

**Dog River Watershed Comprehensive Trash Abatement Program
Truck Bed Trash Can Competition Report**

**Prepared by: Mobile Bay National Estuary Program
Author: Henry Perkins**

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Introduction

In line with the overall purpose of reducing litter throughout the watershed Dog River Clearwater Revival charged the MBNEP with developing a public outreach campaign to target truck bed trash, a specific subset of roadside litter, throughout the Dog River Watershed. Truck-bed trash was targeted due to the high number of trucks in this area and the potential to reduce litter delivered from pickup truck beds. The EPA Gulf of Mexico Program grant included \$33,000 designated for this outreach portion.

It's estimated that as much as 5% of all trash along US roads and waterways results from this inadvertent "truck bed" littering. Thirty percent of respondents in a 2017 Don't Mess With Texas survey responded that they are aware of trash inadvertently leaving their truck, and 88% indicated that they would prefer having a method to dispose of litter in their vehicle as opposed to doing nothing.

Truck dealerships were targeted for engagement on this issue, to not only educate these private sector establishments but their customers as well. It was found that truck owners lacked any real options for securely storing trash in their truck beds, and that there was a need for a receptacle designed to specifically store trash in a truck bed.

Truck Bed Trash Can Competition

The Mobile Bay National Estuary Program, in association with local CBS affiliate WKRG, produced and televised a 30-minute competition called the "Truck Bed Trash Can Competition" to raise awareness of truck bed litter and to crowd source effective trash reduction technology for truck bed litter.

The competition was intended to facilitate the production marketing of a viable "truck bed trash can," i.e., a receptacle or other product designed to prevent trash and litter from inadvertently escaping truck beds, as well as to raise awareness about the general issue of truck bed litter.

The competition was advertised to the public primarily via social media, and special efforts were made to target environmental, entrepreneurial, engineering, and student groups. The importance of the issue of litter was highlighted with all competition promotion.

Volunteer judges for the competition were recruited based on their expertise in engineering, marketing, business development, and/or litter reduction. They included: a green technology CEO, an intellectual property attorney, a professor of entrepreneurship, a marketing expert, and a business owner and previous pitch competition winner.

The prizes for winning the competition were \$3,500 cash (raised through private sources) and 12+ hours of pro-bono professional services. The services included meetings with and advice from professionals with experience in litter reduction, business creation, product development, and intellectual property law. These prizes were designed to support the further development

and bringing to market of the winning trash can prototype. The cash award was secured through sponsorships, and the professional services were donated in-kind from competition judges.

Entrants were asked to design an original prototype for a truck bed trash can and create a brief video pitching it. Finalists in the video round were invited to pitch their prototype live.

The video submissions were judged with precise criteria measuring the designs' practicality, viability, cost, quality, and eco-friendliness. Judges were given one week to complete judging, after which three submissions were selected for live pitches. All contestants were notified of their status and were given notes on how to improve both their prototype and pitch. Most submissions were received from the Mobile area, although there was one submission from Auburn, AL.

The Results

The live pitch for the competition took place on November 12, 2020, from noon until 3:30PM. Pitches were hosted at WKRG-TV and filmed in a television studio. Contestants had 10 minutes to present and pitch their prototype, and judges were allotted 10 minutes to ask questions. WKRG personality Devon Walsh hosted the competition. The problem of litter and possible solutions to it were discussed throughout the show. The runtime of the show was approximately 30 minutes.

The competition aired digitally on December 10, 2020, at 7:00PM on WKRG's website, and a "Viewer's Choice" competition was held to further promote the show, awarding an additional \$500 prize to the most popular design as selected by the audience. The digital show and Viewer's Choice competition were advertised digitally through the MBNEP's social media platforms and mailing lists and through WKRG's social media platform.

In total, six video entries were submitted to the MBNEP and reviewed by judges. The entries and judges' reactions are briefly described below:

Entry 1

The Rake-Up Pack is a durable-plastic receptacle with locking latch. Adjustable prongs attach the device to the tailgate, and storage and ventilation are built into the side of the device. An extending rake for scraping trash out of the truck bed attaches to the side of the device.

Judges were impressed with the design and overall presentation but were concerned that the prototype was too complicated and would have high manufacturing costs as a result.

Entry 2

The Bubble Bucket is an insulated bucket with a hole in the top and a separated insulated layer serves as a cooler for beverage storage. The hole is blocked with a weighted, magnetic lid. Trash bags are sealed in place by the lid on the bucket. The insulation includes pockets for tool storage.

Judges responded positively to the concept's creativity and versatility but were concerned that component materials and a mounting method had not been discussed, were off put by the idea of drinks being stored with garbage, and disapproved of the profanity used in the presentation.

Entry 3

This entry is an unnamed wooden box with a plastic side cut into a "star shape" to allow trash to be pushed through. A latch is installed on the side to empty the trash can. Magnets on the bottom attach the device to the bed of the truck.

Judges felt the product was practical and had potential but were concerned that the cut-plastic side would scrape users' hands, and thought the product overall needed further development.

Entry 4

The Gator Bucket is a lidded bucket with a hole in the lid and vinyl covering the hole. It mounts magnetically to the truck bed. The device is completely recyclable, low cost, and customizable.

Judges were impressed with the simplicity of the design, referring to it as "elegant." They had concerns that such a low-cost trash can secured poorly to a truck bed may come loose and become litter itself.

Entry 5

The Model T-A is a detachable tarp that covers the entire bed of the truck. Extending rods on either end of the tarp hold it in place in the truck bed, and it was demonstrated to stay in place at highway speeds.

Judges were impressed with the research and effort that went into the presentation of this product but were concerned that realistically a driver might not take the time to install the cover.

Entry 6

Humpy Dumpy is a lightweight, rack-mounted, polyhedron metal box designed to sit over the wheel well in the cargo bed of a truck. It included an attached, hinged lid with latch and mounting-rack which attaches to the side of the truck cargo bed. The mounting rack screws into place, while the box is removable when lifted.

Judges were impressed with the design's simplicity, "sleek" look, and use of dead space. They had concerns about the cost of manufacturing and its application over the variety of wheel wells that exist in the market.



The winning design of the competition, Humpy Dumpy

The Gator Bucket, The Model T-A, and Humpy Dumpy were selected to move on to the live pitch. The winning design was Humpy Dumpy. The competition is available for streaming on WKRG's website at <https://www.wkrg.com/truck-bed-trash-can-design-competition>.

After the competition, the winner was introduced to professionals in business development, engineering, and intellectual property law to further develop the prototype and launch the product to market. Over a dozen hours of meetings between the winner and these professionals were arranged, clarifying the scope of what will be required to bring this product to market and outlining the next steps.

Due to the complexities of bringing the product to the market, the winner determined that they lacked the capacity to bring the trash can to market and agreed to sell the intellectual property to the MBNEP for one dollar.

Audience Reached:

Six truck dealerships were approached and educated on issues regarding truck bed trash.

Four college classes lectured on the issue of truck bed trash.

The digital platforms the competition was advertised on have a combined reach of approximately 500,000 individuals.

75 social media posts were created shared 126 times.

The livestream of the competition was viewed 11,000 times.

Next Steps:

With the intellectual property in hand, the MBNEP continues its commitment to bringing the product to market and is working with partners to finalize the product prototype, explore patent options, conduct market research, and identify manufacturers.