



# LitterLess

## Reducing Litter in Carroll County



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### Introduction

#### *Background*

At the annual meetings of the Environmental Advisory Council (EAC) and the Board of County Commissioners (“Board”) in January of 2021 and 2022, Board members expressed concern for the amount of roadside litter they were encountering.

In addition to aesthetic concerns, litter control is a component of the Property Management and Maintenance and the Public Education requirements of the County’s NPDES MS4 permit. Based on the draft permit released in March 2022, the new permit will require the County and its municipal co-permittees to prevent 11 tons of litter and debris from entering the storm sewer system. The permit will also continue to require public outreach.

#### *Purpose of Report*

At the Board’s request, the EAC prepared a litter resource guide in 2022 to raise awareness of the issues associated with litter, particularly along roadways. Detailed data and information are not available to identify the Carroll County-specific sources of litter and how much these sources generate. However, the EAC researched and identified potential options for the Board to consider and possible next steps if the Board would like to move forward with additional measures to reduce litter in Carroll County.





## Why Make the Effort to Reduce Litter in Carroll County

Carroll County-specific data is not available at this time, but the impacts of litter nationwide and in Maryland apply in Carroll County as well. Some of these impacts include the following, although the resources at the end of this report may provide more on the impacts of litter.

- **Harm to Human Health & Safety.**

- "Each year, hundreds of people in the US are killed as a result of hitting or attempting to avoid motorist-created road debris and litter."<sup>7</sup>
- Litter can be a breeding ground for germs and insects that can spread disease, either through the insects themselves, carried by wildlife that comes in contact, or through water pollution. People can be injured by broken glass, needles, and other sharp objects.



- **Harm to Wildlife.** Litter can harm or even kill wildlife in a number of ways, including, among other things, being mistaken for food and ingested; getting wrapped around their bodies or necks causing them to be trapped or suffocate; getting their heads stuck inside and suffocating; and getting hit by a car eating litter thrown out of a vehicle.

- **Water Pollution.**

- Due to the pollution to and contamination of streams, reservoirs, and the Chesapeake Bay caused by litter, *Carroll County's NPDES MS4 stormwater permit requires 11 tons of litter to be collected and cleaned up each year.* The County must clean up and reduce litter to comply with the permit.
- "Rain carries litter on the ground into local waterways and eventually to oceans where worldwide 9 billion tons of litter winds up every year. Litter doesn't just disappear. Items like aluminum cans can last 100 years, and plastic bottles just might be around forever."<sup>6</sup>

- **Other Environmental Pollution and Contamination.** Many forms of litter, such as cigarettes butts, contain toxic chemicals that can leach into the environment or be consumed by animals. Also, these cigarette butts are made of plastic, which does not biodegrade, posing further damage from litter. A large percentage of litter contains plastic and have the same lasting impact.

- **Effects on Tourism, Economy, and Property Values.** The aesthetics of litter and the perceived reasons for litter in an area can significantly impact economic decisions and values.

- "The presence of litter in a community decreases property values by a little over 7%, according to the National Association of Home Builders pricing model."<sup>4</sup>
- "36% of business development officials say that litter impacts a decision to locate to a community."<sup>4</sup>
- "93% of homeowners say a littered neighborhood would decrease their assessment of a home's value and influences their decision to purchase a property. And 40% estimated that litter would reduce a home's value by 10% to 24%."<sup>4</sup>
- "55% of realtors think that litter reduces property values by about 9%."<sup>4</sup>

- **High Clean-Up Costs.** "Cleaning up litter costs US taxpayers and businesses \$11.5 billion each year."<sup>4</sup>

- **Increased Chance of Fires.** Cigarette butts thrown from vehicles are often still lit. This can cause fires and spread quickly in dry conditions.

**National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer Systems (MS4) Permit Requirements.** In Carroll County, litter pollution is important for permit compliance and to ward off the establishment of a "trash" TMDL (total maximum daily load, the maximum pollutant a waterbody can assimilate and still meet water quality standards) by the U.S. EPA and Maryland Department of the Environment (MDE). Preventing litter and the resulting pollution helps to save the County and its municipalities from significant investments to achieve a new TMDL.





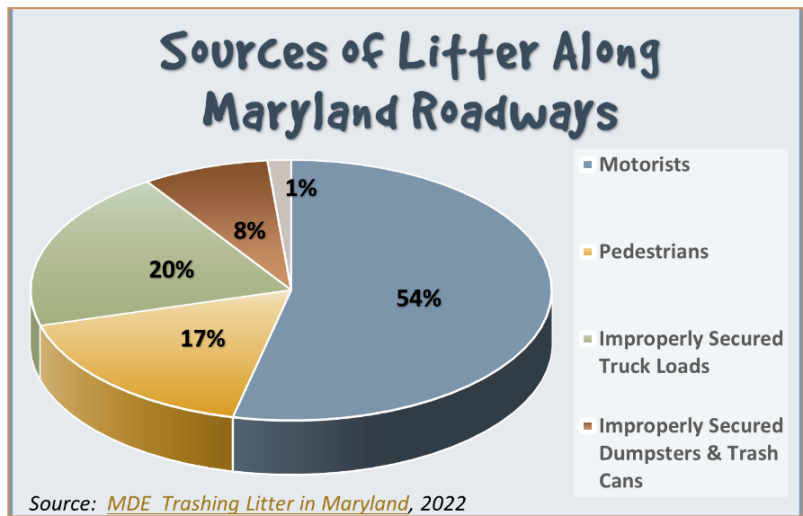
### General Sources and Types of Litter

Carroll County-specific data is not yet available identifying the types and sources of litter identified or collected in the county. Therefore, data for Maryland as a whole has to be generalized to Carroll County.

According to MDE’s “Trashing Litter in Maryland” [webpage...](#)

“People litter both deliberately and by accident, and it can come from many different places, like vehicles, pedestrians, or construction sites, among other sources. Below are key findings about sources of litter, from a variety of studies.

- Motorists and Pedestrians** – Motorists (52.2%) and pedestrians (17.5%) cause nearly 70% of litter along roads and highways. The improper securing of truck or cargo loads, including collection vehicles, represent 20.7% of roadway litter.

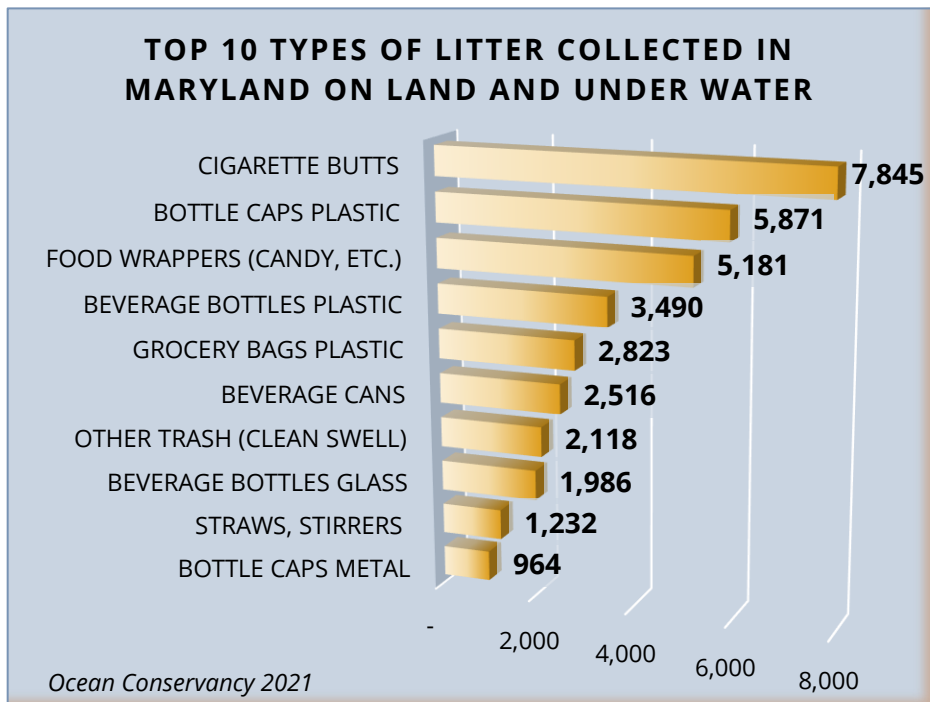


Vehicle debris and improperly secured containers, dumpsters, trash cans, or residential waste/recycling bins represent another 8.1% of litter. The Maryland Department of Transportation State Highway Administration (MDOT SHA) removes over 2 million pounds of litter along our state-maintained roads each year at a cost of more than \$8 million in taxpayers’ money. MDOT SHA litter removal forces are supplemented by inmate crews, contractors, and other programs but, without everyone pitching in to help, it’s still a challenge to keep Maryland clean.

- Construction and Demolition (C&D)** – C&D materials are generated during the building, renovating, and demolition of structures. A Sustainable Materials Management (SMM) approach identifies C&D materials to

be used in new building projects thus minimizing materials that would be disposed, and possibly littered, and minimizing the use of new construction materials.

- Loading Docks** – 85% of litter at loading docks is from loading and unloading goods. Shrink wrap, corrugated boxes, shipping documents, drink containers, fast food packaging and tobacco products and packaging





are typical loading dock trash items.

- **Truck Loads** – Unsecured or improperly secured loads can release loose materials. Air pressure increases as trucks drive faster and loose materials can be blown off truck beds. Roads to landfills are often easy to follow because of all the litter along the road.”<sup>5</sup>

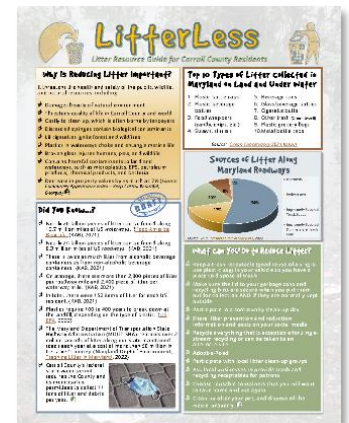
## Current Litter Control Measures in Place in Carroll County

Around the U.S., litter control measures tend to fall under one of four distinct categories, although many activities that involve partnering with local and State organizations could be considered public education and outreach as well.

1. Public Education & Outreach
2. Litter Laws & Requirements
3. Waste Management
4. Partnership with Local Organizations & State Agencies

### 1. *Public Education & Outreach*

- **“LitterLess” Litter Resource Guide for Carroll County Residents.** Per the Environmental Advisory Council’s [2022 Work Plan](#), the EAC prepared and completed a one-sheet outreach piece. This guide provides information on the importance of reducing litter, types and sources of litter, interesting facts, actions individuals can take, and more. The document is available on the EAC’s website under [Other EAC Publications & Topics](#).



- **Stream & Tree Planting Clean-Up Events.** Each year, Land & Resource Management staff organize and host several events aimed at cleaning up the trash and litter along the county’s streams. These events help to prevent the litter from being carried into or farther down the waterway, causing additional water pollution. The public can volunteer to participate, which also offers the opportunity for staff to raise awareness of the importance of these efforts and pollution prevention. Participants are rewarded with a very visual and tangible result for their efforts. These events also contribute to the County’s compliance with the NPDES MS4 permit requirements.

- **Recycling Office Outreach Efforts.** Promoting recycling, reuse, and reducing use is complementary to anti-littering efforts, as increasing the public’s desire to recycle should also make them more conscientious about littering. The [Carroll County Recycling Office](#) offers numerous public outreach materials on the website and participates in multiple events each year.

### 2. *Litter Laws & Requirements*

#### Carroll County Code

Carroll County does not have a specific litter control ordinance/code in place at this time.





Carroll County Code **§50.03 (F), General Waste Handling Requirements**, however, could be interpreted to include litter from haulers that have trucks that are not properly tarped or secured. Currently, no fines for violations are included in this section.

*(F) No person shall collect, transport, or deliver any solid waste in the county in such manner as to allow for littering, spillage, or the creation of a nuisance in any other manner. All loads shall be secured and covered, if necessary. No person shall collect, transport, or deliver recyclables if the recyclables are commingled with any other waste, except pursuant to the provisions of a license issued hereunder; and upon the passage of 90 days from the county's adoption of a resolution declaring that recycling is mandatory.*

Other County Code sections that address either litter or illegal dumping include the following:

- **§3-106, Abatement of Nuisances.** The County enforces/deals with litter through the abatement of nuisances under §3-106, Abatement of Nuisances, of the County Code, which is enforced by the Department of Public Works.
- **Open Space Maintenance Act.** Title 8 of the Code, Carroll County Open Space Maintenance Act, permits the County to clear and remove rubbish and litter from an "Open Space Maintenance District." However, none of these Districts have been created.

The Zoning Administration enforces the regulations surrounding junkyards, but those regulations are specific to each zoning district.

### Maryland Code

Maryland adopted a litter control law that defines and prohibits illegal dumping and discarding of trash. The penalties in the litter control laws range from a \$1,500 fine and possible 30 days in prison to a \$30,000 fine with possible 5 years in prison. The law does not include a penalty for littering under 100 pounds or 27 cubic feet.



### MD. Criminal Law Code Ann. § 10-110 (2021) Litter Control Law

The statute gives counties the authority to adopt an ordinance to prohibit littering. However, the County's General Assembly delegation would have to introduce a bill to amend the State law to specifically allow Carroll County to pass an anti-littering ordinance.

The State litter control law provides that it may be enforced by a county. If Carroll County were to enforce the State litter control law, the enforcement agency would be the Sheriff's Department.

### Carroll County & Municipal Co-Permittees' NPDES MS4 (Stormwater) Permit Requirements

The NPDES MS4 permit issued in December 2014 required litter to be addressed through watershed assessments as well as through public outreach. The tentative permit, released in March 2022, included requirements to "remove from or prevent from entering its MS4 **11** tons of litter and debris" annually. No trash TMDLs have been established for Carroll County waters yet, as has been established in some other Maryland counties. The permit requirements aim to prevent the need for a TMDL to be established.





### 3. Waste Management

Carroll County Department of Public Works (DPW) currently provides trash receptacles at County parks and Recreation & Parks facilities, the Carroll County Farm Museum, and some other County facilities. Containers for trash and recyclables are also provided at County-sponsored/hosted/affiliated events, such as the Maryland Wine Festival at the Farm Museum, 4-H/Agriculture Fair at the Ag Center, fire company fairs/carnivals, etc. The municipalities may also provide trash receptacles and/or bins for recycling at some locations within their boundaries.

### 4. Partnerships with Community, Local Organizations, & State Agencies

Several County agencies and grassroots local groups implement litter control programs, clean-up efforts, and outreach.

- ◆ **Carroll County Adopt-a-Road Program.** [carrollcountymd.gov/media/1910/clean-car.pdf](http://carrollcountymd.gov/media/1910/clean-car.pdf)  
The purpose of the Adopt-A-Road Program is to control and reduce litter on Carroll County's roads at a reduced cost to residents of Carroll County. People are given the opportunity to support the County's "A Cleaner Carroll" program by adopting a road or section of road, along which volunteers will pick up trash and debris to keep the roadway clean. Carroll County Bureau of Roads Operations provides organizations that adopt a road with a sign recognizing the group's efforts.
- ◆ **Carroll County Recreation & Parks Helping Hands.** [carrollcountymd.gov/government/directory/recreation-parks/general-information/volunteer-opportunities/helping-hands-keep-our-parks-green/](http://carrollcountymd.gov/government/directory/recreation-parks/general-information/volunteer-opportunities/helping-hands-keep-our-parks-green/)  
Carroll County Department of Recreation and Parks launched a campaign to encourage additional community involvement to help keep county parks clean. The Helping Hands Keep Parks Green initiative ("Helping Hands") is modeled after similar efforts, such as Adopt-A-Road, and is designed to promote local ownership and care of parks. Each year, the adoptions commitment begins in March and concludes on December 31. Each group schedules regular work dates at the beginning of their adoption period through the end of the calendar year. It is each contact person's responsibility to organize regular cleanups (typically monthly) and communicate those dates with Carroll County Recreation & Parks.
- ◆ **Friends of Liberty Reservoir.** [friendsoflibertyreservoir.org](http://friendsoflibertyreservoir.org)  
Friends of Liberty Reservoir (FoLR) strives to improve and maintain Liberty Reservoir as an invaluable resource. FoLR attempts to find new strategies for dealing with discarded trash and identifying and eradicating invasive species of plants.
- ◆ **Carroll County Trash Troopers.** [thetrashtroopers.com/index.html](http://thetrashtroopers.com/index.html)  
Trash Troopers is a citizen group whose main focus is to keep the land free of litter and debris. While initially formed in Eldersburg, the group now serves a variety of areas in and around Carroll and Howard Counties. Their mission is to create a lasting impact on the community that provides initiative, education, and awareness about the effects of litter and to erase the stigma of being environmentally conscious.





◆ **Maryland Department of Transportation Adopt-a-Highway.**

[roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=11](https://roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=11)

Small businesses and other MDOT SHA approved organizations may participate in this program. Recognition of tourist-related facilities is acceptable. Groups agree to adopt a one-mile stretch of highway to clean it at least four times a year. MDOT SHA provides the group with training, safety vests, trash bags, and tips on how to pick up trash and recyclables. They also place signs recognizing the organization at both ends of the adopted roadside.

- ◆ **Carroll County Environmental Symposium 2022.** Land & Resource Management staff are organizing an event to be held Saturday, November 12, 2022, from 9:00 AM to 12:00 PM in Room K-100 at Carroll Community College. The symposium will bring together community members and local environmental groups, providing an opportunity to learn what these groups do and volunteer to assist with events that provide environmental benefit in Carroll County. The event will provide a networking opportunity for LRM staff and these community groups to find opportunities to partner on clean-up events, tree planting and maintenance events, and other activities that may provide mutual benefit. To help generate interest and participation and increase the reach of the event, the symposium will feature a recycled art contest for high school students. The EAC will participate in this event.

◆ **MD Sustainable Materials Management Workgroup.**

<https://mde.maryland.gov/programs/LAND/RecyclingandOperationsprogram/Documents/EO-01.01.2017.13.pdf>

On June 27, 2017, Governor Hogan signed [Executive Order 01.01.2017.13, Resource Recovery Plan for Maryland](#). The Order:

- Adopts a first-ever sustainable materials management (SMM) policy for Maryland that aims to minimize the environmental impacts of the materials' use throughout the entire lifecycle.
- Emphasizes environmentally and economically sustainable methods to capture and reuse resources- including everything from metals and plastics to energy, nutrients, and soil.
- Initiates a stakeholder consultation process to establish ambitious but achievable goals and to ensure tracking of complete materials management data.
- Empowers new partnerships across State and local agencies, the agricultural, energy, and transportation sectors, environmental organizations, and recycling innovators.
- Tasks specific State agencies with critical initiatives, such as siting, technical, and permitting assistance and demonstration of innovative recycling technologies.

Carroll County Solid Waste Bureau staff participates in this workgroup.

## Carroll County Government OPTIONS for REDUCING LITTER in Carroll County

This report provides general information and options to help the Board determine whether to investigate further or to act on additional measures to reduce littering. These options are not recommendations by the EAC. Some actions can be implemented more easily and sooner than other options and are not necessarily contingent on decision regarding or implementation of other options, such as public outreach. Some actions may be exclusive of others, while some actions, such as public outreach, may be able to be implemented by themselves *or* along with other options.





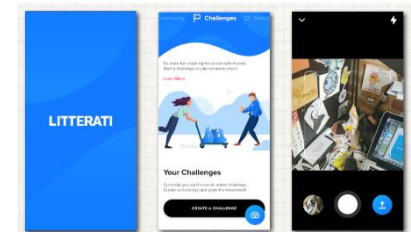
No matter what the benefits or opportunities, policy decisions often come with trade-offs and may have unintended consequences. Therefore, it is important to carefully consider the benefits and challenges to help inform policy decisions and minimize undesired trade-offs that may result. Many of the potential options listed below will need to be evaluated further to determine if the option would be feasible and/or cost effective. Options include some measures implemented in the past but discontinued or considered but not implemented. They are included in recognition that they have been considered in the past.

***It should be noted that, for all options, a decrease in litter is an assumed “pro” and, therefore, is not repeated as a pro under each option. Pros listed are in addition to a decrease in litter.***

### 1. Supporting Data

#### **Collect local data to understand the sources, types, and amounts of litter specifically found in Carroll County.**

One thing that appears clear is that data specific to Carroll County is lacking. Better data would help inform decisions to move forward with certain measures to reduce litter. In addition, the County’s tentative NPDES MS4 permit released in March 2022 included requirements to “remove from or prevent from entering its MS4 11 tons of litter and debris” annually. Efforts to collect better data will help to support collection, tracking, and reporting for permit compliance, as well as to understand the risks to human health and the environment. Better data would provide an opportunity to address litter more efficiently by prioritizing areas that experience higher amounts of litter. Existing apps, such as [Litterati](#) and/or [CleanSwell®](#), should be investigated for possible use by County agencies and in partnership with community members and organizations for collecting data.



Pros:


- ◆ Provides data for NPDES MS4 permit compliance
- ◆ Provide info to identify litter hotspots

Cons:

- ◆ Staff time and resources

Other Considerations:

- ◆ Use of existing [Litterati](#) and/or [CleanSwell®](#) apps eliminates need to develop a new system to track litter, as well as contributes to national data

 **Hold an informal litter summit to develop strategies to address the issue.** After better data is available on the types and sources of litter in the county, an analysis of the data will provide a better understanding of the prevalence of litter and costs to the County. With this information available, the County could host a summit with stakeholders, such as waste haulers, businesses, citizen groups, and County staff, to evaluate the information and develop holistic strategies to reduce litter beyond Carroll County Government actions.







Pros:

- ◆ Fosters community cooperation and responsibility

Cons:




- ◆ Staff time and resources

Other Considerations:


- ◆ —

## 2. Public Education & Outreach

LRM and DPW staff, and possibly the EAC, will continue to pursue public education and outreach activities as part of the NPDES MS4 permit compliance activities and efforts to reduce litter and increase the 3 “R”s (reduce, reuse, recycle) in general. These activities may include the following:

-  **Develop public outreach materials for residents.** The EAC recently developed a quick reference guide for litter resources. Additional materials could be developed to build or expand upon the information once additional opportunities are available to participate in the data collection process and/or volunteer for clean-up events.
-  **Develop public outreach materials for businesses.** Materials similar to residential outreach materials could be developed but geared more toward the commercial application. Information should include providing best practices that could be implemented, such as securing garbage bins and loads in vehicles, offering trash receptacles at places of business, reducing use of commonly littered items, and so on.
-  **Create an anti-littering public outreach campaign.** A public outreach campaign generally involves a collection of activities intended to achieve outreach goals. An outreach campaign often includes developing a logo and brand that are integrated to the design of the educational materials and also entail a wider reach of activities to get the word out, such as social media, press releases, events, and swag. A campaign often focuses efforts within a certain time period. This could include reaching out to schools and developing hands-on opportunities for learning.

## 3. Litter Laws & Requirements

-  **Pass local legislation to curb littering.** The Board of County Commissioners could adopt local legislation to prohibit littering, which would provide a legal basis and framework for prohibiting littering and providing an enforcement and disincentive mechanism. Local legislation could be modeled after those passed by county and city governments in the other parts of the country. The details of how the legislation’s provisions would be structured and how it would be enforced should be determined during the staff process to draft an ordinance for the Board’s review. Penalties should be included to strengthen enforcement and raise the level of importance to the public.

Pros:

- ◆ Additional tools for enforcement
- ◆ Raises public awareness of litter issues

Cons:

- ◆ Additional staff time and resources





Other Considerations:

- ◆ The County currently has the authority to enforce the State Litter Control law.
- ◆ Cameras could aid in enforcement. Would need to determine priority for location.



**Ban certain items that are commonly littered.** The Maryland General Assembly has already banned certain expanded polystyrene (EPS) foam products. The City of Westminster passed a ban on certain single-use plastic bags and plastic straws. These all represent products that not only are common types of litter but also made of materials that do not break down in the environment. The measures taken by the City of Westminster could be expanded upon through action by the Board of County Commissioners to ban single-use plastic bags and plastic straws countywide (outside municipalities).

Pros:

- ◆ Can't be littered if not available
- ◆ Promotes environmental sustainability
- ◆ Reduces waste stream to landfill

Cons:

- ◆ Impact to, pushback from certain local businesses

Other Considerations:

- ◆ Does an end user exist for banned materials? Certain materials have limited or non-existent recycling markets.



**Encourage the Maryland General Assembly (local delegation) to review and update Maryland's current litter control laws to ensure adequate prevention and enforcement provision.**

Pros:

- ◆ Builds on existing law, more efficient, less complicated
- ◆ Provides opportunity to add penalties/fines for smaller scale littering not considered illegal "dumping"
- ◆ County determines level of enforcement effort
- ◆ No local legislative action needed

Cons:

- ◆ Potential enforcement methods & responsibility included in legislation

Other Considerations:

- ◆ Would require cooperation with local law enforcement, as the agency that typically enforces these provisions, to raise the priority level for enforcement



**Increase enforcement provisions for County Code §50.03, General Waste Handling Requirements.**

- ◆ **Check vehicles entering landfill for proper tarping and securing of loads.** Staff at the landfill see every vehicle that enters the landfill. Based on the requirements of, they could perform a quick visual inspection as vehicles enter to determine if their loads are properly tarped and secured. If not, the vehicle driver could be provided with educational materials and encouraged to check their vehicles each time they haul a load or the materials sent to the waste hauling company, when applicable. AND/OR
- ◆ **Strengthen the "tarp and secure" provisions by adding fines for violations.** The only mechanism currently available to enforce this provision is to suspend the haulers solid waste





license. Adding fines for violations provides a less extreme measure to encourage tarping and securing to prevent litter, as well as possible injury to people.

Pros:

- ◆ Existing staff can incorporate to existing process
- ◆ Provides penalty for violation that is more commensurate with severity of violation (rather than suspend license)
- ◆ Addresses significant source of litter in Maryland

Cons:

- ◆ Pushback from haulers and residential customers
- ◆ Inadequate County staffing if program is expanded or rolled-out beyond the landfill
- ◆ Staff and resources/cost to train

Other Considerations:

- ◆ Applicability to which customer group (Licensed Haulers only vs all customers)



**Advocate for the General Assembly to adopt a bottle deposit law.** According to the Maryland Chapter of the Sierra Club, only a quarter of the 4 billion beverage containers purchased each year in Maryland are recycled. This means that more than 3 billion beverage containers are landfilled, incinerated, or littered.<sup>6</sup> A bottle deposit law requires a minimum, refundable deposit on various beverage containers, such as beer and soft drinks. This type of law could be expanded to include cans as well, such as soda and beer cans. The intent of these laws is to increase the rate of recycling or reuse. Generally, the deposit cost is paid by the retailer to the distributor at time of purchase. The retailer collects the deposit and a nominal handling fee from the customer, then recoups that cost as bottles are returned by customers. Unclaimed deposits remain the property of the distributor in many states, while in others, the deposits are used to fund environmental projects. [BottleBill.org](http://BottleBill.org) is a good resource for information about bottle deposit laws.

In Maryland, “bottle bills’ have been introduced in the past but have yet to pass.

Pros:

- ◆ Dramatic increase in recycling rate elsewhere
- ◆ Potential environmental fund for unclaimed deposits
- ◆ Increase in container reuse & reusable containers

Cons:

- ◆ Low history of successful bill passage
- ◆ Requires set up of system and facilities investment to collect returned bottles
- ◆ Staff time and resources if bottle bill requires County hands-on involvement

Other Considerations:

- ◆ Carroll County Delegation priorities/political will

#### 4. Waste Management



**Evaluate current location and frequency of trash receptacles and adjust accordingly.** A [2020 study](#) by Keep America Beautiful found the distance to the trash can at the time of disposal negatively impacts littering. Littering increases as the distance to the nearest trash receptacle increases. Keep America Beautiful observed people in public spaces and found that the average distance to the nearest trash receptacle was 29 feet. The litter rate decreased to from 20%, when the trash bin was 21 to 30 feet away, to 12%, if a trash bin was within 10 feet. The Walt Disney Company studied customers’ behavior at entertainment parks and shopping areas and found that commercial trash receptacles must be within 30 steps to result in proper disposal.<sup>3</sup>





Trash receptacles could be placed in new locations in the public spaces around the county or increased in existing locations, such as parks and municipalities, to lessen the distance between receptacles. Another option would be to shuffle around the existing trash receptacles to concentrate them in busy spots. Cameras and signage may help to reduce littering in identified “hotspots.”

Pros:

- ◆ More visible and convenient for use
- ◆ Greater deterrence to littering and illegal dumping (with camera and signage use)

Cons:

- ◆ Cost to purchase additional trash receptacles, cameras, and/or signage
- ◆ Staff time to collect & maintain additional locations
- ◆ Too many trash receptacles can be an eyesore, particularly if not emptied frequently enough
- ◆ Cost of landfill airspace consumed

Other Considerations:

- ◆ Does the cost for DPW and LRM staff to clean up litter or potentially address more significant permit requirements outweigh the cost and effort to purchase and empty additional trash receptacles?
- ◆ Coordination with and level of participation by municipalities



**Provide additional signage along roadways and in public spaces.** The purpose of “no littering” signs along roadways is to remind people not to litter. If a penalty for littering is available, it is often included on the sign to increase the effectiveness of the message. These signs could be added to existing signposts to reduce costs and labor.

Pros:

- ◆ More frequent and visible reminder not to litter

Cons:

- ◆ Cost of signs
- ◆ Staff time to post
- ◆ Cost of landfill airspace consumed

Other Considerations:

- ◆ Adding to existing road signs would reduce costs for new posts and installation



**Replace drinking water fountains in public spaces with water bottle filling stations.** This provides opportunity and easier access to encourage the use of reusable water bottles. Eliminating the fountain would reduce opportunity to spread germs. However, another option is to replace the fountain that offers both the water fountain and water bottle filling station combination, which wouldn’t provide the benefit of greater safety against spread of germs but would still provide the benefit of the ability to fill a reusable water bottle.

Pros:

- ◆ Decreased health concerns due to spread of illnesses
- ◆ Easier access to refill bottles could reduce use of disposable bottle

Cons:

- ◆ Cost for new equipment & installation





Other Considerations:

- ◆ COVID-19 and other infectious disease protocol compliance



**Place cigarette litter collection stands in key sensitive or higher-foot traffic areas.**

Since cigarette butts are the number one type of litter, and contain toxic chemicals and microplastics, cigarette butt collection boxes could be placed in “hot spots” where foot traffic is higher and in parks and other public environmental areas where the ecosystem may be more sensitive. These boxes can be affixed atop a freestanding pole or affixed to an existing pole or trash receptacle. Attaching them to existing poles or receptacles would reduce the cost of parts and installation.



<https://fredericksburg.today/2020/07/20/more-options-to-dispose-of-cigarette-litter-downtown/>



KeepBlountBeautiful.org

The cigarette butt collection bins can be disposed through the normal waste disposal process, or they can be recycled through national and/or local programs, such as [TerraCycle Waste Free Cigarette Recycling Program](#) or [Downtown Sykesville Connection](#).

Pros:

- ◆ Decreased health concerns due to spread of illnesses
- ◆ Decreased toxins and plastics leaching into the environment
- ◆ Easier access to dispose of cigarette butts

Cons:

- ◆ Cost for new equipment & installation
- ◆ Staff time & resources

Other Considerations:

- ◆ Grants may be available to purchase cigarette butt recycling bins, including grants available to KAB members.

**5. Partnership with Community, Local Organizations, & State Agencies**



**Become a Keep America Beautiful affiliate.** Keep America Beautiful (KAB) provides a replicable framework for community education and hands-on stewardship that seeks to end littering, improve recycling, and beautify America’s communities. Using the fundamentals of the field-tested, time-proven Keep America Beautiful Behavior Change System, [affiliates](#) are able to reach deep into communities to effect meaningful, positive, and lasting change by delivering innovative, locally focused programs that address their community’s needs. The Town of Sykesville established Keep Sykesville Beautiful as an official KAB affiliate.

Pros:

- ◆ Access to tools, resources, and programs
- ◆ Availability of Keep America Beautiful® Litter Index and Community Appearance Index to conduct a visual assessment
- ◆ Strength of national credibility
- ◆ Community impact [grants](#) available
- ◆ Training opportunities
- ◆ Award of grant(s) could balance cost of certification fee

Cons:

- ◆ \$4,500 initial certification [fee](#)
- ◆ \$400 annual [fee](#)
- ◆ Staff time and resources
- ◆ Concerns of membership in lobbyist organization not specifically representing interests of the County





Other Considerations:

- ◆ Impact or benefit of becoming an affiliate may be greater for smaller jurisdictions
- ◆ As of summer 2021, Keep Sykesville Beautiful has received \$10,000 in grants from KAB to fight cigarette butt littering and add trash receptacles in Sykesville parks – one example of potential grants that may be available.



**Establish a partnership with Keep Maryland Beautiful for outreach and events.** [Keep Maryland Beautiful](#) operates via a State-agency steering committee led by Maryland Department of Housing and Community Development (DHCD). It works in three key areas to expand funding opportunities and technical assistance to local governments, nonprofits, and community groups: Clean Up & Green Up Maryland; Workforce Development; and Outreach, Education, and Technical Assistance. This option can be explored to determine if the resources available as an affiliate of KAB would be available through partnering with or requesting technical assistance from the Maryland affiliate. Different grants are listed for the Maryland affiliate than are listed on KAB’s website.

Pros:

- ◆ If same resources available, could save cost of certification and annual fees

Cons:

- ◆ Less control over and access to KAB resources

Other Considerations:

- ◆ —



**Re-establish coupons for a free visit to the landfill for county residents as an incentive to properly dispose of trash.** In the past, two coupons for a free visit to the landfill were sent out with the property tax bills each year. Each coupon covered up to 200 pounds of general household waste disposal. The program was discontinued in 2020 due to lack of utilization by coupon holders (less than 15% of coupons were redeemed annually) and potential cost to the Enterprise Fund should the program be more greatly utilized. In addition, significant landfill airspace would be consumed without revenue if most or all coupons were redeemed for full 200-pound allotment. Little evidence exists the coupon program alleviated typical litter generation.

Pros:

- ◆ Public relations

Cons:

- ◆ Loss of revenue (>\$200/year at historic coupon redemption rate)
- ◆ Increased airspace consumption and reduced landfill life

Other Considerations:

- ◆ Free disposal coupon programs have been canceled by most jurisdictions outside of Carroll County.
- ◆ Coupon program had no offsetting revenue source.
- ◆ Minimal empirical evidence to support coupons reduced illegal dumping. Cases of illegal dumping did not appear to increase when coupon program was discontinued.





**Offer service-learning hours for middle and high school students who participate in clean-up efforts.** While service-learning hours may already be available through staff-hosted events, the offer of service-learning hours could be more-consistently advertised when soliciting volunteers for the event as an incentive for participation.

Pros:

- ◆ Minimal cost to County
- ◆ More boots on the ground increases litter collection

Cons:

- ◆ Training time
- ◆ Staffing to coordinate events

Other Considerations:

- ◆ Number of interested students

**Partner with local groups on joint efforts to collect litter, record data, and encourage volunteer participation.** The mission of many local groups often coincides with the County's objectives for environmental stewardship and compliance with permits and State requirements. County staff, particularly LRM and DPW, could pursue joint activities and solicit volunteers that help achieve the County's objectives as well as the mission of individual groups. Through networking and joint activities, local groups could assist the County in efforts to collect litter and record data on that litter, which would provide a more holistic picture for supporting data.

Pros:

- ◆ Minimal cost to County to implement
- ◆ Potential cost savings to County for cleanup and data collection
- ◆ Additional resources for data collection
- ◆ Good will and public relations
- ◆ "Credit" toward compliance with NPDES MS4 permit re: litter collected and public outreach

Cons:

- ◆ Staffing to coordinate events and data collection

Other Considerations:

- ◆ Environmental Symposium scheduled for Saturday, November 12, 2022, from 9 AM to noon at Carroll Community College, Room K-100. Purpose is to showcase Carroll County community groups focused on environmental stewardship. Participants encouraged to meet and talk with citizen groups who care about our County and the environment, find out more about what participants and these groups can do to promote and implement practices to sustain the county's natural resources.

**Next Steps**

Prior to acting on any of the options that may result in more significant effort or cost than others, it is helpful to determine the desired outcomes and the priority for achieving those outcomes. The goals and priorities identified will weigh into the consideration of options that need additional cost-benefit analysis.





## 1. Identify Goal & Set Priorities

Clearly identify the goal of reducing litter and priorities for outcomes. Determine if the reason for the reduction would be due to NPDES MS4 permit compliance, environmental impact, water quality impact, or a combination thereof. This may help determine or prioritize measures to move forward.

## 2. Cost-Benefit Analysis

More thoroughly research the costs to the County of implementing regulatory and/or operational measures. A cost-benefit analysis should include, but is not limited to, the potential need for additional staff resources, etc. The cost-benefit analysis for each option to be considered should be performed by the agency that would implement or take the lead on that option, in coordination with the Budget office and any other agencies involved.

## Sources/Resources

<sup>1</sup> **Conserve Energy Future.** “Causes, Problems and Possible Solutions to Stop Littering.” (Webpage: <https://www.conserve-energy-future.com/causes-problems-solutions-littering.php>, accessed 8 August 2022)

### **Keep America Beautiful.**

<sup>2</sup> *A Guide to Reducing and Managing Litter.* Prepared in partnership with the Foodservice Packaging Institute, Keep America Beautiful, Inc. and the National Restaurant Association, 2015. (Webpage: [https://kab.org/wp-content/uploads/2019/08/BeingGoodNeighbor\\_AGuidetoReducingandManagingLitter\\_0-1.pdf](https://kab.org/wp-content/uploads/2019/08/BeingGoodNeighbor_AGuidetoReducingandManagingLitter_0-1.pdf), accessed 8 August 2022.)

<sup>3</sup> *Keep America Beautiful 2020 National Litter Study.* 2020. (Webpage: <https://kab.org/litter-study>, accessed 8 August 2022.)

<sup>4</sup> *Key Findings: The Costs of Americans Littering.* January 2010. (Webpage: [https://kab.org/wp-content/uploads/2019/11/LitterinAmerica\\_FactSheet\\_CostsofLittering.pdf](https://kab.org/wp-content/uploads/2019/11/LitterinAmerica_FactSheet_CostsofLittering.pdf), accessed 8 August 2022.)

<sup>5</sup> **Maryland Department of the Environment (MDE).** “Trashing Litter in Maryland.” (Webpage: <https://mde.maryland.gov/programs/LAND/RecyclingandOperationsprogram/Pages/Trashing-Litter-in-Maryland.aspx>, accessed 8 Aug 2022).

<sup>6</sup> **Sierra Club, Maryland Chapter.** “Increase Recycling and Reduce Litter: The Bottle Bill Works.” (Webpage document: <https://www.sierraclub.org/sites/www.sierraclub.org/files/sce/maryland-chapter/2015LegisFactSheets/Bottle%20Bill%20fact%20sheet%201-22-16.pdf>, accessed 16 Sep 2022).

**U.S. EPA.** Webpage: “What You Can Do About Trash Pollution.” (<https://www.epa.gov/trash-free-waters/what-you-can-do-about-trash-pollution>, accessed 8 August 2022.)

<sup>7</sup> **WBMA ABC 33 40 News.** *Reasons to stop littering immediately.* June 10, 2019. (Webpage: <https://abc3340.com/sponsored/spotlight/reasons-to-stop-littering-immediately>, accessed 8 Aug 2022).

