Montgomery County: Anacostia Trash TMDL Monitoring-Related Efforts FY24 Technical Memorandum




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Project Background

Per the approved September 2010 Anacostia Watershed Trash TMDL, Montgomery County (the County) is required by MDE/EPA to annually remove or prevent hundreds of tons of trash from entering into its streams within the Anacostia Watershed. In order to accomplish this challenging task, it is critical that the County annually assess and estimate stream trash levels (Figures 1 -3).

Montgomery County Department of Environmental Protection (MCDEP) contracted with Metropolitan Washington Council of Governments (COG) to assess and estimate trash levels in the County's Anacostia streams employing the Anacostia tributary trash surveying protocol. Recently, a task was added to identify trash hotspot locations. With such locations identified, MCDEP could provide proper management/ removal of the trash.

As such, three major tasks were completed for this 12 month long project and were as follows:

- Task 1: Annual Stream-Level Trash Monitoring;
- Task 2: Trash Hotspot Identification;
- Task 3: Technical Memorandum Development.

This technical memorandum will highlight results from Task 1 and Task 2.

Figure 1. Strainer in Sligo Creek (SCSC204)

Figure 2. Major strainer in Northwest Branch (NWBF301)

Figure 3. Strainer in Paint Branch near White Oak (PBSA100)

Task 1: Annual Stream-Level Trash Monitoring

COG completed the Anacostia tributary trash surveying protocol at the 15 station locations (Figure 4). Appendix A (Table 1) provides the general site information. The trash surveying protocol was completed using the field data sheet in Appendix B to catalogue trash items. This in-stream trash survey was performed two times within the fiscal year 2024 (i.e., July 2023 through June 2024). The "count" surveys were conducted in October 2023 and June 2024. At each site, the total number of trash items within a 500 foot long stream reach was recorded and catalogued according to the protocol's 21 trash items.

Count survey summary data are shown as number of items per 100 feet (e.g., no. items/100 ft.) and the percent trash item distribution. Table 1 represents the 1998 Anacostia Trash Reduction Workgroup's (ATRW) stream trash survey index, which provides a standardized verbal ranking for the number of trash items per one hundred feet.

In addition to counting and cataloguing the trash items, COG removed and weighed trash items from the upstream 250 feet of the 500 foot long survey reach at five of the 15 sites. By removing and weighing the trash at these "pick sites", COG was able to generate a reasonable estimate of in stream trash accumulation rates between survey periods. Also, in keeping with the 2008-9 survey methodology, precipitation data were obtained from the two weather stations. This information was summarized for the Washington National Airport (DCA) and the USDA Beltsville Agricultural Research Center (BARC) weather stations.

Multiple pieces of legislation have been enacted by Montgomery County that attempt to reduce carry out bags, expanded polystyrene food service ware and packaging materials, and single use plastic straws. COG trash surveys have been refined to catalogue these items in order to help identify possible trends in stream trash after implementation of the legislation.

Table 1. Anacostia Trash Reduction Workgroup's Stream Trash Survey Index

Trash Index	
Verbal Ranking	**No. Items/100 ft.**
None - Very Light	0 - 10.0
Light	10.1 - 25.0
Moderate	25.1 - 50.0
High	>= 50.1

FY24 Survey Summary of Findings

- Tables 2 and 3 summarize the fall 2023 and spring 2024 surveys, respectively. In fall 2023, there were six sites with "None-Very Light", four "Light", four "Moderate" and one "High" trash ratings. In spring 2024 there were seven sites with "None-Very Light", six "Light", one "Moderate" and one "High" trash ratings. The following are survey findings from selected sites and their trash verbal rating:
  - PBSA100 continues to score a "High" verbal trash rating, which persisted through both survey periods. A series of exposed roots and strainers continue to collect trash at this site.
  - SCSC314 scored a verbal rating of "High" in spring 2023. In FY24 surveys, this site has returned to a "Moderate" verbal rating, aligning with past survey years.
  - NWNW206A was rated "None" in fall of 2023, no trash was observed at this site. Trash levels returned to "Very Light" spring 2024.
  - SCLB101 and NWBP205 trash levels were rated "Moderate" in fall 2023 and decreased to "Light" verbal rating in spring 2024.
  - LPLP301A and LPLP202 trash levels were rated "Light" in fall 2023 and decreased to a "Very Light" rating in spring 2024.
  - LPLP109 trash levels were rated "Moderate" in FY21, FY22, and FY23. In spring of FY24, the trash level at this site decreased to "Light"
- Figure 5 summarizes the FY24 count surveys' top five trash categories as a percentage of the total number of items. Plastic bags (other), food packaging, plastic bottles, carry out plastic bags, and

cloth/carpeting (e.g., textile items) were in the order of highest to lowest for the top five trash items. Together they comprise nearly 69 percent of all items counted. The reader is referred to Appendix B (e.g., the COG trash data sheet) for the list of trash items and Appendix C, Figure 1 and Figure 2 for historical bar graphs for major trash items.

- Figure 6 shows the FY24 "pick" sites surveys' top five items based on weight. Cloth/carpeting/clothing, plastic bags (other), carry out plastic bags, plastic bottles, and miscellaneous items are listed in the order of highest to lowest percent of the top five items. Together they comprise 79 percent of the total FY24 weight. The reader is reminded that the "pick" survey measures the total wet weight for each trash item and that large bulk trash items such as construction debris, bricks, etc. are not removed, therefore not weighed, during the "pick" survey.
- The toiletries and drug containers category includes personal protection equipment (PPE) such as masks and disposable gloves. From 2011 to 2019, the average seasonal total for all sites was 13 items in this category. However, from spring 2020 to spring 2022, the total seasonal average increased to 92 items. Staff observed a notable increase in PPE, which resulted in an increase of items in this category. In FY23, observations saw a slight decrease in PPE, however the total seasonal average is above the 2011 to 2019 seasonal average. The increase since spring 2020 was largely driven by PBSA100, followed by SCLB101 and SCSC314 as minor contributors. In FY24, a decrease in PEE was observed.
- Table 4 shows the monthly trash accumulation rate by weight for the five "pick" sites from the 2011 summer survey to the spring 2024 survey. Figure 7 graphically summarizes Table 4 for the pounds of trash removed from each site for over 19 surveys. PBSA100 continues to have the highest level of trash weight for both fall 2023 and spring 2024.
- Tables 5 and 6 highlight the weight of selected trash items at the "pick" sites for the fall 2023 and spring 2024 surveys. Expanded polystyrene has the lowest weight among these selected items for both surveys. Plastic bags other had the highest weight for fall 2023 and spring 2024. When both carry out and other plastic bags are combined, they represent the highest weight category for both the fall 2023 and spring 2024 surveys.
- Figure 7 summarizes the pounds of trash removed from each pick site during the fall sampling events from 2011 - 2023. Figure 8 summarizes the same data for the spring sampling events from 2011-2024. PBSA100 remained the site with the highest amount of trash removed at pick sites.
- Figure 9 shows monthly total rainfall at the DCA and BARC weather stations. DCA and BARC weather stations have similar levels of rain fall for most of the year, apart from September 2023, where DCA precipitation levels were less than BARC precipitation levels. Figure 10 shows the total yearly rainfall data for DCA and BARC Stations.
- The food packaging category includes the single use subcategory of plastic straws. In 2018, this subcategory was created ahead of the 2021 legislation to ban the use of plastic straws. Tables 7 and 8 highlight the number of straws counted for the fall 2023 and spring 2024 surveys. The total number of straws represents a very low percentage of food packaging. Counts are, overall, consistent between seasons and straws are present at many sites at very low levels. The site PBSA100 had the highest number of straws per season. Figure 11 shows the count of straws since 2018, and highlights that the total straws counted is heavily influenced by PBSA100. In recent years, paper straws have begun to be observed at very low levels in the trash survey. These paper straws are not counted in the single use plastic straws subcategory; however, paper straws can be mistaken as plastic straws in count data. Compostable straws cannot be differentiated from plastic straws in this survey.

Figure 4. Montgomery County Anacostia Tributary Trash Monitoring Station Network (15 sites)

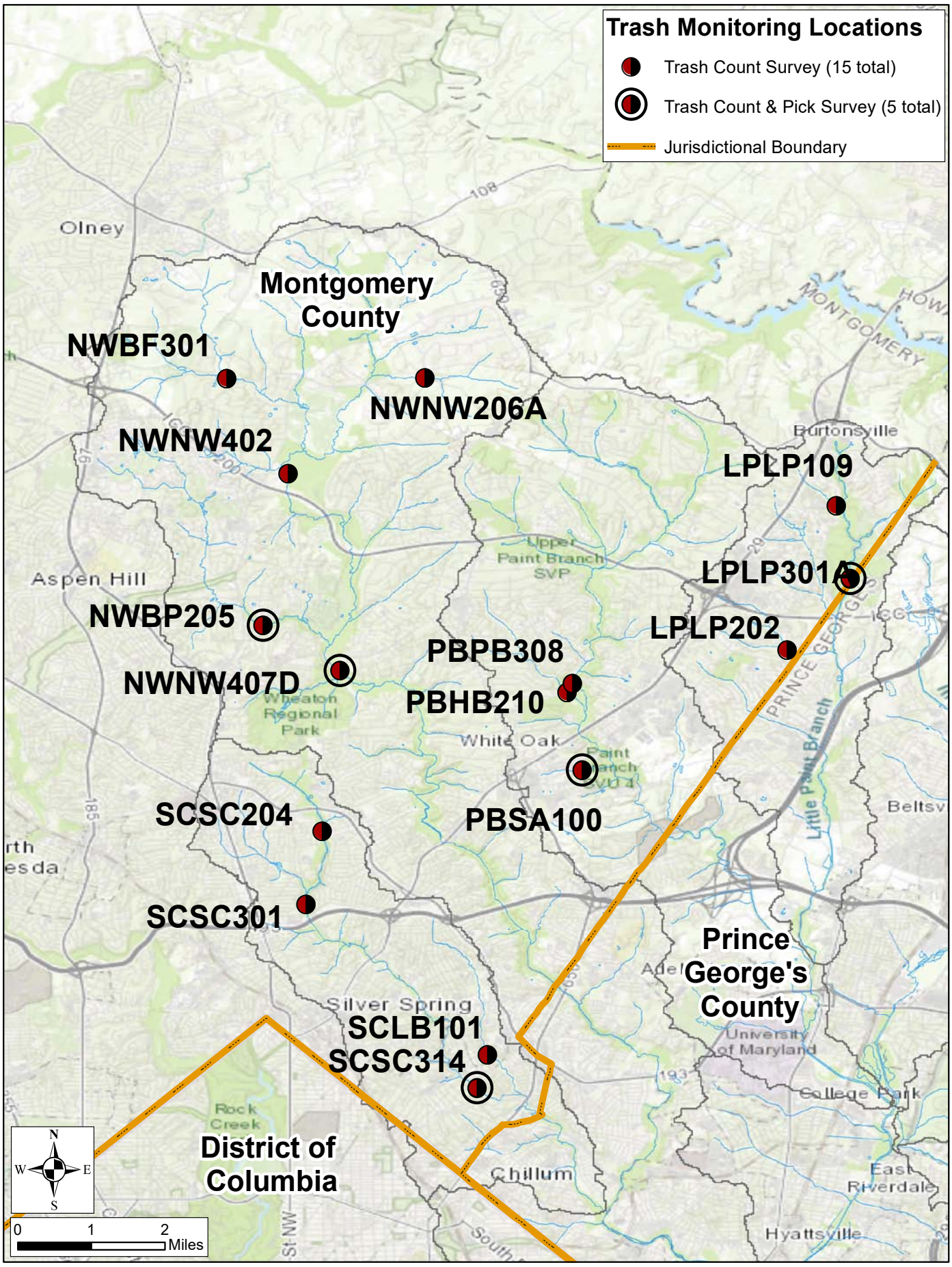


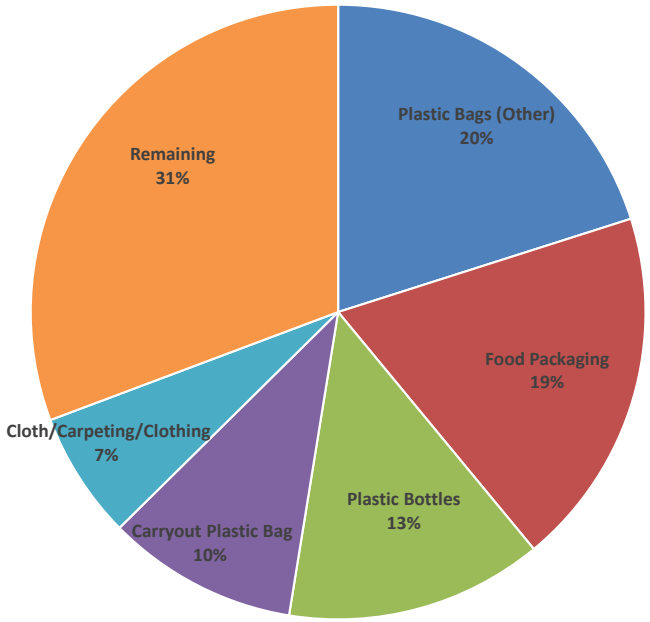
Table 2. Stream Survey Sampling Results Fall 2023

Site ID	Station Name	Subwatershed	Total Number of Items	Mean No. of Trash Items Per 100ft	Verbal Ranking	Strainers
SCSC314	Carroll Avenue	Sligo Creek	214	42.8	Moderate	1
SCSC301	Forest Glen Rd	Sligo Creek	43	8.6	Very Light	0
SCSC204	University Blvd	Sligo Creek	30	6.0	Very Light	4
SCLB101	Long Branch	Sligo Creek	136	27.2	Moderate	1
PBSA100	Stewart April Lane	Paint Branch	595	119.0	High	2
PBPB308	Valley Mill Park	Paint Branch	8	1.6	Very Light	2
PBHB210	Hollywood Branch	Paint Branch	19	3.8	Very Light	1
NWNW407D	Kemp Mill Rd	Northwest Branch	75	15.0	Light	1
NWNW402	Layhill Park	Northwest Branch	13	2.6	Very Light	1
NWNW206A	Bryant's Nursery Run	Northwest Branch	0	0.0	None	3
NWBP205	Bel Pre Creek	Northwest Branch	157	31.4	Moderate	1
NWBF301	Batchellors Run	Northwest Branch	57	11.4	Light	1
LPLP301A	Fairland Regional Park (central)	Little Paint Branch	64	12.8	Light	4
LPLP202	Briggs Chaney Rd	Little Paint Branch	54	10.8	Light	6
LPLP109	Fairland Regional Park (north)	Little Paint Branch	152	30.4	Moderate	5

Table 3. Stream Survey Sampling Results Spring 2024

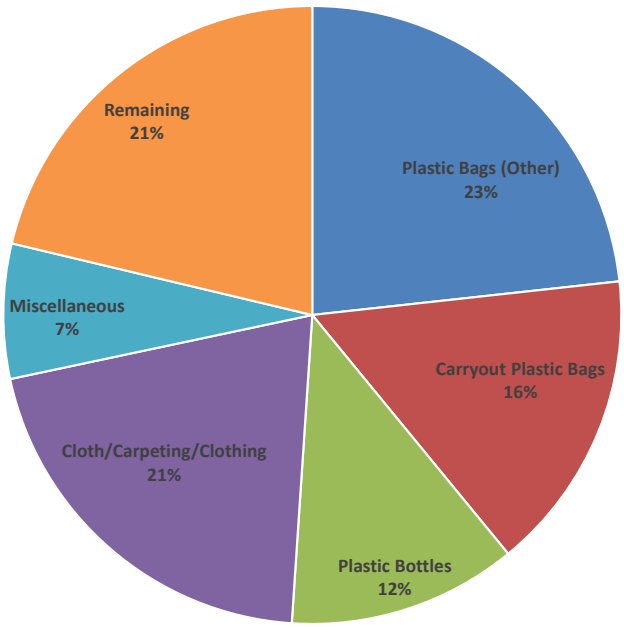
Site ID	Station Name	Subwatershed	Total Number of Items	Mean No. of Trash Items Per 100ft	Verbal Ranking	Strainers
SCSC314	Carroll Avenue	Sligo Creek	208	41.6	Moderate	3
SCSC301	Forest Glen Rd	Sligo Creek	35	7.0	Very Light	0
SCSC204	University Blvd	Sligo Creek	46	9.2	Very Light	2
SCLB101	Long Branch	Sligo Creek	116	23.2	Light	1
PBSA100	Stewart April Lane	Paint Branch	500	100.0	High	6
PBPB308	Valley Mill Park	Paint Branch	32	6.4	Very Light	1
PBHB210	Hollywood Branch	Paint Branch	57	11.4	Light	1
NWNW407D	Kemp Mill Rd	Northwest Branch	85	17.0	Light	3
NWNW402	Layhill Park	Northwest Branch	27	5.4	Very Light	3
NWNW206A	Bryant's Nursery Run	Northwest Branch	18	3.6	Very Light	3
NWBP205	Bel Pre Creek	Northwest Branch	125	25.0	Light	1
NWBF301	Batchellors Run	Northwest Branch	70	14.0	Light	1
LPLP301A	Fairland Regional Park (central)	Little Paint Branch	40	8.0	Very Light	5
LPLP202	Briggs Chaney Rd	Little Paint Branch	43	8.6	Very Light	3
LPLP109	Fairland Regional Park (north)	Little Paint Branch	107	21.4	Light	2

Figure 5. FY24 Count Survey - Top Five Items by Percent Count Distribution[1]



[1] Food packaging includes straws.
Remaining includes: Glass Bottles, Aluminum Cans, Styrofoam, Paper (newspapers, magazines, etc.), Cardboard, Auto Body Parts & Products, Car Batteries, Tires (cars, trucks), Bricks, Concrete, Lumber, Misc. (e.g. drywall, etc.), Appliance(s), Wooden Pallets, Metal, Shopping Carts, Toiletries/Drug Containers, Sports Equipment/Toys, Miscellaneous.

Figure 6. FY24 "Pick Sites" Survey - Top Five Items by Percent Weight Distribution[1]



[1] Miscellaneous: Typical items include: lighters, newspaper straps, weed eater string, handheld electronics (e.g., phones, and calculators) and items that do not fit in any other category description.
Remaining includes: Glass Bottles, Aluminum Cans, Styrofoam , Paper, Cardboard, Food Packaging, Auto Body Parts& Products, Car Batteries, Tires, Construction Debris :, Bricks, Concrete, Lumber, Misc. (e.g. drywall, etc.), Appliance(s), Wooden Pallets, Metal, Shopping Carts, Toiletries/Drug Containers, and Sports Equipment/Toys.

Table 4. Average Monthly Trash Accumulation (lbs per Month) at "Pick Sites": 2011 - 2024

Monthly Trash Accumulation (Summer/Spring)						
Site Name		Carroll Avenue	Bel Pre Creek	Kemp Mill Road	Stewart April Lane	Fairland Regional Park
Site ID		SCSC314	NWBP205	NWNW407D	PBSA100	LPLP301A
Year	2011	1	6	2.2	9.1	1.6
	2012	1.1	1.3	1.6	3.8	0.2
	2013	1.2	0.9	1	5.3	0.3
	2014	1.1	2.4	5.5	6.3	0.5
	2015	0.9	1.3	5.6	2.8	0.6
	2016	0.85	1.35	5.39	3.17	0.51
	2017	0.96	1.70	1.76	7.08	0.40
	2018	1.99	1.12	2.11	3.40	0.30
	2019	1.59	1.28	3.48	4.61	0.33
	2020	3.01	1.21	3.35	5.39	0.37
	2021	2.28	1.65	1.13	7.30	0.29
	2022	2.89	0.94	1.03	6.76	0.31
	2023	3.59	1.12	0.94	6.51	0.72
	2024	2.21	2.01	0.78	5.18	0.09

Monthly Trash Accumulation (Fall)						
Site Name		Carroll Avenue	Bel Pre Creek	Kemp Mill Road	Stewart April Lane	Fairland Regional Park
Site ID		SCSC314	NWBP205	NWNW407D	PBSA100	LPLP301A
Year	2011	3.3	1.1	1.2	4.4	1.1
	2012	1	1.6	0.3	5.6	0.1
	2013	1.2	1.3	1.3	6.2	1.3
	2014	1.6	0.8	7.8	5.1	0.2
	2015	1.5	1.2	5.9	3.6	1.3
	2016	2.47	1.96	3.12	7.80	0.18
	2017	0.88	2.90	3.11	11.82	0.64
	2018	2.23	5.21	5.37	9.79	1.42
	2019	2.25	4.46	8.56	11.72	0.46
	2020	4.35	4.97	5.46	5.68	0.43
	2021	4.12	4.36	2.98	10.65	0.35
	2022	3.42	1.59	0.63	6.43	0.18
	2023	5.50	2.35	0.43	7.07	0.57

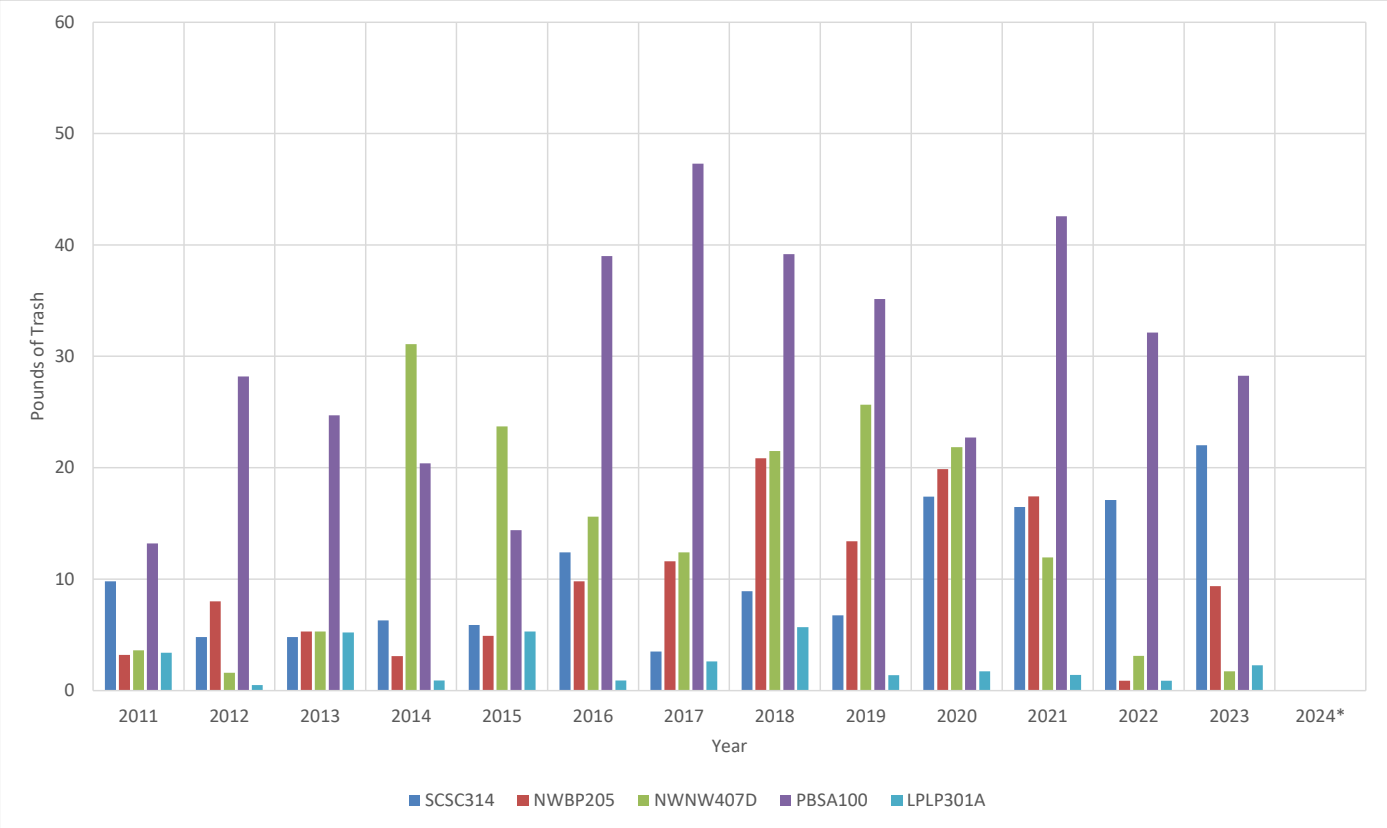
Table 5. October 2023 "Pick Sites" - Weight of Selected Items

Site ID	Site Name	Total Number of Items	Weight of Carryout Plastic Bags (lbs.)	Weight of Plastic Bags (Other) (lbs)	Weight of Expanded Polystyrene (lbs)	Weight of Plastic Bottles (lbs)	Total Weight (lbs)	Monthly Accumulation (lbs per month)
SCSC314	Carroll Ave.	141	2.27	3.35	0.00	0.95	22.01	5.50
NWBP205	Bel Pre Creek	71	1.76	3.48	0.06	0.62	9.38	2.35
NWNW407D	Kemp Mill Rd.	17	0.53	1.01	0.03	0.02	1.72	0.43
PBSA100	Stewart April Ln.	485	5.03	5.80	0.07	4.50	28.26	7.07
LPLP301A	Fairland Regional (Central)	40	0.20	0.84	0.06	0.71	2.27	0.57

Table 6. June 2024 "Pick Sites" - Weight of Selected Items

Site ID	Site Name	Total Number of Items	Weight of Carryout Plastic Bags (lbs.)	Weight of Plastic Bags (Other) (lbs)	Weight of Expanded Polystyrene (lbs)	Weight of Plastic Bottles (lbs)	Total Weight (lbs)	Monthly Accumulation (lbs per month)
SCSC314	Carroll Ave.	313	3.26	5.71	0.09	6.54	17.69	2.21
NWBP205	Bel Pre Creek	89	3.06	9.28	0.09	1.85	16.10	2.01
NWNW407D	Kemp Mill Rd.	26	1.04	2.43	0.00	2.12	6.25	0.78
PBSA100	Stewart April Ln.	389	17.99	19.75	0.45	9.19	41.46	5.18
LPLP301A	Fairland Regional (Central)	18	0.14	0.26	0.00	0.28	0.75	0.09

Figure 7. "Pick Sites" Summary - Pounds Removed Per Site (Fall Surveys 2011 - 2024) [1]



[1]The fall 2024 survey will not be completed until around October 2024.

Figure 8. "Pick Sites" Summary - Pounds Removed Per Site (Spring Surveys 2011 - 2024)

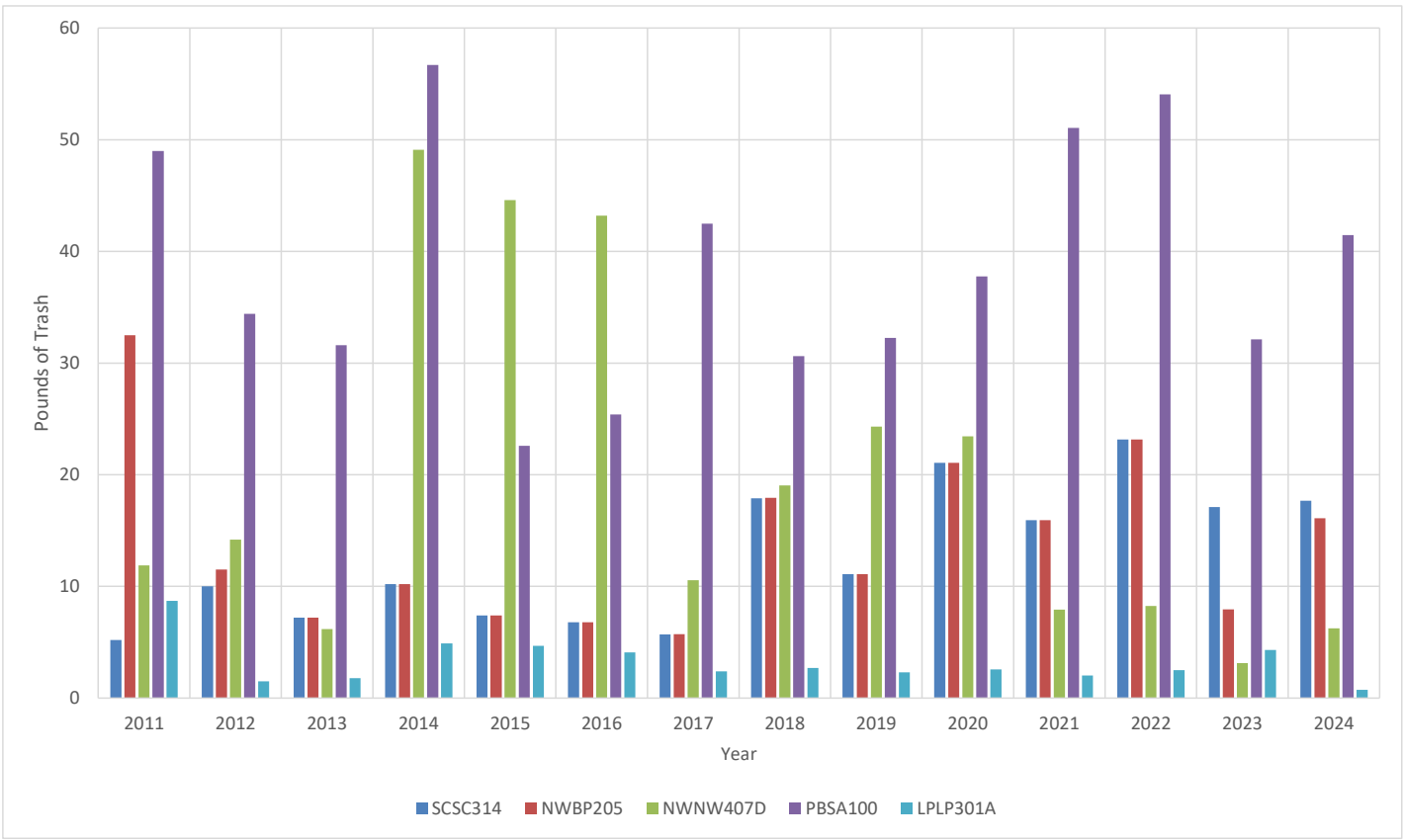


Figure 9. 2022-2024 Total Monthly Rainfall Data for Washington National Airport (DCA) and Beltsville Agricultural Research Center (BARC)

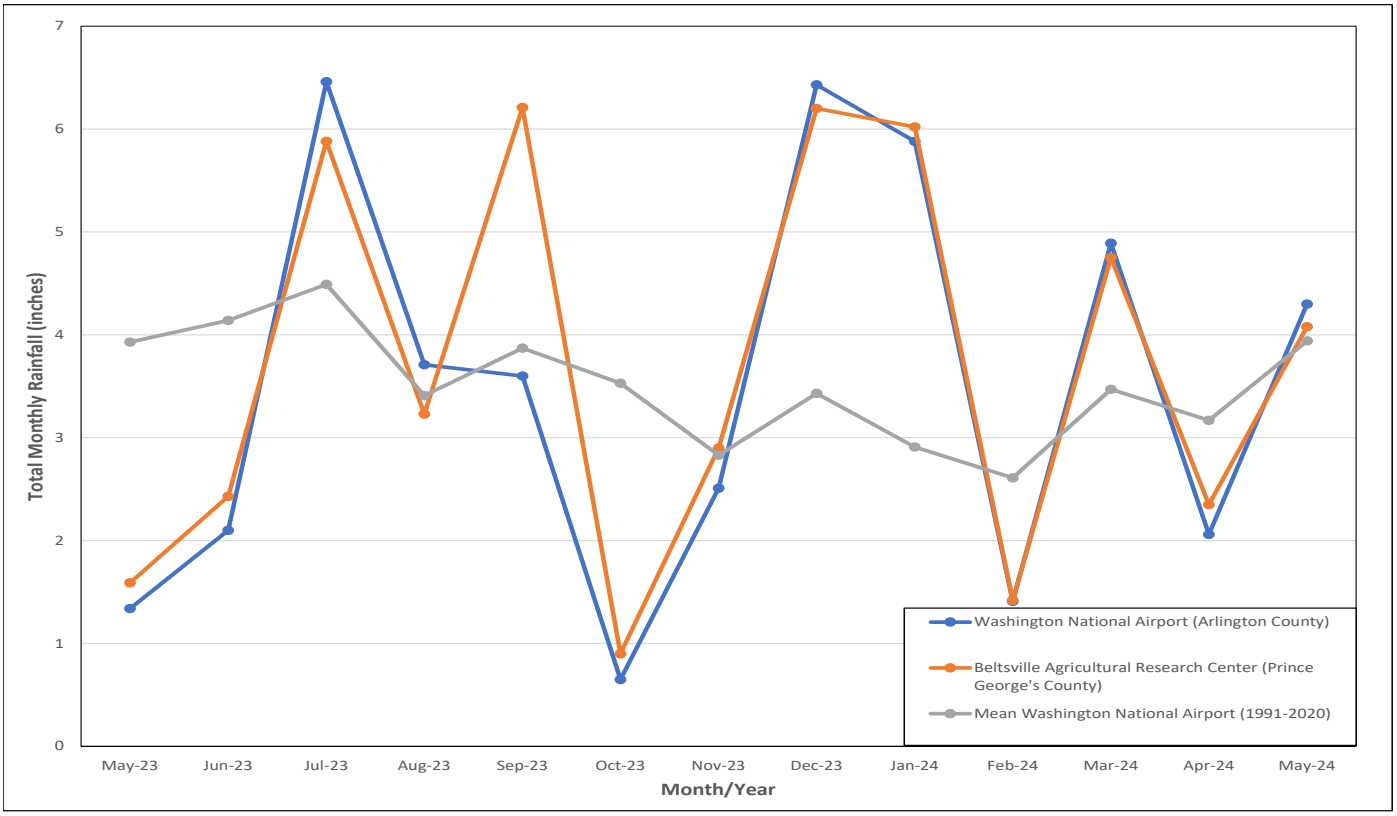


Figure 10. Total Yearly Rainfall Data for DCA and BARC Stations

Table 7. October 2023 Count Survey - Number of Straws

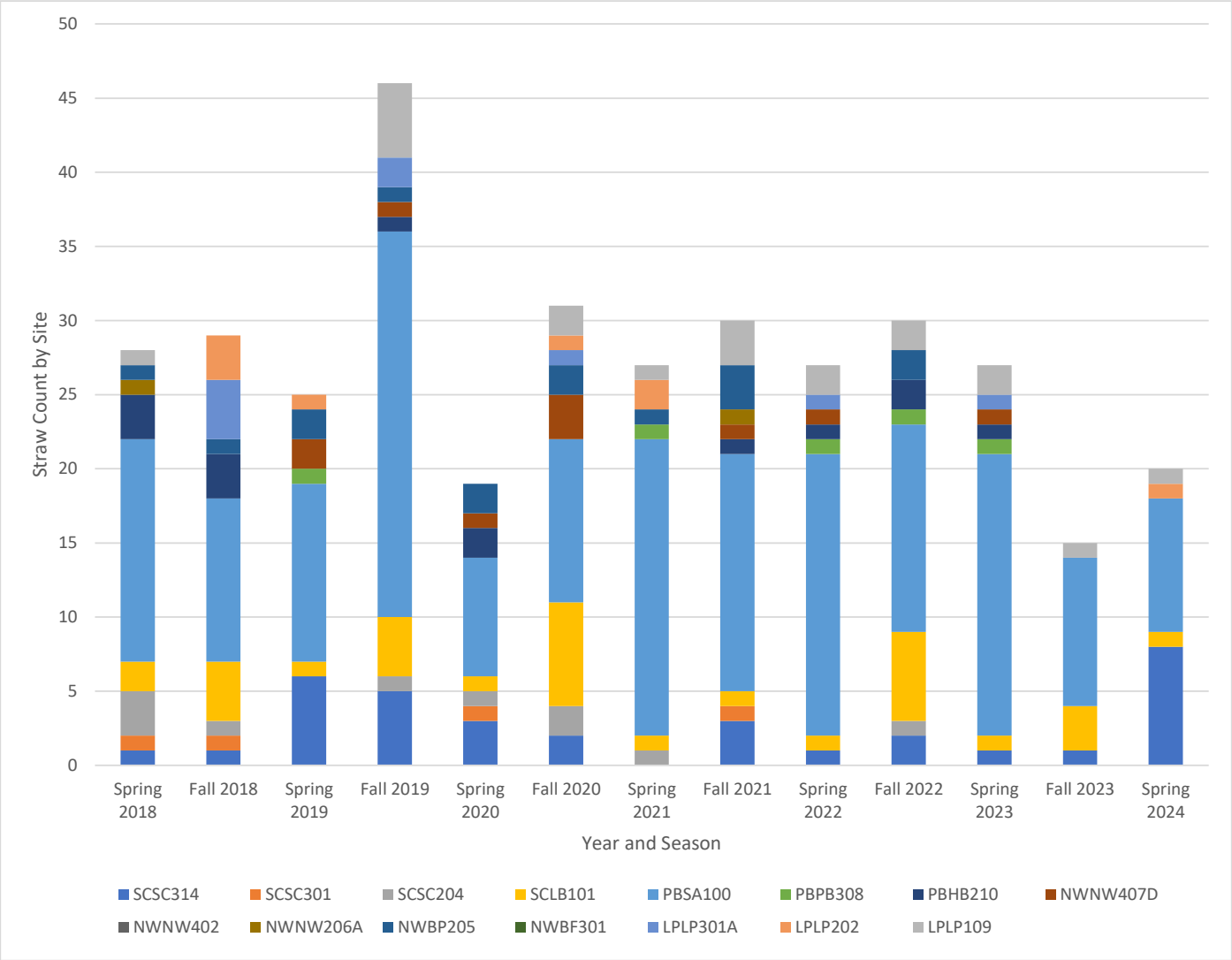
Site ID	Straw Count	Food Packaging Count	Percentage of Straws out of Food Packaging	Total Items	Percentage of Straws out of all Items
SCSC314	8	40	16.7%	208	3.8%
SCSC301	0	8	0.0%	35	0.0%
SCSC204	0	9	0.0%	46	0.0%
SCLB101	1	14	6.7%	116	0.9%
PBSA100	9	135	6.3%	500	1.8%
PBPB308	0	4	0.0%	32	0.0%
PBHB210	0	10	0.0%	57	0.0%
NWNW407D	0	11	0.0%	85	0.0%
NWNW402	0	0	0.0%	27	0.0%
NWNW206A	0	0	0.0%	18	0.0%
NWBP205	0	20	0.0%	125	0.0%
NWBF301	0	0	0.0%	70	0.0%
LPLP301A	0	5	0.0%	40	0.0%
LPLP202	1	8	11.1%	43	2.3%
LPLP109	1	15	6.3%	107	0.9%

Table 8. June 2024 Count Survey - Number of Straws

Site ID	Straw Count	Food Packaging Count	Percentage of Straws out of Food Packaging	Total Items	Percentage of Straws out of all Items
SCSC314	8	40	16.7%	208	3.8%
SCSC301	0	8	0.0%	35	0.0%
SCSC204	0	9	0.0%	46	0.0%
SCLB101	1	14	6.7%	116	0.9%
PBSA100	9	135	6.3%	500	1.8%
PBPB308	0	4	0.0%	32	0.0%
PBHB210	0	10	0.0%	57	0.0%
NWNW407D	0	11	0.0%	85	0.0%
NWNW402	0	0	0.0%	27	0.0%
NWNW206A	0	0	0.0%	18	0.0%
NWBP205	0	20	0.0%	125	0.0%
NWBF301	0	0	0.0%	70	0.0%
LPLP301A	0	5	0.0%	40	0.0%
LPLP202	1	8	11.1%	43	2.3%
LPLP109	1	15	6.3%	107	0.9%

*Total food packaging count includes straw count.

Figure 11. FY24"Count Sites"- Number of Straws by Season and Site



Task 2: Trash Hotspot Identification

A multi-pronged approach was taken to identify potential hotspot areas for field/ground investigation surveys through using land use maps, existing data and other provided locations. The identification process is summarized as follows:

1. Staff reviewed current aerial imagery and specific land use maps (targeting commercial/industrial and high-density residential land areas) adjacent to the stream valley corridors, as well as forest edges within the Anacostia River watershed to identify potential hotspot areas.

2. In communication with DEP staff, it was established that the FY24 hotspot survey would focus on areas of Paint Branch and Northwest Branch sub-watersheds. Future surveys would focus on other sub-watersheds.

From the above process, COG identified over twenty land use areas to focus and investigate for potential hotspots. Field staff traveled to potential hotspot areas to conduct visual and on-the-ground surveys. Open channels, wooded areas, streets and private properties were surveyed (where possible) to assess trash conditions, both in and around the potential hotspot areas. Staff walked these land areas and examined the existing litter/trash conditions. Surrounding streets, dead ends and other areas were surveyed and checked for possible dumping locations. Additional areas identified along driving routes were also surveyed. Figure 12 illustrates all specific sites examined and highlights driving routes.

If litter/trash was found, staff completed an online field data sheet, using an app COG staff designed for this survey; logged the geographic location and took photographs. Site description, a general trash level condition (Table 9), dominant types of trash, accessibility for cleanup and other notes were also recorded. Ranking categories are based on COG's trash surveys throughout the Anacostia watershed.

Table 9. Trash Hotspot Verbal Ranking and General Trash Level Condition

Verbal Ranking	General Trash Level Condition
None - Very Low	All litter/trash would fill less than two 42-gallon contractor clean-up bags; all litter/trash would fill less than one 42-gallon contractor clean-up bags; Litter/trash is well dispersed over the area.
Low	All litter/trash would fill up to approximately two or three 42-gallon contractor clean-up bags; localized small piles; very few bulk items but mostly piles well dispersed over the area. Would require minimal effort to clean.
Medium	All litter/trash would fill approximately four to five 42-gallon contractor clean-up bags; visible piles of litter/trash and/or some bulk items. Would require moderate effort to clean; May require larger equipment to remove items.
High	All litter/trash would fill more than approximately five 42-gallon contractor clean-up bags; visible large piles of trash and/or bulk items. Would require the greatest effort to clean. Requires larger equipment to remove items.

Figure 12. All Survey Sites and Driving Routes

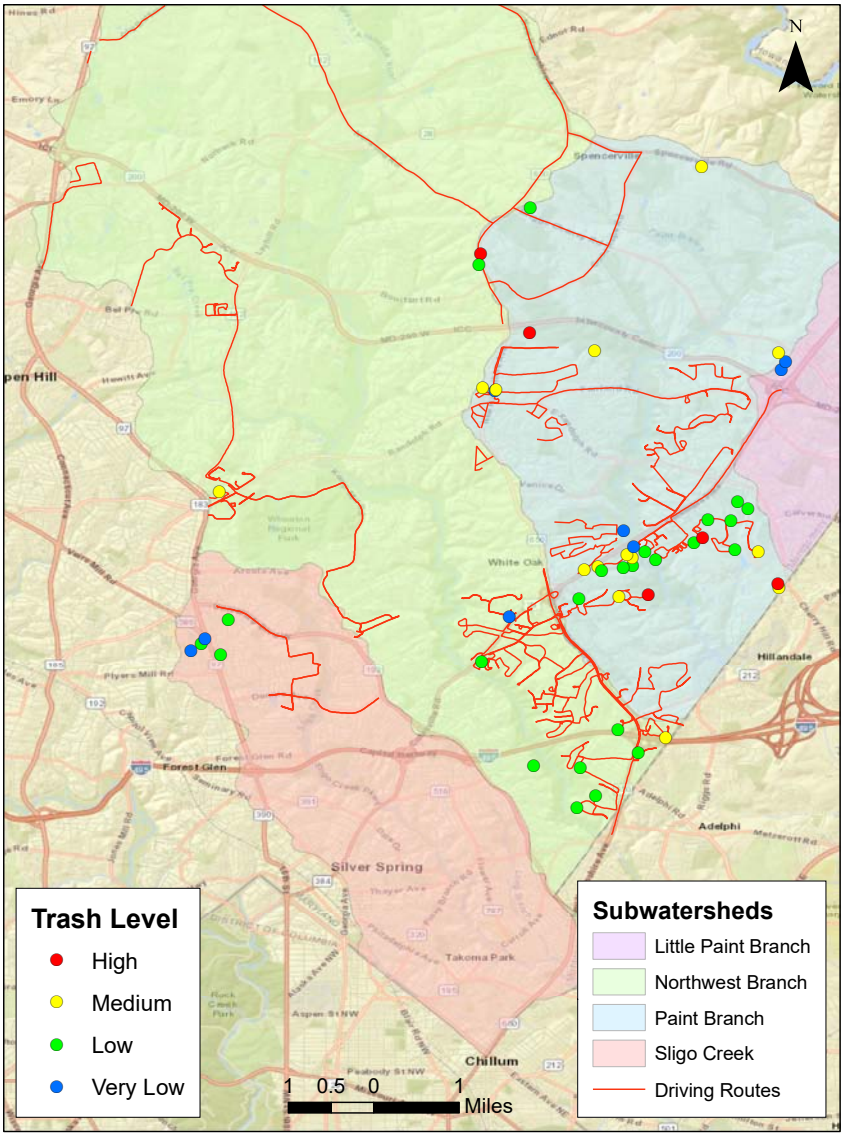
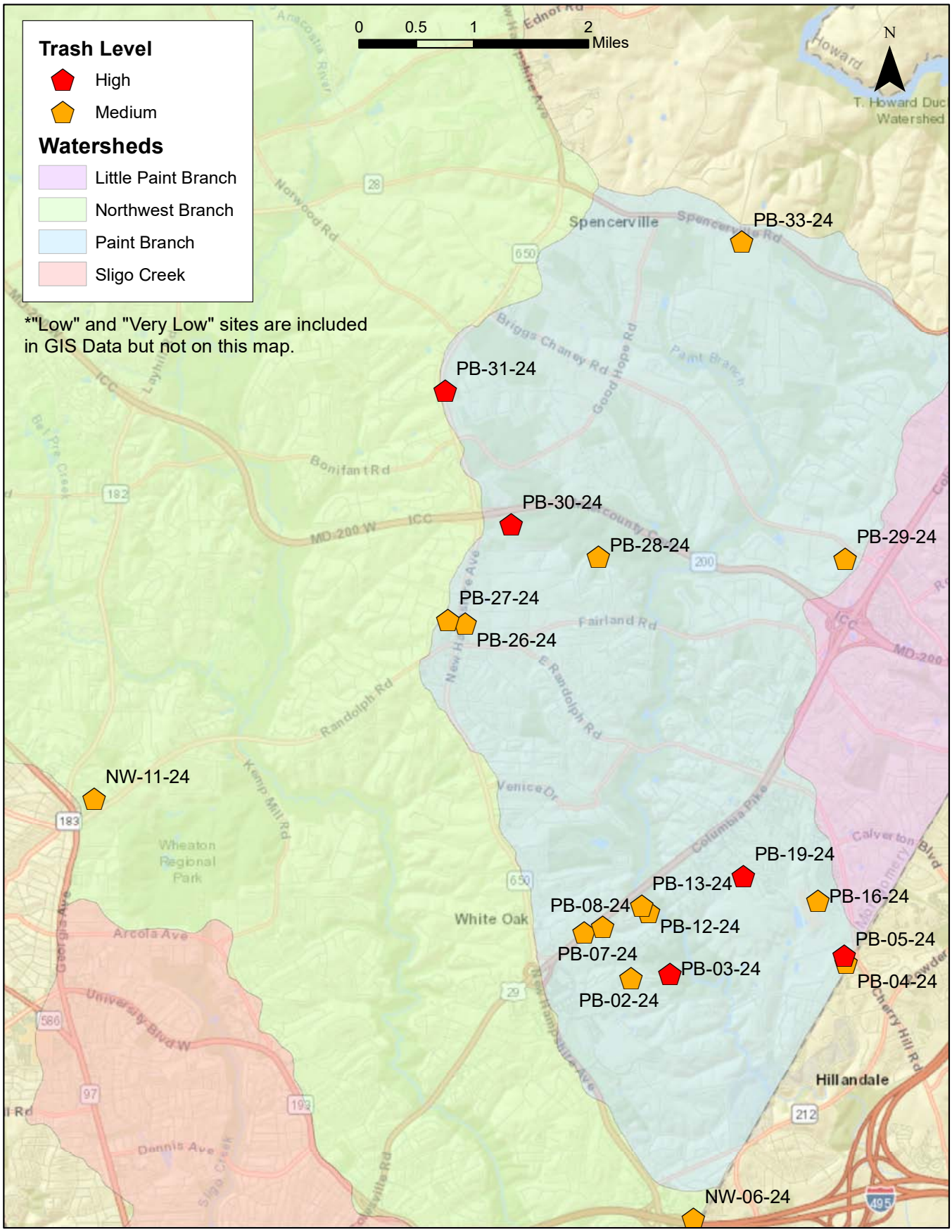


Figure 13. High and Medium HotSpots



Summary of Findings

Land Use Area Hotspot Surveys:

- There were 11 sites with None to Very Low, 24 Low, 14 Medium and 5 with the High ranking (Table 10). Sites with the Medium/High ranking were found more frequently in the Pain Branch watershed (Figure 13).
- Tables 11 and 12 highlight the High and Medium ranked sites. Detailed descriptions of these sites including images, can be found in Appendix 3. None to Low ranking sites are included in the geographic database for reference.

Table 10. Survey Results: Hotspots Listed by Severity

Rank	Hotspot
High	5
Medium	14
Low	24
None to Very Low	11
Total	54

Table 11. High Ranked Hotspots

Site ID	Sub-watershed	Nearest Addess	Public/ Private	Abbreviated Hotspot Description	Litter/Illegal Dumping	Surevy Date	Owner
PB-30-24	PB	14015 New Hampshire Ave #158	Public	Between Hobbs drive and rt200; Industrial misc items, metal, large auto parts, tires, appliances.	Illegal dumping	3/20/2024	MNCPPC
PB-03-24	PB	1603 Regent Manor Ct	Public	Historical dumping household items, metal car parts.	Illegal dumping	3/21/2024	MNCPPC
PB-19-24	PB	2190 Industrial Pkwy	Private	Existing hotspot, illegal dumping and possible parking lot litter overflow.	Illegal dumping	3/25/2024	C/O Corporate Taxation Dept
PB-05-24	PB	11472 Cherry Hill Rd	Private	Glass bottles, cans, construction misc, and plastic bottles/bags. Illegal Dumping/littering.	Both	3/27/2024	Cherry Hill Joint Venture Llp
PB-31-24	PB	214 Windridge Acres Ct	Private	Pile of large strips of metal that is approx. 6' tall and 10' wide.	Illegal dumping	<Null>	Shiloh Christian Fellowship Of Maryland Inc

Table 12. Medium Ranked Hotspots

Site ID	Sub-watershed	Nearest Addess	Public/ Private	Abbreviated Hotspot Description	Litter/Illegal Dumping	Surevy Date	Owner
NW-06-24	NWB	1751 Elton Rd # 300	Private	Trash coming off the beltway and some litter from the business next-door.	Both	3/21/2024	Ralph J Duffie Inc
NW-11-24	NWB	2201 Randolph Rd	Private	Mainly food packaging and shopping carts scattered through the woods behind shopping center.	Litter	4/8/2024	Barnsley James M Jr Rev Liv Tr
PB-28-24	PB	1243 Crockett Ln	Public	Several chairs, trash bags of glass bottles and cans, XL tarp, tires.	Illegal dumping	3/20/2024	MNCPPC
PB-26-24	PB	506 Midland Rd	Unknown	Dry pond facility.	Litter	3/21/2024	Unknown
PB-02-24	PB	11410 December Way	Private	Litter behind the apartments, some concentrated areas.	Litter	3/21/2024	Ap Ya Tic Illc
PB-08-24	PB	11501 Old Columbia Pike	Private	Lots of distributed, liter, bottles bags, food wrappers.	Litter	3/21/2024	Dow Jones & Co Inc
PB-12-24	PB	11770 Carriage House Dr	Public	Illegal dumping behind apartments in to stream valley. On steep slope.	Litter	3/21/2024	MNCPPC
PB-16-24	PB	11890 Healing Wy	Unknown	Grocery carts.	Illegal dumping	<Null>	Unknown
PB-13-24	PB	11770 Carriage House Dr	Public	Household trash, furniture, food packaging dumped behind Guardrail	Illegal dumping	3/28/2024	MNCPPC
PB-29-24	PB	2725 Briggs Chaney Rd	Private	Dumping and litter in the parking lot and near curb, dispersed in the woods, and localized along storm pond fence.	Both	4/8/2024	Johnson Ernestine Et Al
PB-33-24	PB	2215 Spencerville Rd	Private	Five large trash bags, bottles, carry out, plastic, and large metal item.	Litter	<Null>	2141-2229 Spencerville Road Llc
PB-27-24	PB	13508 New Hampshire Ave	Private	Dry pond facility behind Giant and next to commuter parking lot.	Both	3/21/2024	Morningside Hmwnrs Assn Inc
PB-07-24	PB	1312 Milestone Dr	Public	plastic bags and plastic bottles in drainage swale.	Litter	3/21/2024	MDSHA
PB-04-24	PB	11422 Cherry Hill Rd	Private	Dumped shopping carts.	Illegal dumping	3/27/2024	C/O Site Realty Grp

References

Metropolitan Washington Council of Governments (COG) . 2010. Total Maximum Daily Loads of Trash for the Anacostia River Watershed, Montgomery and Prince George's Counties, Maryland and the District of Columbia-FINAL . Submitted to: U.S. Environmental Protection Agency, Region 3, Water Protection Division ,1650 Arch Street , Philadelphia, PA.

Metropolitan Washington Council of Governments (COG). 2019. Anacostia Trash TMDL Monitoring, Standard Operating Procedures and Data Collection Visual Count and Pick Surveys for Wadeable Streams. Prepared for Anacostia Trash Reduction Workgroup.

Metropolitan Washington Council of Governments (COG). 2009. Anacostia Trash TMDL, Work/Quality Assurance Project Plan. Prepared for Montgomery County Department of Environmental Protection and Prince George's County Department of Environmental Resources. Washington, DC.

Appendix A: Table 1 - Station Information and Coordinate Location

Site ID	Site Name	Subwatershed	Latitude	Longitude
SCLB101	Long Branch	Sligo Creek	38.988901	-76.997278
SCSC204	University Boulevard	Sligo Creek	39.032203	-77.029887
SCSC301	Forest Glen Road	Sligo Creek	39.018017	-77.033120
SCSC314*	Carroll Avenue	Sligo Creek	38.982507	-76.999326
NWBP205*	Bel Pre Creek	Northwest Branch	39.072065	-77.041530
NWNW206A	Bryant's Nursery Run	Northwest Branch	39.119944	-77.009675
NWBF301	Batchellors Run	Northwest Branch	39.119873	-77.048719
NWNW402	Layhill Park	Northwest Branch	39.101439	-77.036622
NWNW407D*	Kemp Mill Road	Northwest Branch	39.063277	-77.026360
PBHB210	Hollywood Branch	Paint Branch	39.059098	-76.981635
PBPB308	Valley Mill Park	Paint Branch	39.060755	-76.980538
PBSA100*	Stewart April Lane	Paint Branch	39.044059	-76.978687
LPLP109	Fairland Regional Park (north)	Little Paint Branch	39.095274	-76.928558
LPLP202	Briggs Chaney Road	Little Paint Branch	39.067311	-76.938244
LPLP301A*	Fairland Regional Park (central)	Little Paint Branch	39.081100	-76.925776
*Indicates a "pick survey" site performed from the upstream 250 feet of the 500 foot reach				

Appendix B: Field Data Sheet

ANACOSTIA WATERSHED TRASH SURVEY – MDE 8 Digit Watershed Code - 02140205

DATE:_____ START TIME:_____
CREW:_____ END TIME:_____

SUBWATERSHED:									
STATION NUMBER:									
STATION NAME:									
STARTING COORD. (DDMMSS):	**Lat:**		**Long:**						
END COORD. (DDMMSS):	**Lat:**		**Long:**						
SURVEY TYPE (check applicable)									
1. Stream		**Length (ft):**							
		No. of Trash "Strainers":							
		Riparian Buffer Conditions:							
2. Trash Netting System		**Net Number and Total Weight (lbs)**							
Total Number of Nets/ Nets Surveyed		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
3. Road Right of Way		**300' long and 5' wide on either side of curb gutter per side**							
4. Stormwater Management Pond									
5. Storm Drain Outfall (Trash Fence)		**DA (Acres/mi^2)=**							
GENERAL LAND USES (check all applicable)									
• Low Density Residential (large lot, single family)									
• Medium Density Residential (small lot, single family, and/or townhouses)									
• High Density Residential (apartments)									
• Commercial									
• Industrial									
• Institutional (libraries, schools, religious)									
• Recreational Area (developed)									
• Forest									
• Agriculture									
GENERAL STATION DESCRIPTION:									
PHOTO NUMBERS:									
TOTAL NO. OF OBSERVED ITEMS:									
TOP THREE ITEMS AND ASSOCIATED SUB-TOTALS:									
TOTAL WEIGHT (OPTIONAL): (Kg / g / lbs									

1

Appendix B continued: Field Data Sheet

ANACOSTIA WATERSHED TRASH SURVEY

	Count	Pick/Sort
Time Start:		
Time End:		

STATION ID: _____ **STATION NAME:** _____

Date: _____ **Crew:** _____

	Trash Item	Field Count	Number of Items (Sub-total)	Optional Weight ( )
1	Plastic Bags	Other		
		Carry Out		
2	Plastic Bottles			
3	Glass Bottles			
4	Aluminum Cans			
5	Styrofoam (cups, packaging, etc.)	Polystyrene / Other		
6	Paper (newspapers, etc.)			
7	Cardboard			
8	Cloth/Clothing/Carpeting/Textiles			
9	Food Packaging			
	Straws			
10	Auto: Oil Quart Containers			
	Oil Filters			
	Antifreeze Containers			
	Body Parts: Large >1 ft^2			
	Small <1 ft^2			
11	Car Batteries			
12	Tires (cars, trucks)			
13	Construction Debris:			
	Bricks (>1/2 brick)			
	Concrete			
	Lumber			
	Misc. (e.g. drywall, etc.)			
14	Appliance(s)			
15	Wooden Pallets			
16	Metal (Drums, Cans, Pipes)			
17	Shopping Carts			
18	Toiletries/Drug Containers			
19	Sports Equipment/Toys			
20	Miscellaneous			
TRASH COUNT TOTAL				
TRASH WEIGHT TOTAL ( )				

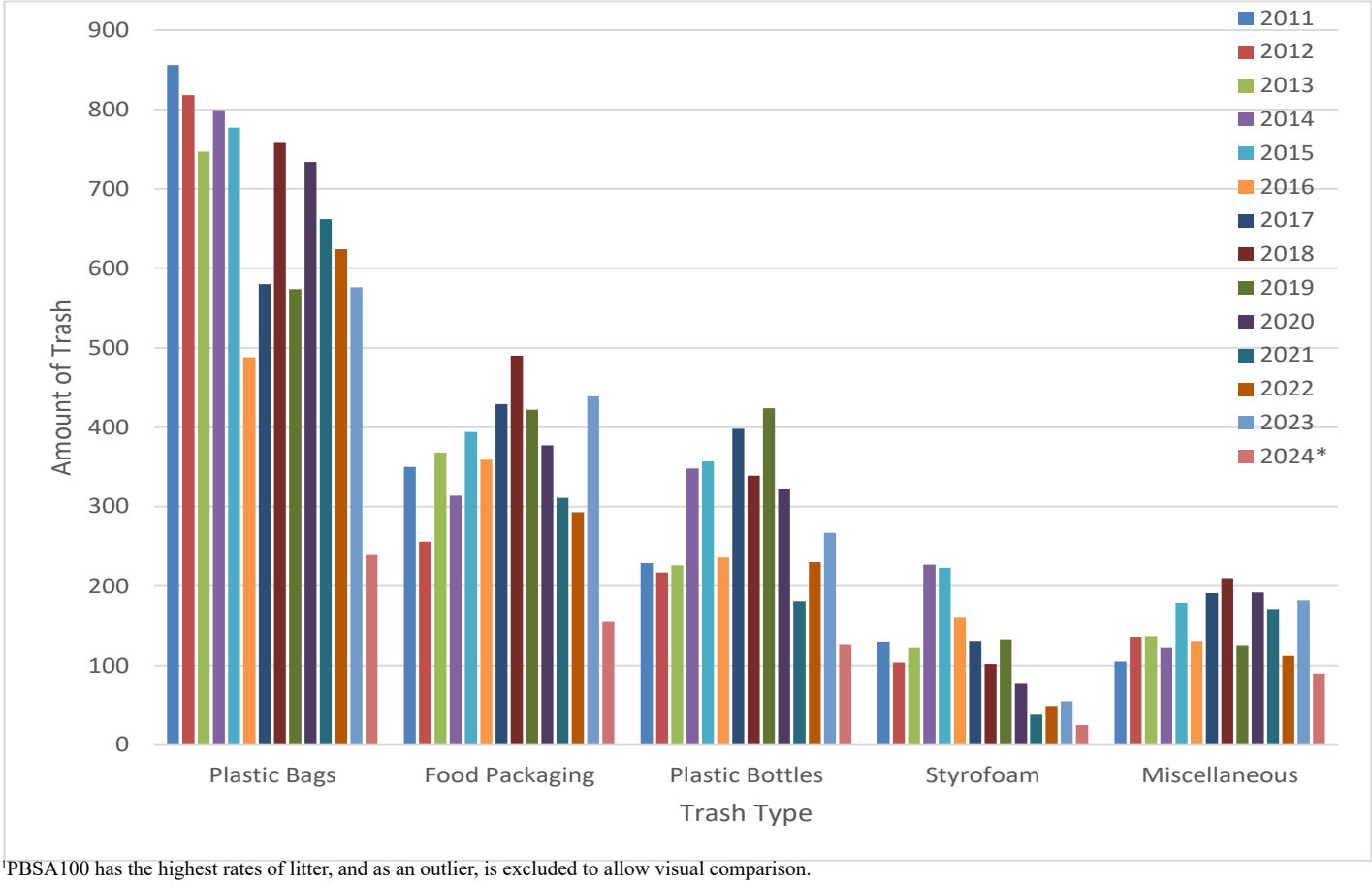
Notes:

Total # of Strainers =

Lower 250 ft	Upper 250 ft

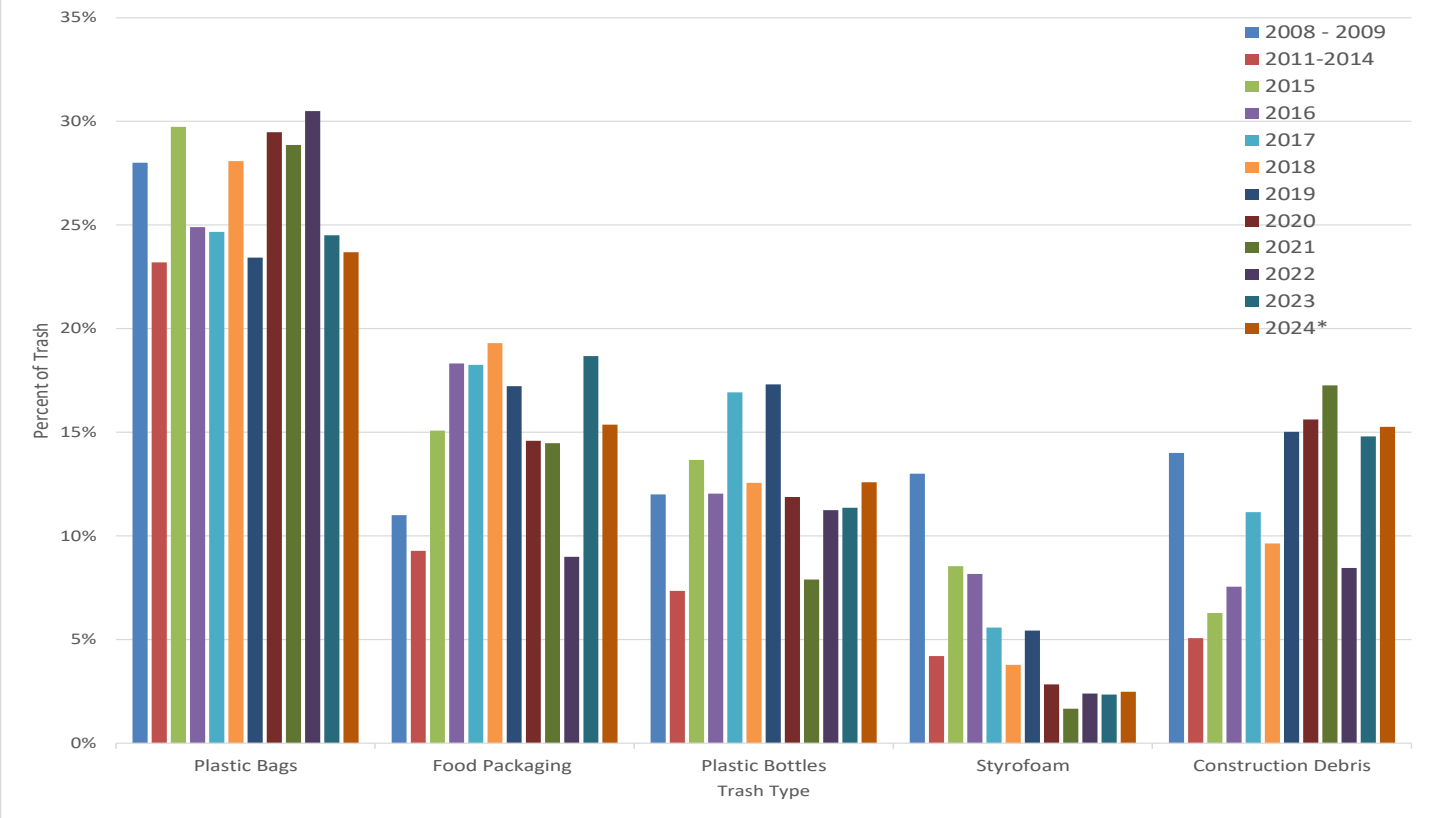
2

Appendix C: Figure 1- Stream Summary by Calendar Year - Major Trash Categories (PBSA100 not included)[1]



[1]PBSA100 has the highest rates of litter, and as an outlier, is excluded to allow visual comparison.
*2024 data is for spring only

Appendix C: Figure 2- Stream Summary by Calendar Year - Percent Total of Major Categories (No PBSA100)[1]



*2024 data is for spring only

Appendix D: Detailed Hotspot Descriptions and Photos (Rated High and Medium only)

Site ID:PB-03-24
Trash Level: High
Subwatershed: Paint Branch
Nearest Address:1603 Regent Manor Ct, Silver Spring, MD 20904
Lat/Long:39.043275; -76.975171

Description: Historical dumping household items and metal car parts.

Site ID:PB-05-24
Trash Level: High
Subwatershed: Paint Branch
Nearest Address:11472 Cherry Hill Rd, Beltsville, MD 20705
Lat/Long:39.045044; -76.953201

Description: Illegal dumping from parking lot; littering.

Site ID:PB-19-24
Trash Level: High
Subwatershed: Paint Branch
Nearest Address:2190 Industrial Pkwy, Silver Spring, MD 20904
Lat/Long:39.052931; -76.96592

Description: Existing hotspot. Illegal dumping and possible parking lot litter overflow.

Site ID:PB-30-24
Trash Level: High
Subwatershed: Paint Branch
Nearest Address:14015 New Hampshire Ave #158, Silver Spring, MD 20904
Lat/Long:39.087594; -76.99518

Description: Between Hobbs drive and rt200; starting near New Hampshire Ave dispersed eastward.

Site ID:PB-31-24
Trash Level: High
Subwatershed: Paint Branch
Nearest Address:214 Windridge Acres Ct, Silver Spring, MD 20905
Lat/Long:39.10078; -77.003504

Description: The adjacent property owner is dumping large strips of metal over their fence. The pile is at least 6' tall and 10' feet wide.

Site ID:NW-06-24
Trash Level: Medium
Subwatershed: Northwest Branch
Nearest Address:1751 Elton Rd # 300, Silver Spring, MD 20903
Lat/Long:39.019121; -76.972182

Description: Litter and possible illegal dumping. Trash coming off the beltway as well possibly some litter from the business next-door.

Site ID:NW-11-24
Trash Level: Medium
Subwatershed: Northwest Branch
Nearest Address:2201 Randolph Rd, Wheaton, MD 20902
Lat/Long:39.060589; -77.047751

Description: Food packaging scattered through the woods in the area behind the shopping center, a few shopping carts as well. Extends all the way around the side and back of the shopping center.

Site ID:PB-02-24
Trash Level: Medium
Subwatershed: Paint Branch
Nearest Address:11410 December Way, Silver Spring, MD 20904
Lat/Long:39.042868; -76.980098

Description: Litter for 15 feet behind the apartments with a couple of concentrated areas. Moderate low.

Site ID:PB-04-24
Trash Level: Medium
Subwatershed: Paint Branch
Nearest Address: 11422 Cherry Hill Rd, Beltsville, MD 20705
Lat/Long:39.044418; -76.952983

Description: Shopping carts seemingly dumped located behind the 7/11.

Site ID:PB-07-24
Trash Level: Medium
Subwatershed: Paint Branch
Nearest Address:1312 Milestone Dr, Silver Spring, MD 20904
Lat/Long:39.047401; -76.985993

Description: Drainage swale between Milestone Drive and Route 29.

Site ID:PB-08-24
Trash Level: Medium
Subwatershed: Paint Branch
Nearest Address:11501 Old Columbia Pike, Silver Spring, MD 20904
Lat/Long:39.047888; -76.983642

Description: Lots of litter for aprox. 100 feet along the grassy area near the road. Lots of distributed, litter, bottles bags, and food wrappers.

Site ID:PB-12-24
Trash Level: Medium
Subwatershed: Paint Branch
Nearest Address:11770 Carriage House Dr, Silver Spring, MD 20904
Lat/Long:39.049411; -76.977861

Description: Illegal dumping behind apartments into the stream valley on steep slope.

No image avaiable for this site.

Site ID:PB-13-24
Trash Level: Medium
Subwatershed: Paint Branch
Nearest Address:11770 Carriage House Dr, Silver Spring, MD 20904
Lat/Long:39.05; -76.978708

Description: Household trash, furniture, and food packaging dumped behind the guardrail into the Paint Branch Valley.

Site ID:PB-16-24
Trash Level: Medium
Subwatershed: Paint Branch
Nearest Address:11890 Healing Wy, Silver Spring, MD 20904
Lat/Long:39.050498; -76.956526

Description: Dumped grocery carts.

Site ID:PB-26-24
Trash Level: Medium
Subwatershed: Paint Branch
Nearest Address:506 Midland Rd, Silver Spring, MD 20904
Lat/Long:39.077845; -77.000952

Description: Dry pond facility.

Site ID:PB-27-24
Trash Level: Medium
Subwatershed: Paint Branch
Nearest Address:13508 New Hampshire Ave, Silver Spring, Md 20904
Lat/Long:39.078171; -77.003155

Description: Dry pond facility behind Giant and next to commuter parking lot.

Site ID:PB-28-24
Trash Level: Medium
Subwatershed: Paint Branch
Nearest Address:1243 Crockett Ln Silver Spring, MD 20904 United States
Lat/Long:39.084413; -76.98419

Description: Several chairs, a couple trash bags of glass bottles and cans, XL tarp, tires, and other; all located just outside the homeowners property line and at the inflection of the hill top.

Site ID:PB-29-24
Trash Level: Medium
Subwatershed: Paint Branch
Nearest Address:2725 Briggs Chaney Rd, Silver Spring, MD 20905
Lat/Long:39.084191; -76.953081

Description: Dumping and litter localized litter in the parking lot and near curb, dispersed in the woods, and localized along storm pond fence. Possible homeless encampment near pond.

Site ID:PB-33-24
Trash Level: Medium
Subwatershed: Paint Branch
Nearest Address:2215 Spencerville Rd Spencerville, MD 20868 United States
Lat/Long:39.115478; -76.966113

Description: Five large trash bags, bottles, carry out, plastic, and large metal item dispersed around lot.