

FY 2021
SUMMARY REPORT

ANACOSTIA RIVER **CLEAN UP AND PROTECTION FUND**

.....
TOMMY WELLS, DIRECTOR
DEPARTMENT OF ENERGY AND ENVIRONMENT

JUNE 24, 2022

Background

The District of Columbia (“the District”) was the first municipality in the country to institute a fee for single-use disposable bags when the Anacostia River Clean Up and Protection Act of 2009 (“the Act”) went into effect. Hundreds more jurisdictions have since followed with some form of regulation on the item. Locally, three Northern Virginia jurisdictions that are part of the larger Chesapeake Bay watershed – Arlington County, Alexandria City, and Fairfax County – approved laws in the past year to charge five cents per bag.

The Act established the Anacostia River Clean Up and Protection Fund (“Bag Fund”), a special-purpose revenue fund administered by the Department of Energy and Environment (DOEE) to protect and clean the Anacostia River and other impaired waterways.

This report, the *Anacostia River Clean Up and Protection Fund Summary Report* is published annually since 2013 and reviews revenue generated and activities supported by the Bag Fund for Fiscal Year 2021 (FY21), spanning October 1, 2020, to September 30, 2021. The COVID-19 pandemic significantly impacted Bag Fund revenue, spending, and program implementation in FY21, explained in further detail in the body of this report. Routine inspections were suspended in March 2020 and resumed at lower capacity in July 2021, reducing total inspections completed in FY21. Many grants and programs supported by the Bag Fund conducted in-person and virtual engagement and education to adhere to District safety requirements.

The Bag Fund receives revenue from four sources:



Disposable Bag Fees

The Act requires District businesses selling food or alcohol to charge a five-cent fee for each paper or plastic disposable bag distributed with any purchase, with a few exemptions. Of each five-cent fee, businesses are required to remit four cents to the Office of Tax and Revenue unless they offer a rebate to customers who bring their own bag; in this case, they are only required to remit three cents. Remitted fees are deposited into the Bag Fund. In FY21, **\$1,946,105.40** in bag fees were collected from regulated businesses.



Voluntary Tax Contributions

District residents can make voluntary contributions to Anacostia River restoration efforts on their individual income tax returns. Both the D-40 and D-40EZ tax forms have special line items for voluntary contributions to the Fund. In FY21, **\$157,507.00** was collected from voluntary contributions.



Anacostia River License Plates

Since 2010, the Department of Motor Vehicles has sold commemorative Anacostia River license plates to District residents. Residents pay a \$25 application fee and a \$10 specialty tag display fee, paid annually upon renewal. A portion of proceeds from the license plates are deposited into the Fund. In FY21, **\$25,617.50** was collected from License Plate fees



Enforcement

To verify compliance with the Act, DOEE typically inspects over 550 businesses per year. Businesses receive a warning letter and compliance assistance upon its first observed violation. For subsequent violations, businesses are fined between \$100 and \$800, depending on the number of previous violations. Fines are deposited into the Fund. In FY21, 157 businesses were inspected and **\$700.00** in fines collected.

Bag Law Revenue by Source, FY10 to FY21

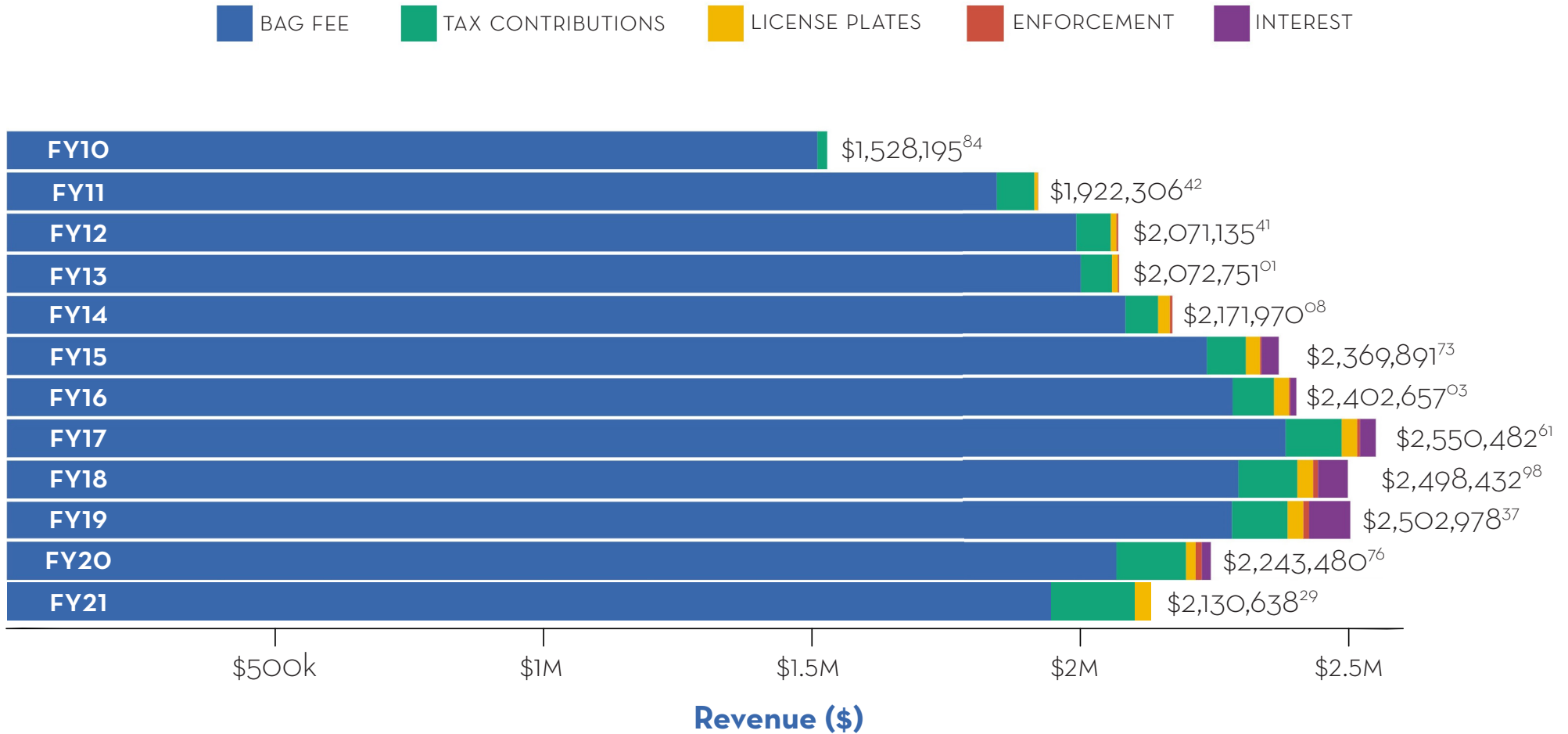


Figure 1: Total Bag Fund revenue for FYs 2010-2021, by source

Total FY21 revenue was lower than recent years due to pandemic-related impacts on businesses and DOEE enforcement. Bag fees are the largest revenue source for the Fund and are further described in the section below. For a detailed breakdown of revenue by year and source, visit Appendix A.

Spotlight: Bag Fees

Bag fees are the largest revenue source for the Bag Fund. In FY20, changes in consumer behavior resulting from the COVID-19 pandemic and confusion from businesses over whether the fee had been temporarily suspended resulted in a drop in monthly revenue. DOEE completed several targeted email outreach campaigns in FY20 to remind businesses of the requirements. Revenue continued to drop in FY21 until rebounding to near-typical numbers in July 2021, a result of enforcement and targeted outreach.

Bag Fee Revenue by Month

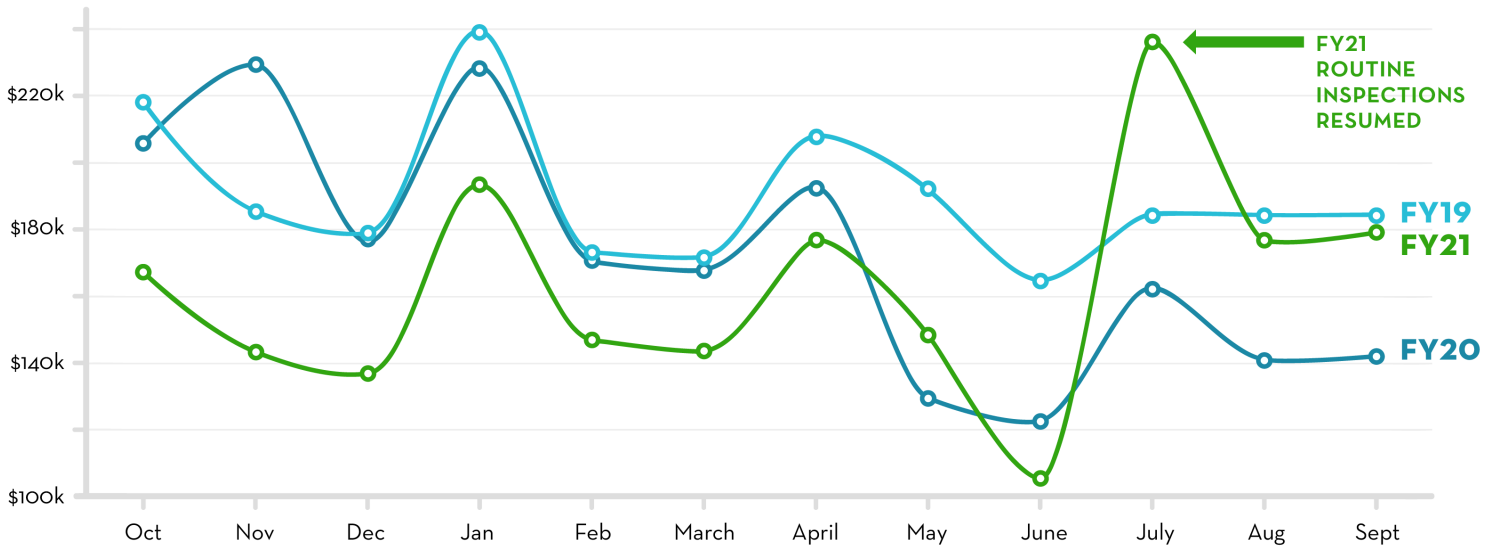
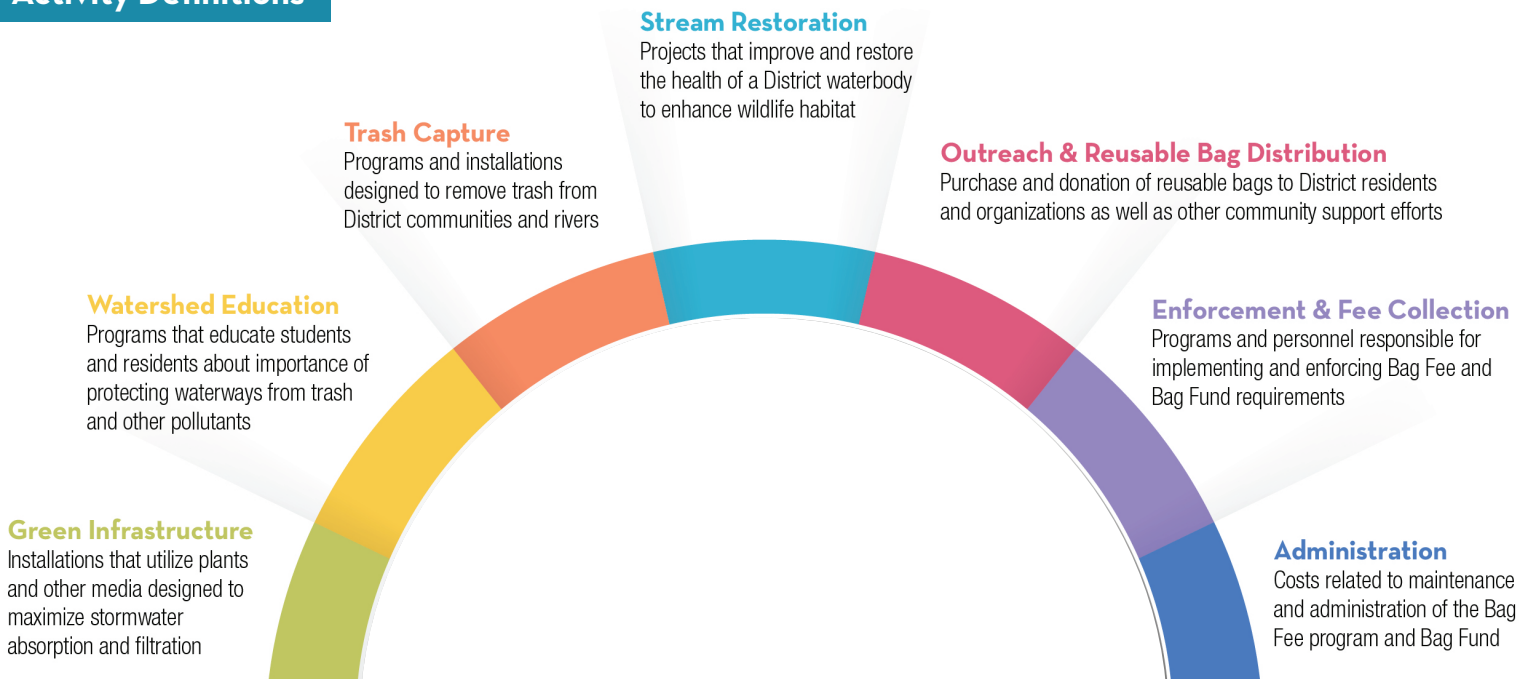


Figure 2: Bag fee revenue by month for FY19, FY20, and FY21

Bag Fund-Supported Activities

Bag Fund revenues are used solely to support activities that fulfill the priorities outlined in the Act, described in more detail below. All spending from the Bag Fund is intended to contribute to cleaning and protecting the Anacostia River and other impaired waterways in the District. The Act's priorities and the activities that address them are outlined in Appendix B. Annual spending varies based on funds available and projects in progress.

Activity Definitions



The breakdown of FY21 spending by category is shown in Table 1. Many of the activities funded in FY21 are ongoing programs that have been supported by Bag Fund revenues over multiple years. Spending on capital projects can vary by year based on the size and complexity of these large-scale restoration efforts. FY21 spending was highest in the Green Infrastructure category, with over \$1.3 million spent on RiverSmart programming, described in detail alongside other select activities implemented with Bag Fund revenues in the following section. Activities included in report may have multiple funding sources and are at least partially supported by the Bag Fund.

Fund-Supported Activity	FY21 Spending (\$)
Green Infrastructure	1,471,682.20
Watershed Education	959,706.33
Trash Capture	101,767.49
Stream Restoration	358,067.06
Outreach and Reusable Bag Distribution	335,170.73
Enforcement and Fee Collection	38,884.67
Administration	284,437.85
Total FY21 Spending	\$3,549,716.33

Table 1: Total spending by category

Fiscal Year	Total Spending (\$)
2014	1,192,126.88
2015	1,541,153.72
2016	1,621,163.62
2017	3,460,501.31
2018	2,677,294.89
2019	3,492,474.16
2020	2,160,799.68
2021	3,549,716.33

Table 2: Total spending per fiscal year

RiverSmart

DOEE's **RiverSmart** programs help to reduce stormwater runoff that pollutes the local waterways that flow into the Chesapeake Bay. The programs provide financial incentives for District property owners to install green infrastructure such as rain barrels, green roofs, rain gardens, permeable pavers, shade trees, and more. These practices allow rainwater to stay on site and soak into the ground, where natural filtration processes help remove pollutants.

In FY21, the Bag Fund supported RiverSmart Homes, RiverSmart Rooftops, RiverSmart Communities, and RiverSmart Schools.

RiverSmart Homes, in partnership with the Alliance for the Chesapeake Bay, offers financial and technical assistance for residential properties to install one or more green infrastructure practices, depending on which are best for their property and lifestyle.

FY21 RIVERSMART HOMES ACCOMPLISHMENTS, BY THE NUMBERS...



1439
property audits



95
rain garden installations



384
Rain Barrel Installations



676
shade trees planted



461
BayScaping installations



66
permeable pavers and re-vegetation installations

RiverSmart Rooftops is also known as the **Green Roofs Rebate Program** and promotes the voluntary installation of green roofs for the purpose of reducing stormwater runoff and pollutants. DOEE offers a rebate of \$10 – \$15 per square foot for voluntary installations of green roofs around the District.

In FY21, RiverSmart Rooftops, in partnership with DesignGreen LLC, installed 8,415 square feet of vegetation that will capture more than 340,000 gallons of stormwater per year. DOEE received 95 interest forms for the program in FY21. Of these, 35 applications met program requirements, and nine successfully completed rebate applications.



Figure 3: RiverSmart Homes BayScaping and shade tree installation in Ward 7

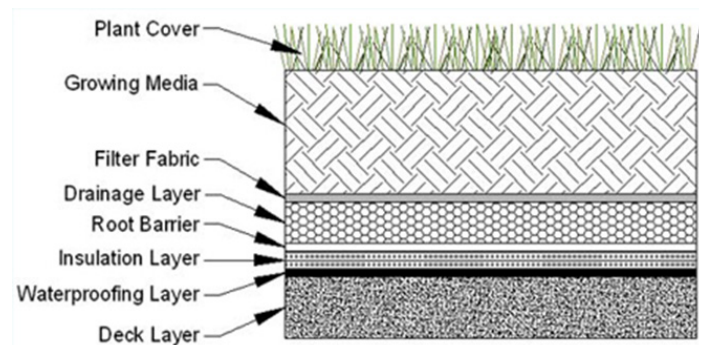


Figure 4: This image shows the different layers of a green roof

RiverSmart Communities is a program aimed solely at installing Low Impact Development (LID) retrofits on non-profit and religious institutional properties. The program provides full funding for design and construction costs to participants on the condition that the non-profit partner will perform outreach and education on watershed protection and relevant DOEE programs. In FY21, RiverSmart Communities had a total of eight project sites including Our Lady of Victory Catholic Church, Allen Chapel AME, Mt. Airy Baptist Church, and Zion Baptist Church.



Figure 5: Green roof installation in Ward 4

Four of the eight sites were selected in FY20. The designs and implementation of these projects were completed in FY21 and had a combined stormwater treatment area of 20,505 square feet. The other four applied for the RiverSmart Communities program and were selected in FY21. During this reporting period, the site selection, design plans, and specific best management practices selected for these project sites were completed. The plan review process has begun, and the completion of these project areas is anticipated for Spring 2022.



Figure 6: Anacostia Watershed Society and volunteers celebrating bioretention installation at Allen Chapel AME Church in Ward



Figure 7: Bioretention installation at St. Paul's Church in Ward 4

RiverSmart Schools funds the installation of green infrastructure at District schools to mitigate stormwater impacts and serve as an educational greenspace for teachers and students. Designs are both functional and educational in order to support an educational environment. In FY21, the program included design and construction projects at three schoolyards: Friendship PCS-Armstrong, St. Thomas More Academy, and Stanton Elementary. The three projects retained over 30,000 gallons of stormwater and treated over 18,000 gallons of stormwater on site during FY21.

Anacostia River Explorers

DOEE provides free boat tours of the river through the [Anacostia River Explorers Program](#) in partnership with Anacostia Riverkeeper and Anacostia Watershed Society. This program is available to anyone, with a focus on District residents.

In FY21, Anacostia River Explorer partners hosted 287 motorized and paddle tours of the Anacostia River. These tours brought together 3,083 participants to learn about the Anacostia River’s history, wildlife, the environmental threats it faces, and solutions to help the river reach its full potential. The program partners also produced new virtual materials including a series of video tours of the river. These resources were utilized in classroom activities and viewed online over 1,000 times.



Figure 8: Participants on a tour of the Anacostia River with non-profit partner Anacostia Riverkeeper

Green Zone Environmental Program

[Green Zone Environmental Program \(GZEP\)](#) is a summer workforce development program that provides District youth and young adults, ages 14-24, with education and training focused on improving water quality, establishing or deepening participants’ connection to the environment, and providing skills for entry-level jobs in the green economy. In FY21, the Bag Fund supported three grantees – Living Classrooms, Latin American Youth Center, and DC SOAR – in training 75 District youth.

Meaningful Watershed Educational Experiences

The Overnight MWEE (MWEE) is a three-day, two-night field experience implemented by the Alice Ferguson Foundation, Living Classrooms, and NatureBridge. The program is designed for District fifth-graders to learn about their local watershed while immersed in a non-urban environment. During the pandemic, the partners modified the program to be implemented virtually. They offered students the chance to work on a stewardship action project, environmental science project, or virtual camp.

Due to implementation barriers presented by the pandemic, DOEE suspended the Overnight Meaningful Watershed Education Experience (OMWEE) program in July 2021. Part of the funding allocated for the OMWEE was utilized to fund a Nature Near Schools (NNS MWEE) program. Five NNS MWEE grants were awarded to grantees who began program implementation in August 2021, with the aim of conducting lessons in 17 schools and reaching 1,182 students and 63 teachers in school year 2021-22.

MWEE IN FY21...

2,199 students served



13 professional training for teachers

940 activity kits delivered

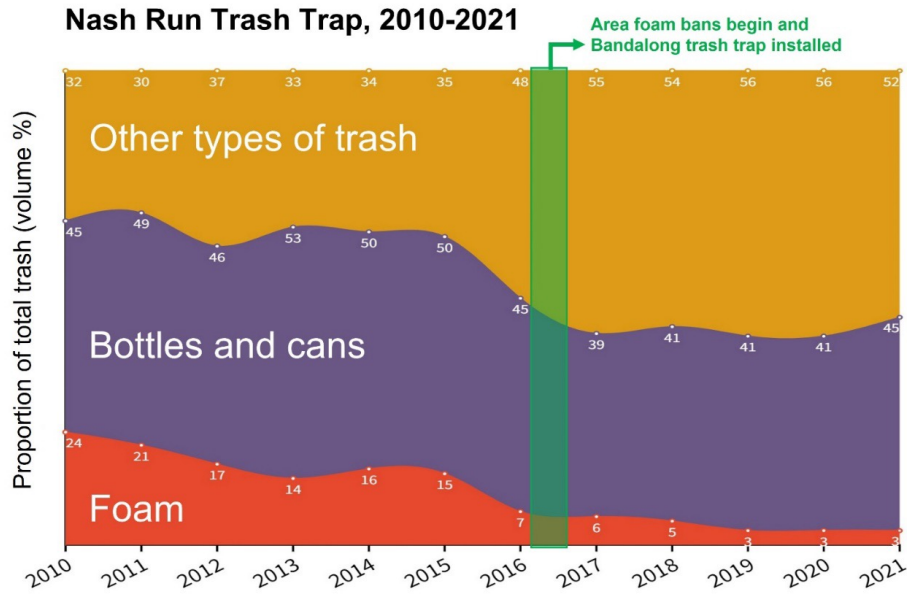


River Corps

In FY21, the Latin American Youth Center (LAYC)'s [River Corps program](#) trained 19 youth. Trainees completed project work maintaining Low-Impact Development installations, stream photo monitoring, trash cleanups, and RiverSmart Homes inspections. Trainees also received certification in OSHA-10, First Aid/CPR, EPA watershed management, and erosion and sediment control.

Trash Traps

Bag Fund revenues supported the installation and ongoing maintenance of nine **trash traps**, which have collectively removed more than 88,000 pounds of trash and debris from the District’s water bodies since their respective installations. In FY21, these trash traps captured over 8,500 pounds of trash and debris. Each trap is monitored, with data reported on the amount (weight and volume) and type of trash collected and removed. This data informs the District’s litter reduction measures.



Graph based on data from Anacostia Watershed Society for calendar years; yearly averages may not sum to 100 due to rounding

Figure 9: Trash Capture includes collecting data to find out what comprises the trash in local waterways.

Mussel Restoration

As of FY21, DOEE and its grantee Anacostia Watershed Society (AWS) released at least 27,607 mussels into the Anacostia River. Five different unionid mussel species have been propagated: Alewife floater (*Utterbackiana implicata*), Eastern pondmussel (*Ligumia nasuta*), Eastern floater (*Pyganodon cataracta*), Eastern elliptio (*Elliptio complanata*) and Eastern lampmussel (*Lampsilis radiata*). In 2021, 20 young largemouth bass (*Micropterus salmoides*) infested with eastern lampmussels were deployed in Genoa cages and 768 eastern lampmussels and alewife floaters (included in the total number above) were deployed at eight locations in the Anacostia and Potomac Rivers in November as part of the sediment remediation project.

During this reporting period, the Mussel Power Program engaged 200 District of Columbia Public School students in educational activities centered on learning about the ecosystem services that freshwater mussels provide. To date, a total of 430 students have been engaged in the Mussel Power Program. Additionally, AWS began developing a Freshwater Mussel Restoration Plan for the District of Columbia.



Figure 10: Mussel release at Kenilworth Aquatic Gardens

Citizen Science Water Quality Monitoring

Each year from May to September, volunteers from all eight Wards in the District tested the levels of bacteria, air and water temperature, pH, and turbidity in areas where residents and visitors recreate. Data from this citizen science water quality monitoring program, implemented by Anacostia Riverkeeper, is published and updated on a weekly basis via the Swim Guide and Water Reporter applications and the Chesapeake Monitoring Cooperative database. Six virtual trainings were held in April 2021 and in-person demonstrations were conducted in May. Additionally, the program trained more than 105 new volunteers who helped collect and analyze about 600 water quality samples in 2021. At the end of the three-year grant period, 1,800 bacteria and 1,800 turbidity samples were collected and analyzed by about 300 volunteers. A final report can be [found here](#).



Figure 11: Mother-daughter team collect a sample from Anacostia Park



Figure 12: A volunteer showing the results of the pH strip at the Wharf

Trash Free Communities

Since 2016, DOEE, in partnership with the Alice Ferguson Foundation (AFF), has implemented a city-wide anti-littering campaign. This includes distributing anti-littering signage, organizing and supporting local community-led trash cleanups, and managing the [Adopt-A-Stream program](#). In FY21, AFF trained 26 new volunteers in the Adopt-A-Stream program, distributed over 250 yard signs, and removed over 66,000 pounds of trash through community cleanups.



Figure 13: Adopt-A-Stream volunteers at a fall cleanup in Rock Creek Park

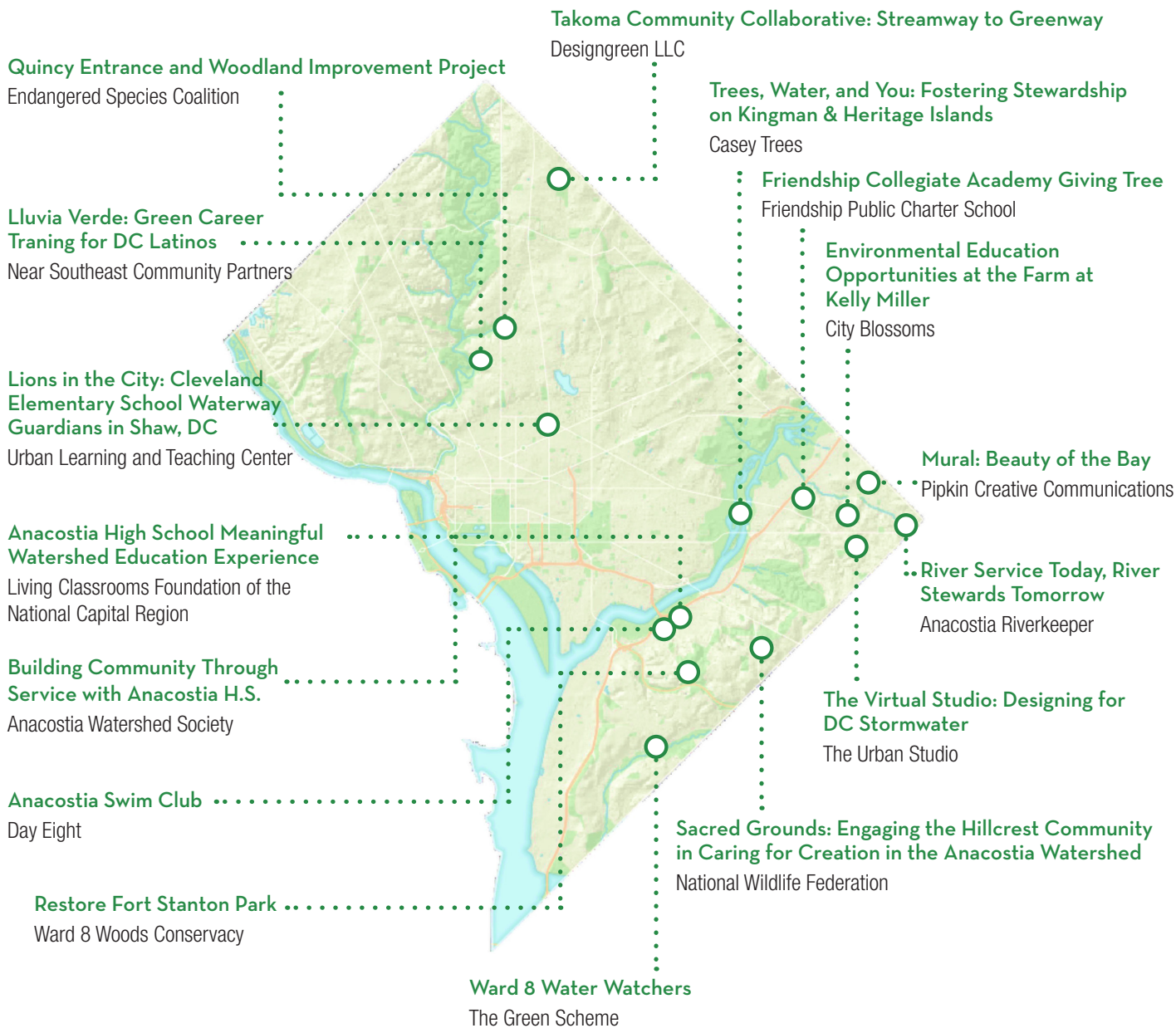
Reusable Bag Distribution

In FY21, DOEE purchased 30,000 reusable bags made from recycled plastics for distribution to District nonprofits, sister agencies, and partners, with a special focus on low-income and senior populations. In FY21, DOEE distributed over 17,000 bags to 13 nonprofits, food pantries, and charities, including Brighter Day Ministries, So Others May Eat, and Martha's Table. This effort aids residents in changing their behavior from using disposable bags to using reusable bags.

Community Stormwater Solutions

Through the **Community Stormwater Solutions grant program**, DOEE provides funding for community-oriented and community-inspired projects to improve water quality, reduce trash, and raise awareness of what residents can do to restore rivers, streams, and parks. In 2020, DOEE expanded the program by partnering with the Chesapeake Bay Trust to help administer funds, cultivate relationships with potential grantees, and execute capacity-building initiatives to make funding opportunities more accessible to new organizations and small businesses. The Bag Fund is one of the major funding sources of this program, which supports projects across several Bag Fund spending categories.

In FY21, 16 Community Stormwater Solutions grants totaling \$295,002 were conducted, with ten awarded in FY20 and six awarded in FY21. Project areas included environmental education, project-based learning with Anacostia High School, green infrastructure, green jobs, habitat restoration, litter and pollution reduction, and Kingman and Heritage Islands.



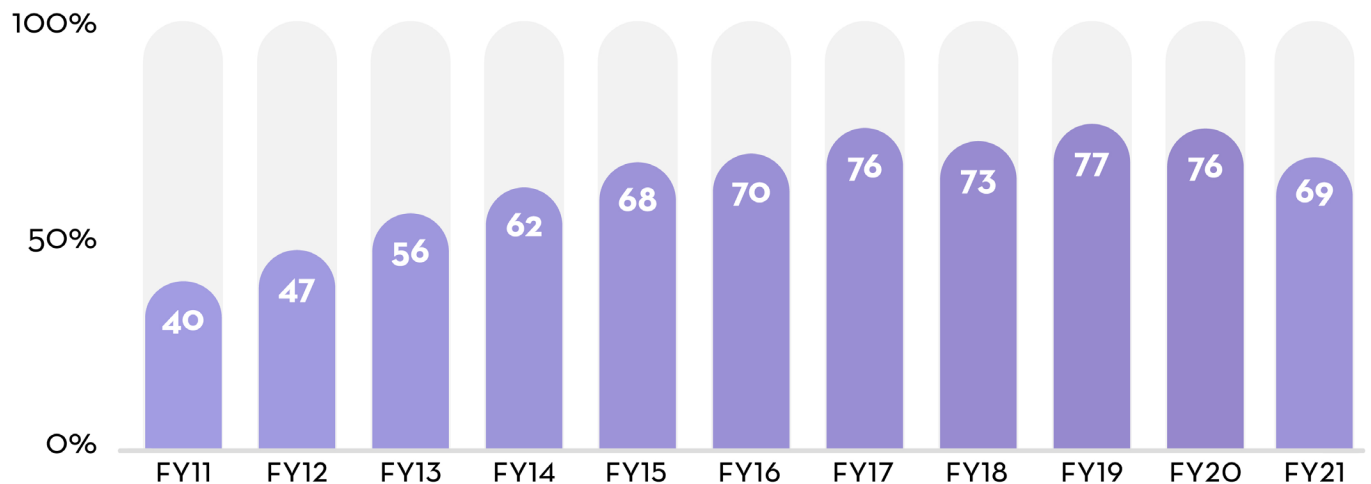
Enforcement and Fee Collection

DOEE suspended routine Bag Law inspections from March 2020 through June 2021 in response to the Mayor’s March 30, 2020 [Stay-at-Home Order](#) and continued health and safety restrictions. This resulted in fewer total inspections for the year as compared to previous years. In FY21, DOEE conducted 157 inspections of District businesses to ensure compliance with the Act. This is compared to the approximately 550 inspections conducted in a normal year. As a result of these inspections, DOEE issued 31 Notices of Violation, or warning letters, and 17 Notices of Infraction, which carry civil penalties. DOEE assessed a total of \$6,400 in civil penalties for infractions that occurred in FY21 and received \$700 in fee revenue. The difference between assessed penalties and fine revenue received is due to businesses paying fines in different fiscal years from the observed violation.

The FY21 compliance rate dropped to 69.4%, a result of routine inspections being suspended until July 2021. Approximately 75% of inspections and 80% of enforcement actions were completed in the fourth quarter of FY21 and have resulted in both fee revenue and compliance with the law returning to near-normal numbers.

Compliance Rates of Bag Law Inspections (%)

FY10 TO FY21



Percentages are rounded to the nearest whole number. No inspections were conducted for FY10, the first fiscal year the Bag Law was in effect.

Figure 14: The compliance rates for Bag Law inspections over time

Administration

A small portion of Bag Fund revenues covers administrative expenses associated with the program, such as equipment, printing and reproduction, and overhead expenses. Bag Fund revenues also support processing bag fees and other revenue sources remitted by businesses and residents and transferring them to the Bag Fund.

Additional Information

The Bag Fund is managed by DOEE’s Natural Resources Administration. For more information about implementation of the Act, visit doee.dc.gov/bags. Additional questions should be directed to Emily Rice, Branch Chief of the Watershed Protection Division’s Partnering and Environmental Conservation Branch, at (202) 535-2679 or emily.rice@dc.gov.



Appendix A: Bag Fund Revenue by Year and Source

Fiscal Year	Fees	Tax Contributions	License Plates	Enforcement	Interest	TOTALS by YEAR
FY10	\$1,510,088.35	\$18,107.49	\$0.00	\$0.00	\$0.00	\$1,528,195.84
FY11	\$1,845,313.25	\$69,849.37	\$6,493.80	\$650.00	\$0.00	\$1,922,306.42
FY12	\$1,993,183.22	\$64,117.91	\$10,670.15	\$3,164.13	\$0.00	\$2,071,135.41
FY13	\$2,001,575.50	\$58,120.21	\$10,753.05	\$2,302.25	\$0.00	\$2,072,751.01
FY14	\$2,084,613.59	\$60,853.69	\$21,935.50	\$4,567.30	\$0.00	\$2,171,970.08
FY15	\$2,236,275.44	\$72,435.77	\$26,414.45	\$2,478.43	\$32,287.64	\$2,369,891.73
FY16	\$2,284,104.15	\$76,906.63	\$28,086.95	\$2,451.51	\$11,107.79	\$2,402,657.03
FY17	\$2,382,747.11	\$104,331.65	\$28,750.70	\$5,230.11	\$29,423.04	\$2,550,482.61
FY18	\$2,294,977.50	\$109,646.07	\$29,288.80	\$9,200.00	\$55,320.61	\$2,498,432.98
FY19	\$2,282,879.44	\$103,541.59	\$29,284.35	\$10,594.60	\$76,678.39	\$2,502,978.37
FY20	\$2,068,208.73	\$129,567.64	\$17,890.75	\$11,200.00	\$16,613.64	\$2,243,480.76
FY21	\$1,946,105.40	\$157,507.00	\$25,617.50	\$700.00*	\$708.39**	\$2,130,638.29
TOTALS by SOURCE:	\$24,930,071.68	\$1,024,985.02	\$235,186.00	\$52,538.33	\$222,139.50	
					TOTAL REVENUE:	\$26,464,920.53

*Low FY21 enforcement revenue a result of suspension of routine inspections between October 2020-June 2021

** Low FY21 interest due to a lower interest rate for the year (FY21 interest rate was 0.05% while FY17-FY20 interest rates ranged from 0.75%-2.30%) as well as the higher spending amount in FY21 compared to FY20

Appendix B: Act Priorities Addressed by Fund-Supported Activities

Act Priority/Fund-Supported Activity	Green Infrastructure	Watershed Education	Trash Capture	Stream Restoration	Outreach and Reusable Bag Distribution	Enforcement and Fee Collection	Program Administration
A public education campaign to educate residents, businesses, and tourists about the impact of trash on the District's environmental health		X			X	X	
Providing reusable carryout bags to District residents, with priority distribution to seniors and low-income residents					X		
Purchasing and installing equipment, such as storm drain screens and trash traps, designed to minimize trash pollution that enters waterways through storm drains			X	X			
Creating youth-oriented water resource and water pollution educational campaigns for students at the District public and charter schools		X					
Monitoring and recording pollution indices			X		X	X	
Preserving or enhancing water quality and fishery or wildlife habitat	X	X	X	X	X	X	
Promoting conservation programs, including programs for wildlife and endangered species	X	X			X		
Purchasing and installing signs and equipment designed to minimize trash pollution, including anti-littering signs to be installed in areas where littering would impact the Anacostia River, recycling containers, and covered trash receptacles			X		X		
Restoring and enhancing wetlands and green infrastructure to protect the health of the watershed and restore the aquatic and land resources of its watershed	X	X	X	X			
Funding community cleanup events and other activities that reduce trash, such as increased litter collection		X	X		X		
Funding a circuit rider program with neighboring jurisdictions to focus river and tributary clean-up efforts upstream ¹		X	X				
Supporting vocational and job training experiences in environmental and sustainable professions that enhance the health of the watershed		X					
Maintaining a public website that educates District residents on the progress of clean-up efforts							X
Paying for the administration of this program							X

1. DDOE addresses this priority area through its participation in the Anacostia Watershed Restoration Partnership and the Metropolitan Washington Council of Governments Regional Water Quality Management Program. Likewise, many local watershed groups (e.g. The Anacostia Watershed Society and Anacostia xRiverKeeper) are already advocating for circuit rider initiatives throughout the region.