



1. Background

The Anacostia River Clean Up and Protection Act of 2009 ("Act") established the Anacostia River Clean Up and Protection Fund ("Fund"), a special-purpose revenue fund administered by the Department of Energy and Environment (DOEE). DOEE uses the Fund to conduct stream restoration projects, install and maintain trash traps in streams, install green infrastructure, deliver watershed education programs, and purchase and distribute reusable bags, especially to low-income and senior populations. The Fund has four revenue sources: disposable bag fees, enforcement revenue, proceeds from Anacostia River commemorative license plates, and voluntary tax contributions from District residents. This *Anacostia River Clean Up and Protection Fund Summary Report*, published annually since 2013, reviews revenue generated and activities supported by the Fund for Fiscal Year 2019 (FY19), spanning October 1, 2018 to September 30, 2019.

Effective January 1, 2010, the Act requires all District businesses that sell food or alcohol to charge a \$.05 fee for each paper or plastic disposable bag distributed with any purchase, with certain exemptions. Most businesses are required to remit \$.04 of each \$.05 fee to the Office of Tax and Revenue on their sales tax return. Businesses that offer a rebate to customers who bring their own bag are only required to remit \$.03 of each \$.05 fee. Remitted fees are deposited into the Fund.

To verify compliance with the Act, DOEE inspects over 550 businesses per year. Businesses in violation of the Act receive a warning letter before being fined between \$100 and \$800, depending on the number of previous violations. Fines are deposited into the Fund.

Since 2010, the Department of Motor Vehicles has sold commemorative Anacostia River license plates to District residents (Figure 1). To obtain these plates, residents must pay a \$25.00 specialty tag application fee and a specialty tag display fee of \$10.00, which must be paid annually upon renewal. A portion of the proceeds from the issuance of Anacostia River license plates are deposited into the Fund.

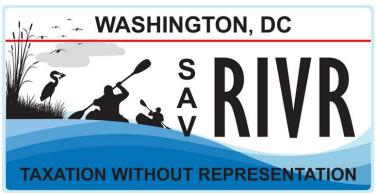


Figure 1: Anacostia River license plate

District residents can also 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.

2. Bag Fee and Enforcement Revenue

Between Fiscal Years 2010 and 2017, annual bag fee revenue increased year-to-year (see Table 1).¹ Revenue has decreased slightly in the past two years, likely due to a combination of factors. The reduction in 2018 revenue was partially attributed to businesses adapting to a new Office of Tax and Revenue (OTR) sales and use tax reporting system. With compliance rates at their highest in FY19 (see Table 8), the slight decrease in FY19 revenue is likely due to behavior change among consumers, as they transitioned to reusable bags or opted for no bag at all.

Table 1: Bag Fee Revenue

Fiscal Year	Revenue (\$)	Fiscal Year	Revenue (\$)
2010	1,510,088.35	2015	2,236,275.44
2011	1,845,313. ²⁵	2016	2,284,104.15
2012	1,993,183.22	2017	2,382,747.11
2013	2,001,575.50	2018	2,294,977.50
2014	2,084,613.59	2019	2,282,879.44

Businesses that fail to properly charge the fee are subject to fines ranging from \$100 and \$800, depending on number of previous violations (see Table 2). As

more inspected businesses are likely to have previously been issued a Notice of Violation over time, the total number of fines issued as well as fine amounts increases, even as compliance rates increase or plateau. Fine revenue is not a reflection of compliance, as some businesses fail to pay their fines and others pay late. For example, while compliance rates were at their highest in FY19, fine revenue was also at its highest, as individual fine amounts increase.

Table 2: Fine Revenue

Fiscal Year Total Fines (\$)		Fiscal Year	Total Fines (\$)	
2010	n/a	2015	2,478.43	
2011	650.00	2016	2,451.51	
2012	3,164.13	2017	5,230.11	
2013	2,302.25	2018	9,200.00	
2014	4,567. ³⁰	2019	10,594. ⁶⁰	

¹ Businesses can remit bag fees on a monthly, quarterly, or annual basis. Bag fees are attributed to the fiscal period they were received by the District government, which may be different than the fiscal period they were collected by a business.

3. Other Revenue Sources

Since 2011, the issuance of Anacostia River license plates has generated more than \$185,000 in revenue.

Table 1: Commemorative License Plate Revenue

Fiscal Year	Revenue (\$)	Fiscal Year	Revenue (\$)
2010	n/a	2015	26,414. ⁴⁵
2011	6,493.80	2016	28,086.95
2012	10,670.15	2017	28,750.70
2013	10,753.05	2018	29,288.80
2014	21,935.50	2019	29,284.35

Since 2010, District residents donated over \$730,000 to the Fund through voluntary contributions on their income tax returns.

Table 4: Voluntary Tax Contribution Revenue

Fiscal Year	Revenue (\$)	Fiscal Year	Revenue (\$)
2010	18,107. ⁴⁹	2015	72,435. ⁷⁷
2011	69,849. ³⁷	2016	76,906. ⁶³
2012	64,117. ⁹¹	2017	104,331. ⁶⁵
2013	58,120.21	2018	109,646. ⁰⁷
2014	60,853.69	2019	103,541. ⁵⁹

From all sources combined, over \$21 million has been collected and deposited into the Fund since it was established in 2010.

Total Fund Revenues, by source

Fiscal Years 2015-2019

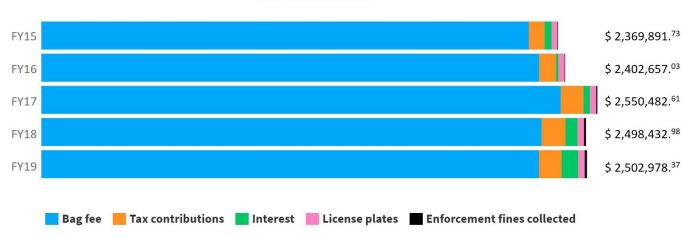


Figure 2: Total Fund Revenue for FY19 Broken Down by Source

Table 5: Total Revenue

Fiscal Year	Revenue (\$)	Fiscal Year	Revenue (\$)
2010	1,528,195.84	2015	2,369,891.73
2011	1,922,156.42	2016	2,402,657.03
2012	2,071,135.41	2017	2,550,482. ⁶¹
2013	2,072,751.01	2018	2,498,432.98
2014	2,171,970.08	2019	2,502,978. ³⁷

4. Fund-Supported Activities

Fund revenues are used solely to support activities that fulfill the priorities outlined in the Act, including environmental education and protection activities that improve the health of the District's water bodies. The Act's priorities and the activities that addressed them are outlined in the Appendix. Annual spending varies based on funds available and projects in progress (see Table 6).

Table 6: Total Spending since 2014*

Fiscal Year	Total Spent(\$)
2014	1,192,126.88
2015	1,541,153. ⁷²
2016	1,612,163.62
2017	3,460,501. ³¹
2018	2,677,294.89
2019	3,691,529.57

^{*}DC Council mandated annual spending reports beginning FY14

In FY19, DOEE used Fund revenues to implement activities across several areas including green infrastructure installation, watershed education, trash capture, stream restoration, and community outreach (see Table 7). Many of these activities are ongoing programs that have been supported by Fund revenues over multiple years. Fund revenues also supported project management for these activities and DOEE's bag fee enforcement and collection efforts. Spending levels were higher in FY19 as compared to FY18 because the Fund supported the Spring Valley Stream Restoration, a major capital project, and a comprehensive outreach campaign around the 10-year anniversary of the Act. Spending on capital projects in particular varies from year-to-year based on the size and complexity of these large-scale restoration efforts.

Table 7: FY19 Total Spending Breakdown

Fund-Supported Activity	FY19 Spending (\$)		
Green Infrastructure	757,809. ¹⁵		
Watershed Education	813,288.99		
Trash Capture	115,117. ⁷⁵		
Stream Restoration	1,264,974.61		
Outreach and Reusable Bag Distribution	413,302.92		
Enforcement and Fee Collection	46,884.85		
Administration	280,151. ³⁰		
Total Spending	3,691,529. ⁵⁷		

Select activities implemented with Fund revenues in FY19 are described below.

5. Activity Descriptions

a. Green Infrastructure

RiverSmart Communities Demonstration Program

DOEE's RiverSmart Communities Demonstration Program covers 100% of the cost to install green infrastructure on eligible properties. Through an application process, DOEE selects projects based on the environmental benefits, community engagement, and project cost-effectiveness and feasibility. Eligible pollution control measures, often called Best Management Practices (BMPs), include shade trees, rain gardens/bioretention cells, impervious surface removal and replacement with pervious/vegetated surfaces, cisterns that drain to other BMPs, stormwater planters, and swales. In FY19, DOEE funded four comprehensive green infrastructure projects at religious institutions.

One of the FY19 projects took place at Nineteenth Street Baptist. DOEE worked with Nineteenth Street Baptist to remove 2,000 square feet of existing concrete and replaced it with 640 square feet of permeable pavement, 1,360 square feet of native plant landscaping, and five shade trees. The new permeable paver system is now treating over 3,000 square feet of impervious surface and can filter over 3,000 gallons of polluted stormwater per rain event.



Figure 3: Completed permeable paver installation at Nineteenth Street Baptist Church

RiverSmart Homes

RiverSmart Homes offers financial and technical assistance to homeowners who reduce their residential stormwater runoff by installing green infrastructure. Stormwater runoff carries pollutants from impervious surfaces into the District's water bodies. District homeowners are eligible for a free stormwater audit to determine their property's suitability for rain gardens, tree planting, rain barrels, native landscaping, permeable pavement, and re-vegetation. If recommended, homeowners are connected to local contractors who will install their selected practices for a small co-pay.

In FY19, RiverSmart Homes accomplishments included the following:

• Properties audited: 1,227

• Properties with new installations: 800

Rain barrels installed: 305
Shade trees planted: 1,479
Rain gardens installed: 85
BayScapings installed: 282

Permeable Pavers and re-vegetation projects installed: 91



Figure 4: A RiverSmart Homes rain garden installation in Brookland

RiverSmart Schools

RiverSmart Schools works with schools in the District to install green infrastructure in an effort to control stormwater and promote environmental education.

RiverSmart Schools trains teachers and informal educators with environmental curricula that support the District's teaching and learning standards. The teachers are also trained on how to properly manage campus installations. In April 2019, RiverSmart Schools provided 15 new teachers with training workshops on site usage and programming. DOEE completed the design and construction of four RiverSmart Schools in FY19. One of the sites, Bunker Hill Elementary School, involved the installation of two bioretention basins, an outdoor learning area, and appropriate landscaping and hardscaping.



Figure 5: A RiverSmart Schools bioretention basin at Bunker Hill Elementary School

b. Watershed Education

Anacostia River Explorers

DOEE provides free boat tours of the Anacostia River through the Anacostia River Explorers Program in partnership with two nonprofit organizations. This program is available to anyone, with a special focus on District residents. The tours are designed to educate participants about the Anacostia River's human and natural history, the threats it faces, and what solutions are being undertaken to restore the river and its waterfront back to its full potential as an invaluable asset for the District and its residents. These guided motorboat and canoe tours launch from a variety of locations along the Anacostia River and can accommodate all ages and abilities. Translation services are also provided. In FY19, DOEE funded 332 tours, allowing 4,873 participants to gain access to the Anacostia River.



Figure 6: A group of students prepares to launch on an Anacostia River Explorers tour from Anacostia Park near the Aquatic Resources Education Center

Anacostia Environmental Youth Summit

The Anacostia Environmental Youth Summit is an annual District-wide showcase that spotlights youth, demonstrates environmental literacy, and encourages stewardship for the Anacostia and Potomac Rivers and the Chesapeake Bay. By exemplifying an ethic of stewardship and responsible action, the Youth Summit emphasizes youth leadership and innovation. In FY19, the event hosted ten schools, 395 students, 30 teachers, 21 exhibitors, 13 volunteers, and seven judges.



Figure 7: Students attending the 2019 Anacostia Youth Summit

Overnight Meaningful Watershed Educational Experiences (MWEE)

DOEE funds overnight meaningful watershed educational experiences that provide District students with outdoor, hands-on experiences that connect them to their local watershed and the Chesapeake Bay. This program helps foster an ethic of responsible citizenship while meeting DCPS standards for teaching and learning.

The Overnight MWEE is a three-day, two-night field experience that offers District 5th graders the opportunity to spend time learning about their local watersheds while immersed in a non-urban environment. In FY19, 2,520 students enrolled in District Public Schools and District Public Charter Schools participated in the Overnight MWEE program.



Figure 8: MWEE students observing a wetland

River Corps

In FY19, the Latin American Youth Center's (LAYC) River Corps trained 18 youth in two, 5-month green infrastructure job training sessions. River Corps members controlled invasive species on over six acres of District park land, collected over 1,600 pounds of litter, photo-monitored 12 streams, and performed inspections on 36 RiverSmart Homes sites and over a dozen public space rain gardens. Corps members also received certification in First Aid/CPR, OSHA-10, the ATSSA (American Traffic Safety Services Association) Flagger Certification, and Maryland's Erosion and Sediment Control Certification Course. One major accomplishment of the spring and fall cohorts includes invasive species removal and replanting of the vernal pool area near the Benning Road entrance of Kingman Island.



Figure 9: Corps members pulling invasive bush honeysuckle at Kingman Island

c. Trash Cleanup

Trash Traps

In 2011, DOEE installed the first of seven trash traps in tributaries of the Anacostia River in order to meet the District's trash Total Maximum Daily Load (TMDL) requirements of the Municipal Separate Storm Sewer System (MS4) Permit requirements. Fund revenues supported the installation and on-going maintenance of these trash traps, which have collectively removed more than 75,000 pounds of trash and debris from the District's water bodies. In FY19, these trash traps captured 7,110 pounds of litter. Each trap is monitored and data is reported on the amount (weight and volume) and type of trash collected and removed. This data informs DOEE's litter reduction measures.

Below is a chart of monitoring data collected at the Nash Run trash trap. Data shows a declining trend in the proportion of trash consisting of Expanded Polystyrene (EPS- "Styrofoam," or foam) once foam bans in the District as well as Montgomery and Prince George's Counties, MD went into effect. Monitoring and data analysis is conducted through a grant with the Anacostia Watershed Society.

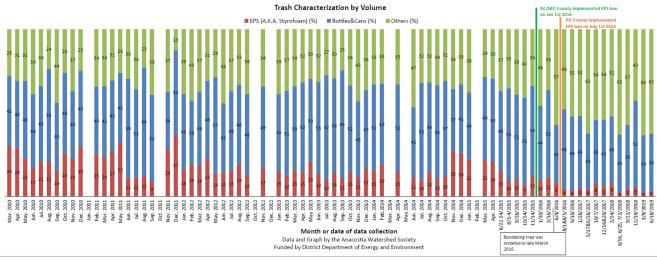


Figure 10: Nash Run trash trap data of trash monitoring volume broken down by product type, with foam in red

d. Stream Restoration

Congress Heights Regenerative Stormwater Conveyance

The Congress Heights Recreation Center is located in the Oxon Run watershed and is approximately four acres, one of which is impervious surface. In FY18, DOEE began the process of restoring a 300-foot woodland stormwater gully on the side of the Center by implementing a Regenerative Stormwater Conveyance (RSC) channel. The construction for this RSC technique began in FY19 and includes the use of boulder step pools that safely convey storm flows while encouraging stormwater treatment.

Spring Valley Stream Restoration

The Spring Valley Park Stream is a 1,100- foot stream and tributary to the Potomac River. DOEE began collecting pre-restoration monitoring data in FY14 with the intent to replace the existing incised stream channel with a stable stream channel. In FY17, DOEE awarded a design-build contract for the restoration of the Spring Valley Park Stream. DOEE met with community members during the restoration to inform them about this project and encourage them to adopt practices on their properties to reduce stormwater runoff to the stream. DOEE completed the Spring Valley Stream Restoration at the end of FY19. The restored channel has been sized to convey increased stormwater flows at a shallower flow depth. This will reduce channel shear stress and minimize potential bank erosion in the future.²



Figure 11: Spring Valley Restoration Project

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² The Bag Law funds utilized for this project are a placeholder for funds provided by DC Water. DOEE is seeking budget authority for these funds and will reimburse the Bag Law expenditure at that time.

e. Community Grant Programs

Community Stormwater Solutions

DOEE provides funding for innovative, community-oriented and inspired projects to improve water quality, reduce trash, and raise awareness of what citizens can do to restore rivers, streams, and parks. A key goal of the program is to increase DOEE's partnerships with community-based organizations and small local businesses to help these entities build capacity and experience as grantees. The program provides up to \$20,000 per grant and is offered on a yearly basis. Grantees must be located within the District and have the capacity to engage a diverse audience.

In FY19, DOEE received 22 proposals and awarded 11 grants totaling \$217,330. The Anacostia River Clean Up and Protection Fund funded six of these grants, totaling \$119,397.39, including the following projects:

- Anacostia Coordinating Council (ACC): Suitland Parkway Woods Project:

 ACC is the fiscal sponsor for the Suitland Parkway Woods Project, which employed five residents of Ward 8 as Park Stewards to remove invasive plants and litter from the natural areas around Suitland Parkway.
- Constituent Services Worldwide Public Benefit Corporation (CSWPBC): Green
 Infrastructure Pathways Project
 CSWPCB employed seven District residents who face significant challenges to employment in a 100-hour post-certification, on-the-job training program.
- Living Classrooms: Kingman Island Access Beautification Community Arts Project
 Living Classrooms worked with about 100 Ward 7 residents to beautify the approach of
 Kingman and Heritage Islands via the Benning Road Ethel Kennedy Bridge with a community
 arts project.
- Step Afrika!: Step Fest, an Activation of Kingman Island
 Step Afrika! produced Step Fest, a one-day event on August 31, 2019 on Kingman and Heritage
 Islands. Funding supported general operations, marketing the event to local communities, dance troops performing at the event, and watershed activities taking place at the event.
- Urban Learning and Teaching Center (ULTC): Geocaching DC's Waterways

 ULTC worked with students at DC Bilingual PCS, Elsie Whitlow Stokes PCS, and Creative

 Minds International PCS to create a Geocaching series that educates the public and raises

 awareness about stormwater runoff.
- Washington Area Bicyclist Association (WABA): Trail Rangers Expansion and Engagement in the Watts Branch Corridor
 WABA engaged residents in the Watts Branch corridor to connect them with nearby trails (Marvin Gaye Trail, Anacostia River Trail, and Suitland Parkway Trail) through organized rides and signage.

Trash Free Communities Grant

In partnership with the Alice Ferguson Foundation (AFF), DOEE is implementing a litter prevention campaign to raise awareness about trash pollution, change behavior around littering, and reduce the amount of trash found in District communities and water bodies. The litter prevention campaign has engaged over 12,465 District residents since its initial award in August 2016, and organized cleanups in FY19 that resulted in the removal of over 97,944 pounds of trash. In FY19, AFF expanded the new Adopt-A-Stream program, which allows volunteers to adopt segments of District streams. The expansion increased capacity for number of volunteers to be trained and stream segments to be adopted. Adopt-A-Stream volunteers collect data on the type of trash found along their adopted stream segments and organize community cleanups. In FY19, 23 volunteers were trained and six stream segments were adopted.

f. Outreach and Reusable Bag Distribution

Bag Law Anniversary Campaign



Figure 12: 10-year anniversary sticker from the Bag Law Anniversary Campaign

In FY19, DOEE celebrated the 10-year anniversary of the Bag Law with an outreach campaign designed to remind businesses of the fee requirements and educate residents on the array of projects funded by the Anacostia Clean Up and Protection Fund. The campaign included sending a mailer to over 6,000 regulated businesses specifying the Bag Law requirements. The mailer included a sticker that businesses could place in a customer-facing space, like a window or counter (Figure 11). DOEE's Office of Community Engagement and Outreach designed infographics summarizing Fund spending and purchased advertising space in local newspapers and blogs to communicate the positive impacts of the Bag Law on the District's water bodies and communities. In FY19, DOEE saw compliance rates rise nearly four percentage points from the previous year, to a high of 77%, which DOEE partially attributes to the campaign.

Reusable Bag Distribution

DOEE purchased approximately 50,000 reusable bags with Fund revenues in FY19. The bags include graphics and messaging to engage and inform residents about how the Fund has supported a diverse portfolio of projects. DOEE distributes bags to communities and organizations throughout the District, with a special focus on low-income and senior populations. This effort aids residents in changing their behavior from using disposable bags to using reusable bags.

g. Enforcement and Fee Collection

In FY19, DOEE conducted 554 inspections of District businesses to ensure compliance with the Act. As a result of these inspections, DOEE issued 78 Notices of Violation, or warning letters, and 49 Notices of Infraction, which carry civil penalties. DOEE assessed a total of \$10,700 in civil penalties for infractions that occurred in FY19. Compliance rates were at their highest in 2019, boosted by the 10-year anniversary outreach campaign (see Table 8). An increase and stabilization of compliance rates is also generally expected for a program entering its tenth year of enforcement.

Table 8: Compliance Rate of Bag Law inspections

Fiscal Year	2015	2016	2017	2018	2019
Compliance Rate	67.7%	70.3%	75.7%	73.3%	77.1%

^{*} Compliance rate calculated for total violations with the law investigated by inspectors per fiscal year

h. Administration

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

6. Additional Information

The Fund is managed by DOEE's Natural Resources Administration. For more information about implementation of the Act, visit <u>doee.dc.gov/bags</u>. 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.