# FACT SHEET

National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit No. DC0000221 (Government of the District of Columbia)

#### NPDES PERMIT NUMBER: DC0000221 (Reissuance)

## PERMITTEE NAME AND MAILING ADDRESS:

Government of the District of Columbia The John A. Wilson Building 1350 Pennsylvania Avenue, N.W. Washington, D.C. 20004

## MS4 ADMINISTRATOR NAME AND MAILING ADDRESS:

Director, District Department of Energy and Environment 1200 First Street, N.E., 6<sup>th</sup> Floor Washington, D.C. 20002

# FACILITY LOCATION:

District of Columbia's Municipal Separate Storm Sewer System (MS4)

#### **RECEIVING WATERS:**

Potomac River, Anacostia River, Rock Creek, and Stream Segments Tributary To Each Such Water Body

#### **ACTION TO BE TAKEN:**

EPA, Region III, proposes to reissue the District of Columbia's (DC or the District) current National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit which currently allows the discharge of stormwater runoff into the waters of the District from its MS4. This is a second public notice for the sections of this proposed permit identified below.

On November 17, 2016 EPA offered the draft permit for public notice and comment. The comment period closed on January 17, 2017. EPA received comments from 138 individuals and organizations. Responses to those comments will be provided in a separate Response to Comments document that will be published with the Final Permit. EPA has carefully considered those comments and has made modifications to the permit in response to many of them. Several of these changes constitute substantive changes, and therefore EPA considers it necessary to provide the public an opportunity to comment on those changes. EPA is taking comment only on the revisions that are considered substantive. Those sections are:

Section 1.2 – Permittee (modified)

Subsections 1.5.3.1 & 1.5.3.2 – Discharge Limits (modified)

Section 2.2 – Revising TMDLs in Need of Revision (removed Subsection 2.2.1 from 2016 Draft Permit)

Subsections 2.2.2.1 & 2.2.2.2 – Milestones and Benchmarks for the Next Permit Term (modified)

Section 2.4 – Eliminating Exemptions for Certain Small Projects (removed Subsection 2.4.1 from 2016 Draft Permit)

Subsection 2.5.2 – Other Controls or Management Measures (new)

Subsection 3.2.3.2 – Grandfathering of Stormwater Retention Credits (removed Subsection 3.1.2.2 from the 2016 Draft Permit)

Subsection 3.3.4.1 – Catch Basin Operation & Maintenance (modified)

Subsection 3.3.6 – Street Sweeping (modified)

Subsection 4.2.3 Table 8 – Sampling Locations for Wet Weather Discharge Monitoring (modified)

Subsection 4.3.2.1 Table 10 – Water Quality Sampling Parameters (modified)

Subsection 4.3.3 – Benthic Macroinvertebrate Sampling (modified)

Section 5.1 – Discharge Monitoring Reports (modified)

Subsection 5.3.1 – Stormwater Program Dynamic Web-based Graphical Interface (new)

Part 8 – Definitions for "Acres Managed" and "Critical Sources" (modified)

This Fact Sheet provides a description and explanation for the substantive changes made to the 2016 Draft Permit. EPA is providing the 2017 Draft Permit in its entirety so that the substantive revisions can be read in context. In addition, EPA is providing a red-line-strike-out comparison document in order to show all changes made to permit language in the 2017 Draft Permit compared to the 2016 Draft Permit. Very minor changes, made for the purpose of providing clarity, consistency, or ease of reading, are shown in the 2017 Draft Permit and in the comparison document but are not discussed in this Fact Sheet. EPA requests that comments be focused on the portions of the permit listed above, to which substantive changes have been made; those sections are identified in bold font in both the 2017 Draft Permit and in this Fact Sheet.

#### General

EPA emphasizes that *all* measures in the 2017 Draft Permit are pivotal in making progress toward attaining applicable wasteload allocations (WLAs). Stormwater controls required by the 2017 Draft Permit include a balance of, on the one hand, prevention and protection measures that are intended to minimize the likelihood of additional impairments occurring and, on the other hand, reduction and remediation measures that are intended to address current impairments. Table A below identifies which provisions of the 2017 Draft Permit are intended to address each applicable pollutant of concern.

|  |   | Permit Requirements           |   |
|--|---|-------------------------------|---|
| Pollutants                                   | TMDLs   | Planning<br>(Part 2)          | Implementation<br>(Part 3)  |
| Nutrients                                    | •   |                               |   |
| Nitrogen,<br>Phosphorus                      | <ul> <li>Anacostia Nutrients and BOD (2008)</li> <li>Chesapeake Bay Phosphorus, Nitrogen and<br/>Sediment (2010)</li> </ul>   | 2.2<br>2.4<br>2.5.1           | 3.2, 3.3.1, 3.3.2,<br>3.3.3, 3.3.4,<br>3.3.5, 3.3.6, 3.4,<br>3.5, 3.6, 3.7.5,<br>3.7.7, 3.8, 3.9,<br>3.10 |
| <b>Conventional Pollu</b>                    | tants   |                               | 0.110   |
| Biochemical<br>Oxygen Demand<br>(BOD)        | <ul> <li>Kingman Lake TSS, Oil and Grease, BOD (2003)</li> <li>Anacostia Nutrients and BOD (2008)</li> </ul>  | 2.2,<br>2.6                   | 3.2,<br>3.3.2, 3.3.8, 3.4,<br>3.6, 3.7.6, 3.7.7,<br>3.8, 3.9, 3.10  |
| Total Suspended<br>Solids (TSS),<br>Sediment | <ul> <li>Kingman Lake TSS, Oil and Grease, BOD (2003)</li> <li>Watts Branch TSS (2003)</li> <li>Anacostia TSS (2007)</li> <li>Chesapeake Bay Phosphorus, Nitrogen and Sediment (2010)</li> </ul>  | 2.2,<br>2.4,<br>2.5.1,<br>2.6 | 3.2,<br>3.3.2, 3.3.3,<br>3.3.4, 3.3.5,<br>3.3.6, 3.3.7, 3.4,<br>3.5, 3.6,<br>3.7.7,<br>3.8, 3.9, 3.10     |
| Bacteria                                     | <ul> <li>Anacostia &amp; Tributaries Bacteria (2003 &amp; 2014)</li> <li>Kingman Lake Bacteria (2003 &amp; 2014)</li> <li>Potomac &amp; Tributaries Bacteria (2004 &amp; 2014)</li> <li>Tidal Basin and Ship Channel Bacteria (2004 &amp; 2014)</li> <li>Chesapeake and Ohio Canal Bacteria (2004 &amp; 2014)</li> <li>Rock Creek Bacteria (2004 &amp; 2014)</li> <li>Oxon Run Organics, Metals, and Bacteria (2004)</li> </ul> | 2.2,<br>2.2.2.1               | 3.2,<br>3.3.1, 3.4, 3.6,<br>3.8, 3.9, 3.10  |
| Metals                                       |   |                               |   |
| Arsenic, Copper,<br>Lead, Mercury,<br>Zinc   | <ul> <li>Anacostia &amp; Tributaries Metals and Organics<br/>(2003)</li> <li>Kingman Lake Organics and Metals (2003)</li> <li>Potomac Tributaries Organics and Metals<br/>(2004)</li> <li>Oxon Run Organics, Metals, and Bacteria<br/>(2004)</li> <li>Rock Creek Organics and Tributaries Metals<br/>(2004, revised 2016)</li> </ul>  | 2.2,<br>2.5.1                 | 3.2,<br>3.3.2, 3.3.3,<br>3.3.4, 3.3.6, 3.4,<br>3.6, 3.7.6,<br>3.8, 3.9, 3.10                              |

# Table A. TMDL Pollutants and Applicable Planning and ImplementationRequirements

| Organics  | Organics   |                 |   |  |  |
|---|--|-----------------|---|--|--|
| Polyaromatic<br>Hydrocarbons<br>(PAHs),<br>Chlordane,<br>Heptachlor<br>Epoxide, Dieldrin,<br>DDT, DDE,<br>DDD, PCBs | <ul> <li>Anacostia &amp; Tributaries Metals and Organics (2003)</li> <li>Kingman Lake Organics and Metals (2003)</li> <li>Potomac and Anacostia Tidal PCB (2007)</li> <li>Potomac Tributaries Organics and Metals (2004)</li> <li>Oxon Run Organics, Metals, and Bacteria (2004)</li> <li>Rock Creek Organics and Tributaries Metals (2004)</li> </ul> | 2.2,<br>2.2.2.2 | 3.2,<br>3.3.2, 3.3.3, 3.4,<br>3.6,<br>3.7.4, 3.7.6,<br>3.8, 3.9, 3.10       |  |  |
| Other Pollutants  |  | T               |   |  |  |
| Oil & Grease  | <ul> <li>Anacostia Oil &amp; Grease (2003)</li> <li>Kingman Lake TSS, Oil and Grease, BOD (2003)</li> </ul>  | 2.2,<br>2.5.1   | 3.2,<br>3.3.2, 3.3.4, 3.4,<br>3.6, 3.7.6<br>3.8, 3.9, 3.10                  |  |  |
| Trash   | • Anacostia Trash (2010)   | 2.2,<br>2.5.1   | 3.2, 3.3.2, 3.3.4,<br>3.3.6, 3.4, 3.7.1,<br>3.7.2, 3.7.3,<br>3.8, 3.9, 3.10 |  |  |

EPA also notes that certain compliance dates in this 2017 Draft Permit may be changed in the final permit if there are additional delays in finalizing the permit.

# DISCHARGES AUTHORIZED UNDER THIS PERMIT (Part 1)

## 1.1 MS4 Permit Area

At the suggestion of one commenter, EPA has removed "Permittee" as a parenthetic reference to the District of Columbia, as this section is describing the geographic scope of the permit. Thus, the first sentence of Section 1.1 now reads "This permit covers all areas within the jurisdictional boundary of the District of Columbia (DC or District) served by or contributing to discharges from the Municipal Separate Storm Sewer System (MS4) owned or operated by the District of Columbia."

# **1.2 Permittee**

The 2016 Draft Permit identified the "permittee" as the Government of the District of Columbia, including all departments, agencies and authorities.

The 2011 DC MS4 Permit ("the 2011 Permit") contains a requirement for the District to coordinate among its various agencies and authorities for purposes of stormwater administration. In 2012, however, EPA modified the 2011 Permit, in part to clarify the role of the permittee ("the 2012 Modification"); in the Fact Sheet for that permit modification, the Agency "provide[d] clarity that the Government of the District of Columbia is the sole permittee." In proposing the 2012 Modification, EPA provided the following rationale for the clarification: The EPA recognizes that the Government of the District of Columbia has the institutional policies, regulations, and agreements to make internal determinations about which District entities shall implement the various provisions of the permit. The EPA realizes that a number of departments, agencies, and authorities of the Government of the District of Columbia will be engaged in carrying out particular responsibilities under the permit. However, the permit does not purport to identify which of these entities are responsible for any particular requirement, as this does not fall within the EPA's purview as the permitting authority. The EPA will continue to work directly with DDOE, the current stormwater administrator.

This rationale was incorporated into the final Fact Sheet that supported the 2012 Modification of the 2011 Permit. Consistent with the underlying basis for the language in the 2012 Modification, in the 2016 Draft Permit EPA had removed as no longer necessary Section 2.3 (Stormwater Management Program Administration/Permittee Responsibilities) of the 2012 Permit but kept descriptive language to be clear that there are still multiple entities with responsibilities in implementing the permit and thus identified the Permittee as follows: "The "permittee" is the Government of the District of Columbia, including all departments, agencies and authorities."

In comments on the 2016 Draft Permit, both the District of Columbia Water and Sewer Authority (DC Water) and the District Department of Environment and Energy (DOEE) requested that Section 1.2 state simply that "The "Permittee" is the Government of the District of Columbia", removing the phrase "including all departments, agencies and authorities."

Following subsequent discussion with DOEE and DC Water, EPA agreed to the requested change because it is consistent with the definition in the 2011 Permit as Modified and the additional language was purely descriptive and therefore not necessary to the definition. However, EPA added back in to Section 1.2 language from Subsection 2.3.1 of the 2011 Permit as Modified regarding the permittee's designation of DOEE as the agency responsible for monitoring and coordinating the Permittee's activities under the permit. The 2017 Draft Permit now reads as follows:

The "Permittee" is the Government of the District of Columbia. The Permittee has designated the District Department of the Environment (DDOE) as the agency responsible for monitoring and coordinating the activities of all District agencies as required to maintain compliance with this permit. If the permittee designates a different responsible agency, it must notify EPA in writing within one week.

## 1.3 Authorized Discharges

Two commenters pointed out that the inclusion of wash waters in Section 1.3 of the 2016 Draft Permit as authorized non-stormwater discharges was inconsistent with the requirement of Subsection 3.3.2.4, which places requirements on the discharge of wash waters. EPA agrees and has removed wash waters from Section 1.3.

#### 1.5.3 Discharge Limits – TMDL Wasteload Allocations

One commenter was confused by the phrase "established or approved" as applies to TMDLs in Subsection 1.5.3, noting that TMDLs that have not yet been approved are not effective for purposes of NPDES permitting. EPA's intent with the original language was to include TMDLs, such as the Chesapeake Bay phosphorus, nitrogen and sediment TMDL, that were established by EPA, as opposed to being established by a state and approved by EPA. To reduce confusion, EPA has added the phrase "by EPA" to this Subsection such that it reads:

Attain applicable wasteload allocations (WLAs) for each Total Maximum Daily Load (TMDL) established or approved <u>by EPA</u> for each receiving water body consistent with...

## 1.5.3.1

An important discharge limit included in both the 2016 and 2017 Draft Permits, which is new for the District stormwater management program, is expressed as "acres managed." Many of the comments on the 2016 Draft Permit indicated that there is confusion over how to interpret and apply this metric. In the 2017 Draft Permit, and in this Fact Sheet, EPA attempts to provide additional clarity.

In the 2011 Permit, EPA established the requirement for on-site retention because it is an effective means of preventing and minimizing discharges of stormwater, and its multiple entrained pollutants, to surface waters (see the 2010 Draft Fact Sheet for a more in-depth discussion). Therefore, as a metric for tracking progress towards meeting permit limits, the amount of stormwater captured in on-site stormwater retention controls is used as an indicator of the amount of pollutants that have been kept out of receiving streams.

The Permittee developed the "acres managed" metric as a way to track implementation for a subset of stormwater controls, primarily those that involve on-site retention of stormwater. In concert with model development, the Permittee has also applied this metric to a small set of additional control measures, such as green roofs and tree plantings, that also have the functional capacity to retain stormwater. As defined in the 2017 Draft Permit, one "Acre Managed" is one acre of land treated by stormwater control measures to the applicable standard established in the Permittee's stormwater regulations or consistent with the relevant voluntary program.

*Example 1:* A development project required to meet the 1.2-inch on-site retention standard for Development and Redevelopment  $\geq$  5,000 square feet (Subsection 3.2.2) across 5 acres, through any combination of on-site retention controls = five (5) "acres managed".

*Example 2:* A Public Right-of-Way Project subject to the District's "MEP" process (Subsection 3.2.4) implements 1.8 inches of on-site retention across 2 acres = two (2) "acres managed".

*Example 3:* A Public Right-of-Way Project subject to the District's "MEP" process (Subsection 3.2.4) implements 0.9 inches of on-site retention across 2 acres = two (2) "acres managed".

*Example 4:* A redevelopment project required to meet the 0.8-inch on-site retention standard for Substantial Improvement Projects (Subsection 3.2.5) across a half-acre, through any combination of on-site retention controls = half (0.5) "acre managed".

*Example 5:* A homeowner voluntarily implementing porous pavement through the District's RiverSmart Homes Program (Subsection 3.2.10) achieves 0.6 inches of on-site retention across a quarter acre = quarter (1/4) "acre managed".

It is fairly straightforward to apply the "acres managed" metric to stormwater controls that retain stormwater directly, as that was the initial context for this metric. However, the Permittee's stormwater program includes a number of other activities that are important to achieving necessary pollutant reductions. It is possible, but more complicated, to apply the "acres managed" metric to implementation measures such as street sweeping and catch basin cleaning. Equally likely, "acres managed" may not be the best metric for these types of stormwater controls, and alternate numeric metrics should be established.

EPA continues to evaluate the most effective ways to measure and track all of these activities and the commensurate pollutant reductions. EPA has included a new provision in the permit (Subsection 2.5.2) that will allow the Permittee to propose to EPA methods for estimating pollutant reductions where there currently are no such methods, so that those pollutant reductions may be counted toward meeting permit requirements. The methods may include translation to "acres managed," if appropriate, or may express the reduction in pounds, colonies per liter, or other applicable unit. The following table includes most of the major stormwater control measures in the 2017 Draft Permit and articulates the current metrics and permit limits. In some cases, metrics and/or numeric limits linked directly (e.g., pounds or tons) or indirectly (e.g., acres managed) to pollutant reductions have not been formally established. EPA encourages the development of numeric metrics for as many measures as possible. At this time, there are some pollutants or Stormwater Control Measures (SCMs) for which no metric has been developed; those are intentionally left blank in the Table B, below.

| Stormwater<br>Control Measure                               | Metric(s)     | Limit in Permit                          | Pollutants             |
|---|---------------|--|------------------------|
| <b>On-Site Retention</b>                                    |               |  |                        |
| New and<br>Redevelopment<br>5,000 square feet<br>and larger | Acres Managed | Part of 1,038 acres managed permit total | Multiple<br>pollutants |

**Table B. Metrics and Permit Limits** 

| PROW activities<br>subject to MEP<br>process    | Acres Managed   | 62 acres managed, part of<br>1,038 acres managed permit<br>total  | Multiple<br>pollutants                             |
|---|---|---|--|
| Incentive<br>programs such as<br>RiverSmart     | Acres Managed   | Part of 1,038 acres managed<br>permit total   | Multiple<br>pollutants                             |
| Green Roofs                                     | Square Feet<br>May also be translated to<br>Acres Managed         | 350,000 square feet<br>(May also be included in<br>1,038 acres managed permit<br>total)   | Multiple<br>pollutants                             |
| Tree Plantings                                  | Net # Trees Planted<br>May also be translated to<br>Acres Managed | <ul> <li>33,525 net total trees for the</li> <li>5-year permit term, with</li> <li>benchmark of 6,705 annual</li> <li>average.</li> <li>(May also be included in</li> <li>1,038 acres managed permit</li> <li>total)</li> </ul> | Multiple<br>pollutants                             |
| Other than On-Site                              | Retention   |   |  |
| Stream, Buffer<br>and Floodplain<br>Restoration |   | Optional  | Nitrogen<br>Phosphorus<br>Sediment                 |
| Industrial SWPP<br>at municipal<br>facilities   |   | All relevant operations must<br>implement SWPPPs; all<br>relevant operations must<br>have appropriate compliance<br>and enforcement<br>mechanisms.  | Multiple<br>pollutants                             |
| Pesticide,<br>Herbicide and<br>Fertilizer       |   | Maintain the program.   | Pesticides<br>Herbicides<br>Nitrogen<br>Phosphorus |
| Catch Basin<br>clean-outs                       |   | Each catch basin cleaned at<br>least once annually, with a<br>margin of error   | Multiple<br>pollutants                             |
| Storm Drain<br>Outfall Repair                   |   | 50 outfalls permit term total   | Sediment<br>Nitrogen<br>Phosphorus                 |
| Street Sweeping                                 | Road Miles Swept  | 8,000 road miles swept<br>annually  | Sediment<br>Nitrogen<br>Phosphorus                 |
| Construction<br>SWPP                            |   | All relevant construction<br>activities must implement<br>SWPPPs; all construction<br>activities must have<br>appropriate compliance and<br>enforcement mechanisms.   | Sediment<br>Nitrogen<br>Phosphorus                 |
| Snow and Ice<br>Management                      |   | Implement the program.  | Multiple<br>Pollutants                             |
| Critical Source controls                        |   | All critical sources must implement appropriate   | Multiple<br>Pollutants                             |

|                   |                            | 11                          | 1            |
|-------------------|----------------------------|-----------------------------|--------------|
|                   |                            | measures; all sources must  |              |
|                   |                            | have appropriate compliance |              |
|                   |                            | and enforcement             |              |
|                   |                            | mechanisms                  |              |
| Illicit Discharge |                            | All identified illicit      | Multiple     |
| Elimination       |                            | discharges must be          | Pollutants   |
|                   |                            | eliminated/remedied         |              |
| Illegal Disposal  |                            | All identified illegal      | Multiple     |
| Elimination       |                            | disposals must be remedied  | Pollutants   |
| Trash Removal     | Pounds of Trash            | 108,347 pounds annually     | Trash        |
| (clean-ups,       | Captured/Removed/Prevented | Anacostia River Watershed   |              |
| skimmers, trash   |                            |                             |              |
| racks)            |                            |                             |              |
| Plastic Shopping  | Estimate of bags prevented |                             |              |
| bag fee           |                            |                             |              |
| Polystyrene Foam  | Estimate of containers     |                             |              |
| Food Containers   | prevented                  |                             |              |
| Ban               |                            |                             |              |
| Coal Tar Ban      |                            | Maintain the restrictions.  | PAHs         |
| Lawn Fertilizer   |                            | Maintain the restrictions.  | Nitrogen     |
| Restrictions      |                            |                             | Phosphorus   |
| Hazardous Waste   |                            | Maintain the program.       | Metals, PAHs |
| Collection        |                            |                             | & others     |
| Leaf and Yard     |                            | Maintain the program.       | Nitrogen     |
| Waste Collection  |                            |                             | Phosphorus   |

DOEE articulated concerns that the "acres managed" milestones that EPA had included in Table 1 of Subsection 1.5.3.1 for each of the major basins might be difficult to achieve given uncertainty about where development might occur over the next five years. EPA incorporated those numbers into the 2016 Draft Permit because it determined them to be practicable, given that the Permittee had included those numbers in the Consolidated TMDL Implementation Plan that it developed and submitted to EPA. Nevertheless, EPA acknowledges the Permittee's concerns.

As a result, although EPA is not changing the total "acres managed" requirement (it remains at 1,038), EPA has modified the milestones for the sub-basins to provide additional flexibility to take advantage of opportunities as they arise. Specifically, EPA has modified the milestones to allow the Permittee to achieve half of the 1,038 total (519 acres managed) in any of the basins, as opportunities arise. The remaining 519 acres managed must be achieved in specific major basins, as shown in Table C below, based on additional analysis that the Permittee provided to EPA following the public notice and comment period. That analysis, *TMDL IP Milestone Analyses FINAL*, is included in the Administrative Record for this 2017 Draft Permit and identifies and tallies potential/expected development projects and opportunities throughout the MS4 Permit Area in each of the three sub-basins. Thus, Table 1 in the 2017 Draft Permit reads as follows:

| Major Basin     | 5-Year Milestones |
|-----------------|-------------------|
|                 | (Acres Managed)   |
| Anacostia River | 307               |
| Potomac River   | 116               |
| Rock Creek      | 96                |
| Anywhere in the |                   |
| MS4 Permit      | 519               |
| Area            |                   |
| Total           | 1,038             |

#### **Table C. Acres Managed Milestones**

One commenter pointed out that public rights-of-way (PROWs) account for almost half of all DC impervious surface, and suggested that EPA should require additional effort in these areas. During the public notice and comment period, the Permittee also submitted its 2016 Annual Report, which detailed the measures that had been implemented in PROWs during the 2011 permit term. Based on progress reported through the 2016 reporting year, the District Department of Transportation (DDOT) has successfully implemented stormwater projects for 31 "aces managed" with another 31 under construction. Considering that the Permittee has demonstrated the feasibility of implementing 62 acres managed in PROW projects in this period (approximately 4 years from the effective date of the stormwater regulations), EPA reevaluated what constitutes MEP for projects in PROWs and discussed this reevaluation with DOEE. Accordingly, EPA is increasing the acres managed requirement for PROWs to 62 in the 2017 Draft Permit. While this increases the percentage of acres managed required to be achieved in PROWs, EPA is not modifying the overall required total of 1,038 acres managed.

One commenter requested additional specificity on the requirements of Subsection 1.5.3.1, noting that the 2016 Draft Permit did not specify that the requirements applied to stormwater. Another commenter requested that EPA specify that this provision applies only in the MS4 Permit Area. EPA agrees that making these changes would clarify and be consistent with EPA's intent when drafting this permit provision. Accordingly, EPA has modified the language of Subsection 1.5.3.1 to read: "To be attained by the end of this five-year permit term in the DC <u>MS4 Permit Area</u>, a collective reduction in all TMDL pollutants of concern <u>in stormwater</u> other than trash..."

## **1.5.3.1** Tree Planting

During the drafting of the 2016 Draft Permit, DOEE provided information to EPA for an annual net number of tree plantings, which EPA mistakenly interpreted to apply only to the MS4 Permit Area. DOEE clarified in its comment that it intended that information to apply District-wide and requested that EPA change the permit requirement to reflect that. EPA acknowledges the misunderstanding and subsequent error.

Although the DOEE requested in its comment that EPA leave the 8,000 figure in the permit but apply it District-wide, EPA reiterates that this permit applies only to the MS4

Permit Area. Although EPA may consider District-wide perspectives when making MEP assessments and calculations, the permit specifies metrics and requirements only for the MS4 Permit Area. EPA has reviewed the information it has regarding tree plantings – specifically, the Permittee's Urban Tree Canopy Plan and the Permittee's 2012 – 2016 Annual Reports (of which the 2016 Annual Report had not yet been submitted when EPA drafted the 2016 Draft Permit). EPA does not consider 8,000 net trees per year District-wide to be a fair representation of MEP for several reasons: 1) the District's Urban Tree Canopy Plan calls for 10,800 trees per year District-wide and 2) over the past 5 years District-Wide totals have averaged 11,128 net trees per year.

|   | U        | Plantings in DC During 2011 Permit Term |            |  |
|---|----------|---|------------|--|
| Year  | MS4 Area | Non-MS4                                 | District-  |  |
|   |          | Area                                    | Wide Total |  |
| 2012  | 8,259    | 3,469                                   | 11,728     |  |
| 2013  | 4,319    | 4,747                                   | 9,066      |  |
| 2014  | 6,413    | 4,600                                   | 11,013     |  |
| 2015  | 8,451    | 5,983                                   | 14,434     |  |
| 2016  | 6,085    | 3,313                                   | 9,398      |  |
| Numbers from the Permittee's annual reports for the years |          |   |            |  |
| noted.  |          |   |            |  |

 Table D. Net Annual Tree Plantings During 2011 Permit Term

Instead, EPA is making two changes to the requirements for net tree plantings.

First, EPA is changing the number of trees required to be planted to apply only in the MS4 Permit Area instead of District-wide and, accordingly, is changing the required number of tree plantings. Specifically, EPA is setting a permit requirement that the Permittee achieve a minimum net increase of 33,525 trees in the MS4 Permit Area by the end of the five-year permit term, and is setting a benchmark of achieving a net annual average tree planting rate of 6,705 plantings in the MS4 Permit Area. Over the past five years, the Permittee averaged 6,705 net trees per year in the MS4 Permit Area, and EPA has no information to suggest that the past five years have been an anomaly or that the current rate of tree planting cannot be sustained. In doing so, EPA notes that MEP is not automatically determined to be the maximum number *ever* achieved; to the contrary, an MEP determination must assess what is practicable. Further, the annual benchmark of 6,705 represents a notable increase over the 4,150 annual net tree planting required in the 2011 Permit, and one that the Permittee can be reasonably expected to achieve based on past performance.

Second, EPA is setting these numbers as annual averages rather than annual minimums. This will provide the Permittee some flexibility in years in which funding, contracts, weather, or other variables delay tree plantings, but will still ensure that the overall objective is achieved. The five-year averaging period will begin with the first year this permit is in effect. Should the permit be extended beyond five years, net tree plantings should continue to accrue at this rate and totals will increase commensurately. **1.5.3.2** Discharge Limits – Permit Limit for Trash in the Anacostia Watershed

Following publication of the 2016 Draft Permit, EPA discovered an error in how it had incorporated the applicable wasteload allocation in the Anacostia Watershed Trash TMDL. In the 2016 Draft Permit, EPA had required the Permittee to remove 103,188 pounds of trash from the Anacostia river basin within the MS4 Permit Area, which represented a removal of 100% of the baseline trash load. However, the applicable wasteload allocation is actually 108,347 pounds of trash – 100% of the baseline load plus five percent margin of safety. See EPA Decision Rationale approving the Anacostia Trash TMDL.

Accordingly, EPA has modified the 2017 Draft Permit to include the correct number such that it reads as follows:

108,347 pounds of trash shall be captured, removed, or prevented from entering the Anacostia River within the MS4 Permit Area annually per the requirements of Subsection 3.7.1 of this permit.

This does not modify the wasteload allocation in the TMDL; it simply represents a corrected permit requirement. This corrected number is both consistent with the applicable wasteload allocation and practicable – the Permittee's Annual Reports demonstrate that the Permittee is already achieving the higher number.

## STORMWATER MANAGEMENT PROGRAM PLANNING (Part 2)

2.1 Elements of the Stormwater Management Program

DOEE requested that EPA remove the phrase "at all times" from the requirement in this Section to have current versions of all plans on the website, and explained that removing this phrase from the requirement would allow for reasonable delays in posting documents to the Permittee website and possible disruptions to the website. EPA agrees that this is a reasonable request, especially since the District generally has had a good track record of keeping relevant documents posted on the website. Therefore, EPA has made the requested change in the 2017 Draft Permit.

#### 2.2 Total Maximum Daily Load Planning

Subsection 2.2.1 (*Revising TMDLs in Need of Revision*) of the 2016 Draft Permit included a provision for the Permittee to provide a schedule for TMDLs it planned to revise. The Permittee requested that EPA remove this provision from the 2016 Draft Permit for several reasons. EPA does not concur with all of them, but does agree that requiring a schedule for TMDL revisions is an inappropriate permit provision. Given that WLAs remain in effect until such time as any TMDL is revised and approved, EPA does not consider this provision crucial to progress and has removed it from the 2017 Draft Permit. EPA has included measures in this draft permit to address all pollutants for which there are WLAs, even though some of those WLAs may be modified at some point in the future; EPA has not changed this aspect of Subsection 2.2.1 between the 2016 Draft Permit and the 2017 Draft Permit.

#### 2.2.2.1 Bacteria Milestones and Benchmarks for the Next Permit Term

DOEE requested that EPA remove the requirement to conduct a Bacteria Source Tracking Study and also the related requirement to use the results of the study to development new milestones and benchmarks for implementing controls to achieve bacteria WLAs., The request was based on the premise that the relevant TMDLs would first need to be revised. EPA disagrees. There are multiple E. coli WLAs assigned to the District MS4. Per 40 C.F.R. § 122.44(d)(1)(vii)(B), EPA is obligated to ensure that the permit is consistent with the assumptions and requirements of any applicable TMDL WLA. In addition, there are District receiving waters listed as impaired for E. coli for which TMDLs have not yet been developed. Per section 402(p)(3)(B)(iii) of the Clean Water Act, it is appropriate for EPA to include measures in the permit as necessary to meet applicable water quality standards for these waters as well. Accordingly, EPA has determined that incorporation of measures into the permit to reduce E. coli in MS4 discharges is necessary and appropriate. EPA appreciates that the Permittee is committed to all actions outlined in its Consolidated TMDL Implementation Plan, but emphasizes that this does not obviate EPA's obligation to include the appropriate requirements in the permit. Delaying action for another permit term, or until such time as existing TMDLs are again revised, is unsupportable.

Some reduction measures for *E. coli* are included in the permit, e.g., illicit discharge detection and elimination (Subsection 3.6.1), SSO response (Subsection 3.3.1), and pet waste education and repositories (Subsection 3.10). However, sources are not adequately identified and relative contributions from different sources are not completely understood. Rather than impose additional measures that may or may not be appropriately targeted to significant sources, EPA is requiring the Permittee to gather additional data (i.e., the source tracking study) in order to make informed decisions about allocation of resources to strategies that most effectively reduce *E. coli* in stormwater discharges (i.e., the benchmarks and milestones). If and when the *E. coli* TMDLs are revised and approved by EPA, this information could also be used for that purpose.

EPA added an additional year to the timeline for the study, so that the Permittee may also collect enough data to inform TMDL revisions. Given how close this deadline comes to deadlines for publishing revisions to the Consolidated TMDL Implementation Plan for public notice, i.e., fifteen (15) months before the end of the permit term, EPA is requiring the Permittee to implement reduction measures for any high priority bacteria sources that may be identified in the study immediately, i.e., prior to public notice and comment and EPA approval. EPA expects that the Permittee will include new milestones and benchmarks in its updated Consolidated TMDL Implementation Plan, which will be subject to public notice and comment and EPA approval per the schedule in Subsection 2.2.5.5 of the 2017 Draft Permit.

#### 2.2.2.2 Legacy Pollutant Milestones and Benchmarks for the Next Permit Term

DOEE also requested that EPA remove the requirement to develop a legacy pollutant minimization plan for chlordane, heptachlor epoxide, dieldrin, DDT, DDE, DDD and PCBs, also based on the rationale that the relevant TMDLs would first need to be revised. For reasons noted above, EPA does not find this argument compelling. However, because the Permittee has options to pursue mitigation of these pollutants through mechanisms other than the MS4 program, EPA is removing the permit requirement to develop a separate legacy pollutant minimization plan. Instead, the Permittee will directly incorporate new milestones and benchmarks to address legacy pollutants into the updated Consolidated TMDL Implementation Plan. In addition, the revised provision acknowledges that the Permittee may use the results of the investigation to revise TMDLs, though this does not preclude the fact that existing WLAs must continue to be addressed until such time as a revised TMDL is approved. The revised language in the 2017 Draft Permit reads as follows:

The permittee shall conduct an investigation for the following TMDL pollutants: chlordane, heptachlor epoxide, dieldrin, DDT, DDE, DDD and PCBs. The investigation shall include measures to identify current sources, including a determination of whether or not these toxic contaminants are largely in situ in the sediments of receiving streams rather than in ongoing MS4 discharges. Data from this investigation shall be used, as appropriate, to inform revisions to relevant TMDLs and to develop new milestones and benchmarks for implementing controls to attain relevant MS4 WLAs. Consistent with Subsection 2.2.5.4, the new milestones and benchmarks shall be incorporated into the revised Consolidated TMDL Implementation Plan.

## 2.2.2.3 Targeted Watersheds

DOEE requested minor language changes to the requirement to develop a list of targeted watersheds and incorporate new milestones and benchmarks into the Consolidated TMDL Implementation Plan. EPA did not incorporate the requested language changes verbatim, but did remove specific mention of *E. coli* and legacy pollutant TMDLs, as they are already part of the universe of TMDLs and there is no need to identify specific TMDLs by name. EPA also clarified that, although the Permittee must address all comments from the Agency, it is not a requirement to incorporate all of EPA's suggestions into a revised Plan.

#### 2.2.3 Stormwater Fee Options Evaluation

DOEE commented that this provision in the 2016 Draft Permit impinged on the District's sovereignty and discretion to provide funding for the stormwater program and requested that EPA remove this provision from the permit. In its 2015 Consolidated TMDL Implementation Plan, the Permittee included the action to conduct a stormwater fee option evaluation and propose an increase if the evaluation supported an increase; thus EPA included it as a condition in the 2016 Draft Permit. EPA agrees that it cannot require the District to increase its fees, thus the 2016 Draft Permit only included (per the District's Consolidated TMDL Implementation Plan) the provision to *propose* (not implement) an increase *if* the evaluation indicated its

feasibility. However, to underscore the fundamental principle of local government autonomy in setting fees, EPA has removed from the 2017 Draft Permit the provisional requirement to propose an increase if warranted. However, EPA has retained the requirement to undertake the evaluation.

## 2.2.4 Analysis of Updating Stormwater Management Regulations

A number of commenters, including DOEE, requested that EPA amend the language in this provision to clarify that the District has the final decision on making changes to the District's stormwater regulations. EPA has clarified the language, such that Subsection 2.2.4.2 of the 2017 Draft Permit now reads: "Should the Permittee determine that changes to the stormwater management regulations are feasible and warranted, the Permittee shall develop the following...".

# 2.2.5 Updating the Consolidated TMDL Implementation Plan

In Subsection 2.2.6 of the 2016 Draft Permit (Incorporate New or Revised TMDLs into the Consolidated TMDL Implementation Plan), EPA included a requirement to update the plan within six months of EPA approval of any new or revised TMDL. DOEE pointed out potential inconsistencies between this schedule and those in Subsections 2.2.6 and 2.2.8 of the 2016 Draft Permit. Upon further review of all plan update compliance dates in the 2016 Draft Permit, EPA acknowledges not only some logistical inconsistencies, but also some unnecessary redundancy between plan update requirements in Subsections 2.2.6.1, 2.2.7 and 2.2.8 of the 2016 Draft Permit. Thus, EPA has combined the requirements of Subsections 2.2.6, 2.2.7 and 2.2.8 from the 2016 Draft Permit into a new Subsection of the 2017 Draft Permit: Subsection 2.2.5, *Updating the Consolidated TMDL Implementation Plan*.

DOEE also pointed out that benchmarks are an adaptive management aid, and requested that EPA remove the requirement to adjust the Consolidated TMDL Implementation Plan should progress fall short of any benchmark. EPA agrees that adjustments to the Plan are only necessary when there is failure to meet stipulated milestones, and has made the requested change.

# 2.4 Public Right-of-Way Optimal Design

In the 2017 Draft Permit, EPA is making two changes to Section 2.4 (Public Right-of-Way Optimal Design). The first of those changes, described in bold below, EPA considers to be a substantive change. The second, not described in bold, EPA does not consider to be a substantive change.

## Change #1:

In Subsection 2.4.1 of the 2016 Draft Permit, *Eliminating Exemptions for Certain Small Projects*, EPA proposed that the Permittee consider stormwater control measures for small projects currently exempt from the on-site retention requirements. DOEE pointed out the significant amount of time and effort necessary to make revisions to the District's stormwater regulations and also the fact that these exemptions were part of the package of requirements that made the broader set of requirements more palatable to the community. DOEE requested that EPA eliminate this requirement. The DC Building Industry also noted the importance of thorough vetting by the development community of modifications to the regulations.

Given that there is a separate requirement to consider a wider variety of changes to the District's stormwater regulations, EPA has eliminated this as a separate permit provision, but has included these small projects as specific types of development to be considered in that assessment (Subsection 2.2.4 of the 2017 Draft Permit). Considering all types of projects in tandem should allow for a balanced strategy. In addition, EPA agrees that a single process for regulatory revisions, which would include a wide array of public input, is more sensible.

#### Change #2:

EPA originally included this provision in the 2016 Draft Permit at the suggestion of DDOT after discussions about the most effective way to ensure maximum and efficient implementation of on-site retention measures in PROWs. DOEE requested wording edits to this provision that would align it more appropriately with the current process used by the Permittee in right-of-way designs. Instead of developing specific designs for specific pre-determined categories of rights-of-way, the Permittee will develop a more general set of designs that could potentially be applied across a variety of types of right-of-way projects. EPA sees no notable difference in outcomes between the originally proposed language and the requested language, and thus this section now reads:

With the 2020 Annual Report, for public right-of-way projects that do not include a design process, the Permittee shall submit a determination of standardized designs that optimize cost, performance, community palatability, climate resilience and other relevant factors.

NRDC requested that climate change be included as one of the factors considered when developing these designs. EPA has added this as a factor to provide clarity only, since it is consistent with the existing requirements of Section 2.7.

## 2.5.2 Other Controls or Management Measures

In its comments on the 2016 Draft Permit, NRDC provided strong support for establishing additional methods for quantifying pollutant reductions beyond just for catch basin cleaning. Therefore, EPA has added a new provision in the 2017 Draft Permit that provides the Permittee the option of submitting to EPA, at any time, methods for estimating pollutant reductions from any activity that prevents or reduces stormwater pollutant discharges to receiving waters. Methods may express reductions as "acres managed" equivalences if appropriate, or may express them in specific measures of the pollutant itself. EPA underscores that this provision is optional, but agrees with NRDC that there is a great deal of value in quantifying and tracking as much pollutant reduction as is feasible.

## STORMWATER MANAGEMENT PROGRAM IMPLEMENTATION (Part 3)

## 3.1 Implementing Part 3 of the Permit

Several commenters expressed confusion over how the on-site retention provisions in Section 3.1 related to the discharge limits expressed in Subsection 1.5.3.1 of the 2016 Draft Permit. In addition to the modifications made to 1.5.3.1 (see explanation in that section of this Fact Sheet), EPA included a new Section 3.1, *Implementing Part 3 of the Permit*, to the 2017 Draft Permit to provide additional clarity. EPA emphasizes that the 1,038 acres managed discharge limit applies to all of the on-site retention measures in Section 3.2. See also, Table B of this Fact Sheet.

3.1.4.2 (as numbered in the 2016 Draft Permit; this subsection does not exist in the 2017 Draft Permit)

Subsection 3.1.4.2 from the 2016 Draft Permit required implementation of the water quality design elements for small sites formerly exempt from the District stormwater regulations, as developed under Subsection 2.4.1 of the 2016 Draft Permit. Since that requirement was eliminated as a separate element and incorporated into the larger assessment of the District's stormwater regulations, this requirement has also been eliminated from this 2017 Draft Permit.

## 3.2 Achievement of the Acres Managed Numeric Milestone

This section has been reorganized such that all requirements related to on-site retention ("acres managed") are included in one Section (3.2), per the discussion above.

In addition, due to comments received from NRDC, EPA recognizes that there is confusion between projects that are termed "retrofits" vs those that are associated with new or redevelopment. Given that nearly all development activities in the District are redevelopment projects, the stormwater control measures associated with them are essentially "retrofits". To eliminate unnecessary confusion, EPA has removed the term "retrofit" from the 2017 Draft Permit and instead uses terms such as "implementation of stormwater management measures" or, as appropriate, "implementation of on-site retention measures".

Therefore, EPA has also reorganized this part of the 2017 Draft Permit by eliminating Section 3.2, *Retrofit Program for Existing Discharges* that was found in the 2016 Draft Permit. The "acres managed" metrics noted in Section 3.2.1 of the 2016 Draft Permit are already stipulated in Subsection 1.5.3.1, which makes them redundant in Part 3. EPA has taken most of the rest of the elements of the original Section 3.2 (RiverSmart Programs, Green Roofs and Trees) from the 2016 Draft Permit and included them as elements of new Section 3.2, along with the other on-site retention provisions.

## 3.2.2.2 Grandfathering of Stormwater Retention Credits

In the 2016 Draft Permit, EPA proposed to eliminate the grandfathering provision for stormwater retention credits (the eligibility for retention practices installed prior to July 1, 2013) within six months of the effective date of the permit. DOEE pointed out that eliminating this provision would require a revision to the stormwater regulations, and that six months would be an inadequate amount of time to accomplish this. In acknowledgement that the Permittee will need additional time to revise its stormwater regulations to implement this provision, EPA is modifying the language in Subsection 3.2.2.2 of the 2017 Draft Permit to read:

If a retention practice was installed prior to July 1, 2013, it will only be eligible to generate SRCs if an application has been submitted within 6 months after the effective date of the appropriate revisions to the District's stormwater regulations. The District shall initiate appropriate revisions to the regulations within 12 months of the effective date of this permit unless an alternate schedule is approved by EPA.

It is reasonable to expect that the Permittee would only revise its stormwater regulations one time during this permit term in order to comply with the provisions of this permit. Should the Permittee opt to make additional revisions to the stormwater regulations, per Subsesction 2.2.4 (*Analysis of Updating Stormwater Management Regulations*), it is reasonable to expect that elimination of the grandfathering provision could be included in that set of revisions. Thus, EPA has included the option for the Permittee to request an alternative schedule for this permit requirement.

## 3.2.2.3 Stormwater Retention Credit Purchase Agreement Program

DOEE requested that EPA remove the specific dollar amount of \$12.75 million dollars from the requirement to implement a stormwater retention credit purchase agreement program, contending that specification of a dollar amount impinges on the District's funding and financing authority. Since the District has already placed the necessary funds in escrow for the SRC Purchase Agreement Program, EPA is agreeable to the proposed change. EPA reiterates that the requirement to establish the SRC program remains in the 2017 Draft Permit, only the dollar amount has been removed.

#### 3.3.1 Response to Sanitary Sewer Overflow to the MS4

DC Water requested that EPA modify this section to clarify that the Permittee should "mobilize to respond to SSOs with containment equipment" rather than "respond to SSOs with containment." DC Water also requested that the response time frame should be marked from the time the overflow is confirmed rather than from the time the Permittee is notified of the overflow.

EPA does not consider preparing to respond the same as responding. Deploying equipment to a site is not the same thing as achieving containment (or other appropriate measure), so EPA has not made the suggested edits. However, EPA believes it is reasonable to measure the response time from the time that the Permittee discovers or confirms the overflow. Also, in situations where containment cannot be achieved within two hours, it is likely that another type or combination of responses are more appropriate, e.g., diversion, or in the case of a small overflow, perhaps just immediate clean-up. As such, EPA has provided some flexibility in how the immediate response is handled, changing the permit provision such that the 2017 Draft Permit reads as follows:

Responding to SSOs with containment or other appropriate measures within two hours of the Permittee discovering or confirming an SSO to, from, or through the MS4.

3.3.2.4 Wash Water

DOEE requested small modifications to this provision, largely for purposes of clarification and also for adding an option for pre-treatment of wash waters prior to disposal. DC Water requested that this provision acknowledge their requirements for discharges to the sanitary sewer.

EPA has incorporated these comments and modified the language in this Subsection such that the language now reads as follows:

Wash water at District-owned and operated facilities includes water from washing vehicles and equipment, water from washing building exteriors when it contains soap and other pollutants, and the dumping of wash water used in the interior of buildings. For wash water at municipal facilities the permittee shall eliminate discharges of pollutants to, from and through the MS4 by implementing any of the following measures: 1) collect and haul off-site for off-site disposal; 2) equip with a pre-treatment device; or 3) redirect to the sanitary sewer in accordance with District regulations and requirements.

#### **3.3.4.1** Catch Basins Operation and Maintenance

EPA is clarifying that the requirement to clean catch basins at least once annually is in place until the Permittee fully implements its GIS-based mobile field application system that includes information on the catch-basin specific frequencies for cleaning and other maintenance. Under the new system, expected to be in place within twelve (12) months of the effective date of this permit (per Subsection 3.3.4.2) the Permittee will have adequate data on each catch basin to determine how frequently each catch basin must be cleaned out; these frequencies may be more or less frequently than annually, depending upon the rates at which they accumulate materials. This system will help the Permittee to optimize resources devoted to catch basin maintenance activities. As soon as this system is in in place and fully implementable, per the requirements of Subsection 3.3.4.3, the permit requirement for cleaning frequency transitions from at least once annually to the customized frequencies as determined by prior inspections and maintenance activities, and documented in the mobile app.

3.3.5 Storm Drain Outfall Operation and Maintenance

DOEE requested that EPA revise the repair objectives from an annual percentage of outfalls in need of repair to a total for the permit term. EPA has accommodated this request by requiring a total of 50 catch basins to be repaired by the end of the permit term. This is the same total number of catch basin repairs originally proposed, but the Permittee now has some latitude with the implementation schedule by having a five-year window in which to accomplish all of the repairs.

DOEE and DC Water both expressed concerns because some of the District outfalls in need of repair can only be accessed via property owned and/or operated by third parties such as the National Park Service. Both entities expressed concern that difficulty obtaining the necessary permissions from those third parties may jeopardize compliance with this permit requirement. EPA acknowledges that some outfall repairs may be delayed by third parties despite due diligence by the Permittee. However, the Permittee will have the entire five-year permit term to repair the outfalls, so if it is anticipated that a third party will be involved in the process, the Permittee may want to commence the process of outfall repair for those outfalls sooner rather than later in the permit term. Providing a five-year schedule for completion of the necessary repairs, rather than annual targets, should also provide some flexibility in implementing this requirement.

## 3.3.6 Street Sweeping

EPA based the requirement in the 2016 Draft Permit to sweep 44,000 miles annually on information provided by the Permittee. During the public comment period, however, the Permittee clarified that those numbers applied District-wide, not just in the MS4 Permit Area, and that it did not have accurate information on how many miles are swept annually in the MS4 Permit Area. In subsequent discussions between EPA and the Permittee, it became clear that the Permittee is close to implementing a georeferencingbased street sweeping system that will make it possible to accurately estimate the number of miles swept in the MS4 Permit Area. Having reevaluated the information, EPA revised the 2017 Draft Permit to require that 8,000 road miles of streets be swept annually in the MS4 Permit Area, based on the Permittee's rough estimate that at least this many street miles are swept annually in the MS4 area. However, EPA is also including a provision that within 18 months of the effective date of the permit, the Permittee will assess the information provided by the georeferencing-based system and provide that information, along with a proposed number of road miles to be swept in the MS4 Permit Area, to EPA. The language in the 2017 Draft Permit reads as follows:

The Permittee shall conduct street sweeping on a minimum of 8,000 road miles annually within the MS4 Permit Area. Within 18 months of the effective date of this permit, the Permittee shall complete a GIS analysis to determine an updated mileage requirement for the MS4 Permit Area, and will submit this metric to EPA for approval.

#### 3.3.7 Transportation and Utility Construction Activities

DC Water requested that EPA modify this requirement to provide a bit of latitude in the amount of soil disturbed. The original draft permit limited this to "the immediate area under repair". DC Water noted that sometimes additional soil disturbance is necessary in order to properly locate, explore, or access the area in need of repair. EPA concurs with this concern and

has modified this requirement such that the soil disturbance is limited to "only what is necessary to effect the repair."

# 3.4 Critical Sources

Since the term "critical sources" is relevant to both Section 3.4, *Critical Sources*, and Subsection 3.3.2, Industrial Activities at Municipal Operations, EPA moved the itemized description of critical sources from Subsection 3.4.1.1 to the definition in Part 8. See additional description in the Part 8 (Definitions) section of this Fact Sheet. EPA notes that moving the itemized list of "critical sources" to Part 8 did not change the permit requirements regarding critical sources; those requirements are the same as they were in the 2016 Draft Permit.

# 3.4.3 Inspection of Critical Sources

Per agreement with EPA, the Permittee conducts inspections at facilities in the District with coverage under EPA's *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activities* in accordance with EPA's *Compliance Monitoring Strategy*. The language in this Subsection has therefore been modified, as follows, to clarify this agreement:

Unless otherwise covered under the Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity or an individual permit, the Permittee shall continue to inspect all Critical Sources in the MS4 Permit Area that are identified in the Critical Source Inventory at least two times during the five-year term of this permit. Critical Sources covered under a MSGP or individual permit shall be inspected according to the EPA Approved Compliance Monitoring Strategy.

# 3.10 Targeted Public Education

The website provisions from Subsection 3.10.1 of the 2016 Draft Permit have been included in enhanced reporting requirements. See the discussion in the Part 5 (Reporting Requirements) section of this Fact Sheet.

A requirement to implement education materials, signage, and pet waste bags and repositories at dog parks and other high pet traffic areas has been added to the public education initiatives requirements (Table 5). See Discussion for Subsection 2.2.2.1 of this Fact Sheet regarding sources of *E. coli*.

# WATER QUALITY ASSESSMENT (Part 4)

4.1.1.2 Evaluate the Health of Receiving Waters

DOEE requested that EPA modify this Subsection to establish that this specific objective was to "evaluate the impact of the District's MS4 on the overall health of the receiving waters" as opposed to "evaluate the health of receiving waters." Although EPA agrees that the Permittee's requested language identifies the objective of the permit provision, EPA also believes that it is not possible to evaluate the impact of the District's MS4 on the overall health of the receiving waters without first understanding the status of the receiving waters themselves. Therefore, EPA has modified the language of this permit provision to include both concepts, such that the language in the 2017 Draft Permit reads as follows:

Evaluate the health of receiving waters within the context of assessing the impacts of District MS4 discharges.

# 4.2.3 Sampling Locations

After the public notice and comment period had closed, the Permittee requested different sampling locations than those listed in the 2016 Draft Permit based on additional field reconnaissance conducted by the Permittee since completion of its Monitoring Strategy in 2016; those requested locations are shown in Table 8 of the 2017 Draft Permit (and Table E, below). The Permittee explained that a number of the locations originally chosen are not ideal for a variety of reasons, (e.g., access), and more appropriate locations have been identified. As these new locations are consistent with criteria for selecting sampling locations, EPA supports these changes in the interest of establishing a robust set of long-term sampling locations. EPA will also support additional adjustments to these locations through the first year of implementation of the new monitoring program, as that first year is expected to be an important test period during which the Permittee can refine methodologies that will support a long-term monitoring program. Those changes must be appropriately justified and documented in the Quality Assurance Program Plan (QAPP) that is due to EPA at the end of the first year of the program. Subsection 4.2.3 of the 2017 Draft Permit now reads:

The Permittee shall conduct wet weather discharge monitoring at all continuous record sites and all stratified random sites as specified in Table 8 below. Stratified random "oversample" sites, identified in the Quality Assurance Program Plan (QAPP) required by Subsection 4.3.1.1, may permanently replace a stratified random site from the same watershed should conditions warrant. The Permittee may substitute stratified random sites for oversample sites not included in Table 8, but must explain and justify those substitutions. Continuous record sites may also be adjusted with sufficient justification.

| Sampling Location   | Watershed       | Type of Site      |
|---|-----------------|-------------------|
| Tributary to Anacostia – Gallatin Street & 14 <sup>th</sup> Street NE | Anacostia River | Continuous Record |
| Oxon Run – Mississippi Ave and 15 <sup>th</sup> St.<br>SE             | Potomac River   | Continuous Record |
| Soapstone Creek – Connecticut Avenue<br>and Albemarle Street NW       | Rock Creek      | Continuous Record |
| Outfall 1080 – Ft. Davis  | Anacostia River | Stratified Random |
| Outfall 1072 – Ft. Dupont   | Anacostia River | Stratified Random |

Table 8Sampling Locations for Wet Weather Discharge Monitoring

| Outfall 950 – Tributary to Potomac   | Potomac River | Stratified Random |
|--------------------------------------|---------------|-------------------|
| Outfall 103 – Oxon Run               | Potomac River | Stratified Random |
| Outfall 887 – Luzon Branch           | Rock Creek    | Stratified Random |
| Outfall 901 – Tributary to Pinehurst | Rock Creek    | Stratified Random |
| Branch                               |               |                   |

#### 4.3.1.2 Biological Stream Survey Methods

DOEE requested some flexibility to adopt and adjust the methods for the biological stream surveys, including the option to identify different reference streams rather than those established in the Maryland Biological Stream Survey. EPA is modifying the requirement accordingly, with the caveat that all methods must be clearly documented in the QAPP. The new language reads:

The Permittee shall ensure that all receiving water assessment activities required by this permit adhere to those established by the Maryland Biological Stream Survey (MBSS), with any adjustments to the protocol documented in the QAPP, including the identification of specific reference streams, as relevant.

#### 4.3.2 Water Quality Sampling

DOEE requested that EPA eliminate 13 of the 15 water quality sampling parameters proposed in the 2016 Draft Permit (retaining total nitrogen and total phosphorus), and proposed substitution with other parameters believed to be more effective in-stream water quality indicators. DC Water proposed the inclusion of E. coli and lead in the suite of analytes. EPA concurs with some of the requested eliminations and substitutions, but also considers this a significant proposed change to permit requirements and therefore requests input on the new set of proposed in-stream monitoring parameters. EPA requests commenters to be specific about the important interpretative/indicator value of including specific parameters if the suggestion is to retain it. Conversely, EPA requests commenters to be specific about the limited value of specific parameters if the suggestion is to exclude it from the monitoring program. EPA underscores that this particular element of the monitoring program is not to track specific pollutants (see Sections 4.2, 4.4, and 4.5 of the 2017 Draft Permit for those objectives), but to characterize the general health of the receiving waters. These parameters are intended to be indicator pollutants, and will not be used for estimates of loading or to identify specific types or sources of discharges. Therefore, EPA intends this suite of analytes to be relatively efficient.

The proposed revised language for this section is as follows:

The Permittee shall sample receiving waters for the indicator parameters in Table 10. Frequency generally is targeted to at least one time every month per the overview provided in Table 5. However, sampling frequencies for specific parameters shall be refined during the first monitoring season, and will be specifically documented and explained in the QAPP. Thereafter, sampling frequencies shall be consistent for the remainder of the permit term. Sampling and analysis procedures shall be performed according to the QAPP required by Subsection 4.3.1.1 herein.

# TABLE 10

## **Receiving Water Quality Sampling Parameters**

| Total Nitrogen  | Total Phosphorus | E. coli          |
|-----------------|------------------|------------------|
| Total Suspended | Water            | Dissolved Oxygen |
| Solids          | Temperature      |                  |
| Conductivity    | Chloride         |                  |

## 4.3.3 Benthic Macroinvertebrate Sampling

The Permittee's 2016 *Revised Monitoring Program*, approved by EPA in 2016, included annual benthic macroinvertebrate sampling. In the interim, the Permittee has clarified that macroinvertebrate sampling, while occurring every spring, will only collect samples from specific sites every other year. From the standpoint of providing useful and interpretable data, EPA considers that this clarification does not notably compromise the value of the data set, as long as methods and frequencies are maintained over the long-term. Therefore, EPA has added the sentence "*Sampling will be implemented on a rolling basis such that each site will be sampled bi-annually*". However, because this is a noteworthy change from the provision in the Draft 2016 Permit, EPA is making this provision available for public notice and comment.

## 4.4.2 Bacteria Source Tracking

DOEE requested that EPA remove this requirement from the permit. EPA declined (see discussion in this Fact Sheet for Subsection 2.2.2.1). However, as a result of subsequent discussions between EPA and the Permittee, EPA made several changes to provide additional clarification and to extend the due date for the study by one year. This provision in the 2017 Draft Permit now reads:

During the permit term, the Permittee shall conduct a bacteria source tracking study to identify sources of bacteria in the MS4 Permit Area where E. coli WLAs have not yet been attained and where waters are impaired by E. coli. The sampling design should be sufficient to ensure that adequate data will be available to develop an effective strategy to prioritize and target sources and causes in order to eliminate or reduce E. coli in stormwater discharges to District surface waters. This includes having enough information to inform the development of milestones and benchmarks per Subsection 2.2.2.1 herein. The study shall be completed by July 1, 2020 unless EPA approves an alternate schedule.

#### 4.5.1 Trash Trap Monitoring

DC Water requested a few clarifications for these provisions, such as adding the clarification of all *existing and new* trash traps, and specifying the MS4 Permit Area. EPA is proposing a few minor edits to accommodate that request:

4.5.1.1 The Permittee shall continue to sample all existing and new trash traps located in the MS4 Permit Area of the District's waterbodies and at outfalls at least 4 times per year for weight and counts of different types of trash.

4.5.1.2 Existing or new trash traps shall be stationary control measures installed as necessary at outfalls in the MS4 Permit Area. Each installed trap shall be maintained on a weekly basis and after a major storm event.

4.5.1.3 The Permittee shall collect and record wet weight and counts for different materials from trash captured by each trap. The Permittee shall capture data on weight and count, at a minimum, for the following trash types: food wrappers, beverage containers, plastic bags, foam products (including food and non-food related products made of polystyrene), tires, and plastic balls.

4.5.1.4 For purposes of assessing compliance with the Anacostia Trash TMDL, data shall be reported in the Annual Report on the amount of trash captured by trash traps located at outfalls in the MS4 Permit Area.

#### **REPORTING REQUIREMENTS (Part 5)**

EPA received a number of comments that emphasized the importance of reporting, especially public reporting. EPA has reorganized this section of the Permit for consolidation and clarification purposes, though other than the addition of the requirements in Subsection 5.3.1 (see below) the proposed requirements remain unchanged.

## 5.1 Discharge Monitoring Reports

The Draft 2016 Permit required that all monitoring data collected pursuant to Part 4 of the permit be reported via NetDMR in Discharge Monitoring Reports. The Permittee has requested that this be modified to include only discharge monitoring data because of the difficulties of reporting non-discharge data via the NetDMR System. EPA agrees that the NetDMR system presents logistical difficulties for reporting other types of data, and has modified this requirement to include only discharge monitoring data. All data collected per the requirements of Part 4 of the Permit will be available to EPA and the public via Annual Reports (Section 5.2) and on the District's website (Section 5.3), such that all data shall be reasonably accessible.

## 5.3.1 Stormwater Program Dynamic Web-based Graphical Interface

EPA received a number of comments that focused on the need for more publicly available data, as well as more easily understandable data for the general public and for individuals and organizations that play a role in water quality-related activities. EPA raised this issue with the Permittee, who agreed to enhance public reporting by developing a new Web-based Graphical Interface that will provide a wide array of information in an easily accessible format. The permit includes a new provision to implement a graphical interface that shall include the following types of information linked through a GISreferenced set of maps: locations of all stormwater control measures in the MS4 Permit Area, sortable by type/function, drainage area, storage volume, and installation date; data on stormwater retention credits certified in the MS4 Permit Area; statistics on implementation of specific types of management practices such as green roofs and trees; TMDL WLAs by stream segment and by pollutant; monitoring locations linked to monitoring data. The Permittee intends to refine this system over time and to supplement the information with other data and syntheses, visual aids such as photos, graphs and charts, multimedia content such as videos, and external links to other relevant information.

# 5.3.2 Website Information Repository

EPA has moved the website requirement from Section 3.10 to Part 5 of the 2017 Draft Permit. The language of the requirement did not change; it simply moved to a different location in the permit.

# STANDARD PERMIT CONDITIONS FOR NPDES PERMITS (Part 6)

EPA removed the specific dollar amount references to fines in both Subsections 6.2.2 and 6.10.5 as those amounts are periodically updated.

## OTHER REQUIREMENTS (Part 7)

## 7.1 National Historic Preservation Act

In July 2017 EPA concluded consultation under the National Historic Preservation Act Section 106 with respect to the DC MS4 permit. The District of Columbia Historic Preservation Office proposed a conditional finding of no adverse effect from the reissuance of the permit, and specified applicable conditions for the proposed finding. EPA has modified the language in the permit to incorporate the applicable conditions, as follows:

Consultation with the District of Columbia State Historic Preservation Officer (DC SHPO) in accordance with Section 106 of the National Historic Preservation Act and its implementing regulations at 36 C.F.R. Part 800 has resulted in a determination that the activities required by the permit will have no adverse effect on historic properties provided that the following conditions are met:

a. All of the projects undertaken pursuant to the permit will be subject to review by the DC SHPO as part of the local historic preservation review process revised in accordance with any DC SHPO and/or DC Historic Preservation Review Board comments, as applicable, pursuant to local DC historic preservation legislation;

- b. The Permittee will ensure that, for any projects that it intends to implement directly, it will coordinate early with the DC SHPO and revise those projects as necessary to avoid adverse effects on historic properties; and
- c. EPA and the Permittee will consult with the DC SHPO pursuant to 36 C.F.R. Part 800 if requested by the DC SHPO, especially for any projects involving adverse effects on historic properties that are of particular concern to the DC SHPO.

If an alternate Historic Preservation procedure is approved by EPA in writing during the term of this permit, the alternate procedure will become effective after its approval.

Correspondence on the consultation is included in the Administrative Record for this draft permit.

# 7.2 Endangered Species Act

In 2017 EPA completed consultation under the Endangered Species Act (ESA) Section 7 with respect to the DC MS4 Permit. The National Marine Fisheries Service concurred via letter dated February 3, 2017 with EPA's conclusion that the proposed permit is not likely to adversely affect any ESA listed species and/or designated critical habitat. The U.S. Fish and Wildlife Service concurred via letter dated January 5, 2017 that no proposed or federally listed endangered or threatened species are known to exist in the project area.

The Biological Evaluation and correspondence with the Services on the consultation is included in the Administrative Record for this draft permit.

## PERMIT DEFINITIONS (Part 8)

## "Acres Managed"

Consistent with the explanation in Subsection 1.5.3.1 for the "acres managed" metric, EPA has modified the definition to read:

"Acres Managed" is the metric established for this permit to measure and track implementation of stormwater control measures. One "Acre Managed" is one acre of land treated by stormwater control measures to the applicable standard established in the Permittee's stormwater regulations or consistent with the relevant voluntary program. The basis for this metric is established for measures that provide on-site retention for a given drainage area, standardized by acres. However, not all stormwater control measures provide on-site retention; therefore, where equivalencies can be established for other types of stormwater control measures, those outcomes may be converted to "Acres Managed", per Subsection 2.5.2 of this Permit. Example 1: A development project required to meet the 1.2-inch on-site retention standard for Development and Redevelopment  $\geq$  5,000 square feet (Subsection 3.2.2) across 5 acres, through any combination of on-site retention controls = five (5) "acres managed".

*Example 2: A Public Right-of-Way Project subject to the District's "MEP" process (Subsection 3.2.4) implements 1.8 inches of on-site retention across 2 acres = two (2) "acres managed".* 

*Example 3: A Public Right-of-Way Project subject to the District's "MEP" process (Subsection 3.2.4) implements 0.9 inches of on-site retention across 2 acres = two (2) "acres managed".* 

Example 4: A redevelopment project required to meet the 0.8-inch onsite retention standard for Substantial Improvement Projects (Subsection 3.2.5) across a half-acre, through any combination of on-site retention controls = half (0.5) "acre managed".

Example 5: A homeowner voluntarily implementing porous pavement through the District's RiverSmart Homes Program (Subsection 3.2.10) achieves 0.6 inches of on-site retention across a quarter acre = quarter (1/4) "acre managed".

"Critical Sources"

DOEE commented that the definition of "Critical Sources" was too broad and overly inclusive, essentially covering every building in the District, and requested a revised definition.

EPA included a definition of "Critical Sources" in the 2016 Draft Permit in response to a concern expressed by the Permittee regarding a requirement of its 2011 MS4 Permit. That provision required the implementation of stormwater pollution prevention measures at all District-owned facilities, including places such as schools and libraries even though those types of facilities rarely undertake activities or utilize materials that pose notable risk of stormwater pollution. In response, when drafting the 2016 Draft Permit, EPA removed that list of facilities from Subsection 3.3.2.1 and instead left it to the Permittee to identify which facilities qualified as "Critical Sources" requiring stormwater pollution prevention measures. In order to implement this new framework, EPA necessarily included a definition of "Critical Sources."

EPA understands the concern the Permittee has articulated regarding how this would affect the requirements of Section 3.4 of the 2016 Draft Permit, which is a requirement to maintain some oversight of all facilities in the District (not just those that are District owned or operated) that may be "Critical Sources." In addition, the list from Subsection 3.4.1.1 in the 2016 Draft Permit included a number of redundancies that EPA has removed:

- 1. The description of industrial stormwater facilities included unnecessarily redundant language regarding individual and general permits, and also excerpted specific language from the regulation. Neither of those inclusions modifies the basic requirement, and they are thus unnecessary.
- 2. Construction activities are already covered in Section 3.5 of the permit.
- **3.** Salvage and recycling operations are included in the definition of industrial stormwater facilities.

EPA has also replaced "other facilities", which provides unnecessary uncertainty, with a more specific criterion for facilities utilizing hazardous substances as defined at 40 C.F.R. Part 116. EPA is also limiting inclusion of those facilities to those that utilize hazardous substances in such a way that they could be exposed to stormwater in quantities that could threaten water quality.

As a result, EPA has moved the modified list of those sources that qualify as "Critical Sources" from Subsection 3.4.1.1 to the definition of that term in Part 8 of the 2017 Draft Permit, which now reads as follows:

"Critical Sources" are those activities and operations that make, use, store, transport or dispose of materials or substances that have the potential to become pollutants in stormwater discharges, specifically:

- a. Commercial vehicular service activities, e.g., washing, maintenance and fueling, including mobile operations.
- b. Dry cleaners.
- c. Aircraft or ship/boat maintenance and fueling activities.
- d. Facilities conducting industrial activities, as defined at 40 C.F.R. § 122.26(b)(14)(i)-(ix) and (xi).
- e. Facilities utilizing any material designated as a Hazardous Substance pursuant to 40 CFR §116, in quantities exposed to stormwater that could cause or contribute to an exceedance of water quality standards or a water quality impairment.

Subsesction 3.3.2 and Section 3.4 of the 2017 Draft Permit both now reference the new definition of "Critical Sources" in Part 8.

## "Retrofit"

Per the discussion in the Fact Sheet on Section 3.2, EPA has removed the term "retrofit" from the 2017 Draft Permit, and has thus also eliminated the definition of that term from Part 8 of the 2017 Draft Permit.

## ANNUAL REPORT TEMPLATE (Appendix A)

DOEE requested minor modifications to one reporting element 29 (Integrated Pest Management and Nutrient Management Plans) in the Annual Report Template; specifically, DOEE requested that these plans not be tallied separately given that many plans include elements of both Integrated Pest Management and Nutrient Management. EPA finds this request to be reasonable and therefore has changed the Annual Report Template accordingly.

EPA also has made a few other minor edits to the Annual Report Template to ensure consistency with other changes to the 2017 Draft Permit.