# DISTRICT OF COLUMBIA CHESAPEAKE BAY PROGRAM BEST MANAGEMENT PRACTICES DATA SUBMITTAL

## QUALITY ASSURANCE PROJECT PLAN FOR THE 2014 DATA SUBMITTAL

**Urban Best Management Practices Database** 

December 2015

## District of Columbia Chesapeake Bay Program Best Management Practices (BMP) Data Submittal for the 2014 Data Submittal

Quality Assurance Project Plan (QAPP)

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Updated 12/04/15 2

#### **Program and/or Project Description**

As a part of its Chesapeake Bay Program commitments, the District of Columbia reports its nutrient and sediment load reduction activities and those of federal agencies within its borders to the Environmental Protection Agency, Chesapeake Bay Program (CBP) Office. The District Department of the Environment (DDOE) is the District government agency tasked with collecting this information and verifying that it is correct.

Stormwater best management practices (BMPs) data for the Bay Program are tracked on a continuous basis but reported annually. The data are cumulatively reported and incorporated into the CBP's Watershed Model to estimate progressive nutrient load reductions from implementation of these BMPs over time. Data are divided by into HUC 11 watersheds tracked in acres for erosion and sediment controls as well as for stormwater management practices. The District also tracks which of these practices are located in the combined sewer system those that in the separated sewer system.

On July 19, 2013, DDOE released the 2013 Rule on Stormwater Management and Soil Erosion and Sediment Control (2013 SW Rule), which amended Chapter 5 (water Quality) of Title 21 (Water and Sanitation) of the District of Columbia Municipal Regulations (DCMR). The new requirements are based upon standards for volume retention, representing a shift of focus from the 1998 regulations, which were more focused on water-quality treatment. Major land-disturbing activities must retain the volume from a 1.2-inch storm event, and major substantial improvement activities must retain the volume from a 0.8-inch storm event. By keeping stormwater on site, retention practices effectively provide both treatment and additional volume control, significantly improving protection for District waterbodies. This Stormwater Retention Volume (SWRv) can be managed through runoff prevention (e.g., conservation of pervious cover or reforestation), runoff reduction (e.g., infiltration or water reuse), and runoff treatment (e.g., plant/soil filter systems or permeable pavement). In 2013, DDOE also developed the Stormwater Management Guidebook, which provides technical guidance on complying with the 2013 Rule on Stormwater Management and Soil Erosion and Sediment Control (2013 SW Rule).

DDOE also launched a new Stormwater Database that will enhance transparency and effectiveness of the stormwater plan review process for regulated and voluntary projects. Applicants are now able to check the status of plans being reviewed by DDOE and submit supporting documentation online. The new database also streamlines participation in the Stormwater Retention Credit (SRC) and RiverSmart Rewards programs, which incentivize installation of runoff-reducing Green Infrastructure (GI). Applications for these programs can also be completed through the database using information already submitted in a stormwater plan. Further, the database will support participation in the SRC trading program by providing public access to the SRC registry, which lists SRCs that are currently for sale. Access to the online database and documentation is provided in the stormwater management database user manual.

The stormwater management data provided by DDOE consists of point source reductions from DC Water, urban BMPs that treat stormwater from new development or redevelopment, retrofits

of existing areas, and non-structural BMPs such as street sweeping, urban stream restoration work, and changes in land use through activities such as tree planting. The District's primary reductions come from upgrades to the Blue Plains waste water treatment plant, the Long Term Control Plan to reduce combined sewer overflows, and from permitted stormwater treatment facilities installed as a part of new development or redevelopment of areas larger than 5,000 square feet.

DC Water is tasked with overseeing and implementing upgrades to it Blue Plains waste water treatment plant and to it combined sewer system. These upgrades are closely tracked by DC Water and are regulated by the EPA as a part of its discharge permit and it's Long Term Control Plan. The permitting of stormwater treatment facilities is regulated and permitted by DDOE's Watershed Protection Division (WPD), Technical Services Branch and their installation and maintenance is overseen by WPD Inspection and Enforcement Branch. DDOE WPD keeps a database of all permitted stormwater facilities and of all inspection and enforcement efforts.

The WPD Planning and Restoration Branch and the Stormwater Management Division (SMD) are charged with compiling, geo-coding, and processing the stormwater BMPs installed and non-structural stormwater BMP activities. DDOE WPD and SMD collect stormwater BMP data from several sources, verifies its location through geo-coding, and organizes this information and reports it to the CBP.

The purpose of this Quality Assurance Project Plan is to document:

- How the District of Columbia collects information on the BMPs installed throughout the city for CBP reporting purposes;
- How the District maintains it database of BMPs installed;
- How the District performs quality assurance/quality control (QA/QC) to identify and replace inaccurate and missing data;
- How the District tracks the maintenance, verification and removal of installed BMPs; and
- How the District reports BMP data to the CBP.

#### **Federal Grants Associated with the Program**

- a. EPA Section 319(h) Grant
- b. EPA Chesapeake Bay Program Implementation Grant
- c. EPA Chesapeake Bay Program Regulatory Assistance Program Grant

#### **Program and/or Project Organization and Responsibilities**

#### **Task Organization**

District Department of Transportation (DDOT) Trees QA/QC Responsibilities – DDOT Trees is responsible for tracking the number and location of trees planted in the public right of way. DDOT Trees QA/QC's this data and then provides it to DDOE Planning and Restoration Branch for reporting to the CBP.

#### DC Water QA/QC Responsibilities -

DC Water is responsible for tracking the implementation of the District's Long Term Control Plan and upgrades to the Blue Plains Wastewater Treatment facility. DC Water also monitors discharges from the Combined Sewer System and Blue Plains, QA/QC's these point source loads, and reports the load data to DDOE Planning and Restoration Branch and to the Metropolitan Washington Council of Governments for reporting to the CBP.

#### District Department of Public Works (DPW) QA/QC Responsibilities -

DPW is responsible for tracking the lane miles swept, how often they are swept, the type of sweeper used, and the location of street sweeping activities as a part of the District's street sweeping efforts. DPW is also be responsible for tracking the actual amount of material collected through their street sweeping efforts. DPW QA/QC's this data and provides it DDOE's Stormwater Division who also QA/QC's it and reports it to the CBP.

#### Federal Agency QA/QC Responsibilities -

Federal agencies are responsible for tracking the BMPs installed on their lands. The federal agencies should submit their plans for BMPs to DDOE for stormwater plan review and approval as all other projects are required to do in the District. If federal agencies fail to follow stormwater regulations, the federal agencies can report their activities directly to SMD, however projects not properly permitted and inspected may not be accepted by DDOE nor reported to the Bay Program.

#### DDOE QA/QC Responsibilities -

DDOE has multiple roles and responsibilities for assuring QA/QC of data reported to CBP. These roles are broken out by DDOE branches below.

DDOE Stormwater Management Division – Collects the street sweeping data from DPW, QA/QC's it and reports to the Bay Program. They also coordinate the collection of data on BMPs installed on federal lands, QA/QCs it, and ensures it does not duplicate records of BMPs in the DDOE plan review database.

DDOE WPD Plan Review Branch – Tracks, reviews, and records all plans for new development or redevelopment in the District. The Plan Review Branch ensures that all permitted construction over 50 square feet has a plan to have appropriate erosion and sediment control devices in place and that all permitted construction over 5,000 square feet has plans to install stormwater suitable BMPs. The Plan Review Branch records all submitted construction plans in its plan review database, manages the database, and QA/QCs the recorded data.

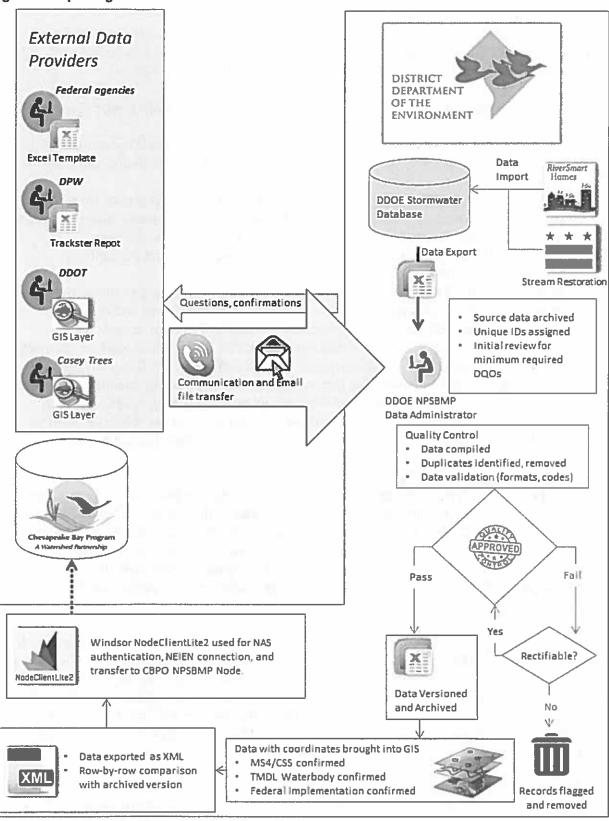
DDOE WPD Inspection and Enforcement Branch – Inspects sites under construction to make sure that they are in compliance with erosion and sediment control regulations, performs inspections during the installation of BMPs, the final inspection on constructed BMPs, and maintenance inspections of installed BMPs. This Branch inspects all installed BMPs every five years to ensure that they are in good working order. If the BMPs require maintenance the Branch requires the landowner to perform the required maintenance to bring it into compliance. The Inspection and Enforcement Branch maintains records of inspections and QA/QCs recorded data.

DDOE WPD Planning and Restoration Branch – Compiles, geo-codes, QA/QCs the information on stormwater BMPs installed and non-structural stormwater BMP activities from the various reporting agencies, divisions and branches. The Planning and Restoration Branch also maintains and manages a database of stormwater BMPs that it or its grantees install that are not tracked in any other database. DDOE WPD then works with SMD to report the BMP data to the CBP including the location of the BMP, the type of BMP installed, the volume capture of the BMP, and the number of acres treated by the BMP. DDOE WPD and SMD also QA/QC and report the inspection, maintenance and/or removal of any previously installed and reported BMP.

#### General Reporting Data Flow

The reporting data flow for this QAPP is shown in Figure 1 below. For each reporting flow path shown in Figure 1 we will document how the data is collected, recorded, reported to the Bay Program.

Figure 1: Reporting Data Flow



Updated 12/04/15 5

#### **BMP** Verification and Validation

BMPs and associated data are verified and validated multiple times from the time they are reported to DDOE to the time they are reported to the Bay Program. Typical verification and validation protocols for stormwater BMPs and stream restoration are as follows:

- 1) Plans are submitted to DDOE including location information, BMP type, volume capture, and area treated:
- 2) WPD Plan reviewers check the information provided and, if needed request revisions;
- 3) Once the plan is accepted as final the project is permitted for installation and construction begins;
- 4) WPD Inspection and Enforcement inspectors oversee the construction of the BMP, verify that it has been done according to plan, and if changes are made ensure that as-built plans are submitted including new volume capture and area treated calculations;
- 5) Once the BMP is installed to the satisfaction of the inspector, final inspection is performed and a final approval is issued;
- 6) At this point the DDOE PRB and SMD perform a final verification of the record to ensure it is accurate, it is not duplicative of other agency reporting, and the data is properly formatted for the CBP and uploaded to the Bay Program servers;
- 7) Once a final approval is issued a countdown begins for the installed practice. Inspectors perform BMP inspections on all permitted District BMPs prior to five years post their final inspection date to ensure that they continue to be in place and maintained per their design. If they are found to not meet their design or be in need of maintenance the inspectors require that this work is performed to their satisfaction. Once the BMP is found to be in good working order the clock begins for the next inspection date.

#### Point Source Reductions (Blue Plains)

The majority of the District's load reductions reported to the Chesapeake Bay Program come from point source pollution reductions either from upgrades to the Combined Sewer System as a part of the Long Term Control Plan, or from modifications to the Blue Plains Waste Water Treatment Plant that reduce loads discharged from the facility. Reductions associated with upgrades to the sewer system and wastewater treatment are generally episodic in nature with long periods of no change followed by a dramatic drop in loads when a project has been completed.

As stated earlier, DC Water is legally responsible for the upgrades to both its combined sewer system and to the Blue Plains Wastewater Treatment facility through EPA permits. DC Water monitors discharges from the Combined Sewer System and Blue Plains, QA/QC's its point source loads, and reports them to the EPA as a part of their permit compliance activities. They also annually report this information to both the DDOE Planning and Restoration Branch and to the Metropolitan Washington Council of Governments (MWCOG). MWCOG is responsible for reporting this data directly to the Bay Program.

#### Tree Planting

The District currently tracks tree planting in the city from three sources: District Department of Transportation, Urban Forestry Administration (UFA) tree planting activity, DDOE grant funded

tree planting activities, and tree planting efforts reported by other non-funded groups such as the National Park Service and Casey Trees.

The reporting for each of these activities is on a "pull" basis where DDOE makes an information request to the major tree planters requesting the tree planting information. UFA provides DDOE with a list of planted trees, their species and the closest address to their planting location. DDOE grantees are required to report on their deliverables and DDOE WPD confirms that the grantee has indeed completed the reported work. Finally, DDOE asks other tree planting organizations to provide information on the number and location of trees they planted over the past fiscal year. These plantings are non-regulatory and the numbers are not confirmed. DDOE PRB collects this information from each of these sources, geocodes the data when possible, and QA/QCs it. PRB and SMD transmits the geocoded data to the Bay Program. Trees that were planted but not geocoded are assigned proportionally to each of the District's four 10 digit Hydrologic Unit Code watersheds and reported to the CBP.

#### Stream Restoration

The majority of stream restoration work is initiated by PRB., Regardless of the originator of stream restoration work, these projects must be reviewed and approved by the Plan Review Branch of the Watershed Protection Division. Submitted plans and their treatment areas are entered into a database and are double-checked by the engineer performing the plan review. On an annual basis, the Planning and Restoration Branch queries the database for stream restoration projects installed, geocodes the locations of each project, determines the linear feet of stream restored, and reports it to the CBP. If the project utilizes enhanced stream restoration techniques, PRB ensures that it has proper documentation to meet this standard and reports the linear feet of these projects to the CBP.

#### Street Sweeping/Catch Basin Inserts

The District Department of Public Works (DPW) is the lead agency for sweeping District of Columbia roadways. DPW uses an ArcGIS database of polygons representing the boundaries of signed sweeping routes along with arterial and highway sweeping routes. DPW also uses Trakster®, a web-based software application designed specifically for public works operations. The FieldTrak module of Trakster® stores data on the dates, sweeping routes, mileage of road swept, and the type of sweeper used. This information is then passed on to the SMD who QA/QCs the data and reports it to the CBP.

#### Development/Redevelopment and all other BMPs

The second largest proportion of load reduction acreage reported to the Bay Program after point source load reductions comes from the redevelopment of the District. The vast majority of the District was developed before the advent of stormwater BMPs so new development in the District invariably reduces stormwater and pollutant loads to our local waterways.

New development and redevelopment projects, including ones on federal lands, must apply for permits through the District Department of Consumer and Regulatory Affairs (DCRA). Construction projects that disturb 50 square feet are automatically directed to DDOE Plan Review Branch for erosion and sediment control plan review. Likewise, construction that disturbs over 5,000 square feet must meet District stormwater regulations and their plans are sent

to the Plan Review Branch for stormwater plan review. All of these projects are logged into a tracking database that tracks the geographic coordinates the project location, the type of BMPs installed, the stormwater retention volume, and their contributing area. The data in the database is maintained and verified by the engineers of the Plan Review Branch. The PRB and SMD query this database on an annual basis, QA/QCs the data, and reports it to the CBP.

Additionally DDOE oversees several incentive programs aimed at encouraging stormwater retrofits. These programs include RiverSmart Homes, RiverSmart Communities, RiverSmart Rooftops, and RiverSmart Rewards. The BMPs installed through these programs often do not meet the size threshold to require stormwater review so they are not captured in the plan review database. Instead DDOE has developed separate databases to track these installs. With each of these programs DDOE staff visit the property to verify that the installs did indeed take place and they perform follow up visits on a subset of the installations on an annual basis to ensure that BMPs are still present and are being properly maintained. The geocoded location of each BMP, the area treated, and the volume of stormwater retained are reported annually to the Bay Program by PRB and SMD.

Below is the list of District agencies and partners that collect data utilized by the Planning and Restoration Branch for reporting to the CBP and information on the type of database maintained by the agency.

Table 1: Reporting Agencies and the Type of Databases they Utilize

Туре	Agency/ Organization	Type of BMP	Contact Person	Database
Local	WMCOG (DC Water)	Point Source - Blue Plains	tspano@mwcog.org	Custom Excel Report
Local	DDOT UFA	Urban Tree Planting	earl.eutsler@dc.gov	ArGIS Layer
ocal	Casey Trees	Urban Tree Planting	JSanders@caseytrees.org	ArGIS Layer
Local	DDOE Planning & Restoration Branch	Urban Tree Planting	lauren.linville@dc.gov	Custom Excel Report
Local	DPW	Street Sweeping	eetienne@dpwsolutions.com	Trakster
Local	DDOE Plan Review Branch	New Development & Redevelopment	matthew.espie@dc.gov	QuickBase
Local	DDOE Plan Review Branch	Stream Restoration	josh.burch@dc.gov	Custom Excel Report
Federal	AOC	New Development & Redevelopment	dhelmann@aoc.gov	NEIEN Excel Template
Federal	AFRH	New Development & Redevelopment	David.Watkins@afrh.gov	NEIEN Excel Template
Federal	USACE	New Development & Redevelopment	Heather.R.Cisar@usace.army.mil	NEIEN Excel Template
Federal	DOD	New Development & Redevelopment	jennifer.l.steele@navy.mil	NEIEN Excel Template
Federal	DOD	New Development & Redevelopment	Shabir.A.Choudhary@usace.army .mil	NEIEN Excel Template
Federal	DOD	New Development & Redevelopment	Lia.Gaizick@us.army.mil	NEIEN Excel Template

Туре	Agency/ Organization	Type of BMP	Contact Person	Database
Federal	DOD	New Development & Redevelopment	Jagdish.P.Tarpara@usace.army.m il	NEIEN Excel Template
Federal	FRA (Fed Railroad Admin)	New Development & Redevelopment	Sydney.schnier@dot.gov;	NEIEN Excel Template
Federal	FRA (Fed Railroad Admin)	New Development & Redevelopment	david.valenstein@dot.gov	NEIEN Excel Template
Federal	GSA	New Development & Redevelopment	nia.francis@gsa.gov	NEIEN Excel Template
Federal	GSA	New Development & Redevelopment	phyllis.carr@gsa.gov	NEIEN Excel Template
Federal	GSA	New Development & Redevelopment	robin.snyder@gsa.gov	NEIEN Excel Template
Federal	NPS	New Development & Redevelopment	Tammy_Stidham@nps.gov	NEIEN Excel Template
Federal	NPS	New Development & Redevelopment	Kristen_Hamilton@nps.gov	NEIEN Excel Template
Federal	NPS	New Development & Redevelopment	Nick_Bartolomeo@nps.gov	NEIEN Excel Template
Federal	NPS	New Development & Redevelopment	marian_norris@nps.gov	NEIEN Excel Template
Federal	Smithsonian	New Development & Redevelopment	SpoffordM@si.edu	NEIEN Excel Template
Federal	Smithsonian	New Development & Redevelopment	trowbridgea@si.edu	NEIEN Excel Template
Federal	USDA	New Development & Redevelopment	Cary.coppock@ars.usda.gov	NEIEN Excel Template
Federal	USDA	New Development & Redevelopment	Ramon.Jordan@ars.usda.gov	NEIEN Excel Template
Federal	USDA	New Development & Redevelopment	donald.williams@ars.usda.gov	NEIEN Excel Template
Federal	USDA	New Development & Redevelopment	Dana.Jackson@ARS.USDA.GOV	NEIEN Excel Template

#### **Quality Assurance Objectives**

The stormwater management data collected by PRB and SMD from other agencies is not provided on a mandatory basis, but instead are provided through inter-agency cooperation. DDOE's Planning and Restoration Branch objectives for reporting to the Bay Program are:

- To receive data on all BMPs listed under NPDES Permits (ongoing)
- To receive data on all BMPs being installed and inspected (ongoing)
- To receive data on all federal BMPs (ongoing)
- To accurately record location data for all BMPs in the database (ongoing)
- To update the database to meet new District stormwater regulations which require a stormwater retention standard (complete)
- To receive data on all BMPs installed on a voluntary basis (non-permitted activities such as tree planting) (ongoing)

- To verify BMPs installed on a voluntary basis (ongoing)
- To provide the BMP data in the format necessary for the CBP Model (ongoing)
- To provide the CBP with stormwater volume capture data (stormwater performance standard information) for each newly installed BMP (ongoing)
- To provide the data through the National Environmental Information Exchange Network (NEIEN) (ongoing)
- To perform a comprehensive, one-time, verification effort of the District's stormwater BMP inventory (ongoing: estimated completion date: May 2016)
- To post the BMP data and their associated load reduction estimates on the internet for the public (May 2015)

### Data Processing Procedures, System Audits and Quality Assurance Corrective Action Plans

Upon receiving BMP data, the PRB and SMD staff edit the data. This includes the following steps:

- Site descriptions and addresses are standardized so that they can be properly geocoded. This facilitates sorting and helps in the recognition of replicates.
- Site locations without addresses are geo-referenced manually to ensure that as many projects are geo-referenced as is possible.
- The data are imported to Arc GIS, and intersected with the district's TMDL Water body delineations, the boundary between the combined and separate sewer system (CSS and MS4), and the CBP Federal Lands layers.
- The compiled data is verified to include geospatial information, BMP type, stormwater volume captured and area treated by each BMP.
- The data is converted to a NEIEN-NPSBMP compliant XML file, and submitted to the CBP.
- DDOE works with CBPO staff to review any processing errors to resolve issues.
   This can be accomplished by contacting the data source and reconciling issues in the source data and simultaneously updating XML documents.
- All supporting data is compiled and stored in Access and Excel databases as well as in Outlook email archives. This data is backed up weekly by DDOE information technology staff.

Table 2: BMP Structures Currently Reported to the Bay Program

Structure Name	Structure Function	Reporting Units
Bio-retention	Landscape designed such that stormwater runoff collects in shallow depressions before filtering through fabricated planting soil media	Acres treated/volume captured
Cisterns/Rain Barrels	Rain barrels and cisterns capture and store stormwater runoff from rooftops and other impervious catchment areas, providing water for non-potable uses such as landscape irrigation.	Acres treated/volume captured
Detention Structure (Dry Pond)	Designed to store runoff without creating a permanent pool	Acres treated/volume captured
Extended Detention Structure (Two types):	Designed to temporarily detain a portion of runoff for 24 hours after a storm using a fixed orifice to regulate outflow at a specific rate, allowing solids & associated time to settle out	Acres treated/volume captured

Updated 12/04/15

Structure Name	Structure Function	Reporting Units	
1) Extended Detention Structure, Dry	Designed for the temporary storage of runoff associated with at least a 24 hour 1-year storm without creating a permanent pool of water.		
2) Extended Detention Structure, Wet	Designed for the storage of runoff associated with at least a 24 hour 1-year storm. The detained water drains partially & the remaining portion creates a permanent pool.		
Bioswale	Open vegetated channel used to convey runoff and provide treatment by filtering pollutants and sediment.	Acres treated/volume captured	
Green Roof	Green roofs absorb, store, and later evapotranspire initial precipitation, thereby acting as a stormwater management system and reducing overall peak flow discharge to a storm sewer system.		
Hydrodynamic Structure aka:  1) Oil grit separator 2) Bay Saver 3) Stormceptor	An engineered structure used to separate sediments and oils from stormwater runoff using gravitational separation and/or hydraulic flow.	Acres treated/volume captured	
Infiltration Basin	Designed to allow stormwater to infiltrate into permeable soils. It differs from a retention structure in that it may include a back-up underdrain pipe to ensure eventual removal of standing water.	Acres treated/volume captured	
Disconnection of Rooftop Runoff	Impervious area reduction	Acres treated/volume captured	
Infiltration Trench (Three types):	An excavated trench that has been backfilled with exposed or unexposed stones to form an underground reservoir (Also see Dry Well)		
1) Complete Exfiltration  2) Partial Exfiltration	Runoff can only exit the trench by exfiltrating through the stone reservoir into the underlying infiltration system.  Runoff exits the trench by exfiltrating a) through the stone reservoir into the underlying soil, and b via a perforated underdrain at the bottom of the trench that diverts runoff to a central outlet	Acres treated/volume captured	
3) Water Quality Exfiltration	Storage volume is set to receive only the first ½" of runoff (first flush) from an impervious area of the watershed		
A porous asphalt surface designed to have bearing strength similar to conventional asphalt but provides a rapid conduit for runoff to reach a subsurface stone reservoir		Acres treated/volume captured	
A bed of sand to which the first flush of runoff is diverted. Water leaving the filter is collected in underground pipes & returned to a waterway. A layer of peat, limestone, and/topsoil may be added to improve removal efficiency		Acres treated/volume captured	
Stream restoration in urban areas is used to restore the urban stream ecosystem by restoring the natural hydrology and landscape of a stream, help improve habitat and water quality conditions in degraded streams.		Linear feet restored/linear feet restored – enhanced treatment	
Wetlands	A structure with a permanent shallow pool planted with wetland vegetation often designed to provide extended detention		
Vegetated Buffer	A vegetated protective zone of variable width located along both sides of a waterway	Acres treated	

Updated 12/04/15

Table 3: Non-Structural BMPs Currently Reported to the Bay Program

Structure Name	Practice Function	Reporting Units
Street Sweeping	Street sweeping on a regular basis reduces nitrogen, phosphorus, and sediment whereas less regular street sweeping reduces only sediment.	Acres swept
Urban Nutrient Management	An urban nutrient management plan is a written, site-specific plan which addresses how the major plant nutrients (nitrogen, phosphorus and potassium) are to be annually managed for expected turf and landscape plants and for the protection of water quality.	Acres managed
Tree Planting	Urban tree planting is planting trees on urban pervious areas.	Number of trees
Erosion & Sediment Control	Erosion & Sediment control BMPs help prevent destruction of property and natural resources caused by soil erosion, sedimentation and nonagricultural runoff from land-disturbing activities.	Acres treated

For additional information on BMPs, please see the attachment titled "DDOE QAPP Attachment A (NEIEN Appendix).xlsx."

#### Identification of Customers and Stakeholders

- Customers: U.S. Environmental Protection Agency
- Stakeholders: District of Columbia government agencies, DC Water, federal agencies, and the general public.

#### **Procedures for Emergency Situations**

The data submitted to the CBP and all supporting data is compiled and stored in QuickBase, Access, and Excel databases, DC Geographic Information System open data, as well as in Outlook email archives. This data is backed up weekly by District government information technology staff. The District government has contingency plans in case of an information technology disaster. DDOE IT Branch maintains this plan.

#### Reporting Requirements

The DDOE Planning and Restoration Branch reports on its CBP funded grant activities on a semi-annual basis and annually reports load reduction data for inclusion in the Bay Program model.