



CHESAPEAKE BAY FOUNDATION

Environmental Protection and Restoration
Environmental Education

Senate Bill 642

Maryland Beverage Container Recycling Refund and Litter Reduction Program

Date: March 5, 2024
To: Energy, Education, and the Environment Committee

Position: **Favorable**
From: Julieta Rodrigo, Urban and
Community Resilience Manager

Chesapeake Bay Foundation (CBF) **SUPPORTS** SB 642 which establishes the Maryland Beverage Container Recycling Refund and Litter Reduction Program to increase the reuse and recycling of beverage containers and reduce the litter, pollution, and costs associated with beverage containers

Most plastic beverage containers in Maryland are not recycled.

Although recycling programs have existed in Maryland for many years, less than one-quarter of the 5.2 billion beverage containers sold in the state in 2019 were recycled and reused.¹ This means that the remaining 4 billion containers were left in the environment, to meet their fate of landfilling, incineration, or littering. In addition to the negative impacts of plastic pollution on the aesthetic and environmental health of our ecosystems, this is a large waste of resources, as virgin plastic requires large amounts of fossil fuels, the extraction and burning of which result in higher greenhouse gas emissions and energy use. Incineration of plastic bottles also contributes to poor air quality in Maryland, releasing nitrogen oxides, particulate matter, and other pollutants that worsen residents' health and affect the acidity and balance of our Chesapeake Bay.²

Plastic beverage bottles contribute to microplastic pollution and environmental damages.

Contrary to the popular belief that plastic pollution largely ends up in the ocean, most of the plastic pollution that makes its way into the rivers of the Chesapeake Bay stays in and along local waters. Indeed, about 94% of microplastics – particles measuring 5 millimeters or less in diameter – that feed into the system via its rivers stay in the system, with an additional 5% carried to the ocean and 1% remaining in the water column.³ Microplastics threaten the health of the biodiversity that lives within the Bay watershed, as well as the health of the residents that consume seafood. For example, microplastics can physically block or fill up an animal's gut, potentially reducing its ability or desire to feed. Microplastics can also cause behavioral changes as their presence changes a fish's buoyancy or swimming behavior, which can make the fish more susceptible to predators. Microplastics also can carry toxic chemicals into the fish's body, which

¹ Container Recycling Institute, 2022. "2019 Beverage Market Data Analysis."

² "CBF Study: Baltimore Incinerator Causes \$55 Million in Health Problems per Year." *Chesapeake Bay Foundation*, 11 Dec. 2017, <https://www.cbf.org/news-media/newsroom/2017/maryland/cbf-study-baltimore-incinerator-causes-55-million-in-health-problems-per-year.html>.

³ Pipkin, Whitney. "The Chesapeake Bay Is a 'Sink' for Plastic Pollution." *Bay Journal*, Bay Journal Media, 13 Oct. 2021, https://www.bayjournal.com/news/pollution/the-chesapeake-bay-is-a-sink-for-plastic-pollution/article_ca6f12ec-21fd-11ec-b0c4-cf096494dd62.html.

Maryland Office • Philip Merrill Environmental Center • 6 Herndon Avenue • Annapolis • Maryland • 21403

could bioaccumulate as the fish consumes other prey that have ingested plastics, and eventually make its way to human consumption.⁴ All of these factors threaten the health of our ecosystem, as well as threaten the longevity and safety of Maryland's seafood industry.

Beverage container deposit programs are a proven, highly effective policy for recovering used beverage containers and reducing litter.

Ten states in the U.S., covering about 90 million people, have longstanding, successful beverage container deposit programs (California, Connecticut, Hawaii, Iowa, Maine, Massachusetts, Michigan, New York, Oregon, Vermont).⁵ Together, they average a 60% recycling rate for beverage containers, compared to 24% in states without these programs.⁶ The recycling rate for deposit beverage containers is much higher than for containers not subject to a deposit, and it increases with a higher deposit amount. The two states that offer a 10-cent redemption refund, Michigan and Oregon, have the highest beverage bottle recycling rates in the nation, reaching 75%⁷ and 85% recycling rates in 2022⁸, respectively. Producer responsibility has been a successful approach toward providing a cleaner and safer future for residents, and we recommend that Maryland take this opportunity to protect its citizens and ecosystems from the harmful effects of abundant plastic production and consumption.

CBF urges the Committee's FAVORABLE report on SB 642.

For more information, please contact Matt Stegman, Maryland Staff Attorney, at mstegman@cbf.org.

⁴ Pipkin, Whitney. "Picture of Chesapeake Microplastics Grows Clearer." *Bay Journal*, Bay Journal Media, 7 June 2021, https://www.bayjournal.com/news/pollution/picture-of-chesapeake-microplastics-grows-clearer/article_87bd3606-c3e1-11eb-bdc4-4f1a3864c6f9.html.

⁵ "Redemption Rates and Other Features of 10 U.S. State Deposit Programs." *Bottle Bill Resource Guide*, Container Recycling Institute, <https://www.bottlebill.org/images/Allstates/10-state%20Summary%208-5-22r.pdf>.

⁶ "Bottle Bills", Container Recycling Institute, <https://www.container-recycling.org/index.php/issues/bottle-bills>.

⁷ "Michigan." *Bottle Bill Resource Guide*, Container Recycling Institute, <https://www.bottlebill.org/index.php/current-and-proposed-laws/usa/michigan>.

⁸ "Oregon." *Bottle Bill Resource Guide*, Container Recycling Institute, <https://www.bottlebill.org/index.php/current-and-proposed-laws/usa/oregon>.