Anne Arundel County, MD

Litter and Floatables Comprehensive Plan

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Anne Arundel County WATERSHED Protection & Restoration PROGRAM

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Introduction

Litter can be loosely defined as any materials improperly discarded by the public, and may also include materials spilt during business and/or waste management operations. The state of Maryland defines litter as “all rubbish, waste matter, refuse, garbage, trash, debris, dead animals, or other discarded materials of every kind and description.” When exposed to storm water or any runoff, litter can become a pollutant in the storm drain system, our water ways, and eventually the Chesapeake Bay. The US EPA defines floatables as “any foreign matter which may float or remain suspended in the water column” including plastics (bottles, food packaging, and other items), polystyrene (styrofoam) items, plastic bags, aluminum cans, foil bags, and paper products. Litter and floatables are the most visually impactful pollutants. Floatables present a clear danger to wildlife, as both aquatic and terrestrial organisms can ingest or become entangled in debris. Litter and floatables also constitute potential flooding hazards by clogging storm drain inlets. Small and large floatables can hinder the growth of aquatic vegetation, decreasing spawning areas and habitats for fish and other organisms.

Prevention and removal of litter and floatables in the County’s waterways will have significant positive effects on water quality and aquatic life and habitat. Eliminating litter and floatables from our waterways will make recreational activities more enjoyable and make our rivers and streams even more aesthetically pleasing, leading to an increased public interest in our waterways.

II. Existing Conditions

Litter is a pollutant that does not occur naturally. Whether intentional or accidental, litter exists solely as a result of human behavior. Population trends, demographics, infrastructure, and land use are all important factors that may influence the extent of a litter problem within a municipality, and which must be considered when implementing litter reduction practices.

Anne Arundel County has a total area of 379,353 acres (593 square miles). Approximately 113,916 acres - 30 percent of the total area of the County - is water. The County is bordered to the east by the Chesapeake Bay and numerous tidal tributaries; to the north by the Patapsco River, Baltimore County, and Baltimore City; to the west by the Patuxent River and Prince Georges and Howard Counties; and to the south by Calvert County. The County is divided into 12 primary watersheds, which are further divided into numerous smaller subwatersheds (Figure 1). Portions of the Patapsco Tidal watershed are listed by MDE as “impaired” for trash.

Figure 1. Primary watersheds and non-tidal stream reaches in Anne Arundel County.

Streams and Waterways

Anne Arundel County has numerous creeks, streams, and rivers (Figure 1). There are approximately 1,324 miles of streams within Anne Arundel County, all of which directly or indirectly lead to the Chesapeake Bay. The County has 533 miles of shoreline and most of its boundaries are defined by water, principally by the Chesapeake Bay to the east, the Patuxent River to the west, and the Patapsco River to the north.

Land Use

Land use is strongly correlated with the amount of litter that enters the storm drain system. Multiple studies have shown that urban run-off is the primary source of litter (Los Angeles Regional Water Quality Control Board, 2007). Studies have also shown that commercial land-use areas generate more gross pollutants than residential or light industrial land use areas despite the presence of trash cans, recycling bins and, more intensive street sweeping efforts in commercial areas (Walker and Wong, 1999; Allison and Chiew, 1995).

The 2004 County land use data, reported in the 2009 General Development Plan, recommends that over half (52 percent) of the County's land use remain in rural and low density residential uses. County land use/land cover is shown in Figure 2. Low density residential land use accounts for 21 percent of total land area, medium density residential land use accounts for 13 percent of total land area, and high density residential land uses account for three (3) percent of total land area. Agriculture accounts for approximately 12 percent of land use area, while commercial and industrial land uses account for four (4) and two (2) percent of total land area respectively. Government, institutional, and transportation land use areas account for another six (6) percent.

There are urban concentrations of residential and commercial property in the northern portion of the County (North County) and Annapolis. Suburban character is prevalent in its eastern and western portions (West County). The southern portion (South County) is mostly rural and undeveloped, as are some areas within the central portion of the County. However, both the southern and central portions include several shoreline communities where development can be characterized as small villages.

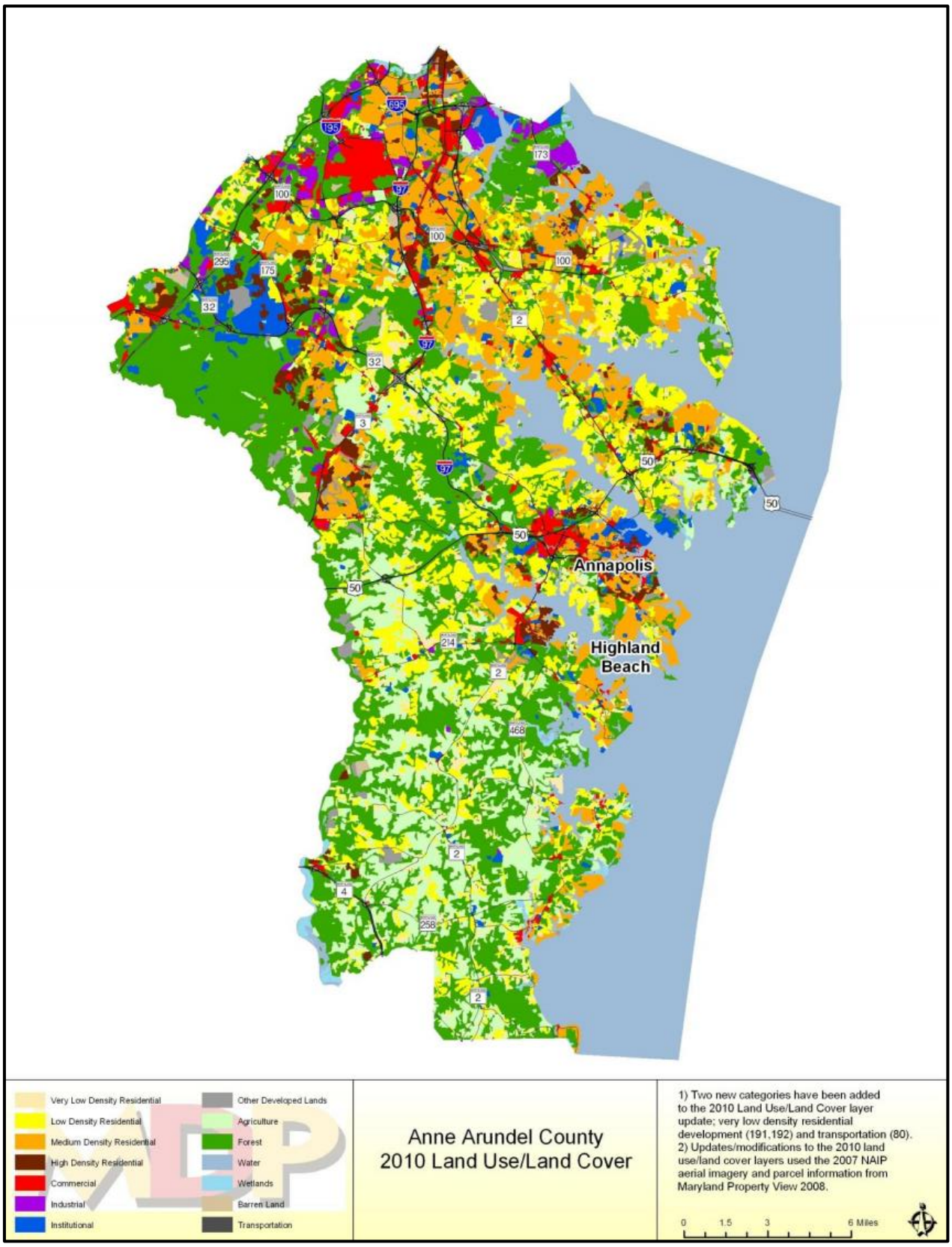

Figure 2. Land use/land cover in Anne Arundel County.

Demographics

Based on the 2010 US Census, Anne Arundel County has an estimated population of 537,656, with an over-18 population of 412,595. There are a reported 212,562 total housing units in the County, of which 199,378 (94%) are occupied and 13,184 (6%) are vacant. The number of owner occupied units is 148,006 (74% of all occupied units), while the number renter occupied units is 51,372 (26% of all occupied units) (Maryland Department of Planning, 2012). Vacant properties are often "hotspots" for litter and illegal dumping activity, and some studies have shown that neighborhoods with higher rates of home ownership are likely to produce less litter than neighborhoods with high rates of renters (Baltimore City DPW, 2016; O'Brien, 2012.)

Transport Infrastructure

There are 6,715 county-owned public roads – approximately 1,825 centerline lane miles – in Anne Arundel County. The Anne Arundel County Bureau of Highways (BOH) is responsible for all maintenance activities associated with county-owned roads and their respective right-of-ways, including street sweeping and removal of litter, trash, storm debris. There are approximately 1,213 miles of state-owned roads and highways in Anne Arundel County maintained by Maryland Department of Transportation (MDOT) State Highway Administration (SHA). Figures 3 and 4 show the network of County and State-owned roads in highways in Anne Arundel County.

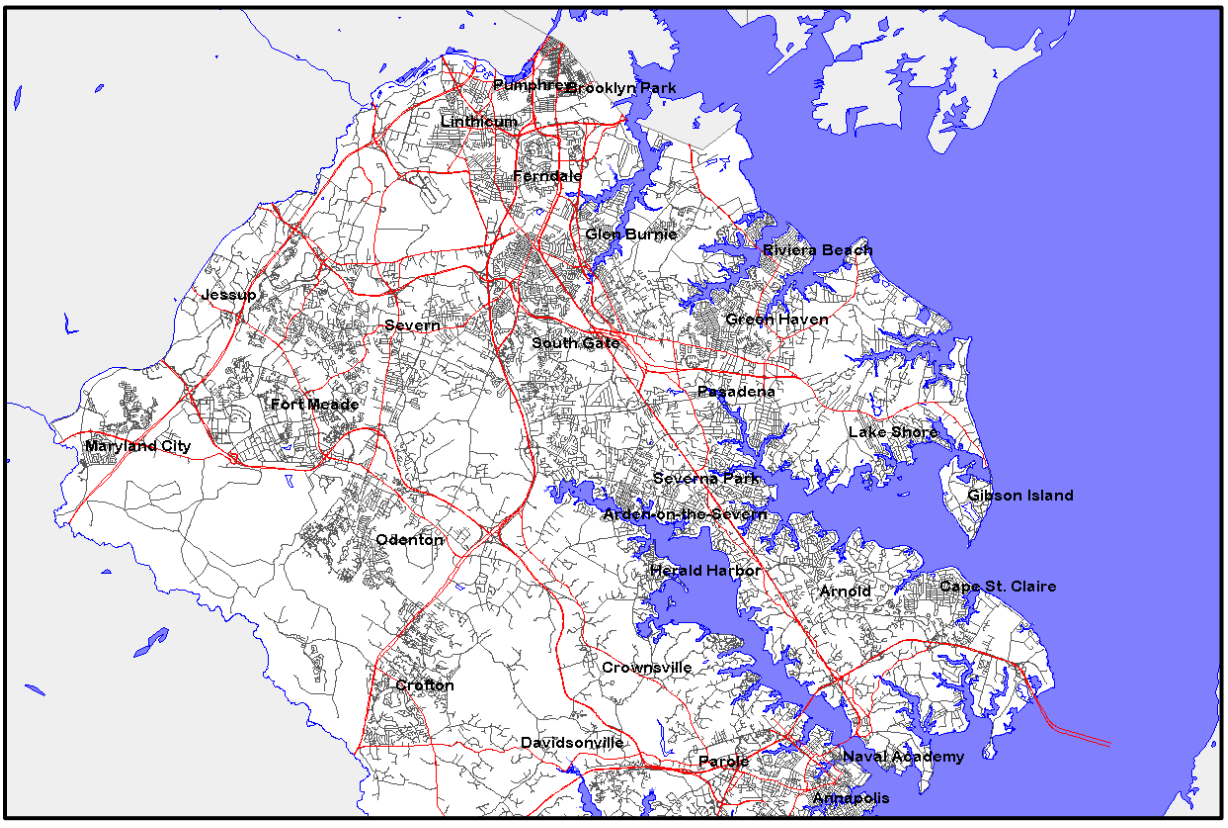

Figure 3. County and state-owned roads (black) and highways (red) in northern Anne Arundel County.

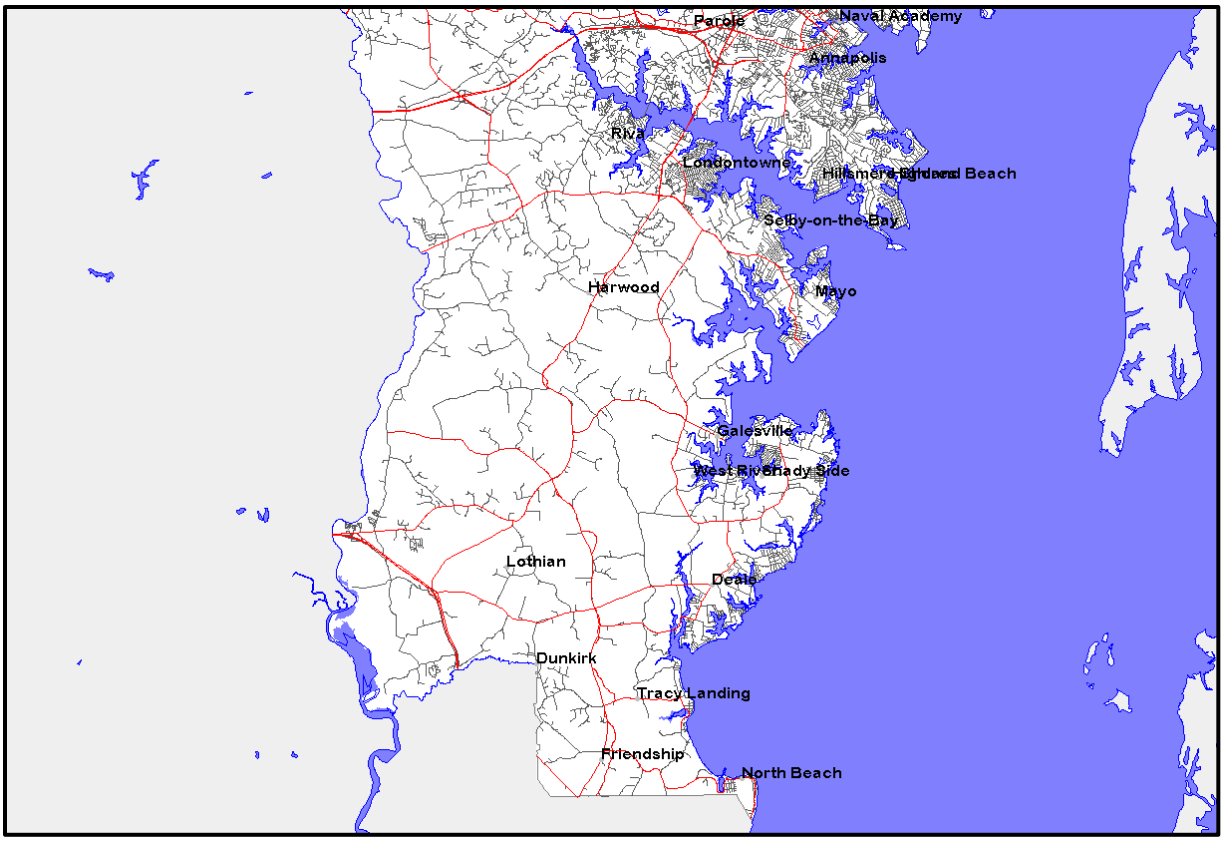

Figure 4. County and state owned roads (black) and highways (red) in southern Anne Arundel County.

Drainage Infrastructure

Anne Arundel County's storm drain system has over 900 miles of drainage pipes. Storm water pipes empty into waterways such as creeks and streams at storm drain outfalls, and eventually drain into the Chesapeake Bay. As of June 2018, there were 6,161 closed storm drain outfalls and 2,267 major outfalls in the County. Litter that finds its way into a storm drain will inevitably end up in a water body. Some storm drain pipes serve as conduits for segments of historic streams. The network of storm drain pipes in northern and southern Anne Arundel County is shown in Figures 5 and 6, respectively.

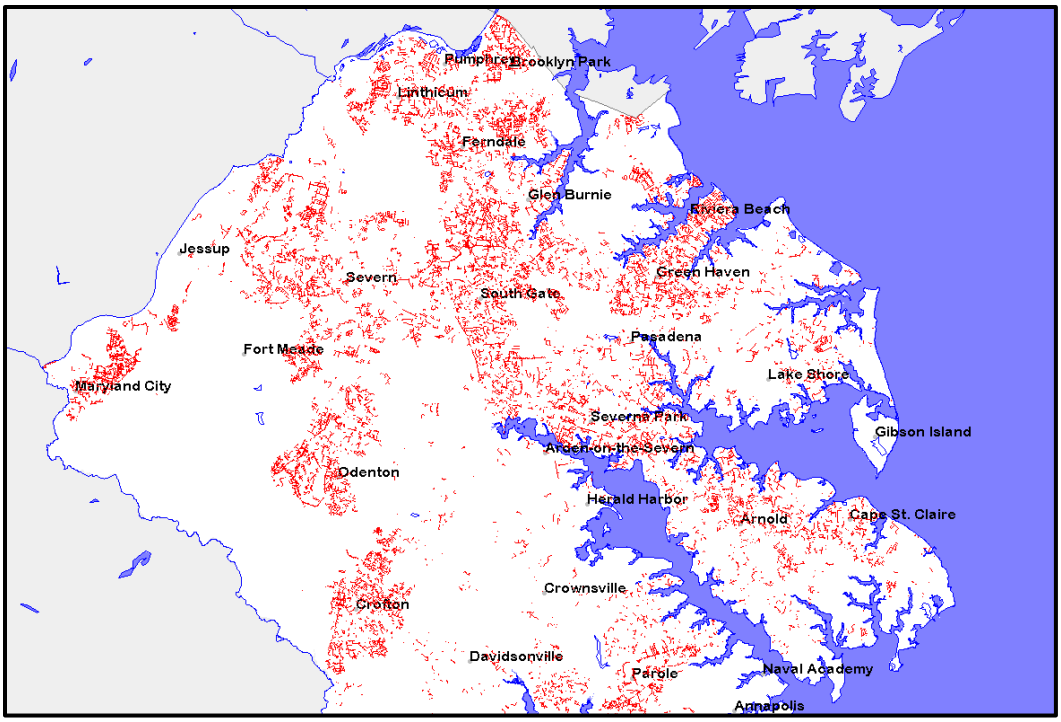

Figure 5. Storm drain pipes (red) in northern Anne Arundel County.

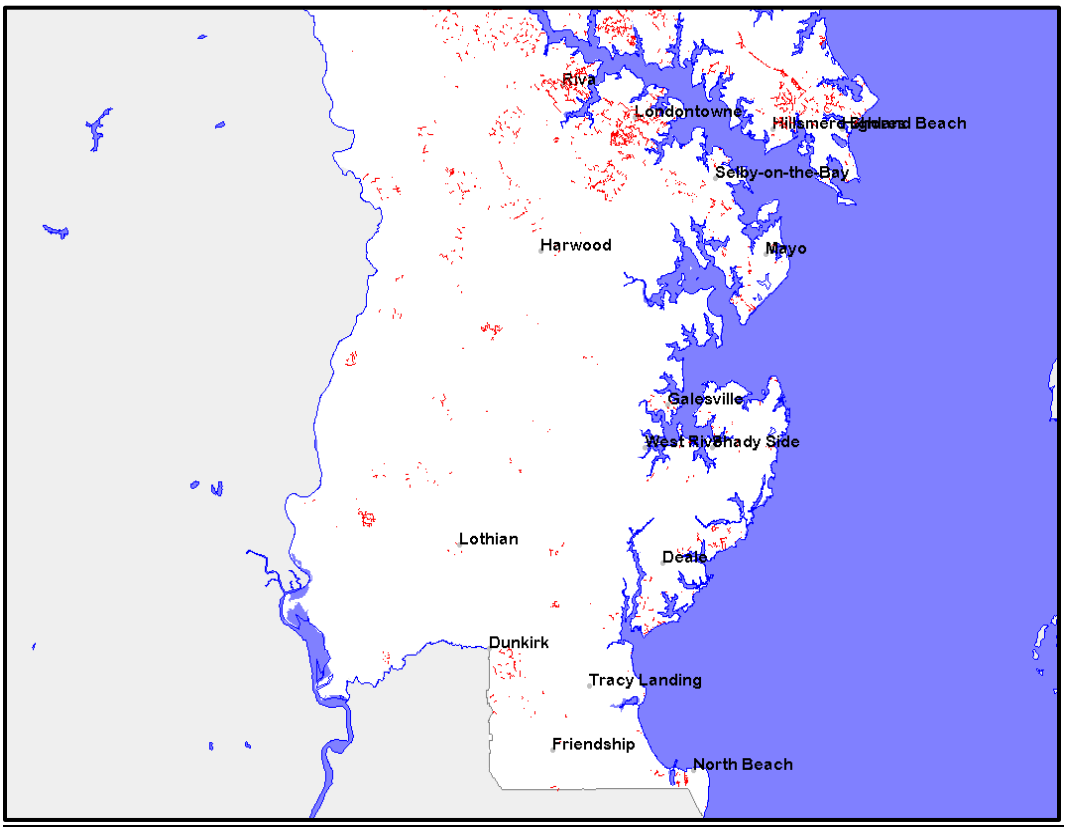

Figure 6. Storm drain pipes (red) in southern Anne Arundel County.

III. Current Programs and Practices

The programs and practices currently employed by Anne Arundel County to reduce litter and floatables can be divided into two categories: 1) Pollution Prevention and Source Elimination and 2) Cleanup, Removal, and Collection (Table 1). Pollution prevention and source elimination programs can be described as "proactive" solutions, attempting to stop litter before it starts. On the other hand, cleanup, removal, and collection programs are "reactive" solutions, focused on correcting the problem after it has already occurred.

Table 1. Current litter reduction programs and practices employed by Anne Arundel County.

Pollution Prevention/Source Elimination	Cleanup/Removal/Collection
Education & Outreach	Roadside Cleanup
Recycling Programs	Alley Cleanups
Hazardous Waste Disposal	Community Cleanups
Storm Drain Stenciling	Stream Cleanups
Law Enforcement	Street Sweeping
Reporting	Inlet Cleaning and Storm Drain Vacuuming

Education & Outreach

The County's Bureau of Waste Management Services (WMS) operates a robust public education and outreach program targeted to waste reduction, reuse, and recycling, as well as household hazardous waste disposal. The success of WMS' Recycling and Waste Reduction Division's recycling program is achieved through effective, consistent communication and education. Sustaining program promotion and customer education are key to keeping customers informed while also motivating them to continue to participate as the recycling programs changes and evolves. Lack of a comprehensive communication strategy can result in higher contamination levels in collected recyclables, less recycling by new residents, and a loss of interest from existing customers who may become frustrated with changing program guidelines or apathetic towards the goal.

Therefore, the Recycling Division has made communication and education its primary focus, with the goal of catalyzing a steady incremental growth in the residential recycling rate. WMS recognizes the importance of keeping citizens educated about its programs, particularly with regards to its changes and advancements, and to encourage residents to "Recycle More Often" and to "Recycle More, Recycle Right." Recycling Program Specialists provide public outreach at attend schools, fairs, festivals, HOA meetings, community outreach events, and more. WMS also provides technical assistance with recycling at larger-scale events such as the Anne Arundel County Fair, Annapolis Greek Festival, and more. A total of 24 fairs and festivals were attended in FY18, and recycling assistance was provided to 16 events hosted in the County. Anne Arundel County promotes its recycling program to the public through several methods such as:

• Providing technical assistances, and services when possible, to small businesses and multifamily units;

• Improving communication with customers by maximizing the use of various media including direct mail, broadcast media, social media, newspaper advertisements, and its websites (http://www.recyclemoreoften.com/ and http://www.aacounty.org/departments/public-works/waste-management/)

• Attending civic and community meetings and events, workshops, displays, and special promotions;

• Specially-designed programs and contests for school aged children; and

• Educating customers on new programs, changes to existing programs, source reduction, schedule updates, and holiday collections.

Education programs are offered to students, faculty, parents, and more throughout Anne Arundel County's public and private schools, as well as day care and home schooling groups. Technical assistance with recycling is also provided upon request, as well as assistance with obtaining Green School Certification through the Maryland Association for Environmental and Outdoor Education (MAEOE) program. In FY18, Recycling Program Specialists provided 35 elementary school programs, 18 middle school programs, and 13 summer camps programs, as well as providing 22 tours of our County Landfill. The Recycling Division also administers three contests annually for County students, including a poster contest for elementary schools, a sculpture contest for middle schools, and a fashion contest for high school students. This helps generate even more excitement about the importance of recycling. The County utilizes a multi-media outreach approach. In addition to attendance and participation in multiple community events, recycling-themed mailers and brochures are distributed and advertisements supporting recycling can now be heard on music streaming services. Additional information on the County's recycling and household hazardous waste programs may be found at the following websites:

• http://www.recyclemoreoften.com/

• http://www.aacounty.org/services-and-programs/household-hazardous-waste-drop-off-days

• https://www.facebook.com/annearundelrecycling/

This ongoing and extensive outreach effort has proven to be very successful. Since the inception of the education and outreach program in 2008, the Countywide recycling rate has increased from 31% to 43%.

In an effort to bring awareness to litter issues throughout Anne Arundel County, WPRP and the Recycling and Waste Reduction Division have proposed to engage Anne Arundel County public high schools students to participate in the "Anne Arundel County Litterati Challenge" utilizing the Litterati application ("app") for smartphone or tablets[1]. The Litterati app is used by over 20,000 people worldwide and as of October 2018 has resulted in nearly 2 million pieces of litter being picked up around the globe.

[1] https://www.litterati.org/

Participating students will be able to use the app to track the time and place of litter they pick up, upload photographs, and tag the type of litter collected using hashtags which are already hardcoded into the Litterati app. Participants can then attribute the total number of items collected to their high school using a hashtag. Items collected must be disposed of properly (i.e. trash, recycling, compost). The program is still in its developmental phase, but it is anticipated that the program will launch in fall 2019, with hopes that the program may be incorporated into the classroom curriculum in the future. The Litterati Challenge will mesh technology, school pride, and social and environmental awareness to bring attention to the litter issue that is pervasive throughout Anne Arundel County. In addition to engaging students in litter removal, the app may prove to be helpful in identifying litter "hotspots" due to its geotagging capability.

Recycling

Residential Curbside Collection

WMS offers curbside collection of recyclables one day a week for approximately 162,000 residential households. Residents are provided, free of charge, one 65-gallon lidded recycling cart per household for single-stream recyclables. The lidded carts are more effective at preventing recyclables from being blown out of the receptacle. Lidded containers are also more effective with rodent and pest control than the lidless variety. The County does provide previously used 18-gallon or 32-gallon lidless recycling containers via request, when available. In 2017, a pilot program was launched which allowed residents to receive a 95-gallon lidded cart if a second cart or larger container was requested. In 2018, efforts continued to promote the exclusion of plastic bags, wrap, and film from the recycling stream. All customers (residential, CORP, and Small Business) were encouraged to place their recyclables loose in the container, not bagged.

In 2017, yard waste was prohibited from being placed in plastic bags for curbside pickup, further reducing the number of plastic bags entering the waste stream, resulting in a cleaner finished compost product.

Small Business Recycling Program

The WMS Recycling Division offers a Small Business Recycling Program for offices looking to recycle. This operation is an extension of the residential program with contractors servicing the businesses on the roster with weekly pick-up of containers up to 96 gallons. In FY18, 200 small businesses were signed up for Small Business Recycling and more than 1,300 tons of single-stream recycling was collected.

WMS Recycling Division staff is available for presentations, technical support, and Maryland Recycling Act (MRA) assistance regardless of whether a business elects to use the County for collection of recyclables. Currently there are 205 County-based businesses that report to the County for MRA purposes and thus are known to be actively participating in a recycling program.

Parks

The WMS Recycling Division provides recycling containers and collection services for County parks and County buildings. Recycling collection occurs on a once per week basis if the park has been provided with 95-gallon recycling carts. If the park has been provided with roll-off recycling containers (20 cubic yards), collection occurs on-call as needed. WMS does not provide County parks with trash receptacles or collection for standard trash.

Schools

The County's Solid Waste Management Plan is required to address and implement a strategy for collecting, processing, marketing, and disposing of recyclable materials from the County's public schools. Although Anne Arundel County Public Schools (AACPS) operate independently from the County's recycling and solid waste management plan, the public schools are an important recycling partner with the County. AACPS have a single stream-recycling program which allows the schools to place the same items accepted by the County's residential recycling program into one container. Each school has recycling containers located in each classroom, office, cafeteria, and common area. As previously discussed, both the WMS Recycling Division and the WPRP have robust education and outreach initiatives focused on public schools in the county.

County Office Recycling Program (CORP)

With recycling being so heavily promoted in the County, it is only fitting that the County employees lead by example and practice recycling as well. The County Office Recycling Program (CORP) was developed to assist in providing County offices and facilities with the necessary tools behind an effective recycling program (e.g., containers, signage, and pick-up service); all offices/facilities have a Recycling Coordinator that directly communicates with the recycling program office. Approximately 1,200 tons of single-stream recycling was collected at 142 County sites (offices, parks, pools, etc.) in FY18.

In October 2017, a drop off bin for textile recycling was placed in the parking lot of the County offices at the Heritage Complex in Riva, Md.

Recycling Centers

Anne Arundel County has three recycling centers open to use for County residents, all of which operate Monday through Saturday from 8 AM to 4 PM. Un-bagged plastic, paper, metal, and glass items are accepted. Clean and dry plastic bags – not accepted in curbside recycling bins – can be recycled at the County Recycling Centers or at participating local grocery and retail stores. A full list of materials accepted at the recycling centers can be found on the County's recycling website https://www.aacounty.org/departments/public-works/waste-management/Materials_Accepted

Household Hazardous Waste Disposal

In FY18, there were six household hazardous waste events (two at each of the Recycling Centers). These events accounted for the proper disposal of 115 tons of household hazardous waste, successfully keeping these materials out of the County's landfills, roadside ditches, and waterways. These events are vital in helping to keep harmful toxins out of the County landfill, as well as discouraging illegal dumping

of hazardous materials. The County does not accept hazardous waste for disposal at its landfill. All household hazardous waste collected at the facilities during these events is packaged, transported, and disposed of by a licensed hazardous waste contractor.

Storm Drain Stenciling

Storm drain stenciling by NGOs is supported by the County in that the County permits groups to conduct stenciling on County-owned storm drain structures. Storm drain stenciling is an effective way of communicating to the public that trash and litter that finds its way down storms drains will inevitably end up in the County's waterways. In 2018, the County purchased custom designed storm drain stencils that can be loaned to NGOs, schools, and other organizations for use.

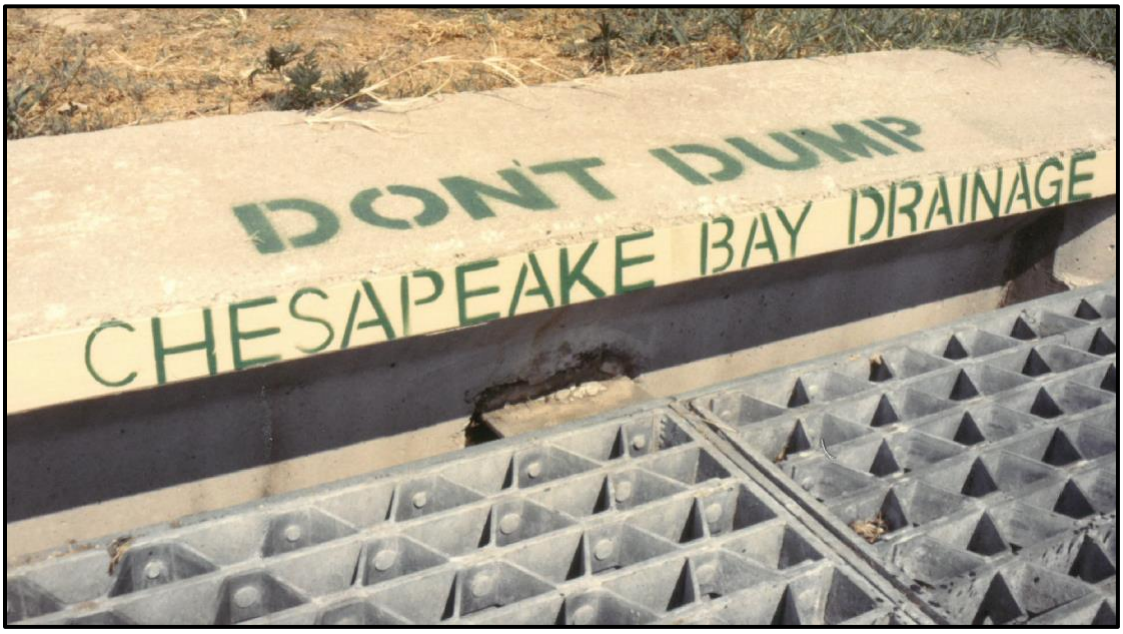

Figure 7. Storm drain stencil used by Anne Arundel County in the past.

Law Enforcement and Reporting

Maryland State law requires that all commercial and residential vehicle trash/recycling loads be properly covered to eliminate debris from blowing out. Littering from a vehicle and illegal dumping can be reported to the police by calling 911 if the act is in progress. A separate phone number is available to report littering/illegal dumping if it has already occurred. Litter laws are enforceable by state and local police, and a violation can carry a maximum penalty of $30,000. County Bill #95-16, enacted in February 2017, amended Article 13 of the County Code to make it a civil offense to rake, blow, and deposit litter and yard waste into County right-of-ways, storm drains, and waterways; first time offenders are subject to a $125 fine, while subsequent offenses are subject to fines up $500. Enforcement of litter laws may prove to be an effective deterrent from engaging in littering.

Roadside Litter Cleanup

The County Bureau of Highways (BOH) is responsible for all maintenance activities associated with County-maintained roads. Litter is collected from County roadways on a routine basis. Additionally, BOH conducts weekday and weekend roadside litter and trash removal throughout the year, using supervised inmate labor in partnership with the County Department of Detention Facilities. The program was first started in 2007 with a focus on high litter count road segments, dump sites and illegal roadside signs that were proliferating across the County. Since the inception of the program BOH has constructed a list of high litter areas based on staff and citizen observations. Weekend roadside litter pickup occurs every other weekend throughout the year, dependent on weather. The overall effectiveness of the program ultimately depends on the number of inmates eligible for the program. The goal of the weekend pickup program is to realize an improvement in the condition of roadsides in Anne Arundel County without a reduction to other Highways services. Weekend litter removal activities follow a programmed frequency throughout the year. Litter removal crews bag recyclables and other trash items separately and crews are asked to empty the recyclable items out of their collection bags into containers provided by the WMS Recycling Division.

A total of 9,640 thirty-gallon bags of litter were removed from roadsides from July 1, 2017 to June 30, 2018, with 7,087 bags collected during the routine work week and 2,553 bags collected by the weekend litter removal program (Figure 8). This represents a 1.1% decrease from the last reporting period in which 9,751 bags of litter were removed. Since FY10, the County's roadside litter cleanup program has removed an average of 10,834 30-gallon bags of litter from roadsides per fiscal year. Litter collection may vary from year to year largely as a result of the number of work release inmates made available to the BOH. BOH also performs debris collection from roadsides, which involves pickup of larger items such as discarded tires, appliances, and furniture as well as tree limbs. In FY18, BOH collected over 1,500 tons of roadside debris, a 9% increase from the last reporting period.

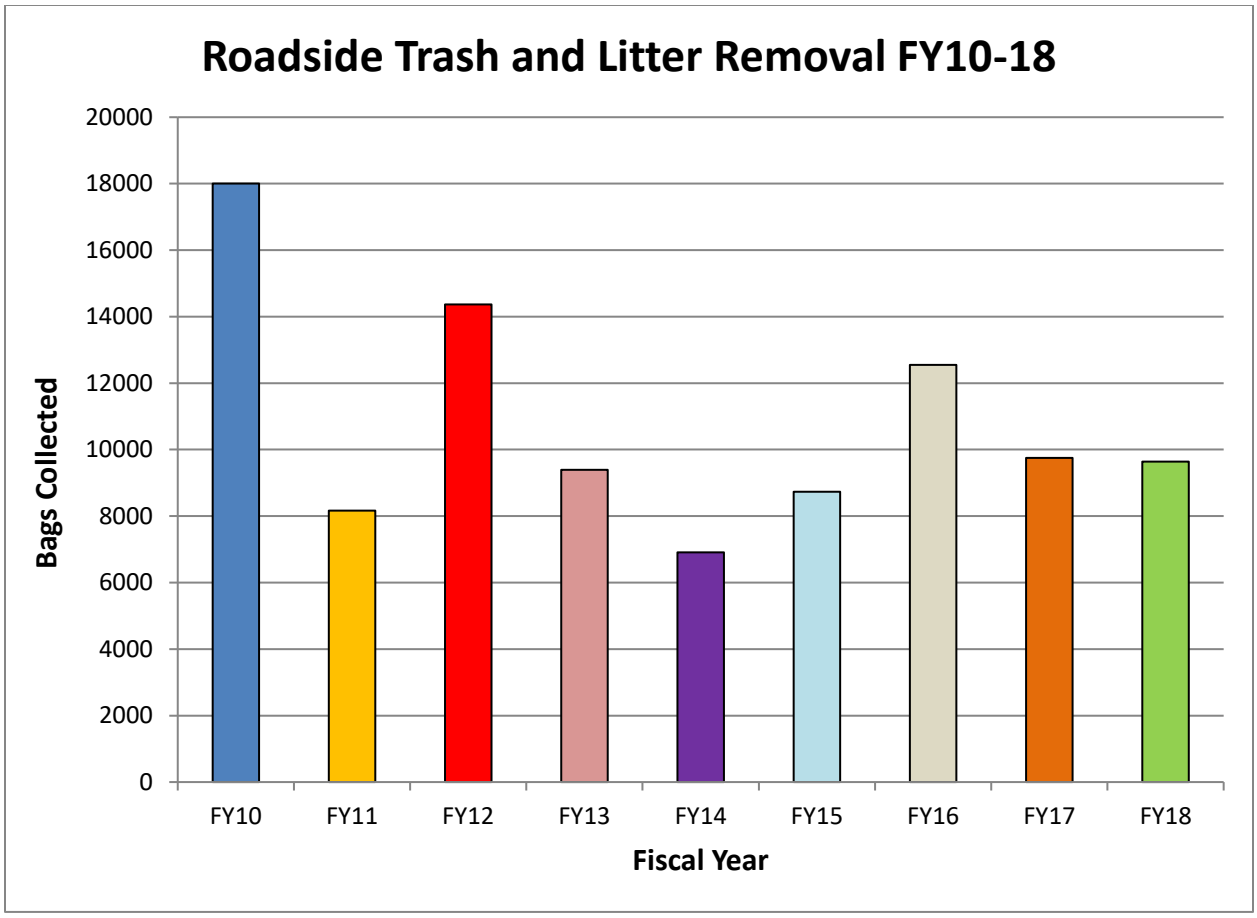

Figure 8. Number of 30-gallon bags of trash and litter removed per fiscal year in BOH roadside cleanup operations (weekday and weekend combined).

Alley Clean-ups

In late FY17, BOH began litter and debris pickup in alleys in select communities in the northern portion of the County as part of the County's rodent control initiative. BOH continued with this initiative in FY 18, collecting 116 30-gallon bags of litter/debris from 48 alleyways in the Brooklyn Park, Arundel Village, and Glen Burnie neighborhoods (Figures 9 and 10). The alley clean-up events occurred in lieu of the typical weekend roadside litter cleanup work. Continuation of the alley clean-up work in the future is dependent on available BOH resources.

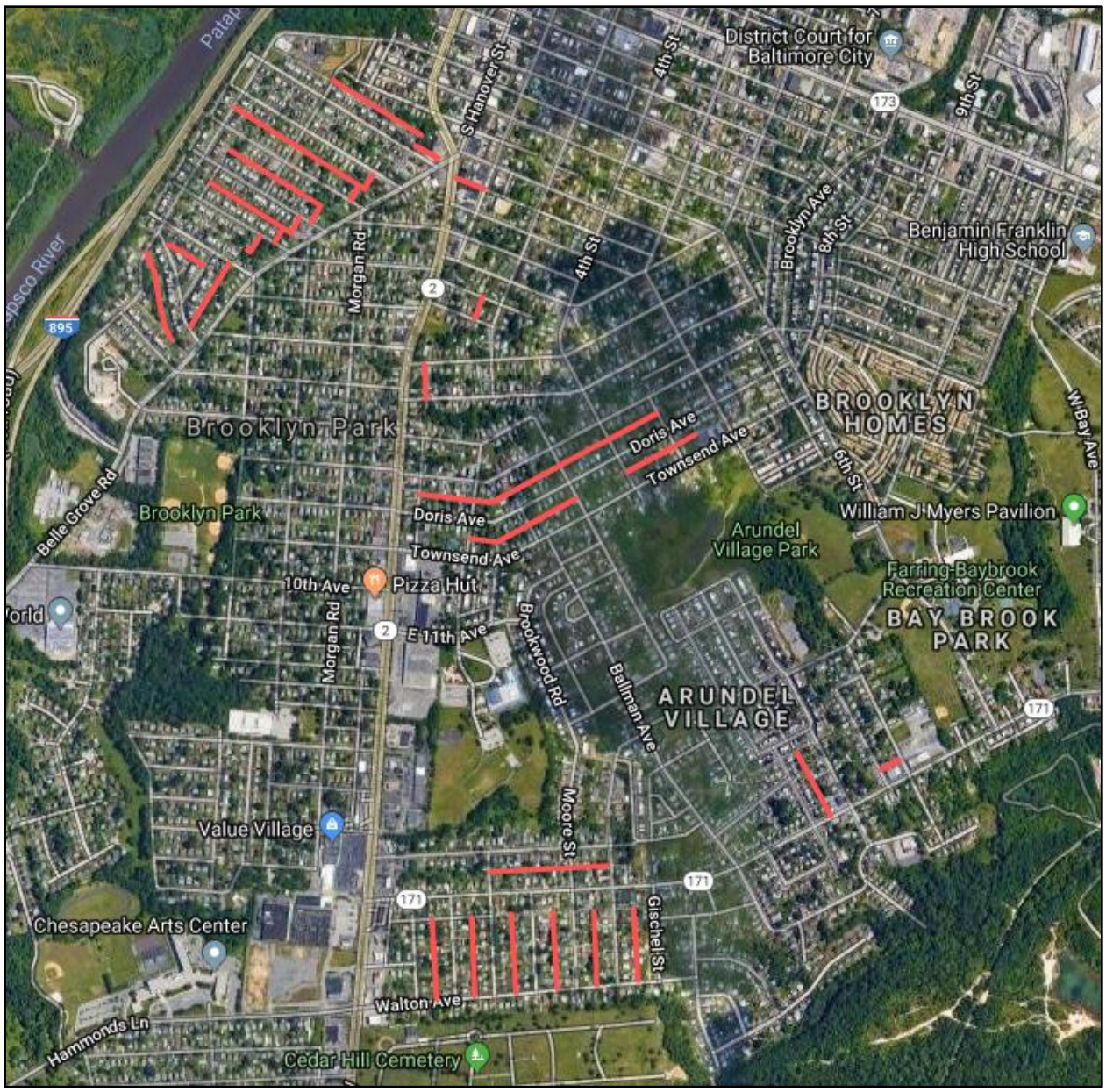

Figure 9. Alleys (highlighted in red) in the Brooklyn Park and Arundel Village neighborhoods serviced in FY18 as part of the County's rodent control initiative.

Figure 10. Alleys (highlighted in red) in Glen Burnie serviced in FY18 as part of the County's rodent control initiative.

Community Cleanups

The County also provides 40-cubic yard roll-off bins throughout the year for citizen groups, communities and the Watershed Protection & Restoration Program of the County to aid in community and watershed cleanup activities. WMS also assists in hauling the trash and recyclable material collected from these activities. In FY18, WMS provided five dumpsters for four community cleanups, removing 4.35 tons of trash.

Stream Cleanups

BOH and WMS both supported several watershed cleanup initiatives during the reporting period. In partnership with these efforts, the County supported seven events and hauled away more than 29 tons of material for proper disposal. Specific examples of clean-up events supported by the County are listed in Table 2.

Table 2. Community cleanup activities supported by the County in FY 18.

Date	Organization/Location	Location	Amount of Trash Removed
July 21, 2017	Patapsco Heritage Greenway	841 Hammonds Ferry Rd N, Linthicum	0.50 tons
February 21, 2018	Patapsco Heritage Greenway	841 Hammonds Ferry Rd N, Linthicum	2.50 tons
April 7, 2018	Project Clean Stream	1343 Cape St. Claire Rd, Annapolis	1.84 tons
April 7, 2018	Project Clean Stream	55 Forest Plaza Dr, Annapolis	0.59 tons
April 14, 2018	Restore Rock Creek	Chaucer Ct. & Saltwood Glen, Pasadena	0.54 tons
April 20, 2018	Forks of Patuxent	1100 Patuxent Rd	1.38 tons
April 26, 2018	Patapsco Heritage Greenway	841 Hammonds Ferry Rd N	22.10 tons

Street Sweeping

Anne Arundel County BOH's street sweeping program is designed to keep sediment and litter/debris out of storm drains, creeks and, rivers, and ultimately the Chesapeake Bay. The street sweeping program targets arterial roads, local and collector streets, industrial/business parks, and County facility parking lots (including park and rides). The program also targets NPDES priority areas - routes that consist of curbed streets in impaired watersheds, streets serviced by the MS4 that have a relatively large litter count, lack engineered storm water quality controls, or otherwise constitute an environmental "hotspot." Currently, the County is targeting those curbed roads with high traffic volumes or outfalls that discharge to and/or touch a tidal or non-tidal water body, with the Patapsco River Watershed slated to be a priority street sweeping area given the Baltimore Harbor Trash TMDL. Arterial roads, local and collector streets, industrial/business parks, and NPDES priority areas are swept twice per month (25 times per year), while parking lots are swept once per month (12 times per year). BOH tracks street sweeping data by curb miles and debris tons. The County swept 6,799 curb miles from July 1, 2017 to June 30, 2018, equating to 565 curb miles per month, representing a 5% decrease from the last reporting period. Depending on debris disposal costs and other factors, the number of curb miles swept may vary by 5% annually. Current funding levels support sustainable accomplishment of approximately 6,800 miles annually, a 40% increase over FY16 levels. In FY18, the street sweeping program collected approximately 362 tons of material from County maintained streets.

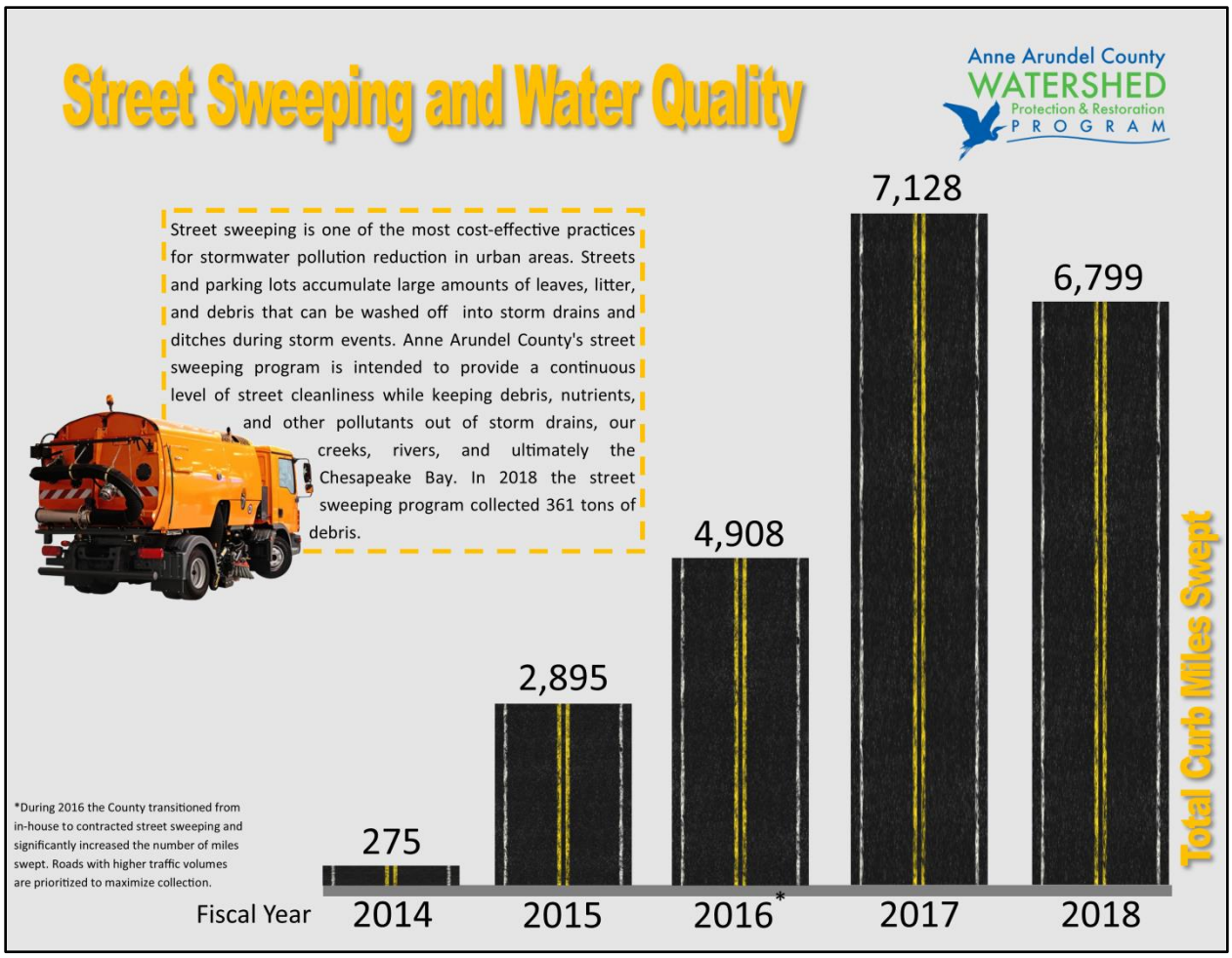

Figure 10. The number of curb miles swept per year under the County's curb sweeping program has increased significantly since FY14.

Inlet Cleaning and Storm Drain Vacuuming

Anne Arundel County BOH conducts manual and mechanical storm drain inlet cleaning on approximately 25,850 inlets throughout the County. Work is conducted on a rotating basis, with each inlet being serviced about once every three years. Special attention is given during and after rainfall events to insure proper drainage. BOH also solicits requests for storm drain inlet cleaning via telephone. In FY18, the County manually cleaned and removed debris from catch basins, inlets and outlets of pipes to maintain proper drainage for 7,432 structures, an increase of 8% from the last reporting period. In addition, the County inspects catch basins, manholes, and associated pipes to identify structures for cleaning with a sewer vacuum or power rodder. Vacuum truck loads are first dewatered and then taken to the County landfill. Storm drain cleaning via vacuum truck data is tracked in both tons (dewatered) and number of structures serviced. A total of 4,135 structures - for a total of 107.8 tons of material removed - were serviced with a sewer vacuum. A total of 89,773 linear feet of pipe were cleaned, an increase of 81% from the last reporting period.

The County also cleans and removes debris from roadside inlet and outlet ditches and concrete swales, removes leaves from ditch lines and curbs by hand and leaf vacuum, and cleans and reshapes roadside ditches by machine. In FY 18, the County cleaned 159,421 linear feet of ditches, a decrease of 8% from the previous reporting period. Year to year variability in linear feet of ditch and curbline cleaning is routinely around 30%.

Maryland Clean Marina Initiative

The Maryland Clean Marina Initiative, operated by Maryland DNR, promotes marinas, boatyards, and yacht clubs that voluntarily adopt pollution prevention practices, encouraging patrons to utilize certified Clean Marinas and to adopt clean boating practices. The Clean Marina certification is awarded based on an evaluation of a marina's stormwater management, waste containment and disposal practices, and emergency preparedness. Two certifications were awarded to marinas in Anne Arundel County in 2018. Currently, 50 of the 156 marinas in Anna Arundel County in 2018 are certified Clean Marinas.

Adopt-a-Highway and Sponsor-a-Highway

The Adopt-a-Highway and Sponsor-a-Highway programs, administered by the Maryland Department of Transportation (MDOT) State Highway Administration (SHA), allow small businesses and approved community organizations to adopt sections of state roads and highways to maintain for litter and trash. There are currently 91 miles of roads in Anne Arundel County sponsored under the Sponsor-a-Highway program, while 57 miles are currently sponsored under the Adopt-a-Highway program (C. Diaczok, personal communication, September 24, 2018). Anne Arundel County is currently revisiting the idea of implementing of its own Adopt-a-Highway program.

Scrap Tire Program

MDE's Scrap Tire Program establishes state-wide tire disposal regulations as well as a Scrap Tire Fund generated from the collection of a tire disposal fee. The program is also responsible for cleaning up existing illegal tire dumps.

IV. Looking Forward

In November 2017, WPRP staff attended the 11th annual Trash Summit in Washington, D.C. to gain perspective on local and regional solutions to trash and litter currently being employed by other municipalities and organizations. The County will continue to explore new and innovative ways to reduce the amount of trash, litter, and debris that reach our waterways. It is imperative that future efforts to reduce litter continue to focus on education, perception, and behavior in order to prevent litter from occurring in the first place.

The County continues to investigate potential locations for the installation of a trash trap as a means of reducing trash and litter from entering waterways. A trash trap installed on Crab Creek (a tributary of the South River) by the local NGO South River Federation, collected 190 lbs of trash and debris in FY 18. This project has served as an education tool as the County continues to seek out suitable sites for trash trap installation. In October 2018, County staff participated in a tour given by the Anacostia Watershed Society of trash traps in the Anacostia River watershed.

In August 2018, Anne Arundel County Executive announced the launching of the "Wonderful Anne Arundel" initiative focused on reducing litter and debris and improving the landscaping aesthetics on County-owned roads and properties. Components of the initiative will include:

- Initiating an adopt-a-median and round-about program: The County will solicit interest from landscaping companies and other groups to improve the appearance of these traffic structures beyond the level that the County can fund.
- Coordinating with State Highway Administration to improve appearance of State properties: The majority of roads in the County are owned by the State Highway Administration and the County will work with SHA to clean up trash along SHA-maintained roads.
- Expanding trash clean ups and reducing the prevalence of trash: The County will expand regular trash pickup events on specific roadways as well as provide opportunities for the community to participate in trash clean-up acres to reinforce the need for personal investment in the appearance of the County.

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