

Testimony of Jacob Ross
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To the Maryland Senate Finance Committee
February 20, 2020

Thank you for the opportunity to testify on behalf of SB 313, the Plastics and Packaging Reduction Act. As the largest international advocacy organization dedicated solely to ocean conservation, Oceana fits a unique niche. 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 SB 313 and to urge you to pass this important legislation.

Plastic Pollution Is a Growing Problem for Ocean Health

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.¹

Nearly 40% of all plastic produced is for packaging, most of which is used once and then thrown away.² Plastic bags 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 forever.

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.^{3,4,5,6} Plastic is harming our native wildlife and contaminating Maryland's waterways.⁷

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.⁸ Tens of thousands of individual marine animals have been observed suffering from entanglement or ingestion of the plastic permeating the marine environment.⁹

- 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

¹ 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

² 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

³ 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

⁴ 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

⁵ 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

⁶ 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

⁷ 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.

⁸ 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.

⁹ 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

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.¹⁰

- 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.^{11,12}
- At least 17% of the species observed to be affected by marine debris are listed as near threatened or more endangered,¹³ indicating that marine plastic debris may be contributing to the potential of species extinction.

Global production of plastic is now projected to increase at least fourfold between 2014 and 2050.¹⁴ 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.¹⁵ 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.

Instead, U.S. cities, counties and states have been leading the way. Just last month, the City of Baltimore prohibited grocers and other retailers from providing single-use plastic checkout bags and imposed a surcharge on alternatives in order to curb plastic pollution and reduce overall waste. Other municipalities in Maryland are considering similar legislation to reduce throwaway plastic, but it's critically important that we come together as a state to lead the way in fighting plastic pollution.

SB 313, the Plastics and Packaging Reduction Act, does just that. By working to reduce the use of plastic bags throughout the state, encouraging the use of reusable over paper bags as alternatives, and establishing a working group to explore ways that we can reduce other single-use plastic items entering our waterways, Maryland would be taking a key step to addressing this global crisis.

We strongly support SB 313, including the provision imposing a small fee on alternative bags in order to encourage consumers to switch to reusable bags and reduce overall consumption. We believe this bill will

¹⁰ 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

¹¹ 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

¹² 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

¹³ 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

¹⁴ -- (2016) The New Plastics Economy: Rethinking the future of plastics. World Economic Forum. 36p.

¹⁵ Ibid.

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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