terrell) Balloon release and balloons in the water.
- 1-8. (Marisol) Balloon release
- 2-1. (Jamel) People releasing balloons
- 2-2. (Catinna) Little boy finding out what really happens
- 2-3. (Vickie) Beautiful
- 2-4. (Daniel) Release of balloons, litter of balloons
- 2-5. (Lauren) Kid on top asking about the reality, kid on bottom knows the reality
- 2-6. (Doretha) Lots of beautiful balloons
- 2-7. (Christina) Before and after
- 2-8. (Noel) Too many people, too many balloons ☹
- 3-1. (Unknown #1) Dad? Release -> boat
- 3-2. (Unknown #2) Split image with children at wedding and on boat
- 3-3. (Patrick)
- 3-4. (Michael)
- 3-5. (Amy)
- 3-6. (Terry) Two images – release boating
- 3-7. (Raphael) Balloons all over
- 3-8. (Darrin) Two sides of balloons

**First Impressions**

- 1-1. (Angel)
- 1-2. (Joe) Just have coast guard/portstaff clean it up; littered balloons.
- 1-3. (Shavedra) The first one shows the "good side" of a release. The second shows the side where it is destroying our Earth.
- 1-4. (Raheem) Perspective
- 1-5. (Rhonda) People seem excited to release balloons, but how many wonder about impact.

- 1-6. (Randall) Kids can be a nuisance
- 1-7. (Terrell) Balloon release
- 1-8. (Marisol) This is what we're teaching the future kids.
- 2-1. (Jamel) This picture leaves me 50/50
- 2-2. (Catinna) Sad, they should only know what happens / no guilt
- 2-3. (Vickie) Kills animals
- 2-4. (Daniel) Uplifting, a couple of balloons isn't that bad
- 2-5. (Lauren) Parents need to be honest, not mystical and vague with the truth
- 2-6. (Doretha) Trashy balloons in water are bad for sea animals
- 2-7. (Christina) Disappointment that people don't take the time to think of where the balloons will end up
- 2-8. (Noel) Lack of knowledge, unnecessary.
- 3-1. (Unknown #1)
- 3-2. (Unknown #2) Showed event and aftermath
- 3-3. (Patrick) Informative
- 3-4. (Michael) Not safe for wildlife
- 3-5. (Amy) Irony of the two images
- 3-6. (Terry) Division between our freedom and responsibility
- 3-7. (Raphael) Littering lots of balloons
- 3-8. (Darrin) Reality

**Image E**

Bird flying with balloon on wing



E

Key to Focus Group numbers:

- 1: VA Beach FG #1, afternoon of Dec 15, 2015
- 2: VA Beach FG #2, evening of Dec 15, 2015
- 3: Roanoke FG on Jan 20, 2016

Focus Group Number ↓	How much this image or idea makes me pause and think about the impact of releasing balloons.					Average score ↓
	Very much (5)	(4)	Some (3)	(2)	Not at all (1)	
1	6	1	0	1	0	4.500
2	5	0	1	2	0	4.000
3	3	4	0	0	0	4.429
						4.310

Average Impact of this image:

Number of people who gave this image a "Star": 0, 0, 0.

**Image description (written by participants)**

- 1-1. (Angel) People on and off boat releasing balloons.
- 1-2. (Joe) Ribbon tied to a bird in flight.
- 1-3. (Shavedra) Bird caught in a string
- 1-4. (Raheem) Bird balloon.
- 1-5. (Rhonda) Bird entangled with string from balloon.
- 1-6. (Randall) Bird in flight



- 1-7. (Terrell) Bird flying with a balloon
- 1-8. (Marisol) Seagull
- 2-1. (Jamel) Bird with ribbon tangled around its wing.
- 2-2. (Catinna) Bird is stuck in ribbon
- 2-3. (Vickie) Fly away
- 2-4. (Daniel) Bird with balloon around its wing
- 2-5. (Lauren) Seagull flying with ribbon from balloon tangled on wing
- 2-6. (Doretha) Bird can't fly, tail tangled in balloon
- 2-7. (Christina) Flying
- 2-8. (Noel) Bird is not free to fly, stuck and tangled
- 3-1. (Unknown #1) Balloons blow – ring billed gull
- 3-2. (Unknown #2) Balloons blow ad with gull entangled in ribbon
- 3-3. (Patrick)
- 3-4. (Michael)
- 3-5. (Amy)
- 3-6. (Terry) Balloon with ribbon swinging
- 3-7. (Raphael) Bird tangled
- 3-8. (Darrin) Warning message

### First Impressions

- 1-1. (Angel) Balloons may catch in under water nets (Navy protects)
- 1-2. (Joe) Restrict balloons that are being released in air from being tied with ribbons
- 1-3. (Shavedra) When the balloons go up curios animals fly towards them and get entangled.
- 1-4. (Raheem) Curious birds/clueless human
- 1-5. (Rhonda) The mere thought that a bird's flight is hampered by a balloon string is interesting
- 1-6. (Randall) We should love animals as we love each other
- 1-7. (Terrell) Pollution/litter
- 1-8. (Marisol) It's struggling to fly, poor thing.
- 2-1. (Jamel) That must hurt to fly with that around your wing
- 2-2. (Catinna) My dog! He's an animal with feelings! SO SAD, I wish I could help them ALL.
- 2-3. (Vickie) Fly away, do not release balloons.
- 2-4. (Daniel) How did someone get this picture?
- 2-5. (Lauren) How is he flying? It will eventually get more tangled or eaten
- 2-6. (Doretha) Balloons will \_\_\_ birds to balloons.
- 2-7. (Christina) Although I know of the impacts, I feel less emotionally engaged by this picture because it seems like the bird can still fly even though it has the balloon.
- 2-8. (Noel) Sad
- 3-1. (Unknown #1)
- 3-2. (Unknown #2)
- 3-3. (Patrick) Destructive to wildlife
- 3-4. (Michael) Harmful to animals of all sort
- 3-5. (Amy) Sad to see the bird with attached balloon debris
- 3-6. (Terry) Agree with message - important
- 3-7. (Raphael) Bird in trouble
- 3-8. (Darrin) Informative

### Image F

Balloons don't go to heaven

Key to Focus Group numbers:

1: VA Beach FG #1, afternoon of Dec 15, 2015



2: VA Beach FG #2, evening of Dec 15, 2015

3: Roanoke FG on Jan 20, 2016

Focus Group Number ↓	How much this image or idea makes me pause and think about the impact of releasing balloons.					Average score ↓
	Very much (5)	(4)	Some (3)	(2)	Not at all (1)	
1	3	1	0	1	3	3.000
2	3	1	2	1	1	3.500
3	4	0	2	0	0	4.333
						3.611

Average Impact of this image:

Number of people who gave this image a "Star": 1, 0, 1.

#### Image description (written by participants)

- 1-1. (Angel) Mass let go of pink balloons
- 1-2. (Joe) Alternate request
- 1-3. (Shavedra) Balloons going up and some coming back down popped
- 1-4. (Raheem) Balloon heaven
- 1-5. (Rhonda) Balloons being released with caption focusing on an alternate way to celebrate
- 1-6. (Randall) Pink balloons in sky
- 1-7. (Terrell) Balloon release
- 1-8. (Marisol) Balloons
- 2-1. (Jamel) Balloons don't go to heaven
- 2-2. (Catinna) Pretty pink balloons
- 2-3. (Vickie) Do not do it
- 2-4. (Daniel) Balloons to heaven
- 2-5. (Lauren) Balloons being released, but asking to find other ways.
- 2-6. (Doretha) Balloons are litter
- 2-7. (Christina) Mass pink release
- 2-8. (Noel) I agree with the statement completely
- 3-1. (Unknown #1) Balloons do not go to heaven
- 3-2. (Unknown #2) Pink balloon ad "Balloons do not go to heaven"
- 3-3. (Patrick)
- 3-4. (Michael)
- 3-5. (Amy)
- 3-6. (Terry) Pink
- 3-7. (Raphael) Balloons all over water
- 3-8. (Darrin) Alternate

#### First Impressions

- 1-1. (Angel) Cost efficient for citizens. Cost affective for cleanup crew
- 1-2. (Joe) True.
- 1-3. (Shavedra) Shows that all balloons come back and are bad for the environment
- 1-4. (Raheem) Alternatives maybe aren't as pretty.
- 1-5. (Rhonda) So true...
- 1-6. (Randall) Pretty
- 1-7. (Terrell) Balloon release

- 1-8. (Marisol) Just like I thought we're harming the future of our planet
- 2-1. (Jamel) The message could've been a little lighter.
- 2-2. (Catinna) Picture makes me want to release balloons, so pretty / not good.
- 2-3. (Vickie) Just say a prayer
- 2-4. (Daniel) Very colorful
- 2-5. (Lauren) Needs different image to get point across
- 2-6. (Doretha) Imagine how much litter it would be from balloons not going to heaven.
- 2-7. (Christina) Disappointment at the scale of the balloon released pictured. They will all fall down
- 2-8. (Noel) True
- 3-1. (Unknown #1)
- 3-2. (Unknown #2) Image doesn't spark a...
- 3-3. (Patrick) Fact full knowledge
- 3-4. (Michael) Not biodegradable
- 3-5. (Amy) Duh!
- 3-6. (Terry) Strong message with direction
- 3-7. (Raphael) Litter, lots of trouble
- 3-8. (Darrin) Find another idea

**Image G**

**Balloons cause power outages**

Key to Focus Group numbers:

- 1: VA Beach FG #1, afternoon of Dec 15, 2015
- 2: VA Beach FG #2, evening of Dec 15, 2015
- 3: Roanoke FG on Jan 20, 2016

G



	How much this image or idea makes me pause and think about the impact of releasing balloons.					
Focus Group Number ↓	Very much (5)	(4)	Some (3)	(2)	Not at all (1)	Average score ↓
1	4	3	0	0	0	4.571
2	5	1	0	2	0	4.125
3	2	1	3	0	0	3.833
						4.176

Average Impact of this image:

Number of people who gave this image a "Star": 1, 0, 0.

**Image description (written by participants)**

- 1-1. (Angel) N/A
- 1-2. (Joe) Power line
- 1-3. (Shavedra) A fire hazard
- 1-4. (Raheem) Power outage
- 1-5. (Rhonda) Balloons stuck on a power line.
- 1-6. (Randall) Balloon in telephone wire
- 1-7. (Terrell) Balloons on a power line
- 1-8. (Marisol) Power lines
- 2-1. (Jamel) Will you lose power tonight?

- 2-2. (Catinna) Balloon stuck in power line
- 2-3. (Vickie) No
- 2-4. (Daniel) Balloons in power line
- 2-5. (Lauren) Balloons caught on the power line
- 2-6. (Doretha) Power outage due to balloons
- 2-7. (Christina) Power outage
- 2-8. (Noel) Balloons are not worth losing power!
- 3-1. (Unknown #1) Power outages
- 3-2. (Unknown #2) "Will you lose power tonight?"
- 3-3. (Patrick)
- 3-4. (Michael)
- 3-5. (Amy)
- 3-6. (Terry) Power
- 3-7. (Raphael) Balloons caught in power lines.
- 3-8. (Darrin) Power lines.

### First Impressions

- 1-1. (Angel) N/A
- 1-2. (Joe) Restrict locations for balloon release
- 1-3. (Shavedra) This shows the affects that a balloon release can have on us by starting a fire
- 1-4. (Raheem) Balloon release has immediate effect on humans.
- 1-5. (Rhonda) Possibility of power outage from balloon release must be considered
- 1-6. (Randall) Needs to be more careful with our earth
- 1-7. (Terrell) Excessive balloon release litter
- 1-8. (Marisol) Wow I didn't think about it but yeah this sucks
- 2-1. (Jamel) Balloons being released is somewhat bad.
- 2-2. (Catinna) Scary, scary for workers, how do you get it out?
- 2-3. (Vickie) Do not release
- 2-4. (Daniel) Wow
- 2-5. (Lauren) A town going out of power may actually be better for the environment
- 2-6. (Doretha) I do not want to lose power due to balloons
- 2-7. (Christina) Anger – It's really dumb that something as useless as a balloon can cause something as serious as a power outage. NOT COOL.
- 2-8. (Noel) True and agreed
- 3-1. (Unknown #1)
- 3-2. (Unknown #2) Show person freezing in home. Looks like a scare tactic.
- 3-3. (Patrick) Fact full knowledge
- 3-4. (Michael) Could end up bad for families not participating
- 3-5. (Amy) Agree, seen this before
- 3-6. (Terry) Concerned but seems rare not as concerning.
- 3-7. (Raphael) Hazard, trouble
- 3-8. (Darrin) Scare tactic

### Image H

Sea turtle with balloon ribbon in mouth

Key to Focus Group numbers:

- 1: VA Beach FG #1, afternoon of Dec 15, 2015
- 2: VA Beach FG #2, evening of Dec 15, 2015
- 3: Roanoke FG on Jan 20, 2016



H

	How much this image or idea makes me pause and think about the impact of releasing balloons.					
Focus Group Number ↓	Very much (5)	(4)	Some (3)	(2)	Not at all (1)	Average score ↓
1	4	1	2	1	0	4.000
2	4	2	1	0	0	4.429
3	4	2	1	0	0	4.429
						4.286

Average Impact of this image:

Number of people who gave this image a “Star”: 2, 0, 1.

#### Image description (written by participants)

- 1-1. (Angel) Same opinion as F
- 1-2. (Joe) Sea turtle having balloon lunch
- 1-3. (Shavedra) Turtle with string in his mouth
- 1-4. (Raheem) Sea turtle balloon string
- 1-5. (Rhonda) Sea turtle
- 1-6. (Randall) Turtle
- 1-7. (Terrell) Turtle entangled with balloon
- 1-8. (Marisol) Sea turtle/ can't really see the animal
- 2-1. (Jamel) Sea turtle balloon accident
- 2-2. (Catinna) Sea turtle swallowed a balloon
- 2-3. (Vickie) Do not release balloons
- 2-4. (Daniel) Sea turtle
- 2-5. (Lauren) Turtle in vets getting operated on because he ate a balloon
- 2-6. (Doretha) Turtle thinks balloons are food
- 2-7. (Christina) Turtle
- 2-8. (Noel) Balloons are not worth lives.
- 3-1. (Unknown #1) It only takes one – sea turtle not clear
- 3-2. (Unknown #2) “It only takes one balloon.”
- 3-3. (Patrick)
- 3-4. (Michael)
- 3-5. (Amy)
- 3-6. (Terry) Sea turtle
- 3-7. (Raphael) Turtle swallowed balloon
- 3-8. (Darrin) Sea turtle

#### First Impressions

- 1-1. (Angel) Same opinion as F
- 1-2. (Joe) Not good
- 1-3. (Shavedra) The string can't be broken down and the sea turtle may die
- 1-4. (Raheem) Balloons go everywhere even deep sea
- 1-5. (Rhonda) Must be mindful of impact of balloon release upon sea turtles

- 1-6. (Randall) Picture lacks distinction – relies on text
- 1-7. (Terrell) No more balloon releasing
- 1-8. (Marisol) It is such a waste to make all these animals suffer
- 2-1. (Jamel) That’s really sad.
- 2-2. (Catinna) Finding Nemo, poor little turtles, that is so sad.
- 2-3. (Vickie) Do not release balloons
- 2-4. (Daniel) Didn’t see balloon at first
- 2-5. (Lauren) This image will get to people. “Thank you” helps.
- 2-6. (Doretha) How many turtle have choked to death?
- 2-7. (Christina) So sad! Turtles are beloved sea creatures. It’s horrible to see them suffering.
- 2-8. (Noel) Disapproved
- 3-1. (Unknown #1)
- 3-2. (Unknown #2) Image difficult to decipher
- 3-3. (Patrick) Guilt/Remorse
- 3-4. (Michael) Awful
- 3-5. (Amy) Poor little sea turtle
- 3-6. (Terry) Difficult to understand, once explained - sad
- 3-7. (Raphael) Turtle choking
- 3-8. (Darrin) How significant? – Hard to see impact.

**Image I**

Illustration: What Goes Up...



Key to Focus Group numbers:

- 1: VA Beach FG #1, afternoon of Dec 15, 2015
- 2: VA Beach FG #2, evening of Dec 15, 2015
- 3: Roanoke FG on Jan 20, 2016

	How much this image or idea makes me pause and think about the impact of releasing balloons.					
Focus Group Number ↓	Very much (5)	(4)	Some (3)	(2)	Not at all (1)	Average score ↓
1	3	1	2	1	0	3.857
2	4	3	0	1	0	4.250
3	1	4	2	0	0	3.857
						3.988

Average Impact of this image:

Number of people who gave this image a “Star”: 0, 0, 0.

**Image description (written by participants)**

- 1-1. (Angel) Same opinion as F
- 1-2. (Joe) What goes up... down.
- 1-3. (Shavedra) Water pollution
- 1-4. (Raheem) Sea turtle meme
- 1-5. (Rhonda) Balloon release and that of course return to sea, etc.
- 1-6. (Randall) Balloon/turtle in water
- 1-7. (Terrell) Protesting balloon release
- 1-8. (Marisol) cartoon
- 2-1. (Jamel) Save a turtle from choking on a balloon



- 2-2. (Catinna) Cartoon of a balloon cycle
- 2-3. (Vickie) This is a true statement
- 2-4. (Daniel) Island and water turtle
- 2-5. (Lauren) Cartoon image of balloons, about to fall into sea
- 2-6. (Doretha) Balloon in the air falls back to earth.
- 2-7. (Christina) Cartoon turtle.
- 2-8. (Noel) Turtle is following the balloons
- 3-1. (Unknown #1) What goes up ... animation
- 3-2. (Unknown #2) Illustration, What goes up, must come down.
- 3-3. (Patrick)
- 3-4. (Michael)
- 3-5. (Amy)
- 3-6. (Terry) What goes up
- 3-7. (Raphael) Balloons up in air
- 3-8. (Darrin) Warning message

### First Impressions

- 1-1. (Angel) Same opinion as F
- 1-2. (Joe) True. Need consideration.
- 1-3. (Shavedra) The balloons go up and come down and cause all kinds of threats to the sea creatures
- 1-4. (Raheem) Good PSA poster
- 1-5. (Rhonda) Devastation to sea creatures
- 1-6. (Randall) Simplistic illustration – weakens argument
- 1-7. (Terrell) No more balloon releasing
- 1-8. (Marisol) Doesn't seem serious to me
- 2-1. (Jamel) That poor turtle
- 2-2. (Catinna) Poor turtle, nobody is there to save him.
- 2-3. (Vickie) Find another way to celebrate
- 2-4. (Daniel) Did think this was such as issue
- 2-5. (Lauren) The image may appeal to kids, but adults may not take it seriously.
- 2-6. (Doretha) Save sea life
- 2-7. (Christina) Less sad in comparison to the actual turtle photo. (was that a narwhale?)
- 2-8. (Noel) Lesson learned
- 3-1. (Unknown #1)
- 3-2. (Unknown #2) More peaceful message
- 3-3. (Patrick) Classroom poster
- 3-4. (Michael) Causes more harm than joy
- 3-5. (Amy) True statement. Think.
- 3-6. (Terry) Educational – clear message. A little chastising and victim-based
- 3-7. (Raphael) Trouble when they come down, innocents waiting.
- 3-8. (Darrin) Nice message or thought

### Image J

Don't let your celebration hurt me.

Key to Focus Group numbers:

- 1: VA Beach FG #1, afternoon of Dec 15, 2015
- 2: VA Beach FG #2, evening of Dec 15, 2015
- 3: Roanoke FG on Jan 20, 2016



J

	How much this image or idea makes me pause and think about the impact of releasing balloons.					
Focus Group Number ↓	Very much (5)	(4)	Some (3)	(2)	Not at all (1)	Average score ↓
1	3	2	0	1	1	3.714
2	4	3	2	0	0	4.222
3	3	2	1	0	0	4.333
						4.090

Average Impact of this image:

Number of people who gave this image a "Star": 1, 0, 0.

### Image description (written by participants)

- 1-1. (Angel) Hard to see, not wearing glasses.  
 1-2. (Joe) Bird with balloon in beak  
 1-3. (Shavedra) A seagull eating a balloon  
 1-4. (Raheem) Celebration spoiler  
 1-5. (Rhonda) Seagull eating a balloon.  
 1-6. (Randall) Seagull  
 1-7. (Terrell) Bird with balloon  
 1-8. (Marisol) Too busy.  
 2-1. (Jamel) Seagull choking on a balloon  
 2-2. (Catinna) Bird eating red balloon.  
 2-3. (Vickie) Did not know  
 2-4. (Daniel) Seagull with balloon in mouth  
 2-5. (Lauren) Seagull with a balloon in the mouth  
 2-6. (Doretha) I will try not to release balloons  
 2-7. (Christina) Seagull  
 2-8. (Noel) Bird eating balloons  
 3-1. (Unknown #1) Gull – celebration hurt one  
 3-2. (Unknown #2) "Don't let your celebration hurt me." Bird with balloon.  
 3-3. (Patrick)  
 3-4. (Michael)  
 3-5. (Amy)  
 3-6. (Terry) Gull/tern eating balloon  
 3-7. (Raphael) Bird with balloon in mouth  
 3-8. (Darrin) Warning message

### First Impressions

- 1-1. (Angel) N/A  
 1-2. (Joe) Picking up balloon to study  
 1-3. (Shavedra) The seagull is eating the balloon which may choke him resulting in his death  
 1-4. (Raheem) Feeling good shouldn't hurt someone else  
 1-5. (Rhonda) Possibility of creatures eating balloons is alarming  
 1-6. (Randall) Animals need us  
 1-7. (Terrell) No more balloon releasing  
 1-8. (Marisol) At first glance I don't get it.  
 2-1. (Jamel) Balloons need to be made out of better materials  
 2-2. (Catinna) Red must be a food color to animals, not good!  
 2-3. (Vickie) Celebrate another way  
 2-4. (Daniel) Sad  
 2-5. (Lauren) Strong move using the perspective of the seagull

- 2-6. (Doretha) Don't be harmful or killer litterbug
- 2-7. (Christina) Terrible – Seeing the bird with the balloon stuck in its mouth is so sad.
- 2-8. (Noel) Sick
- 3-1. (Unknown #1)
- 3-2. (Unknown #2) Might result message
- 3-3. (Patrick) Makes me think twice
- 3-4. (Michael) Terrible/sad
- 3-5. (Amy) Feel bad for the bird
- 3-6. (Terry) Strong image – sad, direct message.
- 3-7. (Raphael) Bird choking
- 3-8. (Darrin) Sensitive message

**Image K**

**Wedding on beach, hatching turtles**

Key to Focus Group numbers:

- 1: VA Beach FG #1, afternoon of Dec 15, 2015
- 2: VA Beach FG #2, evening of Dec 15, 2015
- 3: Roanoke FG on Jan 20, 2016



	How much this image or idea makes me pause and think about the impact of releasing balloons.					
Focus Group Number ↓	Very much (5)	(4)	Some (3)	(2)	Not at all (1)	Average score ↓
1	5	0	1	0	2	3.750
2	3	1	2	0	1	3.714
3	2	3	0	0	1	3.833
						3.766

Average Impact of this image:

Number of people who gave this image a “Star”: 1, 0, 1.

**Image description (written by participants)**

- 1-1. (Angel) Romance
- 1-2. (Joe) Wedding
- 1-3. (Shavedra) Showing turtle getting to live
- 1-4. (Raheem) Feel good future
- 1-5. (Rhonda) Couple getting married without balloon release
- 1-6. (Randall) Newlyweds on a beach
- 1-7. (Terrell) On the beach
- 1-8. (Marisol) Once again can't see the bottom picture
- 2-1. (Jamel) Turtles not harmed by balloons
- 2-2. (Catinna) Baby sea turtles living
- 2-3. (Vickie) Thanks for letting them go
- 2-4. (Daniel) Wedding couple on beach / turtles
- 2-5. (Lauren) Married couple walking on beach below is a group of turtles
- 2-6. (Doretha) Don't celebrate by releasing balloons



- 2-7. (Christina) Marriage
- 2-8. (Noel) Wedding celebration without balloons, very symbolic.
- 3-1. (Unknown #1) Turtle babies – bright future
- 3-2. (Unknown #2) “Thank you for not celebrating by releasing balloons...” Turtles in nest
- 3-3. (Patrick)
- 3-4. (Michael)
- 3-5. (Amy)
- 3-6. (Terry) Married couple on beach/ turtles
- 3-7. (Raphael) No balloon released
- 3-8. (Darrin) Two sides with bride/groom



### First Impressions

- 1-1. (Angel) It’s worth it – Just pay for a clean up
  - 1-2. (Joe) Happy for them
  - 1-3. (Shavedra) The baby turtles have a chance at life and being able to start off on a good note
  - 1-4. (Raheem) Think about more than yourself
  - 1-5. (Rhonda) It’s possible to celebrate major occasions without balloon release
  - 1-6. (Randall) Silly artsy
  - 1-7. (Terrell) Safer way to celebrate
  - 1-8. (Marisol) Wedding I think happiness
  - 2-1. (Jamel) No balloon release = safety
  - 2-2. (Catinna) So nice (Baby sea turtles die a lot before they get to the water, so it’s bitter sweet)
  - 2-3. (Vickie) Do not release balloons ever again.
  - 2-4. (Daniel) Not focused as much on anything but couple.
  - 2-5. (Lauren) I think it’s subtle, not very effective. How are they affected? People may wonder.
  - 2-6. (Doretha) Balloons
  - 2-7. (Christina) Hopeful that others may abstain from releasing balloons
  - 2-8. (Noel) Happy
  - 3-1. (Unknown #1)
  - 3-2. (Unknown #2) More positive, less harsh.
  - 3-3. (Patrick) Fact informative knowledge
  - 3-4. (Michael) People actually thought about impact
  - 3-5. (Amy) Informative. Good message
  - 3-6. (Terry) Positive!!!
  - 3-7. (Raphael) Excellent choice
  - 3-8. (Darrin) Caring message – good tone
-



## APPENDIX G



### Message Board Testing at Hampton Bridal Show - January 2017



#	Description	Comments from Brides	Votes
<p>General Observations: We need to be sure to clearly document/capture the comments. When they are cryptic, it may not be clear what the bride was conveying. Based upon responses and questions from couples, an image and a message that is positive but includes a reference to not releasing balloon (either in the main title of the "ad" or at the bottom of the ad) may be most effective. Also, test the phrases "litter-free" as well as "eco-friendly".</p>			
<p>These five message boards compared the same thematic message "Love is in the air." with both happy, positive and sad/negative behavior images. Boards 1C and 1D received the most positive votes. Both images were positive, happy. Should test these two boards again, but tweak design of 1D so that face of groom isn't covered by bubble and add text "please do not release balloons" or "release joy not balloons" to the base of the board. Test image used on board 1E with new message - "Keep love in the air but please do not let your balloons follow." Or "Keep your love in the air but please do not let your balloons go."</p>			
<p><b>Board 1A</b></p> 	<p><b>"Love is in the air. Bubble with joy!"</b> Image of bride and groom in front of church with giant bubble in front of them.</p>	<ul style="list-style-type: none"> <li>• Less depressing.</li> <li>• Picture to dark. (Referring to brightness of photo.)</li> <li>• Don't like crooked photo.</li> <li>• I like the positive message.</li> <li>• Unclear that your message is anti-litter.</li> <li>• "Eco-friendly" is better than "litter free" for people in my generation (comment from a 20-something bride.)</li> </ul> <p>Test image again?</p>	8
<p><b>Board 1B</b></p> 	<p><b>"Love is in the air. (But please keep your balloons tied down.)"</b> Image of bride and groom kissing on the beach with bride holding a balloon – string wrapped around hand.</p>	<ul style="list-style-type: none"> <li>• Tied down? Dirty minds?</li> <li>• What's the difference? (comparing message boards 1B and 1C – did not note difference in text.)</li> <li>• Liked simpler words.</li> </ul>	28



<p><b>Board 1C</b></p> <p><i>Love Is in the Air!</i> <i>(But please keep your balloons grounded.)</i></p>  <p>Your send-off should be joyful, memorable and picture-perfect! Visit <a href="http://JoyfulSendoff.info">JoyfulSendoff.info</a> for fun, creative but litter-free ideas.</p>	<p><b>“Love is in the air. (But please keep your balloons grounded.)”</b> Image of bride and groom kissing on the beach with bride holding a balloon – string wrapped around hand.</p>	<ul style="list-style-type: none"> <li>• More of a pun.</li> <li>• I like because we got engaged on the beach.</li> <li>• Too much beach wedding.</li> <li>• Unclear message.</li> <li>• To the point.</li> <li>• If you don’t know the balloon thing, doesn’t make sense.</li> <li>• Have to keep your marriage grounded.</li> <li>• Do you mean “Don’t release balloons?” If so, say so more quickly.</li> <li>• Brides like to see wedding dresses. Couple looks happy.</li> </ul> <p><b>Test this board in VA Beach and change to “Keep love in the air (but don’t let your balloons go.)”</b></p> <p><b>Test - “Visit JoyfulSendOff.info for picture-perfect, eco-friendly ideas and make one uniquely yours!”</b></p>	<p>36</p>
<p><b>Board 1D</b></p> <p><i>Love Is in the Air.</i> <i>Bubble with joy!</i></p>  <p>Your send-off should be joyful, memorable and picture-perfect! Visit <a href="http://JoyfulSendoff.info">JoyfulSendoff.info</a> for fun, creative but litter-free ideas.</p>	<p><b>“Love is in the air. Bubble with joy!”</b> Image of bride and groom on beach holding hands and twirling with bubbles in the air.</p>	<ul style="list-style-type: none"> <li>• Do not like bubble in front of groom’s face (<a href="#">this comment was made by 11 brides.</a>)</li> <li>• Love bubble idea!</li> <li>• Better compared to image referring to being tied down. More fun.</li> <li>• Like less than board 1A.</li> <li>• Cute.</li> <li>• You can see joy in both their faces.</li> <li>• I didn’t notice bubble over groom’s face.</li> <li>• Bubbles better. (Was this bride saying that bubbles “are” better? Or that the image of bride and groom with bubbles was better than bride and groom with a balloon?)</li> <li>• Like message.</li> <li>• Words match image.</li> <li>• Short and sweet.</li> <li>• Witty. I like funny.</li> </ul> <p><b>Test this board in VA Beach and change to “Keep love in the air (but don’t let your balloons go.)” OR (Let bubbles of joy abound!) OR (Release bubbles of joy.) OR (Release bubbles of joy but please not balloons.)</b></p> <p><b>Test - “Please don’t release balloons. Visit JoyfulSendOff.info for picture-perfect, litter-free ideas and make one uniquely yours!”</b></p>	<p>46</p>



 <p><b>Love Is in the Air.</b> <i>Bubble with joy!</i></p> <p>Your send-off should be joyful, memorable and picture-perfect! Visit <a href="http://JoyfulSendoff.info">JoyfulSendoff.info</a> for fun, creative but litter-free ideas.</p>	<p><b>New board</b></p>	<p><b>“Love Is in the Air. Let bubbles fly, not balloons!”</b></p> <p><b>“Visit JoyfulSendOff.info for picture-perfect, litter-free ideas and make one uniquely yours!”</b></p> <p><b>Check with Mike to see if he has a similar image. Need one without bubbles hiding faces.</b></p>	
<p><b>Board 1E</b></p>  <p><b>Love Is in the Air!</b> <i>(But please keep your balloons grounded.)</i></p> <p>Your send-off should be joyful, memorable and picture-perfect! Visit <a href="http://JoyfulSendoff.info">JoyfulSendoff.info</a> for fun, creative, litter-free ideas.</p>	<p><b>“Love is in the air. (But please keep your balloons grounded.)”</b> Image of heart-shaped balloon deflated in surf.</p>	<ul style="list-style-type: none"> <li>● Love is in the water. Boo.</li> <li>● Clear message.</li> </ul> <p>When message was changed to “Love was in the air. (Please don’t let your balloons go.)”, the response was:</p> <ul style="list-style-type: none"> <li>● Dark. Don’t like “was.”</li> <li>● Implies divorce.</li> <li>● Love is always in the air.</li> </ul>	<p>2</p>
<p>These two message boards compared the use of the same image (positive) with two different messages (positive). There was not a definite preference between the two different messages however a message that refers to the beach combined with an image that is a beach-theme may not translate to other regions/areas without beach access. Test the message “A picture perfect memory can last a lifetime.” With another image(s) and add the message not to release balloons at the base of the board.</p>			
<p><b>Board 2A</b></p>	<p><b>“Capture the moment in the sands of time.”</b> Image of bride and groom (legs and feet only) standing on beach in</p>	<ul style="list-style-type: none"> <li>● Reduce and use more impactful font at the top. Use the term “eco-friendly.” Bolder font is easier to read.</li> <li>● Thought of beach wedding.</li> <li>● Too beachy.</li> <li>● Lighten up pants.</li> <li>● Says beach wedding, and that might not apply to everyone.</li> </ul>	<p>30</p>

	<p>front of message written in sand surrounded by heart of shells.)</p>		
<p><b>Board 2B</b></p> 	<p><b>“A picture perfect memory can last a lifetime.”</b> Image of bride and groom (legs and feet only) standing on beach in front of message written in sand surrounded by heart of shells.)</p>	<ul style="list-style-type: none"> <li>● Eye catching.</li> <li>● Liked shorter phrase (comparing this message board with board 2A – see above entry)</li> </ul>	<p>37</p>
<p>These two message boards compared the use of the same image (negative behavior) with two different messages (one more serious and one more humorous). There was not a definitive preference between the two types of message however message board 3B could be retested with more simple phrasing and design changes can be made to message boards.</p>			
<p><b>Board 3A</b></p>	<p><b>“Don’t let the beauty of your wedding fade. (Please don’t let your balloons go.)”</b> Image of balloons with love message in wrack on beach.</p>	<ul style="list-style-type: none"> <li>● Would be good ad. Powerful. Add “eco-friendly” (I believe that must have meant add it to the text at the bottom of the board – “Your send-off should be joyful, memorable and picture perfect.”)</li> <li>● Make bottom text easier to read. (Text is on a white-based gradient with picture showing through.)</li> <li>● Like wording more than image 3B. (add description.)</li> <li>● It is more to the point. It says no balloons.</li> <li>● “Took the air out of the room.”</li> <li>● Balloon message is important.</li> <li>● Straight to the point.</li> <li>● Simpler. (Bride in PR.)</li> <li>● “Wedding fade” is good.</li> <li>● Not wordy.</li> <li>● Just looks like trash.</li> </ul>	<p>43</p>

		<ul style="list-style-type: none"> <li>• Too negative. Don't put "beauty" in title with trash.</li> </ul> <p><b>Test this board in VA Beach and change message to "Looking for litter-free send-off ideas?" "Visit JoyfulSendoff.info for picture-perfect ideas and make one uniquely yours!"</b></p>	
<p><b>Board 3B</b></p> 	<p><b>"And you thought your cousin's wedding date getting trashed as a problem."</b> Image of balloons with love message in wrack on beach.</p>	<ul style="list-style-type: none"> <li>• Funny. Love it.</li> <li>• Great <b>facebook</b> post. Made me laugh. Edgy. Maybe too edgy for ad in magazine.</li> <li>• Graphics blend well – Use less transparency at top.</li> <li>• Too long to read. I might read it if in a magazine if I had time.</li> <li>• Funny but not easy to see your point.</li> <li>• Funny.</li> <li>• Funny but serious.</li> <li>• Funny.</li> <li>• Slightly negative. Too wordy.</li> <li>• Wordy.</li> <li>• Reminds me of family.</li> <li>• Like balloon message (at base of board was "Your send-off should be joyful, memorable and picture perfect, but please do not release balloons.")</li> <li>• Shorten phrase (bride in PR).</li> <li>• Like. Witty.</li> <li>• Funny but too long to read. Unclear.</li> </ul> <p><b>Test this board in VA Beach and reduce font-size of message. "Please do not (bold) release balloons. Visit JoyfulSendoff.info for picture-perfect, litter-free ideas and make one uniquely yours!"</b></p> <p>New image - bride and groom with baskets of balloons and the message "This is not what we expected." need to think about this wording some more.</p>	<p>38</p>
<p><i><b>This message board tested image of an alternative behavior – or send-off.</b></i></p>			
<p><b>Board 4A</b></p>	<p><b>"Your Send-off should be joyful, memorable and picture</b></p>	<ul style="list-style-type: none"> <li>• Likes that send-off idea is center of image and highlighted.</li> <li>• Looks like a prom (this image is a close-up of couple and that she is wearing a wedding dress is not clearly evident.)</li> </ul>	<p>9</p>

<p>Your send-off should be joyful, memorable and picture-perfect!</p>  <p>Visit JoyfulSendoff.info for fun, creative, litter-free ideas.</p>	<p><b>perfect.”</b> Bride and groom embracing, while she holds a ribbon wand in her hand which flow over his shoulder.</p>	<ul style="list-style-type: none"> <li>● Didn't know what the ribbons were. Never heard of ribbon wands as a send-off idea.</li> <li>● See happiness, love. See her face. It is intimate.</li> <li>● Can't see his face.</li> <li>● Like the streamers.</li> <li>● Message too long.</li> <li>● Highlights the ribbon.</li> <li>● Message should reflect image.</li> </ul> <p>(Note – this message board was not shown to all brides. Swapped out for another message board.)</p> <p><b>Test this board in VA Beach and change image to full length, keep message, and change bottom language to “Please do not (bold) release balloons. Visit JoyfulSendoff.info for litter-free ideas and make one uniquely yours!”</b></p>	
<p><i>This message board tested the term “picture perfect”. Even where juxtaposed with what would seem a negative image – burst balloon in water – the connection was not clear to the brides interviewed. Sub-test may be needed and should be tested.</i></p>			
<p><b>Board 5</b></p> <p>Picture-Perfect?</p>  <p>Your send-off should be joyful, memorable and picture-perfect, but please do not release balloons! Visit JoyfulSendoff.info for fun, creative, litter-free ideas.</p>	<p><b>“Picture Perfect?”</b> Image of heart-shaped balloon with love text in surf.</p>	<ul style="list-style-type: none"> <li>● “Picture-perfect” (this message) does not tell you anything.</li> <li>● Dark.</li> </ul>	<p>3 (two fully negative votes)</p>

# APPENDIX G

## Message Board Testing at Virginia Beach Bridal Show - February 2017

Overall observations based on message board testing at Hampton and Virginia Beach wedding shows, and follow-up surveys:

**Need new imagery that is -**


- positive - in behavior and emotion
- clearly shows joy in faces of bride and groom and guests
- has color and depth
- includes guests engaged in positive behavior as well as bride and groom
- alternatives clearly demonstrated

**Need message that is -**


- positive
- simple
- what not to do and what to do - don't let balloon go, do this instead
- use both "litter-free" and eco-friendly" in the message at the base of ad

**Conclusion - A "Love Is in the Air" message series with the following images:**


- After two shows, "Love Is in the Air" appears to be the best slogan
- combine "Love Is in the Air" with alternatives, for a series of ads:
  - "Love Is in the Air. Let ribbons wave, not balloons."
    - bride and groom like image from board 1 (groom bending bride for kiss, but add guests in background waving ribbon wands)
  - "Love Is in the Air. Let bubbles fly, not balloons."
    - bride and groom twirling or arms upraised with bubbles in air being blown by guests
  - "Love Is in the Air. Let paper airplanes soar, not balloons."
    - bride and groom running ahead of paper airplanes
  - "Love Is in the Air. Let light fill the sky, not balloons." (for glow sticks, candles.)
    - bride and groom lite by the light of glow sticks, or candles held by guests

Message Board	Comments from Brides, Grooms and Others (Moms, Best Maids, Etc.)	# Brides Engaged	# Positive Votes
<b>Board 1</b> 	<b>Comments comparing boards 1-3:</b> --Groom thinks <b>colors</b> are better in this ad as compared to other two. Really likes environmental idea and thinks this is an up and coming business opportunity. --Bride likes this ad best of 1-3. --Mother of bride likes this ad best of 1-3. --Bride <b>likes this picture best</b> of 1-3. Her mother liked it best also. --Suggest <b>adding bubbles</b> to have both bubbles and ribbon wands in picture. Also <b>likes this slogan best.</b> --Likes the <b>colors and background in picture.</b> --Likes the photo colors. --On one comment page a poll was taken and 7 people liked this photo and 1 liked the slogan. --Likes the picture best of 1-3 but slogan from #2 and 'eco-friendly' from #3 should be used. --Picture stands out more, but <b>too much text.</b> --Use this picture with bubbles. --Likes the ribbon. Had never seen this before. It's unique.	Brides 28  Grooms 4  Other 18  Subtotal 50	Brides 8  Grooms 2  Other 4  Subtotal 14





	<p>--Likes this picture best because it is more clear.                  --Likes the picture best and this slogan.                  --Just use 'eco-friendly' in slogan.                  --Likes the slogan.                  --Likes 'litter-free' because it is more to the point.                  --Love the pose in the picture but it seems to be falling off page.                  --"This one doesn't do it for me."                  --Love the image because it is the best of 1-3.</p> <p><b>At 1:30 we changed to only four boards: 1, 3, 4 and 5. Comments below on board #1 are based on these comparisons:</b></p> <p>--Too focused on dress so that one doesn't notice ribbon wand in her hand.                  --Like the photo pose because it looks like fun.                  --Like the photo because it shows ribbon wand.                  --This is best picture compared to 3, 4, and 5.                  --Love this photo.                  --This one is romantic and pretty. I love the "no balloon" message.                  --"I'm interested in an eco-friendly wedding. I looked for seeds pressed into petals. I would like to have guests throw them at me during sendoff and the seeds could grow. I can't find them and they are expensive."                  --Would like to learn how to make them.                  --Your message is pretty much eco-friendly. People should do weddings without balloons that harm animals.                  --Bride says she likes this board as second best.                  --Mom says this will appeal to people who love animals.                  --The information on this board sticks.                  --The ribbons are really pretty.                  --This board is really cute.                  --I like that he's dipping her and I like the ribbons in her hand.                  --These photos need to show more people actually doing a send-off.                  --Don't pollute is what 'eco-friendly' means.                  --Groom thinks this board is most appealing of these four.                  --Likes the ribbon in the photo.                  --Doesn't say anything much about not using balloons. --This is third best choice.</p>	<p>Brides 26</p> <p>Grooms 2</p> <p>Other 12</p> <p>Subtotal 40</p> <p>Total 90</p>	<p>14</p> <p>Brides 1</p> <p>Grooms 0</p> <p>Other 2</p> <p>Subtotal 3</p> <p>Total 17</p>
<p><b>Board 2</b></p>  <p><i>Keep Love in the Air. (Let bubbles of joy abound!)</i></p> <p><i>Please don't release balloons. Visit @golfandcaddies for picture-perfect, litter-free ideas and make one uniquely yours!</i></p> <p><i>Let bubbles of joy abound!</i></p>	<p><b>When comparing boards 1-3:</b></p> <p>--Poll taken on this board had two votes for 'eco-friendly' and one for 'litter-free.'                  --Likes this photo and slogan best. 'Litter-free' gets to the point. 'Eco-friendly' is too general a term.                  --Add wands or heart and show more people to give idea of actual send-off and alternatives.                  --Slogan is "not bad." The word 'litter' implies cleanup and a bride doesn't want to cleanup.                  --This slogan is the best. The photo of the ocean and sand "calls to me."                  --'Litter-free' is more to the point.                  --People may not equate 'litter-free' to 'eco-friendly.'                  --Like the term 'litter-free.' "Don't be a jerk."                  --A poll taken on one comment page showed 5 people liked slogan &amp; 4 liked photo.                  --This board is more positive. Liked the subliminal message about litter.                  --Like the term 'litter-free' and the picture using bubbles.                  --Mom said it is hard to see the bubbles. Likes the term 'eco-friendly' because it is more positive.                  --Mom says 'Keep Love in the Air' is a good slogan.                  --Likes this board better than #1.</p>	<p>Brides 24</p> <p>Grooms 3</p> <p>Other 13</p> <p>Total 50</p>	<p>Brides 6</p> <p>Grooms 0</p> <p>Other 3</p> <p>Total 9</p>



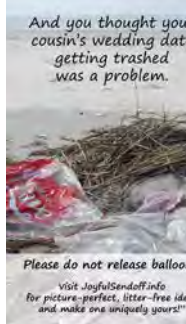
Board 3	Comments comparing boards 1-3:		
<p><b>Love Is in the Air.</b> <i>(Let bubbles fly, not balloons)</i></p> 	<p>--This board is softer and comes across nicer. --I like this slogan the best compared to 1 and 2. --This board is simple and gets straight to the point. --This slogan is the best compared to 1 and 2 because it is simpler and 'eco-friendly.' --Should move 'let the bubbles fly...' to the bottom. --'Eco-friendly' may not be understood by younger people. --'Eco-friendly' is a happier message and likes 'uniquely yours.' --'Eco-friendly' is the 'it' word.</p>	<p>Brides 24</p> <p>Groom s 4</p>	<p>Brides 7</p> <p>Groom s 2</p>
<p><i>Let bubbles fly, not balloons!</i></p>	<p>--Bubbles draw attention and the message says no balloons. --On one page, poll taken showed 5 people liked the slogan. On this same page, 7 people liked the term 'eco-friendly' as compared to 8 that preferred 'litter-free.' --Likes the 'eco-friendly' phrase. --Likes this board best compared to 1 and 2 because of the phrase and the picture. It is to the point. This respondent was interested in bio-degradable confetti. --"If I wanted balloons, this would make me feel bad." --Likes this message because it is more direct. --Likes the term 'eco-friendly' better than 'litter-free.' Mom and daughter both agree on this. --On one page, 9 people preferred 'eco-friendly' to be used here and 2 preferred the term 'litter-free.' --Don't like bubbles covering the grooms face. --This board is more 'advertising-like.' --Like this board better than #1. --'Eco-friendly' is a much better term than 'litter-free.'</p>	<p>Other 15</p> <p>Subtot al 43</p>	<p>Other 2</p> <p>Subtot al 11</p>
	<p><b>At 1:30 we changed to only four boards: 1, 3, 4 and 5. Comments below on #3 are based on these comparisons:</b> --Like these words at top best as compared to others. --Mom says I like this best because message is clear--'don't release balloons.' --This photo and slogan are the best of all four. --'Eco-friendly' covers more than 'litter-free.' --Add more bubbles to the photo. --'Litter-free' is more direct. 'Eco-friendly' means that you're behind the environment." --Like the big bubbles. --This is the best slogan. --This is the best slogan. --This is the best photo. --Likes this photo best. --Best photo except for the bubble on his face. --This is the best slogan. --Likes that this is at the beach. It is simple and has best slogan. --This is best slogan. --This is best slogan. --The bubbles stand out and are eco-friendly. --Groom likes this best because it is plain. --Likes this picture best of all four. --Likes this best for bubbles and slogan. Also likes 'eco-friendly' better than 'litter-free.' Yes it would direct me to the website. --Likes the picture because it is the happiest. Also likes this slogan best and 'eco-friendly' term. This term seems more familiar. --Likes this one out of the four boards. Need to correct bubbles on his face. Comments on Board 3 comparing boards 1, 3, 4 and 5 (continued):</p>	<p>Brides 23</p> <p>Groom s 2</p> <p>Other 12</p> <p>Subtot al 37</p>	<p>Brides 3</p> <p>Groom s 1</p> <p>Other 2</p> <p>Subtot al 6</p>

	<p>--Likes this slogan the best out of four but likes the term 'eco-friendly' better.</p> <p>--Likes this slogan best.</p> <p>--Likes this slogan best.</p> <p>--Likes this best for the photo and the slogan. Also like the term 'litter-free' because it is clearer and straight to the point.</p> <p>--Likes the group photo on the display board with people using ribbon wands at sendoff.</p> <p>--The term 'eco-friendly' makes people think about it more.</p>	<p>Total 84</p>	<p>Total 17</p>
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Board 4	Comments comparing boards 4-6:		
	<p>--This is a cute idea. Message is 'don't let it go.'</p> <p>--Both bride and groom say this board is "ok." To them it says the couple just got married and they are in love. Out of all three boards they like this one the best. They feel the message comes through.</p> <p>--"This board doesn't make me think of anything. It is just a picture and I am not sure what the message is."</p> <p>--Likes this board the best of all three. The other two are more environmental.</p> <p>--Love this board the best. Like the term 'litter-free' and think the message is young.</p>	<p>Brides 18</p> <p>Grooms 4</p> <p>Other 14</p>	<p>Bride s 8</p> <p>Groo ms 3</p> <p>Othe r</p>
	<p>Was aware that rice is not good because it harms animals.</p> <p>--This board stands out with the balloon. It is a typical beach wedding and she likes that. Assumes the message is clean beach and 'litter-free.' This is the board that would make them want to go to the website.</p> <p>--"After reading it I agree with it." (The bride commenting here is a veterinarian and knows what balloons do to animals.) She likes this one better than other two because it includes a bride and groom.</p> <p>-Like the messaging. It is an interesting pun, while the other two are more direct. This is the one that would make me go to the website.</p> <p>--This board is sweet and romantic. Don't get the idea of sendoff from this message.</p> <p>--This board is very pretty and cute. It is Virginia Beach specific.</p> <p>--Bride likes this board but Mom said it is too faint and monochromatic. Both think message is good.</p> <p>--Like this one the best of all three.</p> <p>--This message is true, a lot of people have been doing balloon releases. I saw balloons in a lot of the videographer's materials.</p> <p>--Likes this one best for the caption and picture.</p> <p>--Likes this slogan, 'Keep love in the air.' It draws attention.</p> <p>--"This ad is nice but to be honest I don't understand message. I actually didn't read it at first and now that I read it I don't think it is clear. We're not allowed to have sparklers at the Wyndam and I really wanted them." (Bride getting married at Star of the Sea where she is also not allowed to leave any residue.)</p> <p>--"My future brother-in-law hates balloons because they kill sea turtles."</p>	<p>Subtotal 36</p>	<p>4</p> <p>Subt otal 15</p>
	<p><b>At 1:30 we changed to just four boards: 1, 3, 4 and 5. Comments below on #4 are based on these comparisons:</b></p> <p>--This board captures the feeling of love, 'keep your love in the air.' It is romantic. 'Litter-free' means same as 'eco-friendly.'</p> <p>--Likes term 'eco-friendly' over 'litter-free.'</p> <p>--Should bold or underline web address if you want to direct people there.</p> <p>--This one has no 'wow' factor.</p> <p>--Love the message but afraid people won't read it.</p> <p>--Like this one the best of all four.</p> <p>--Groom says this one seems to still promote using balloons since she is holding one and that is confusing.</p> <p>--Bride likes this slogan the best because it is more creative.</p> <p>--The term 'litter-free' is more concrete.</p> <p>--Bride likes the term 'eco-friendly' best. Groom says 'litter-free' is better because it is more specific.</p> <p>--This is second favorite choice of four.</p> <p>--Likes this one best because it is clear. The couple is the focal point and it gets to the point to not let balloons go. Not too busy but simple.</p> <p>--Likes the word 'love' in the slogan.</p> <p>--Likes this board the best.</p>	<p>Brides 21</p> <p>Grooms 2</p> <p>Other 10</p>	<p>Bride s 1</p> <p>Groo ms 0</p> <p>Othe r 0</p>
		<p>Subtotal 33</p>	<p>Subt otal 1</p>
		<p>Total 69</p>	<p>Total 16</p>

Board 5	Comments comparing boards 4-6:		
 <p>Looking for Litter-free Send-off Ideas? <small>(Please don't release balloons)</small></p> <p><small>Visit JoyfulSendoff.info for picture-perfect ideas and make one uniquely yours!</small></p>	<p>--This board is sad. It is about pollution. The message is clear. This one especially gets 'litter-free' message across. Like 'litter-free' better than 'eco-friendly.'</p> <p>--Not feeling this one. Both groom and bride feel this board is more about Clean the Bay Day.</p> <p>--"Well, it's quite striking. I really wasn't expecting this coming from Joyful Sendoff. I didn't make the connection between Joyful Sendoff. Feel needs to show pictures of alternatives. Do side-by-side photos. Say that you are an environmental group."</p> <p>--We are big beach goers. "Ah-ha—this is about balloons and people just left their trash."</p> <p>--Should cleanup after. If people are trying to keep beach clean this image is better. It says more about green weddings. I like the term 'eco-friendly' better than 'litter-free' because I already know what 'eco-friendly' means.</p> <p>--"This one says 'eco-friendly.' But people will look at this and say nah, and they are not going to read it." Think 'eco-friendly' and 'litter-free' mean the same thing.</p> <p>--Bride likes this one better. Groom likes this one because it is more direct while #4 is subtle. Probably will not make people go to the website. Litter on the beach is bad for wildlife. Wouldn't choose balloons after looking at this message.</p> <p>--Mom thinks these balloons look like blood. Thought it was blood at first. Mom and bride both like this caption. No one else is saying this message.</p> <p>--Bride likes this one better than 4 because 4 is too cute. This one has stronger message. Groom says he can't get initial idea from this board and it makes him think 'recycling' and not 'wedding.'</p> <p>--Downer on weddings but gets to the point.</p> <p>--Likes this one better than #4.</p> <p>--This board is direct and to the point. I like the message. You have to be responsible and pick up after yourself. But you can't pick up your own balloons if you let them go.</p> <p><b>At 1:30 we changed to only four boards: 1, 3, 4 and 5. Comments below on #5 are based on these comparisons:</b></p> <p>--Need to make message clearer and guide reader to website. Say one can find 'litter-free' ideas at JoyfulSendoff.info. Too many words as it is and sad.</p> <p>--Thought balloons go away. Thought photo implied use balloons then the message made the point not to.</p> <p>--Made me sad.</p> <p>--Best for agenda pushing.</p> <p>--Would grab attention.</p> <p>--I see balloons all over the Outer Banks.</p> <p>--This board is more like a cleanup crew and not 'wedding-ish.' It would speak to someone who is already green.</p> <p>--Too sad and not motivating.</p> <p>--'Litter-free' gets to the point.</p> <p>--Good to add so people know impacts.</p> <p>--This board is very powerful.</p> <p>--On one page a poll taken showed 6 respondents preferred 'eco-friendly' to be used here and 2 preferred 'litter-free.'</p> <p>--Groom says this board would be great for inside a brochure.</p> <p>--Bride thinks this one is more specific.</p> <p>--Groom likes this one the best.</p> <p>--Got the message but would be weird. Would get attention.</p> <p>--Might turn some people away.</p> <p>--Balloons not clear. Need to see one intact and one deflated. Could also use sparklers as</p>	<p>Brides 18</p> <p>Grooms 4</p> <p>Other 16</p> <p>Subtotal 38</p> <p>Brides 17</p> <p>Grooms 2</p> <p>Other 9</p> <p>Subtotal 28</p> <p>Total 66</p>	<p>Brides 7</p> <p>Grooms 2</p> <p>Other 2</p> <p>Subtotal 11</p> <p>Brides 0</p> <p>Grooms 0</p> <p>Other 0</p> <p>Subtotal 0</p> <p>Total 11</p>

	litter or fire hazard. --Too negative. --Aviation Museum—lanterns (KO note: not sure meaning of this comment written in margin)		
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<p><b>Board 6</b></p> 	<p>Comments comparing boards 4-6:</p> <p>--This is the same as board 5.</p> <p>--Isn't this the same as other one (#5)? Not sure what the message is and I don't like the caption.</p> <p>--No I don't like it. It is unclear. I wouldn't look at this ad. Should show good alternatives like bubbles and wands. Liked the images on boards 1, 2 and 3 more. I'd stay with 'Joyful Sendoff' rather than in-your-face 'Be litter-free.'</p> <p>--Mom mentioned balloons get tied into power lines.</p> <p>--This board is more humorous.</p> <p>--Like this one less than the other 5. It is less effective.</p> <p>--This is great too. First one is too confusing 'Love in the Air?'</p> <p>--Like this one because it is very funny (bride and groom agree). This is the best. We would go to the website for more information. We are aware of eco-logically friendly alternatives like don't use bird seed anymore. Like the term 'eco-friendly' over 'litter-free' or even use the term 'green.'</p> <p>--Bride and groom both like the environmental message of this one. Groom thinks should combine this image with the image on #4.</p> <p>--This one says to me litter on my beach and never choose balloons.</p> <p>--Mom and daughter laughed and said it was funny. Message is to find a different sendoff.</p> <p>--Both bride and groom laughed and think this is the best. They used the term 'litter-free' and said it implies there is another way to celebrate.</p> <p>--This board is funny and made me think. It's not as 'in-your-face' as the other one (#5). But I didn't know these were balloons at first.</p>	<p>Brides 16</p> <p>Grooms 4</p> <p>Other 14</p> <p>Total 34</p>	<p>Brides 5</p> <p>Grooms 2</p> <p>Other 3</p> <p>Total 10</p>
<p><b>'Eco-friendly' vs 'Litter-free'</b></p>	<p>Four note pages provided tallies of 'eco-friendly' vs. 'litter-free' that were not associated with a specific board.</p> <p>The result was as follows: 22 preferred 'eco-friendly' compared to 12 preferred 'litter-free'</p>		