APPENDIX 7

Organization Name:	District of Columbia Government
Program/Grant Title:	DC DOEE Infrastructure Support for Effective Basins
Grant #	41-963991-01
Project Period:	10/1/2022-9/30/2026
Place of Performance:	District of Columbia

Strategic Plan Linkage:
2022-2026 Strategic Plan (https://www.epa.gov/planandbudget/strategicplan)

Goal 5: Ensure Clean and Safe Water for All Communities
Objective 5.2: Protect and Restore Waterbodies and Watersheds

Introduction

This project is funded by the Infrastructure Investment and Jobs Act.

The District of Columbia (District) has a long history of working with the Chesapeake Bay Program (CBP) to restore the Chesapeake Bay. The District was a signatory to the original Bay Agreement in 1987 and met its early 40% reduction goal for phosphorus. In 2000, the CBP stepped up its efforts with a renewed Bay Agreement and more refined goals. In 2003, the CBP partners, including New York, Delaware, and West Virginia agreed to new cap load reductions for nitrogen, phosphorus, and land-based sediment that will be necessary to restore Bay water quality. The District agreed to reduce the following loads to the Potomac River: nitrogen by 2.32 million pounds/year, phosphorus by 0.12 million pounds per year, and land-based sediment by 11.16 million pounds per year. The District released its tributary strategy in June 2004. In 2008, the Bay Program began developing a watershed Total Maximum Daily Load (TMDL) for the Bay. To accomplish this, United States Environmental Protection Agency (USEPA) and the partners agreed on a framework for its development, including partners developing Watershed Implementation Plans (WIP) that will feed into an overall TMDL plan. The District finalized its Phase I WIP in 2010, its Phase II WIP in 2012, and its Phase III WIP in 2019 and provides incremental pollution reduction targets by setting and tracking two-year milestone goals.

Through the years the District's environmental programs have resided under various agencies including the Department of Public Works, the Department of Consumer Affairs, and the Department of Health. The District Department of the Environment was officially established on February 15, 2006 pursuant to the District Department of the Environment Establishment Act of 2005, D.C. Official Code 8-151.01 et seq. Effective June 14, 2006, the Mayor transferred responsibility for the Chesapeake Bay Implementation Grant Program from the Department of Health to the newly established District Department of the Environment. In August 2015 the name was changed to Department of Energy and Environment (DOEE). DOEE is the lead D.C. agency responsible for carrying out program activities related to the Chesapeake Bay. DOEE does this by focusing primarily on local water bodies including the Anacostia River, Potomac River, and Rock Creek, all of which drain to the Chesapeake Bay.

The D.C. Chesapeake Bay Implementation Grant Program (CBIG) resides in the DOEE Watershed Protection Division (WPD). The mission of the Division is to conserve the soil and water resources of

the District of Columbia and to protect its watersheds from point and nonpoint source pollution. The Division has the following two branches:

- Restoration Branch; and
- Partnering and Environmental Conservation Branch

Responsible Agencies

The WPD oversees the implementation of the District's voluntary green stormwater infrastructure (GSI) retrofit projects, watershed education and outreach, litter reduction, pollution prevention, and GSI maintenance activities. WPD administers the city's Nonpoint Source (NPS) management and CBIG programs, and funds derived from the District's five cent bag fee. WPD and its sister Divisions use these funds along with funds from District Stormwater Utility Fees, District Tree Fund, District Wetland Fund, and federal sources including the Water Pollution Control Program (Clean Water Act, Section 106), State Revolving Funds (Clean Water Act, Section 602), and the Water Quality Management Planning Grants (Clean Water Act, Section 604(b)).

The DC CBIG program uses a watershed approach to tackle its nonpoint source problems and implement Bay initiatives. This involves working with other government agencies, environmental groups, and District residents, as well as targeting community-based watershed protection activities in high NPS priority areas. In managing the CBIG, WPD works with other groups within DOEE (point source control, groundwater, wetlands, water quality standards, and nonpoint source control) utilizing a comprehensive watershed management approach to implement the directives of the federal Clean Water Act (CWA), the District of Columbia Water Pollution Control Act of 1984 (DC Law 5-188), and the Erosion and Sedimentation Control Act (DC Law 2-223 of 1977). CBIG activities that the District collaborates with others on include:

- Performing public outreach (staffing public events, developing outreach materials, etc.);
- Providing technical assistance;
- Designing, installing, and maintaining Green Stormwater Infrastructure (GSI) and stream, outfall, and wetland restoration projects;
- Analyzing data using geographic information system (GIS) technology;
- Developing and Implementing Total Maximum Daily Loads (TMDLs);
- Monitoring water quality;
- Litter, waste, and illegal dumping reduction activities and monitoring;
- Pollution prevention reduction activities, monitoring, tracking, and reporting;
- Developing Watershed Implementation Plans (WIPs); and
- Implementing Municipal Separate Storm Sewer System (MS4) permits.

Two-year Milestones

Along with the other Bay Program signatories, the District has committed to developing and implementing two-year milestones for enhanced implementation of its watershed plan and better tracking and accountability of its Bay watershed work. The District's milestones reflect priorities to install green infrastructure, conduct stream habitat and wetland restoration, promote pollution prevention, promote stewardship through outreach and education, and better track outputs through web-

based tools for permitting and inspection. The District is committed to updating these milestones every two years until the end of this grant. In addition to CBP funding, support for Bay milestone activities comes from the District's MS4 program, 319 Nonpoint Source grant, and ongoing municipal funding. It is clear that both the CBIG and this Chesapeake Bay Regulatory Accountability grant better enable the District to meet these important milestones.

Presidential Executive Order (EO) Number 13508, May 2009

This EO is another strong tool which helps guide District restoration programs and activities. The EO directed federal agencies to "define environmental goals for the Chesapeake Bay and describe milestones for making progress toward attainment of these goals." For the strategy, federal agencies have focused on achieving the most essential priorities for a healthy Chesapeake ecosystem. In the EO, President Obama declared the Chesapeake Bay a "national treasure" and ushered in a new era of federal leadership, action, and accountability. The purpose of the EO is "to protect and restore the health, heritage, natural resources, and social and economic value of the nation's largest estuarine ecosystem and the natural sustainability of its watershed." Some of the goal categories include:

- Restoring Clean Water;
- Recovering Habitat;
- Sustaining Fish and Wildlife; and
- Conserving Land and Increase Public Access

The District is encouraged by the additional federal focus, however federal agencies have to-date lagged behind the District in committing additional resources to reduce pollution to the Bay from the nearly 1/3 of the District lands that are under their authority. The District remains hopeful that federal partners will redouble their efforts to aid the nation's capital in achieving its Bay pollution goals.

DC Watershed Implementation Plan

The District of Columbia completed its Phase I WIP in December 2010, its Phase II in March 2012, and its Phase III in August 2019. The current plan calls for the District of Columbia to use the following four-pronged approach to meet its allocation of 2.42 million pounds nitrogen, 0.13 million pounds phosphorus, and 41.9 million pounds sediment to the Potomac including:

- D.C. Water completing the USEPA-approved Long-Term Combined Sewer Overflow (CSO) Control Plan by 2025;
- Implementing requirements specified in the District's National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit;
- Retrofitting the District of Columbia with Best Management Practices (BMPs) where practical and feasible to control urban nonpoint source pollution; and
- Federal facilities working to develop and implement plans to achieve the assigned load reductions from their properties located in the District.

The work plan presented here supports the urban nonpoint source component of the District's WIP by using voluntary means to install BMPs on private lands.

Data/Information Outputs Submission

Reporting on implementation of activities described in this grant will be on a semi-annual basis. The reporting periods will be from October 1 to March 31 and April 1 to September 30, while the grant remains open. Data, information, and/or document outputs to the CBP from this grant will comply with the instructions found in the CBP document entitled *Chesapeake Bay Program Guidance for Data Management.* This will include the submission of data, information, and/or document outputs in electronic format unless otherwise specified in the grant agreement. Electronic deliverables include but are not limited to: reports, graphics, spreadsheets, imagery, data files, audio, and digital video products. WPD will distribute its deliverables through its own data server/website.

The District of Columbia government provides the EPA Chesapeake Bay Program with data that account for BMP implementation levels in the District of Columbia. DOEE's data node provides the CBP with information on all installed BMPs including their treatment type, geo-location, area treated (or in the case of stream restoration linear feet restored), depth of rain event captured and treated, and their long-term maintenance.

Work Plan Objective/Project Description

Objective # 1	**DEIJ Through RiverSmart Homes**
Budget Summary for this Objective:	EPA Share: ~~$500,000~~ $2,195,652 Non-Federal Share: NA TOTAL: ~~$500,000~~ $2,195,652
Narrative Summary of Outputs for this Objective:	The overall goal of this project is to accelerate load reducing activities related to RiverSmart Homes, with an emphasis on implementing Diversity, Equity, Inclusion, and Justice (DEIJ) strategies in support of serving disadvantaged communities in the District's Most Effective Basins (MEBs). The RiverSmart Homes program provides stormwater audits for residential properties and arranges for the installation of a suite of lot-level stormwater BMPs for a small co-payment. Stormwater BMPs installed through this program include rain gardens, BayScaping (conservation landscaping), rain barrels, permeable surfaces, and trees. The project will conduct direct outreach in the form of walking tours, canvassing, and tabling to encourage further participation in designated disadvantaged communities in the District's MEBs. This project will fund the salary of one staff member to support program implementation as well as fund RiverSmart Homes installations.
Description of Objective:	1) What is the ultimate goal of the project? The goal of this project is to achieve measurable reductions in sediment and nutrients discharging into the District's MEBs through the installation of RiverSmart Homes practices. The program will also educate a significant number of District residents in disadvantaged communities about nonpoint source pollution and measures to control it through stormwater audits provided to the participants as a part of the project. The project will invest time, energy, and resources into historically underinvested communities. The practices installed through these programs will be tracked as they are implemented. Implementation will depend upon demand, however interest is currently strong. 2) What will be accomplished during the current grant cycle? DOEE plans to conduct stormwater audits on at least 300 properties and conduct at least two direct outreach events in disadvantaged communities. DOEE plans to install ~~100~~ 70 rain barrels, 15 rain gardens, and ~~60~~ 50 BayScapes annually in disadvantaged communities. 3) If a multi-year project, what has been completed in previous years? Is the project on track? NA

Tasks Under this Objective:	1) Conduct stormwater audits of residential properties in disadvantaged communities in the District's MEBs. 2) Educate participants in disadvantaged communities in the District's MEBs about the sources of and solutions to nonpoint source pollution. 3) Perform additional outreach in disadvantaged communities in the District's MEBs to increase the adoption rate and number of stormwater BMPs installed in watersheds with historically underserved and overburdened communities. 4) Work with nonprofit partners to ensure successful installation of RiverSmart Homes BMPs. 5) Work with nonprofit partners to educate residents on BMP maintenance.
Specific Outputs for this Objective	Programmatic • Conduct at least 300 stormwater audits annually. • Facilitate and oversee the installation of RiverSmart Homes practices at ~~100~~ at least 75 residential properties located in disadvantaged communities in the District's MEBs per year. • Coordinate two direct outreach events/campaigns in designated disadvantaged communities in the District's MEBs. Administrative • Semi-annual report of accomplishments submitted to EPA (due 10/31 and 4/30)
Outcomes for this Objective:	*2014 Chesapeake Bay Watershed Agreement* Goals and Outcomes: Goal: Healthy Watersheds Goal Outcome: Healthy Watersheds Outcome Goal: Water Quality Goal Outcome: Watershed Implementation Plan Outcomes Goal: Stewardship Goal Outcomes: Citizen Stewardship Outcome and Diversity Outcome
DEIJ Outcomes for this Objective:	This objective advances the Chesapeake Bay Program DEIJ Statement specifically through conservation activities that reduce stormwater pollution, help cool urban environments, and provide additional environmental benefits in historically disinvested areas of the District. RiverSmart Homes will reinvest in historically underserved and overburdened communities by increasing targeted outreach and engagement in what the Bay Program defines as "disadvantaged communities. The ultimate goal is to increase BMP installation rates in these areas and create a more equitable distribution of resources.
Climate Change Outcomes for this Objective:	According to the District's Climate Ready DC Plan, the climate change impacts for DC are (1) rising temperatures and heat; (2) rainfall and flooding; and (3) sea level rise and storm surge. Additionally, Climate change will not affect everyone equally. Individuals who are most vulnerable to climate change are those who are more sensitive to events like heatwaves and those who have less capacity to adapt and respond to the stresses caused by climate change. The installation of stormwater BMPs in these most vulnerable areas through this objective will help

	combat those impacts by cooling areas through increased native plantings and decreased impervious surface. Residential BMP installation will increase stormwater retention and infiltration to combat increased rainfall and flooding. The RiverSmart Homes program plants native, drought-tolerant species to combat more erratic rainfall patterns, and longer time between larger storm events, and is planning for the future by planting species more adapted to warmer climates.
Link to Jurisdiction's WIP Commitment(s)	**DC Phase III WIP** (https://doee.dc.gov/service/watershed-implementation-plans-chesapeake-bay) • Voluntary Retrofit, page 90 • RiverSmart Homes, page 112
Link to Priority Practices and/or Priority Watersheds	Priority Practice(s): Urban stormwater runoff control with green stormwater infrastructure District-wide. Implementation of the above priority practice will directly impact the amount of pollution making its way into District waterbodies and will allow for the further development of a District-wide strategy for preventing pollution through outreach and education. Priority Watershed: 1) This objective will target MS4 and direct drain (over-land flow) areas of Rock Creek and Anacostia and Potomac River watersheds, with emphasis on non-tidal tributaries in the Anacostia River, Oxon Run, and Rock Creek watersheds. 2) Watershed considered priority by (please check one): ____ CBP Priority Agricultural Watersheds Map ____ USDA Core 4 _X__ Other (the priority watersheds include waterways listed as impaired for several types of pollutants, and have TMDLs established for them) 3) Which priority strategy(s) will be implemented in this objective? Pollution Reduction

Objective # 2	**District Tidal Wetland Restoration**
Budget Summary for this Objective:	EPA Share: $299,540 Non-Federal Share: N/A TOTAL: $299,540
Narrative Summary of Outputs for this Objective:	The objective of this project is to restore the 11-acre River Terrace tidal wetland on the Anacostia River, with an emphasis on implementing Diversity, Equity, Inclusion, and Justice (DEIJ) strategies to advance the wetland restoration outcomes associated with the 2014 Chesapeake Bay Watershed Agreement to the Bay Program. The District Department of Energy and Environment (DOEE) is partnering with National Park Service (NPS) in seeking Chesapeake Bay Program funding to restore the River Terrace wetland on the Anacostia River in the District of Columbia. This currently degraded wetland provides significant potential for ecological uplift and recreational opportunities, which are especially crucial within an urban environment. Current conditions include a spreading population of *Phragmites australis* and other invasive species that are reducing the wetland's ability to provide essential ecosystem functions. Overgrowth of invasive vegetation, particularly sprawling vines, also impedes the National Park user experience and residents' ability to connect with and enjoy views of the wetland and river. The wetland restoration proposed by DOEE includes the preparation and implementation of habitat restoration plans that use multiple rounds of invasive plant management, restoration of the plant community with native plants, monitoring plans, and adaptive management to increase resiliency and provide significant uplift for species of greatest conservation need (SGCN). Restoration plans will include the installation of interpretive signage, and identify opportunities for residents and local stakeholders to participate in the future implementation of the plan, including vegetation removal, planting, trash clean up, and long-term monitoring. The wetland restoration site is located on the Anacostia River across from Kingman Island and adjacent to the River Terrace neighborhood (see Appendix A). This site was selected due to its potential for ecological uplift as determined by functional assessments and assessments of wetland restoration need performed for the 2020 Wetland Conservation Plan and based on its proximity to an underserved community. The River Terrace wetland is located within the National Capital Parks East (NACE) administrative unit of NPS and helps maintain habitat connectivity between wetlands and surrounding uplands in the Anacostia River corridor. The River Terrace neighborhood is located at the edge of the 100-year floodplain in the District. As flood risk increases in the face of a changing climate, this wetland serves as an important buffer between the community and rising river waters.

	According to the USEPA's EJ Screening Tool, the neighborhood currently experiences significant disparities across a variety of environmental justice indicators and indicators of opportunity when compared to other neighborhoods in the District and within the United States as a whole (see Appendix B). Indexes for Diesel Particulate Matter, Air Toxics Cancer Risk, Air Toxics Respiratory Risk, Superfund Proximity, and Hazardous Waste Proximity are all above the 90th percentile within the United States. 97% of residences within the neighborhood are people of color and the Demographic Index is 61% compared to 42% for the District as a whole. Regulatory compliance for this project is covered by the National Park Service National Capital Region Invasive Plan Management Plan and the Anacostia Park Wetlands and Resident Goose Management Plan and Environmental Impact Statement.
Description of Objective:	1) What is the ultimate goal of the project? The goal of this project is to enhance climate change resiliency for humans and wildlife and improve water quality along the Anacostia River corridor in the District of Columbia. The objective of the project is to restore the River Terrace wetland along the Anacostia River through invasive plant management and the restoration of greater than 85 percent coverage of native vegetation. Inclusive engagement with community stakeholders and residents will inform the restoration design with the goal of improving community access to nature and ensuring long-term community stewardship through activities such as invasive plant removal events, plantings, trash clean-ups, and monitoring plans. 2) What will be accomplished during the current grant cycle? Given the nature of wetland restoration projects that involve invasive plant management and the restoration of native vegetation, this project will require multiple rounds of invasive plant management (e.g., spraying, mowing, hand-pulling) over several seasons to control invasives prior to planting. Within the first year, DOEE plans to issue a request for bids to prepare a wetland restoration plan and begin invasive plant management. After the contract is awarded, the contractor will: • conduct a rapid ecological assessment at to identify all existing native vegetation, invasive species, and other resources that may be important to wildlife, • determine which Species of Greatest Conservation Need (SGCN) should be targeted for uplift, based on a paper assessment of the wildlife communities that use the site and consultation with DOEE and NPS biologists,

	• hold two community meetings to inform residents of the restoration plans and gather input, • acquire NPS input and approval for the planting plan, and • complete one-round of invasive plant control within the entire project area. Within years 2 and 3, DOEE's contractor will plant wetland habitat in accordance with NPS-approved and community-informed restoration plans, and monitor the project area to identify and implement adaptive management needs and ensure the success of planted vegetation. It is anticipated that several rounds of monitoring, invasive plant treatment, and replanting may be necessary to achieve greater than 85% coverage of native vegetation within the project area. 3) If a multi-year project, what has been completed in previous years? Is the project on track? N/A
Tasks Under this Objective:	1) Issue a request for bids to prepare wetland restoration plan. 2) Conduct a rapid ecological assessment to identify all existing native vegetation, invasive species, and other resources that may be important to resiliency functions and wildlife habitat. 3) Determine which SGCN should be targeted for uplift, based on a paper assessment of the wildlife communities that use the site and consultation with DOEE and NPS biologists. 4) Hold two community meetings to inform residents of the restoration plans and allow opportunity for input. 5) Acquire NPS input and approval for planting plans. 6) Ensure compliance with District and Federal permits. 7) Complete one round of invasive plant control within the entire project area. 8) Monitor the project area that received the first round of invasive plant control treatment to identify areas that require additional treatment. 9) Complete additional rounds of invasive plant control, per monitoring results. Repeat #8 and 9 until the invasive plant population is controlled. 10) Plant wetland with native vegetation in accordance with the NPS-approved and community-informed restoration plan. 11) Install herbivory protection (e.g., goose fencing, tree protection) 12) Monitor the project area to ensure greater than 85% survival of native plants. 13) Implement adaptive management (e.g., replanting, additional invasive plant treatment) as needed. 14) Install interpretive signage at wetland area.

Specific Outputs for this Objective	Programmatic • A wetland restoration plan by 9/30/25 for native plant communities that will enhance resiliency and habitat for SGCN. • Two community outreach meetings by 9/30/25 to solicit input on locations for interpretive signage and areas to improve for education and recreation. • 11 acres of invasive plant treatment within the wetland by 9/30/25. • A minimum of 85% coverage of site-appropriate native plantings for 11 acres of wetland by 9/30/25. • A monitoring report for ensuring plant survival and identifying adaptive management needs by 9/30/25. Administrative • Semi-annual reports of accomplishments to EPA (due annually 10/31 and 4/30)
Outcomes for this Objective:	<u>*2014 Chesapeake Bay Watershed Agreement* Goals and Outcomes:</u> Goal: Vital Habitats Goal Outcome: Wetlands Outcome Goal: Healthy Watersheds Goal Outcome: Healthy Watersheds Outcome Goal: Water Quality Goal Outcome: Watershed Implementation Plan Outcomes Goal: Stewardship Goal Outcomes: Citizen Stewardship Outcome and Diversity Outcome
DEIJ Outcomes for this Objective:	This objective advances the Chesapeake Bay Program DEIJ Statement specifically through outcomes that will increase climate resiliency, help cool urban environments, improve water quality, improve recreation and education opportunities, and provide additional environmental benefits in a historically disinvested community in the District. This project will increase residents' connection to and ownership of the wetland in their community, and will increase their connection to the Anacostia River itself. Many of the Anacostia River tidal wetlands are used by DOEE and non-profit organizations to provide environmental education and recreation access for local communities. This project will allow those organizations to reach additional community members and build new connections to this habitat. Invasive plant control will improve visual access to a natural area currently obscured by non-native overgrowth. A diverse wetland vegetative community also helps prevent pollutants and nutrients from entering a historically disinvested and degraded waterway. The installation of soft infrastructure like interpretive signage will improve passive recreation opportunities and environmental education for the community.

Climate Change Outcomes for this Objective:	According to the District's Climate Ready DC Plan, the most pressing climate change impacts for the District are (1) rising temperatures and heat; (2) increased rainfall and flooding; and (3) sea level rise and storm surge. Wetlands play an important role in building climate resiliency. Wetlands enhance ecosystem and community resiliency by protecting communities from flooding and drought, serving as carbon sinks, buffering storm surge, and mitigating urban heat island effect. Degradation from invasive plants diminishes the ability of these habitats to provide these services. Invasive plant management is critical to building climate resiliency. Climate change outcomes for this project include: • an increase in wildlife species diversity, richness, and composition in the targeted area; • improved wildlife resiliency in an urban area through the provision of refuge and habitat; • improved carbon sequestration through planting of native wetland vegetation; and • improved flooding resiliency through planting of native wetland vegetation.
Link to Jurisdiction's WIP Commitment(s)	**DC Phase III WIP** (https://doee.dc.gov/service/watershed-implementation-plans-chesapeake-bay) • BMP Type: Wetlands, page G-39
Link to Priority Practices and/or Priority Watersheds	**Priority Practice(s):** Water quality restoration with wetland restoration. Implementation of the above priority practice will directly impact the amount of pollution making its way into District waterbodies. **Priority Watershed:** 1) This objective will target the Anacostia River watershed. 2) Watershed considered priority by (please check one): ____ CBP Priority Agricultural Watersheds Map https://www.chesapeakebay.net/what/maps/keyword/agriculture ____ USDA Core 4 _X__**Other:** Priority watersheds include waterways listed as impaired for several types of pollutants and have established TMDLs. The Anacostia River watershed meets the definition of an impaired waterway. 3) Which priority strategy(s) will be implemented in this objective? Pollution reduction

Objective # 3	Forest Buffer and Urban Tree Canopy Expansion
Budget Summary for this Objective:	EPA Share: $125,000 Non-Federal Share: NA TOTAL: $125,000
Narrative Summary of Outputs for this Objective:	The goal of this project is to accelerate urban tree planting and forest buffer tree planting in the District of Columbia, with an emphasis on implementing Diversity, Equity, Inclusion, and Justice (DEIJ) strategies in support of serving disadvantaged communities in heavily impacted watersheds. Many forests in the Chesapeake Bay watershed have been lost or fragmented because of rapid development and forest health has been compromised. With the arrival of the Emerald Ash Borer, riparian forest areas along the Anacostia River have taken a significant hit with devastating ash mortality. Also alarming, the more recent decline of upland oaks over the past few years due to a combination of climate stressors has further impacted our upland forest canopy. Renewed efforts towards expanding forest buffers and urban tree canopy are needed. Through accelerated forest buffer and urban planting, we can improve the ecological condition of the landscape and achieve further water quality improvements. These activities benefit both Chesapeake Bay watershed ecosystems and the human communities that rely on them. Trees are arguably the most beneficial land cover for reducing nutrient and sediment pollution and for restoring the functions and services of Chesapeake ecosystems. Trees are also the most cost-effective best management practice (BMP) for stormwater management in the District. As the only green infrastructure practice that appreciates in value over time, trees are now beginning to receive recognition for their full potential. The Chesapeake Bay Program has championed regional efforts on forest cover and tree planting through both the Forestry Workgroup and the Chesapeake Tree Canopy Network. This has focused the work of states to develop goals and annual work plans to expand urban tree canopy by 2,400 acres by 2025. The Forestry Workgroup's 2021 high-level priorities include: prioritizing Chesapeake Bay Program DEIJ efforts to grow investments in communities, with tree equity as a focus; and to continue and grow support for critical state urban and community forestry programs, through leveraging available programs and policies, for multiple benefits such as improved water quality, climate resilience, extreme heat mitigation, public health, community and workforce development. This project strongly aligns with and directly advances these high-level priorities of the Chesapeake Bay Program. The District's tree canopy goal is to cover 40 percent of the jurisdiction with a healthy tree canopy by 2032. To help meet this goal, the District Department of Energy and Environment (DOEE) plants over 3,500 new trees per year on public and private properties. These efforts helped increase the District's tree canopy from 36% in 2006 to 38% in 2015. However, a 2020 measurement showed the District's tree canopy at 37%. The good news is that we are maintaining hard-

	fought gains and can replicate and accelerate tree planting through established programs, partners, and strategies—given the resources. DOEE has identified forest buffer planting locations in the District within the Anacostia Watershed (Most Effective Basin locations). These areas are largely owned by the National Park Service, Department of Defense, and District Government. DOEE proposes to conduct forest buffer plantings to enhance riparian habitats, reduce nonpoint source pollution, and mitigate areas of extreme heat. This project would not only accelerate tree planting in the District but help ensure a healthy canopy by providing tree maintenance after planting and outreach and education to District property owners on the benefits of trees and instructions for tree maintenance. As the District gets closer to reaching its tree canopy goal, tree planting space has become more limited. As a result, DOEE is working on new pilot programs to conduct targeted outreach and engagement that includes funding incentive programs with customers to identify tree planting locations. This project would support these new programs and help close the gap in disadvantaged communities with less tree canopy.
Description of Objective:	1) What is the ultimate goal of the project? The ultimate goal of this project is for the District to meet its tree canopy goals in support of the Chesapeake Bay Program Agreement, Tree Canopy Outcome Management Strategy, and 2021-2022 Tree Canopy Logic and Action Plan. More specifically, the goal of this project is to increase the District's tree canopy in historically underserved and overburdened communities—most of which are located within our most impacted sub watersheds. The project will also educate District residents in disadvantaged communities about the benefits of trees, nonpoint source pollution, and heat island mitigation. 2) What will be accomplished during the current grant cycle? DOEE plans to plant 250 additional trees, specifically in historically underserved and overburdened communities and areas that have less than average tree canopy. This includes urban tree planting and forest buffer planting locations. Additionally, DOEE will implement new pilot programs to conduct targeted outreach and engagement that includes funding incentive programs with customers to identify tree planting locations. This project will be managed by existing DOEE staff, specifically the DOEE Tree Planting and Policy Coordinator, with oversight and guidance from the District's Urban Forestry Advisory Council. The entire budget for this project will be dedicated to implementation.

	3) If a multi-year project, what has been completed in previous years? Is the project on track? NA
Tasks Under this Objective:	1) Conduct targeted outreach in disadvantaged communities on the benefits of tree planting and the sources of and solutions to nonpoint source pollution. 2) Work with nonprofit partners to ensure the successful installation of 250 trees (in urban and forest buffer locations). 3) Work with nonprofit partners to educate residents on tree maintenance. 4) Track and report tree planting to the Bay Program.
Specific Outputs for this Objective	<u>Programmatic</u> • Plant 250 trees in underserved/overburdened communities in the District by 9/30/24. • Manage, coordinate, and track DOEE's tree grants and initiatives including the following activities all by 9/30/24: o Work with the sub-award recipients to identify sites for planting and develop planting plans. o Perform site visits to at least 20 percent of planting sites to ensure proper planting and maintenance have occurred and to ensure tree mortality is under five percent. o Track staff and volunteer hours spent planting, watering, and maintaining trees planted through DOEE tree grants. o Compile and track locations of trees planted through the grant in a GIS database and report locations to the Chesapeake Bay Program annually. <u>Administrative</u> • Semi-annual report of accomplishments submitted to EPA (due 10/31 and 4/30)
Outcomes for this Objective:	<u>*2014 Chesapeake Bay Watershed Agreement* Goals and Outcomes:</u> Goal: Vital Habitats Goal Outcome: Tree Canopy Outcome Goal: Water Quality Goal Outcome: Watershed Implementation Plan Outcomes Goal: Healthy Watersheds Goal Outcome: Healthy Watersheds Outcome
DEIJ Outcomes for this Objective:	This objective advances the Chesapeake Bay Program DEIJ Statement specifically through conservation activities that support environmental justice. DOEE will continue implementing coordinated outreach strategies through strategic partnerships to increase tree planting in historically underserved and overburdened communities that have lower-than-average tree canopy coverage in the District. Targeted plantings will also be planned utilizing urban heat island data and tools

	to help maximize urban heat island mitigation in historically underserved and overburdened communities.
Climate Change Outcomes for this Objective:	According to the District's Climate Ready DC Plan, the climate change impacts for DC are (1) rising temperatures and heat; (2) rainfall and flooding; and (3) sea level rise and storm surge. Additionally, Climate change will not affect everyone equally. Individuals who are most vulnerable to climate change are those who are more sensitive to events like heatwaves and those who have less capacity to adapt and respond to the stresses caused by climate change. The installation of trees in these most vulnerable areas through this objective will help combat those impacts by cooling areas through tree planting and maintenance. Tree planting will increase stormwater retention and infiltration to combat increased rainfall and flooding. DOEE plants native, drought-tolerant species to combat more erratic rainfall patterns, and longer times between larger storm events and is planning for the future by planting species more adapted to warmer climates.
Link to Jurisdiction's WIP Commitment(s)	**DC Phase III WIP** (https://doee.dc.gov/service/watershed-implementation-plans-chesapeake-bay) • Voluntary Retrofit, page 90 • Tree Canopy, page 106 • RiverSmart Homes, page 112
Link to Priority Practices and/or Priority Watersheds	Priority Practice(s): Urban stormwater runoff control with green stormwater infrastructure District-wide. Implementation of the above priority practice will directly impact the amount of pollution making its way into District waterbodies and will allow for the further development of a District-wide strategy for preventing pollution through outreach and education. Priority Watershed: 1) This objective will target MS4 and direct drain (over-land flow) areas of Rock Creek and Anacostia and Potomac River watersheds, with emphasis on non-tidal tributaries in the Anacostia River, Oxon Run, and Rock Creek watersheds. 2) Watershed considered priority by (please check one): ____ CBP Priority Agricultural Watersheds Map ____ USDA Core 4 _X__ Other (the priority watersheds include waterways listed as impaired for several types of pollutants, and have TMDLs established for them) 3) Which priority strategy(s) will be implemented in this objective? Pollution Reduction

Budget Detail:

	Year 1 (FY22)		Year 2 (FY23)		Year 3 (FY24)		Year 4 (FY25)		Year 5 (FY26)		
	Federal	Local	Federal	Local	Federal	Local	Federal	Local	Federal	Local	TOTAL
Total travel	969	0	969	0	969	0	969	0	969	0	4,843
Total equipment	0	0	0	0	0	0	0	0	0	0	0
Total supply	2,748	0	2,748	0	2,748	0	2,748	0	2,748	0	13,740
Total contractual	1,200	0	300,740	0	1,200	0	1,200	0	1,200	0	305,540
Total construction	0	0	0	0	0	0	0	0	0	0	0
Total other	399,048	0	447,466	0	322,466	0	322,466	0	322,466	0	1,813,912
Total non-personnel	403,965	0	751,923	0	327,383	0	327,383	0	327,383	0	2,138,035
Total personnel	96,035	0	96,530	0	96,530	0	96,530	0	96,530	0	482,157
Total pers. & non-pers.	500,000	0	848,453	0	423,913	0	423,913	0	423,913	0	2,620,192

Objective 1 Title: DEIJ Through RiverSmart Homes	Year 1 (FY22)		Year 2 (FY23)		Year 3 (FY24)		Year 4 (FY25)		Year 5 (FY26)		
	Federal $	non-fed $	Federal $	non-fed $	Federal $	non-fed $	Federal $	non-fed $	Federal $	non-fed $	Objective Total
Chesapeake Watershed Forum: registration 1 staff @ $200/staff	$200	$0	$200	$0	$200	$0	$200	$0	$200	$0	$1,000
Chesapeake Watershed Forum: Transportation 1 staff @ $94/staff	$94	$0	$94	$0	$94	$0	$94	$0	$94	$0	$468
Chesapeake Watershed Forum: hotels & meals 1 staff @ $145/day 2 days	$250	$0	$250	$0	$250	$0	$250	$0	$250	$0	$1,250
Chesapeake Bay Landscape Certification: 1 staff @ $425/staff	$425	$0	$425	$0	$425	$0	$425	$0	$425	$0	$2,125
total travel	$969	$0	$969	$0	$969	$0	$969	$0	$969	$0	$4,843
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
total equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Field protective clothing 1 staff @ $80/staff	$80	$0	$80	$0	$80	$0	$80	$0	$80	$0	$400
Field and safety supplies 1 staff @ $75/staff	$450	$0	$450	$0	$450	$0	$450	$0	$450	$0	$2,250
Field laptops 1 staff @ $880/staff	$880	$0	$880	$0	$880	$0	$880	$0	$880	$0	$4,400
Cell phones 1 staff @ $838/staff	$838	$0	$838	$0	$838	$0	$838	$0	$838	$0	$4,190
Office supplies (paper, pen, printer, etc) 1 staff @ $500/staff	$500	$0	$500	$0	$500	$0	$500	$0	$500	$0	$2,500
total supplies	$2,748	$0	$2,748	$0	$2,748	$0	$2,748	$0	$2,748	$0	$13,740
RiverSmart Homes Signs	$1,200	$0	$1,200	$0	$1,200	$0	$1,200	$0	$1,200	$0	$6,000
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
total contractual	$1,200	$0	$1,200	$0	$1,200	$0	$1,200	$0	$1,200	$0	$6,000
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
total construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Cell phone data plan for 1 field staff @ $420/staff	$420	$0	$420	$0	$420	$0	$420	$0	$420	$0	$2,100
Field laptop data plan 1 staff @ $360/staff	$360	$0	$360	$0	$360	$0	$360	$0	$360	$0	$1,800
RiverSmart Homes Outreach Materials	$2,000	$0	$1,000	$0	$1,000	$0	$1,000	$0	$1,000	$0	$6,000
RiverSmart Homes Rain Barrel Grant (subaward)	$85,000	$0	$40,000	$0	$40,000	$0	$40,000	$0	$40,000	$0	$245,000
RiverSmart Homes Rain Garden Grant (subaward)	$311,268	$0	$280,686	$0	$280,686	$0	$280,686	$0	$280,686	$0	$1,434,012
Total Other	$399,048	$0	$322,466	$0	$322,466	$0	$322,466	$0	$322,466	$0	$1,688,912
total salaries	$96,035	$0	$96,530	$0	$96,530	$0	$96,530	$0	$96,530	$0	$482,157
Total Project 1	$500,000	$0	$423,913	$0	$423,913	$0	$423,913	$0	$423,913	$0	$2,195,652

Objective 2 Title: District Tital Wetland Restoration	Year 1		Year 2		Year 3		Year 4		Year 5		
	Federal $	non-fed $	Federal $	non-fed $	Federal $	non-fed $	Federal $	non-fed $	Federal $	non-fed $	Objective Total
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
total travel	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
total equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
total supplies	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
District Tidal Wetland Restoration	$0	$0	$299,540	$0	$0	$0	$0	$0	$0	$0	$299,540
total contractual	$0	$0	$299,540	$0	$0	$0	$0	$0	$0	$0	$299,540
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
total construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Other	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
total salaries	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Project 2	$0	$0	$299,540	$0	$0	$0	$0	$0	$0	$0	$299,540

Objective 3 Title: Forrest Buffer and Urban Tree Canopy Expansion											
	Year 1		Year 2		Year 3		Year 4		Year 5		
	Federal $	non-fed $	Federal $	non-fed $	Federal $	non-fed $	Federal $	non-fed $	Federal $	non-fed $	Objective Total
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
total travel	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
total equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	$0									$0
total supplies	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
total contractual	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
total construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Forrest Buffer and Urban Tree Canopy	$0	$0	$125,000	$0	$0	$0	$0	$0	$0	$0	$125,000
Total Other	$0	$0	$125,000	$0	$0	$0	$0	$0	$0	$0	$125,000
total salaries	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Project 3	$0	$0	$125,000	$0	$0	$0	$0	$0	$0	$0	$125,000

Summary of Staff Funded:

Salaries 2022-2026						
	Total salary on grant	Fed/Local Share		Fringe	Indirect	Total Personnel
Year 1 (FY22)	$60,814	Fed	$60,814	$14,413	$20,808	$96,035
		Local	$0	$0	$0	$0
Year 2 (FY23)	$64,206	Fed	$64,206	$15,217	$17,108	$96,530
		Local	$0	$0	$0	$0
Year 3 (FY24)	$64,206	Fed	$64,206	$15,217	$17,108	$96,530
		Local	$0	$0	$0	$0
Year 4 (FY25)	$64,206	Fed	$64,206	$15,217	$17,108	$96,530
		Local	$0	$0	$0	$0
Year 5 (FY26)	$64,206	Fed	$64,206	$15,217	$17,108	$96,530
		Local	$0	$0	$0	$0
Total (5 yrs)	$317,638	Fed	$317,638	$75,280	$89,239	$482,157
	0	Local	$0	$0	$0	$0

Additional Requirements (Required, when applicable. Otherwise, state N/A):

Conferences and Workshops: NA

If this work plan includes conferences or workshops that the recipient will conduct, the recipient must respond to each of the following:

- *Briefly describe the conference or workshop. NA*
- *Who is initiating the conference of workshop? NA*
- *Whose logo will be on the agenda and conference, workshop, and meeting materials? NA*
- *What is the expected percentage distribution of the persons attending the conference, workshop, or meeting (i.e., percent of federal, state, local, or public participants)? NA*
- *Is the recipient going to conduct the proceedings or analysis/analyses and disseminate this information back to the appropriate state, local, and scientific community? NA*
- *Does the recipient anticipate any program income being generated from the conference, workshop, or meeting, including registration fees? NA*

Meals and Refreshments:

If this work plan or budget detail includes activities during which meals and/or light refreshments will be provided, the recipient must provide a narrative response to address each of the following:

- *Briefly describe the event where meals and/or light refreshments will be provided and provide an estimated cost for the event. NA*
- *Will those attending the event receive a per diem financed through grant funds? NA*
- *Why is the provision of light refreshments and/or meals necessary to achieve the objectives of the assistance agreement? NA*
- *Why is the provision of light refreshments and/or meals necessary to achieve the objectives of the event? NA*
- *When will meals and/or light refreshments be made available (before, during, or after the event)? NA*