



**Committee: Environment and Transportation**

**Testimony on: HB 232 – “Maryland Beverage Container Recycling Refund and Litter Reduction Program”**

**Position: Support**

**Hearing Date: February 14, 2025**

The Maryland Chapter of the Sierra Club strongly supports HB 232. The primary objective of this bill is to reduce beverage container litter and plastic pollution in Maryland. It would create a beverage container deposit program with a 10- or 15-cent refundable deposit on metal, glass, and plastic beverage containers. The deposit would be refunded to the customer when the beverage container is returned for recycling. By attaching value to empty beverage containers, fewer are littered and those that are littered do not remain in the environment. These programs have been highly effective in the U.S. and around the world for reducing beverage container litter and diverting containers from disposal. They also produce a number of other important benefits, highlighted below.

### **The problem**

Beverage container litter in Maryland is pervasive and growing, and is a major source of plastic pollution, posing threats to the environment and human health. About 5.5 billion beverage containers are sold in Maryland every year, but only about a quarter are recycled.<sup>1</sup> Four billion containers annually are wasted – left in landfills, on roadsides, in waterways, or incinerated. More than half of these wasted containers are plastic. Beverage containers, most of them plastic, account most of the trash in trash traps on the Anacostia River watershed (Exhibit 1).<sup>2</sup>

Maryland’s beverage container litter problem is so severe that the Environmental Protection Agency declared the Anacostia watershed to be impaired with trash in 2010, and made the same determination in 2014 for the watershed surrounding Baltimore Harbor. Our state, home to the largest estuary in the country – the Chesapeake Bay – also has the dubious distinction of having two of the three water bodies in the country that are impaired for trash and regulated by the EPA under the Clean Water Act.

Plastic pollution from beverage containers poses a threat to wildlife and human health. The containers break into ever smaller pieces and are ingested by marine life, injuring and killing fish, seabirds, and marine mammals. Plastic particles have been found in the food we eat, the air we breathe, and in most human organs. Scientists estimate that we are ingesting up to a credit card’s worth of plastic weekly.<sup>3</sup> The impact of plastic ingestion on human health is of great concern.

### **The solution**

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.<sup>4</sup> Beverage container litter in those states was reduced by 70-84%.<sup>5</sup> A study of coastal litter in debris surveys in Australian and U.S. states with and without container deposit legislation found that

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<sup>1</sup> Container Recycling Institute (CRI). “2024 Beverage Market Data Analysis (BMDA)” for Maryland, based on 2021 data.

<sup>2</sup> Anacostia Watershed Society, Anacostia Riverkeeper.

<sup>3</sup> Dahlberg and University of Newcastle, Australia. 2019. *No Plastic in Nature: Assessing Plastic Ingestion from Nature to People*. Commissioned by the World Wildlife Fund.

<sup>4</sup> California, Connecticut, Hawaii, Iowa, Maine, Massachusetts, Michigan, New York, Oregon, Vermont.

<sup>5</sup> Reloop and CRI. 2021. *Fact Sheet: Deposit Return Systems Reduce Litter*. <https://www.reloopplatform.org/wp-content/uploads/2021/06/DRS-Litter-Fact-Sheet-Summary-14June2021.pdf>

the share of containers in states with container deposit legislation was 40% lower than in states without the laws.<sup>6</sup> A 2011 University of Maryland analysis of the impact of a potential beverage container deposit system in Maryland concluded “there is little evidence that any other program, in and of itself, is nearly as effective as deposit programs at reducing litter rates.”<sup>7</sup>

Refundable deposits both reduce litter and greatly increase recycling rates for beverage containers covered by these programs. Recycling rates for beverage containers in the ten deposit states in 2019 averaged 75%, ranging from 59% to 91%, compared with an estimated 23% in Maryland, with no deposit (Exhibit 2). Two states – Michigan and Oregon – have achieved recycling rates of 90% with a 10-cent deposit. Deposit beverage containers are 2-3 times more likely to be recycled than are containers not subject to a deposit (Exhibit 3). The ten deposit states represent 27% of the U.S. population but contribute 48% of U.S. beverage container recycling.<sup>8</sup> In states with beverage container deposit programs, deposits coexist with curbside collection to maximize recycling by capturing containers for beverages consumed at and away from home.

The **Maryland Beverage Container Recycling Refund and Litter Reduction Program** (HB 232, a.k.a, the “Maryland Bottle Bill”) would initiate a deposit as of January 1, 2028 and has benefitted from lessons learned over the past 50 years for successful beverage container deposit programs.

- It would maximize the reduction of beverage container litter and waste by including all beverages in metal, plastic, and glass beverage containers<sup>9</sup> and setting a deposit level that will motivate the public to change behavior: 10¢ for containers holding up to 24 fluid ounces and 15¢ for larger containers, up to 3 liters.
- It would require beverage producers to take responsibility for financing and implementing the program, with significant oversight from the Maryland Department of the Environment (MDE). The program would be implemented by a non-profit Beverage Container Stewardship Organization of all beverage producers selling or distributing redeemable beverage containers in the State. MDE’s responsibilities would include: appointing the Stewardship Organization; approving a Stewardship Plan and annual reports; and setting convenience standards and handling fees, among others. An Advisory Council of stakeholders would advise MDE on approval of the Stewardship Organization, its stewardship plan, annual reports, and program implementation and performance.
- It would create the conditions for future development and adoption of reusable/refillable beverage container systems. Ten percent of unclaimed deposits would fund a Recycling Refund Grant program to increase the reuse and recycling of beverage containers.
- The program would pay for itself, including MDE oversight. It would be funded from registration and Stewardship Organization fees paid by beverage producers, the revenue from sale of raw materials, unclaimed deposits, and penalties paid by producers. Registration fees calculated to completely cover the costs of MDE oversight in the next year would be kept in a special account in the State Recycling Trust Fund that can only be used for specific program purposes. MDE’s start-up costs will be reimbursed by producers to the General Fund at the start of the first year of operation.

Several features of the bill have been updated in response to feedback from stakeholders since it was first introduced in the 2023 General Assembly, including:

- Implementation by a single stewardship organization, rather than potentially multiple organizations, to facilitate MDE oversight
- Extension of the preparation time for program launch by one year (from 18 to 30 months)
- Ensuring that MDE’s expenditures leading up to the launch are fully covered, via reimbursements of any General Fund expenses. The program is completely self-financing.

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<sup>6</sup> Schuyler, Qamar, *et al.* 2018. “Economic incentives reduce plastic inputs to the ocean,” *Marine Policy* 96: 250-255. October.

<sup>7</sup> University of Maryland, Environmental Finance Center (EFC). 2011. “2011 Impact Analysis of a Beverage Container Deposit Program in Maryland.” December 15, p. 4.

<sup>8</sup> CRI. “2024 Beverage Market Data Analysis (BMDA)” for Maryland, based on 2021 data. *Op.Cit.*

<sup>9</sup> Medical beverages and infant formula are the only excluded beverages.

- Clarifying the expectations for retailers and hospitality establishments (sellers of beverages consumed on premises, such as restaurants, hotels, bars, sports venues)
- Exempting small retailers with less than 3,000 square feet of sales area from having to accept most containers for redemption and refund.
- Adding a per container materials handling fee for hospitality establishments for collecting and pre-sorting empty redeemed containers to be picked up by the program for recycling.
- Adding provisions for MDE to add more container types in the future, as materials change and technologies for redemption improve.
- Explicitly excluding cartons, pouches, and aseptic packaging from the program.
- Authorizing the grant program to finance an evaluation of the investments and policies required to increase the share of reusable containers sold in the state to 10% by 2035.

### **The program's benefits**

Reduction in beverage container litter and plastic pollution: The program would capture 3.6 billion additional beverage containers annually for recycling, including 2.3 billion plastic bottles, diverting at least 236,000 tons of plastic, aluminum, and glass containers from litter, landfills, and incinerators.

Quadrupling of Maryland's beverage container recycling rate: With a 10-cent deposit, the recycling rate for beverage containers, currently estimated at only about 25% of containers sold in the state, would more than triple, to 90% or more, within the first five years of operation..

Increase in high quality, food-grade recycled content for new food and beverage containers: When the targets are achieved, the program would generate an additional 13,328 tons of aluminum, 47,665 tons of PET plastic, 7.847 tons of HDPE plastic, and 159,397 tons of glass to be recycled into new containers annually. The program would contribute to creating a circular, bottle-to-bottle economy that maximizes the reduction in waste.

Reduction in greenhouse gas emissions: By reducing the production of new cans and bottles from virgin materials, the additional recycling from the bill would eliminate 231,707 metric tons of CO<sub>2</sub> equivalent, annually, the equivalent of removing the emissions of 50,000 cars from the road.

Savings for taxpayers and local governments: Beverage producers would finance the costs of collecting and processing the three-quarters of beverage containers currently being disposed or littered, as well as the collection and processing of some containers currently recycled. The program will divert materials from costly landfills and incinerators. These disposal costs are currently borne by taxpayers and local governments.<sup>10</sup>

Investments in refillable and reusable beverage container systems: Deposits are critical for development of refillable and reusable containers. The program will launch that transition, with a target of 10% of beverage containers sold in Maryland to be reusable and refillable by 2035.

Job creation: Increased recycling generated by a deposit program would create five times as many jobs in collection, sorting, and transporting as created by garbage collection, hauling, landfilling, or incineration.<sup>11</sup> The maintenance of reverse vending machines and investments in the reuse/refill systems will also create new opportunities.

### **Overwhelming public support for the Maryland Bottle Bill**

According to a recent statewide public opinion poll of registered voters conducted by Gonzales Research, 95% of respondents are concerned about the environmental and health impact of plastic beverage containers and pollution (Exhibit 4). More than 90% of respondents supported a beverage container redemption program in Maryland with a 10-cent refundable deposit that could be refunded at a convenient retailer or redemption site, financed and

<sup>10</sup> A review of more than 30 studies of the impact of beverage container deposit programs on costs to local governments worldwide found that in the context of the overall waste management system, local governments saved costs by adopting the deposit program. Reloop. 2021. *Fact Sheet: Deposit Return Systems Generate Cost Savings for Municipalities*. <https://www.reloopplatform.org/wp-content/uploads/2021/05/Fact-Sheet-Economic-Savings-for-Munis-8FEB2021.pdf>

<sup>11</sup> Reloop. 2021. *Fact Sheet: Deposit Return Systems Create Jobs*. <https://www.reloopplatform.org/wp-content/uploads/2021/01/DRS-Factsheet-Jobs-27Jan2021.pdf> .

implemented by beverage companies, not taxpayers. The level of support was at least 80% among all demographic groups, party affiliations, and geographic regions of the state (Baltimore City, Baltimore suburbs, Washington suburbs, and rural areas).<sup>12</sup>

### **Deposit programs complement extended producer responsibility for packaging laws**

Deposit programs are a type of producer responsibility program that is uniquely effective in reducing beverage container litter, and can be set up in relatively quickly. They complement other programs that aim to reduce packaging, redesign hard-to-recycle packaging for recyclability and reuse, improve recycling systems, and to make producers responsible for those outcomes. Maryland needs both of these programs. Producer responsibility for packaging bills have been approved in five states so far, but they take 5-8 years to go into effect<sup>13</sup> and there is still a lot to learn about what works. There's no need to wait to pass the Maryland Bottle Bill, because the elements for success are already well established, and this is the only bill of the two that will reduce beverage container litter and plastic pollution.

### **Conclusion**

Maryland is facing a plastic pollution crisis that is impacting our health and the environment. Beverage container deposit programs are highly effective in reducing beverage container litter. These programs are spreading worldwide, fueled by public concern about plastic pollution. The proposed program makes beverage producers responsible for fixing the problem and paying for it. And there is overwhelming public support for the program. **There's no excuse for kicking the can down the road. It's time to pass the Maryland Bottle Bill now.** Every year we wait, another 4 billion containers are left in the environment.

The Sierra Club respectfully requests a favorable report on HB 232.

Martha Ainsworth, Chair  
Chapter Zero Waste Team  
[Martha.Ainsworth@MDSierra.org](mailto:Martha.Ainsworth@MDSierra.org)

Josh Tulkin  
Chapter Director  
[Josh.Tulkin@MDSierra.org](mailto:Josh.Tulkin@MDSierra.org)

### Attachments:

Exhibit 1 - Beverage containers account for more than 70% of trash in Anacostia River trash traps.

Exhibit 2 - Recycling rates for covered beverage containers in deposit states vs. Maryland, 2019

Exhibit 3 - Recycling rates by material type in deposit and non-deposit states, 2019

Exhibit 4 - Public support for the Maryland Bottle Bill

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<sup>12</sup>Gonzales Polls, Inc. *Maryland Statewide Survey January 2025, Beverage Container Results* , conducted 12/27/2024 – 1/4/2025, with a sample of 811 registered voters. The margin of error is +/- 3.5%..

<https://www.sierraclub.org/sites/default/files/2025-01/gonzales-report-sierra-club-beverage-container-redemption-program-january-2025.pdf>.

<sup>13</sup> Eunomia. 2023. *The 50 States of Recycling: A State-by-State Assessment of U.S. Packaging Recycling Rates*. p.61.

[https://www.ball.com/getmedia/df01b0-3b52-4b90-a107-541ece7ee07c/50-STATES\\_2023-V14.pdf](https://www.ball.com/getmedia/df01b0-3b52-4b90-a107-541ece7ee07c/50-STATES_2023-V14.pdf) . Three of the five states that have passed producer responsibility for packaging laws (California, Maine, Oregon) already had longstanding bottle bills in operation.

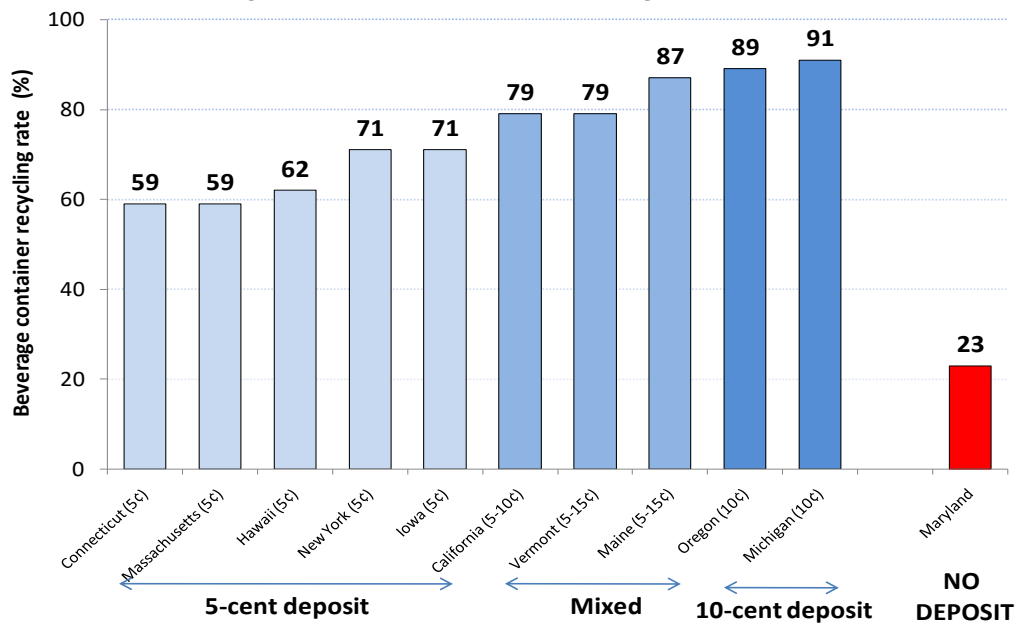
**Exhibit 1: Beverage containers account for more than 70% of trash in Anacostia River trash traps, by volume**



Source: Trash sort from the River Terrace Trash Trap, Anacostia River, September 28, 2024

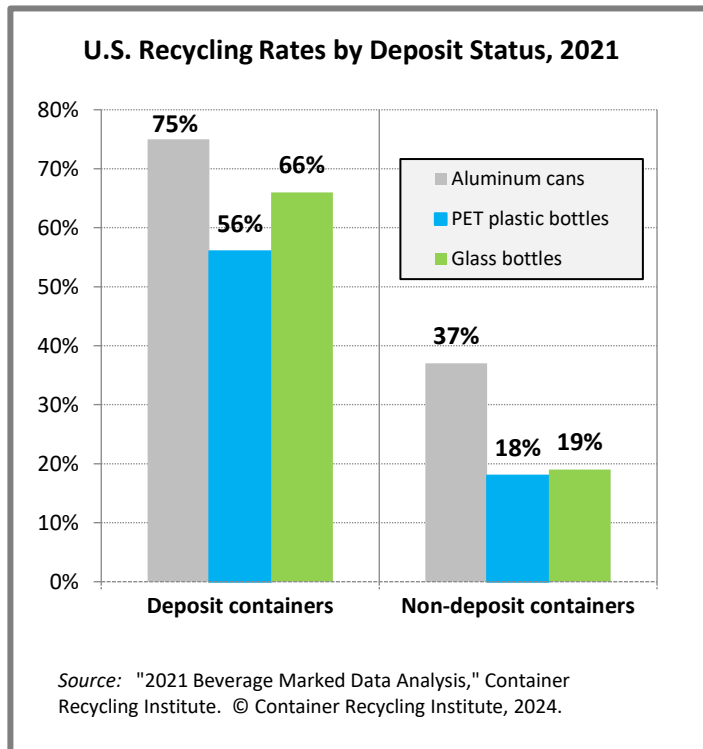
**Exhibit 2:**

**Recycling rates (%) for covered beverage containers in deposit states vs. Maryland, 2019**

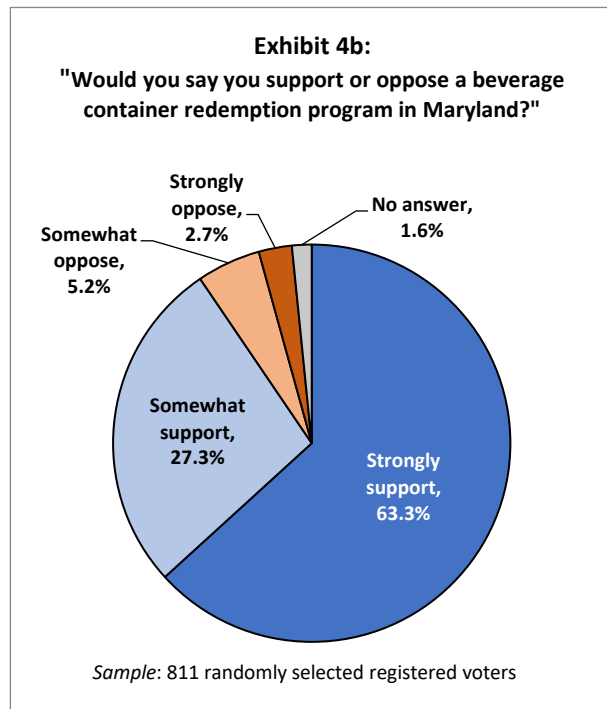
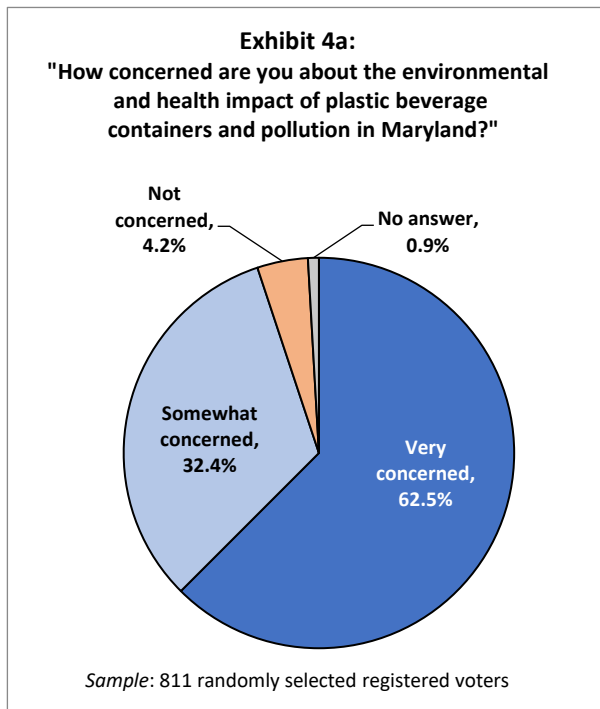


Source: Container Recycling Institute, 2022 Beverage Market Data Analysis

**Exhibit 3:**



**Exhibit 4: Public support for a Maryland Bottle Bill**



**Source:** Gonzales Polls, Inc. *Maryland Statewide Survey January 2025, Beverage Container Results*  
<https://www.sierraclub.org/sites/default/files/2025-01/gonzales-report-sierra-club-beverage-container-redemption-program-january-2025.pdf>