Testimony of Jacob Ross Mid Atlantic Campaign Organizer, Oceana To the Maryland House Environment and Transportation Committee January 13, 2021

Thank you for the opportunity to testify on behalf of HB 391, the Prohibition on Releasing a Balloon Into the Atmosphere. Oceana is the largest international advocacy organization dedicated solely to ocean conservation. As of July 2020, we have 17,800 supporters across Maryland. We work to advance science-based policies at the federal, state, and local level that will restore the ocean's abundance and biodiversity. We submit this testimony to share our strong support for HB 391 and to urge you to pass this important legislation.

Plastic Pollution and Balloons Are a Growing Problem for Ocean Health

A 2019 scientific report found that among the marine debris items ingested by seabirds, balloons were the most likely to result in death. Balloons, which can travel hundreds of miles after they're released, must land somewhere. Those released anywhere in the state could end up in the Chesapeake Bay, which is home to hundreds of bird species, including many that are threatened with extinction. Additionally, plastic debris like balloons can affect other types of marine life, from plankton to dolphins and sea turtles. Tens of thousands of individual marine animals have been observed to be suffering from entanglement in, or the ingestion of, plastic.²

Plastic pollution is a growing threat to the world's oceans, as well as our food, health and climate. Each year, an estimated 17.6 billion pounds of plastic enters the marine environment. This is roughly equivalent to a garbage truck full of plastic being dumped into the oceans every minute.³

Nearly 40% of all plastic produced is for packaging, most of which is used once and then thrown away.⁴ Balloons and other packaging and single-use products are profoundly flawed by design. These products are designed to be used for only a few moments before being disposed of, but the material they are made of was created to last for centuries. In the end, communities across Maryland and marine life are left to deal with the consequences of this growing problem.

Plastic pollution is everywhere. Scientists have found plastic floating on the surface of the ocean, washing up on the world's most remote coastlines, melting in Arctic sea ice, raining onto the Rocky Mountains, and even sitting at the deepest part of the ocean floor. ^{5,6,7,8} Plastic is harming our native wildlife and contaminating Maryland's waterways. ⁹

¹ Roman L, Hardesty BD, Hindell MA and Wilcox C (2019) A quantitative analysis linking seabird mortality and marine debris ingestion. *Scientific Reports* 9. doi: 10.1038/s41598-018-36585-9

² Gall SC and Thompson RC (2015) The impact of debris on marine life. *Marine Pollution Bulletin* 92: 170–179. doi: 10.1016/j.marpolbul.2014.12.041

³ Jambeck JR, Geyer R, Wilcox C, *et al.* (2015) Plastic waste inputs from land into the ocean. *Science* 347: 768-771. doi: 10.1126/science.1260352

⁴ Geyer R, Jambeck JR and Law KL (2017) Production, use, and fate of all plastics ever made. *Science Advances* 3. doi: 10.1126/sciadv.1700782

⁵ Lavers JL and Bond JL (2017) Exceptional and rapid accumulation of anthropogenic debris on one of the world's most remote and pristine islands. *Proceedings of the National Academy of Sciences* 114: 6052-6055. doi: 10.1073/pnas.1619818114

⁶ Chiba S, Saito H, Fletcher R, *et al.* (2018) Human footprint in the abyss: 30 year records of deep-sea plastic debris. *Marine Policy* 96: 204-212. doi: 10.1016/j.marpol.2018.03.022

⁷ Peeken I, Primpke S, Beyer B, *et al.* (2018) Arctic sea ice is an important temporal sink and means of transport for microplastic. *Nature Communications* 9 doi: 10.1038/s41467-018-03825-5

⁸ Wetherbee G, Baldwin A and Ranville J (2019) It is raining plastic: Open-File Report 2019-1048. *United States Geological Survey*. doi: 10.3133/ofr20191048

⁹ Soper S (2019) Assateague Horse Incident Highlights Balloon Dangers. The Dispatch. Available: https://mdcoastdispatch.com/2019/05/29/assateague-horse-incident-highlights-balloon-dangers/. Accessed Feb 19, 2020.

Marine species around the globe and here in Maryland are being affected by plastic debris. A piece of plastic can look like food to a fish, turtle, marine mammal or bird. We are seeing increasing reports of dead whales beached with bellies full of plastic debris. Tens of thousands of individual marine animals have been observed suffering from entanglement or ingestion of the plastic permeating the marine environment. The property of the plastic permeating the marine environment.

- Home to over 3,600 plant and animal species, the Chesapeake Bay is the largest estuary in the country and is an important part of Maryland's identity and economy. But it's being impacted by our dependence on single-use plastics according to a 2014 study, microplastics were found in 59 out of 60 water samples from the Chesapeake Bay and its tributaries.¹²
- Plastic ingestion and entanglements can lead to death by starvation or suffocation for marine life.
 Ingested plastic may also cause ulcers or punctures and impair feeding, growth, mobility, reproduction and behavior.^{13,14}
- After surveying dozens of government agencies, organizations and institutions that collect data on the impact of plastic on marine animals, Oceana found evidence of nearly 1,800 animals from 40 different species swallowing or becoming entangled in plastic since 2009. Of those animals, a staggering 88% were from species listed as endangered or threatened with extinction under the Endangered Species Act.¹⁵

Global production of plastic is now projected to increase at least fourfold between 2014 and 2050. As plastic production increases, so will the amount of plastic that enters the ocean.

Solution: Reduce Plastic Pollution at the Source

Recycling is not enough to solve the plastic pollution crisis. Waste-management solutions have not adequately dealt with plastic pollution in the past and cannot realistically keep up with the rising rates of plastic production. Only 9% of all the plastic waste ever produced has been recycled. ¹⁷ The rest of it has been incinerated, landfilled, or lost in the environment.

Policies governing the production and use of single-use plastic are the most effective way to stem the flow of it into our oceans, bays, and wetlands, and these policies are becoming more common all around the world. While multiple countries have taken national action, the United States has so far failed to implement a nationwide policy that comprehensively addresses the plastics crisis threatening our future.

Thankfully, local communities are acting by passing policies limiting the use of single-use plastic and banning balloon releases. Baltimore, Ocean City, Queen Anne's County, Montgomery County, and Frederick have already prohibited the release of balloons into the environment. Communities across Maryland are calling on the Maryland General Assembly to follow suit.

¹⁰ Irfan U (2019) The alarming trend of beached whales filled with plastic, explained. In: *Vox.* Available: https://www.vox.com/2019/5/24/18635543/plastic-bags-whale-stomach-beached. Accessed Jun 25, 2019.

¹¹ Gall SC and Thompson RC (2015) The impact of debris on marine life. *Marine Pollution Bulletin*. 92: 170–179. doi: 10.1016/j.marpolbul.2014.12.041

¹² Yonkos LT, Friedel EA, Perez-Reyes AC, Ghosal S and Arthur CD (2014) Microplastic in four estuarine rivers in the Chesapeake Bay, U.S.A. *Environmental Science & Technology* 48: 14195-14202. doi: 10.1021/es5036317

¹³ Cole M, Lindeque P, Fileman E, Halsband C and Galloway TS (2015) The Impact of Polystyrene Microplastics on Feeding, Function and Fecundity in the Marine Copepod *Calanus helgolandicus*. *Environmental Science & Technology* 49: 1130–1137. doi: 10.1021/es504525u

¹⁴ Watts AJR, Urbina MA, Corr S, Lewis C and Galloway TS (2015) Ingestion of Plastic Microfibers by the Crab *Carcinus maenas* and Its Effect on Food Consumption and Energy Balance. *Environmental Science & Technology* 49: 14597–14604. doi: 10.1021/acs.est.5b04026

¹⁵ Oceana.org

¹⁶ -- (2016) The New Plastics Economy: Rethinking the future of plastics. World Economic Forum. 36p.

¹⁷ Ibid

Passing HB 391, the Prohibition on Releasing a Balloon Into the Atmosphere, is a critical step in reducing plastic pollution at the source. By working to reduce the intentional release of plastic balloons throughout the state, Maryland would be taking a key step towards addressing the pollution concerns of communities across the state.

We strongly support HB 391. We believe this bill will have a significant impact on the amount of plastic pollution that impacts the Chesapeake Bay, marine life along the Atlantic coast, and communities who depend on these unique ecosystems and species. We thank you for the opportunity to testify and urge you to pass this important legislation to reduce plastic pollution.

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