2023 DC MS4 Permit
EPA Responses to Public Comments Received on the Draft Permits

On January 31, 2023, EPA made the draft NPDES permit for the District of Columbia's Municipal Separate Storm Sewer System ("DC MS4 Permit"), permit DC0000221, available for public notice and comment for a period of 45 days. The public notice and comment period on the January 2023 draft of the DC MS4 Permit closed on March 17, 2023.

EPA made numerous revisions to the draft DC MS4 Permit in response to the public comments received. On July 13, 2023, EPA made the revised draft DC MS4 permit available for public notice and comment for an initial period of 30 days, which was extended to 60 days upon request. The public notice and comment period on the July 2023 draft of the DC MS4 Permit closed on September 13, 2023.

This document provides EPA's responses to the public comments received on the two drafts of the DC MS4 Permit made available for public notice and comment. Each comment is reproduced verbatim, followed by EPA's response to that comment.

Comments Received on January 2023 Draft

Draft Permit Part 1: Discharges Authorized Under this Permit

1.5 Discharge Limits

1.5.3.1 Numeric Acres Managed Limit

1. Comment, Earthjustice et al[1] (footnotes removed):
   The 1,038 "Acres Managed" Standard must be increased. The 2023 Draft Permit's acres managed limit falls short of the Clean Water Act's maximum extent practicable (MEP) standard, violates the "as soon as possible" standard for compliance schedules established by federal regulation, and flouts the Act's prohibition against backsliding.

(1) The 2023 Draft Permit does not comply with the Clean Water Act's MEP standard. Courts have held that the phrase 'to the maximum extent practicable' does not permit unbridled discretion. It imposes a clear duty on the agency to fulfill the statutory command to the extent that it is feasible or possible." While the term "practicable" is not defined in the municipal stormwater context, "practicable" as used in a different section of the Clean Water Act has been defined as meaning that technology is required

[1] EPA received one set of comments from, collectively, the Anacostia Parks & Community Collaborative, Anacostia Riverkeeper, Anacostia Watershed Community Advisory Committee, Anacostia Watershed Society, DC Environmental Network, Earthjustice, National Parks Conservation Association, Nature Forward, Potomac Conservancy, Potomac Riverkeeper Network, Rock Creek Conservancy, The Nature Conservancy MDDC, Waterkeepers Chesapeake, and Wentworth Green Strategies.

unless the costs are "wholly disproportionate" to pollution reduction benefits. State hearing boards have applied this interpretation to the stormwater context as well. Neither courts nor EPA have taken the position that practicability is defined exclusively by what a permittee can achieve with its current level of funding. Here, there is ample evidence that DOEE not only can practicably achieve a higher level of on-site retention, but already is achieving a higher level of retention.

The 2023 Draft Permit requires the same numeric "acres managed" standard included in the 2018 permit, "carried over from" that permit, despite the fact that EPA recognizes MS4 permits "require[] . . . increasingly more stringent requirements over several permitting cycles," and that the District is already achieving more than 1,038 "acres managed" per permit term. In the five year period between 2016 and 2020, the District achieved 1,292 acres managed. EPA utterly fails to explain why at least this level of acres managed is not "practicable" for the next five year term, stating only that there "is no guarantee" it can be achieved again, "considering the availability of land for future development and economic trend fluctuations." But the MEP standard is not the maximum extent of stormwater controls that can be guaranteed. EPA points to no data demonstrating that 1,292 acres managed, or even more, cannot practicably be achieved in the next permit term. Vague economic concerns cannot support a failure to set a permit limit at a level the permittee can obviously achieve based on current performance. Absent some clear demonstration that the District can no longer practicably achieve at least the level of retention it is currently achieving, a permit limit that is less than the current level of performance cannot meet the MEP standard. Any decrease in the level of effort is particularly concerning given the recent surge in federal funding for infrastructure and the desire to maximize protections for communities suffering from environmental injustice.

The 2023 Draft Permit's numeric discharge limit requiring 1,038 acres managed was originally intended to apply to stormwater controls that "directly" retain stormwater through development and redevelopment projects, as well as retrofit projects, that result in 1.2 inches of retention. However, the limit is now so diluted that there is no numeric standard to which runoff from this area must be managed.

The 2023 Draft Permit explains that no performance standard whatsoever will apply to the acreage target. Rather, any amount of retention will receive full acreage credit, even if it is significantly less than the 1.2-inch standard established in the development rules. In its examples of how projects will be assigned acreage credit under the 1,038-acre milestone, EPA reveals that *any* amount of retention will be granted full acreage credit (as long as the project satisfies any independently applicable standard), with no floor for the minimum amount of on-site. In fact, EPA clarified that the standard may be applied to activities that do not fall under any numeric on-site retention standard whatsoever, such as voluntary homeowner installations of stormwater controls. Although the 1.2-inch standard still separately applies to regulated development and redevelopment sites, other types of projects will be given equal acreage credit despite

achieving far less volume retention and pollution reduction. EPA makes no showing that this shortfall will be made up by projects that achieve more than 1.2 inches of retention. The formerly separate and distinct requirements of the 2011/2012 permit for tree planting, the voluntary RiverSmart incentive program, and green roofs were rolled into the acres managed limit in the 2018 permit, meaning actions taken under those programs could be counted toward the 1,038-acre milestone, despite the fact that they do not achieve 1.2 inches of direct on-site retention. This ability to count non-onsite retention programs towards the on-site retention standard continues in the 2023 Draft Permit. Additionally, the formerly separate stream buffer and floodplain restoration program can now be counted towards the acres managed standard, diminishing the retention further. The 2023 "acres managed" milestone is therefore even weaker than the version in the 2018 permit. As a result, it continues to violate the MEP standard, and it seriously jeopardizes the District's efforts to reduce pollution in accordance with applicable TMDLs.

(2) The 1,038-acre milestone also violates the "as soon as possible" standard for compliance schedules. The acreage milestone is based on implementation of actions that would put the District on track for attaining applicable wasteload allocations ("WLAs") by the year 2189, a deadline which is 35 years beyond the year 2154 deadline that EPA previously found was unacceptably long. EPA offers no explanation for its silence regarding the extended 2189 deadline, after disapproving of the year 2154 deadline.

Assuming that the District's MS4 areas is retrofitted with BMPs in future years at the same rate this retrofitting is occurring in the years 2020-2040, DOEE has projected that the entire MS4 area will be retrofitted with BMPs to a 1.2 inch retention standard by 2134. But even after the entire area is retrofitted, not all WLAs will be attained. In other words, the 1.2 inch retention standard is insufficient to achieve attainment of all WLAs. Instead of increasing the retention standard or requiring more rapid retrofitting to the 1.2 inch retention standard, DOEE is extending the timeline for fifty-five additional years beyond complete BMP retrofitting, and relying on unidentified future "technological and other strategic advancements" at that time to achieve WLA attainment in approximately 2189.

The well more than a century-long projected WLA attainment schedule is far too long for District residents to wait for clean water and wholly inconsistent with the letter and spirit of the Clean Water Act. Moreover, the plan assumes that the same level of effort towards retrofitting the MS4 area will be expended during both the 2020-2040 period and the 2040-2189 period. In other words, the plan does not account for any escalation of effort over time through the ramping up of direct investment or the tightening of regulatory standards. Such stagnant effort cannot meet the "as soon as possible" standard and does not comport with EPA's own recognition that MS4 permits must become increasingly stringent over time in order to attain water quality standards. In its 2018 Response to Comments on the current MS4 permit, EPA explained:

EPA has already identified the 2154 date of attainment as too protracted, and therefore agrees that an ongoing and linear implementation rate, i.e., over multiple permit terms, of 1,038 acres managed, would be insufficiently aggressive. EPA intends for this implementation rate to become more aggressive with each permit term, consistent with the MEP framework, as described in EPA's regulations, preambles, and guidance, not to remain linear.

EPA has failed to explain how the stagnation of this key acres managed permit requirement can be squared with its stated intent to strengthen this requirement with each permit term, as needed to combat the far too-lengthy timelines for WLA attainment.

(3) The District's 1,038 "acres managed" requirement, introduced for the first time in the 2018 permit, is less stringent than the amount of stormwater management required in the 2011/2012 permit because it implicitly removes any obligation for retrofitting – a problem that continues in this 2023 Draft Permit. The 2011/2012 permit required the District to both enforce its stormwater regulations on new development and redevelopment projects and implement 413 acres of retrofits on previously developed land (which are generally performed by the District itself), but the separate requirement for retrofitting was removed from the 2016 Draft Permit and replaced by the new "1,038 acres managed" milestone. For the 2018 permit, because more than 1,038 acres of new development and redevelopment were projected to occur in the District in the permit's five year term, this new requirement could be met without any retrofitting, simply by enforcing the development rules against regulated third parties. Consequently, the 2018 permit was weaker than the mandates of the 2011/2012 permit, which EPA previously found to be practicable, without any explanation as to why the previous permit's level of effort was no longer achievable or appropriate. Unfortunately, the 2023 Draft Permit continues this backsliding trend, including the 1,038 acres managed standard without a separate retrofit standard. Given that MS4 permits are supposed to get more stringent as they are reissued over time, not less, and given the urgency of reversing the current trend in increasing imperviousness, this unexplained and unsupported weakening of the District's acres managed requirement is clearly unlawful and arbitrary.

The reversal of course from the 2011/2012 permit regarding the elimination of a retrofit requirement—unsupported by any factual evidence or rational basis that explains why present circumstances justify a weaker requirement—is impermissible under federal backsliding prohibitions and under the Clean Water Act's MEP standard. EPA must at a minimum establish a performance standard that is objective and quantifiable, and that equals or exceeds the mandates of prior permits by requiring the District to enforce its existing stormwater regulations for all new development and redevelopment and implement at least 413 acres of retrofits. It is also inconsistent with EPA's own guidance on meeting water quality standards through stormwater permitting. The Office of

Water's 2014 memorandum on "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs" clearly reflected EPA's expectation that stormwater permitting authorities ensure their permits "reflect reasonable further progress towards meeting the applicable water quality standard (WQS)." The guidance said "if the BMPs used during prior years were shown to be inadequate to meet the requirements of the Clean Water Act (CWA), including attainment of applicable water quality standards, the permit would need to contain more specific conditions or limitations." Because this MS4 permit must increase stormwater protections over time to hasten compliance, though, EPA must require even greater stormwater volume reductions in this new permit.

In its 2022 Consolidated TMDL Implementation Plan, the District reported that from 2008 to 2019, the amount of impervious area in the MS4 increased by about 4%. This startling rise, despite simultaneous rises in BMPs, underscores the need to strengthen the District's key MS4 stormwater management requirements, including by increasing the numeric acres managed milestone. With the increasing impervious surface and total volume of precipitation-based runoff, the MS4 permit must dramatically increase the acreage managed or else it amounts to functional backsliding of the permit.

EPA Response to Comment 1:

EPA reevaluated the method used to determine a practicable number of acres managed for this permit term and, in the July 2023 draft DC MS4 Permit, revised this limit to require that a total of 1,175 acres managed be attained by the end of the five-year permit term. Subsequently, the number of acres managed to be implemented in each major basin has also been updated to reflect this increase. EPA explained the method used to calculate this limit in the Fact Sheet for the July 2023 revised draft DC MS4 Permit. The Fact Sheet for the Final Permit at Section 1.5.3.1 also provides a full explanation of the method used to determine this numeric limit.

As there are multiple statements contained in this comment, the responses will be broken out accordingly.

(1) Other measures, in addition to retention, effectively remove multiple pollutants; "acres managed" for purposes of this permit constitutes a compliance metric, i.e., a set of milestones or limits for the permit. The "acres managed" metric is consistent with the modeling framework the District established through a public stakeholder process during the development of the updated Consolidated TMDL Implementation Plan for estimating and tracking pollutant reductions. During this process, no stakeholders expressed any concern with this planning element. The District's models account for progress for each pollutant towards achieving all applicable wasteload allocations. In addition, EPA has retained a number of other metrics in this permit (e.g., net number of trees planted, miles of street sweeping, number of outfalls repaired) to support and verify, or to supplement, the acres managed metric. This framework has not changed

since the last permit. EPA believes that reduction measures, even the requirements such as tree planting and the RiverSmart incentive program, provide water quality benefits and thus should all be included in "acres managed" tallies. The permit continues to include provisions for the District to oversee and track all categories of projects.

The commenters' claim that the "2023 Draft Permit explains that no performance standard whatsoever will apply to the acreage target" is incorrect. As explained in Subsection 1.5.3.1 of the Fact Sheet, EPA clarifies that 1 acre managed = 1 acre treated to the appropriate retention standard as defined by District regulations. For example, 1.2" retention for projects over 5,000 square feet; 0.8" retention for Substantial Improvement Projects; etc. For a more in-depth discussion, as well as several examples, please see the Fact Sheet discussion for Subsection 1.5.3.1.

(2) EPA does not consider the MEP determination required for MS4 permits to be a compliance schedule. In the MS4 context, in making the MEP determination EPA considers what is the most a permittee can do in this permit term and thus effectively considers what is "as soon as possible" when making that determination. In addition, the commenter's conclusion conflates two different issues: final dates of attainment and rates of implementation. EPA had previously identified the 2154 date of attainment in the 2016 TMDL IP as too protracted, and therefore agrees that an ongoing and linear implementation rate, i.e., over multiple permit terms, of 1,038 acres managed, would be insufficiently aggressive. EPA intends for this implementation rate to be as aggressive as practicable for each permit term, consistent with the MEP framework and as described in EPA's regulations, preambles, and guidance. Accordingly, the acres managed metric for this permit term has been increased to 1,175, as explained in the Fact Sheet Subsection 1.5.3.1, which EPA has determined is appropriate, i.e., represents MEP, for this permit term.

(3) To the extent that this is a comment on the 2018 DC MS4 Permit, that permit was issued five years ago and is not open for public notice and comment. To the extent that this comment argues that the 2023 draft DC MS4 Permit is not at least as stringent as the Final 2018 permit, EPA disagrees with the commenter. Even before revising the draft permit to increase the number of required Acres Managed, based on a wholistic MEP analysis the draft permit was at least as stringent if not more so and thus does not constitute backsliding. Furthermore, EPA notes that it did revise the method of calculating the Acres Managed requirement, and therefore the number of Acres Managed, in the revised draft DC MS4 Permit. The Final Permit does not change that requirement.

2. Comment, Earthjustice et al (footnotes removed):
The number of Acres Managed in Public Rights-of-Way (PROW) must be increased because it does not meet the MEP standard.

The 2023 Draft Permit requires that at least 70 of the 1,038 acres managed must be

located in public rights-of-way ("PROW") in the MS4 area. This numeric PROW requirement is slightly higher than the same requirement in the 2018 permit, which was 62 acres. While commenters support the proposed modest increase in PROW acres managed, the PROW proposal must be increased further because it does not meet the MEP standard.

EPA cannot logically conclude that 70 PROW acres managed is the most the District can practicably achieve because the District Department of Transportation ("DDOT") is already far exceeding 70 acres managed in PROWs over five years. As EPA recognizes, between 2016 and 2020, DDOT accomplished 151 acres managed in PROWs. EPA offers no explanation for its puzzling conclusion that the District will only be able to achieve less than half of its current effort over the next five year permit term. Instead, EPA states that the District's recent performance of 151 acres managed over five years "demonstrates the feasibility of increasing the number of Acres Managed in PROW projects for this permit term," and "[t]herefore, EPA is establishing the requirement for 70 Acres Managed to be implemented in PROWs . . . ." Because the District has demonstrated the feasibility of achieving at least 151 acres managed in PROWs over five years, EPA must increase this requirement to a minimum of 151 acres, or more given the need for MS4 permits to increase stormwater protections over time.

EPA Response to Comment 2:

EPA has reevaluated the method used to determine a practicable number of acres managed to be implemented in the PROW for this permit term and has revised this limit to require that a total of 175 acres managed be attained by the end of the five-year permit term. Refer to the Fact Sheet at Section 1.5.3.1 for a full explanation of the method used to determine this numeric limit. However, EPA notes that the MEP analysis is a wholistic analysis of the most a permittee is reasonably capable of doing in a given permit term; each component of that analysis is not necessarily severable, and the level reached during a previous permit term may not necessarily be the level reachable during any other permit term. For this upcoming permit term, EPA has determined that a total of 175 acres managed in the PROW is part of the overall MEP determination; this may not be the case in the next permit term.

1.5.3.2 Numeric Tree Planting Requirements

3. Comment, Earthjustice et al (footnotes removed):

The number of trees required to be planted must be increased because it does not meet the MEP standard.

The 2023 Draft Permit requires that 36,000 trees be planted in the MS4 area over the five year permit term, with an annual average of 7,200 trees planted. The draft permit also allows for this tree planting to be translated into "acres managed" and counted towards the acres managed requirement. In contrast, in the 2018 permit, the District was required to plant an average of 6,705 trees annually, for a total of 33,525 trees

planted over the five year term. This slight increase in the tree planting requirement is laudable. Yet, as with the acres managed and the PROW requirements, the tree planting requirement cannot meet the MEP standard because the District is already achieving a greater amount of tree planting.

EPA concluded that an annual average of 7,200 trees could practicably be planted in the MS4 area based on the District's Urban Tree Canopy Plan and records of the District's tree planting efforts in the MS4 area from 2019-2022. The Urban Tree Canopy Plan calls for 10,800 trees to be planted annually across the entire district. EPA reasons that because the MS4 area represents approximately two-thirds of the District's entire area, it should establish the MS4 tree planting requirement at two-thirds of this 10,800 tree goal, or 7,200 trees. While this math may satisfy the Urban Tree Canopy Plan, it cannot satisfy the Clean Water Act because it does not meet the MEP standard.

In the years 2019-2022, the District has been planting an average of 8,188 trees per year, and 32,751 trees total during the four year period. If this average is continued in 2023, the District will be on pace to plant 40,939 trees over this most recent five year period. EPA offers no explanation for why this annual 8,188 trees average cannot be sustained. In fact, EPA concedes that it "has no information to suggest that the past four years have been an anomaly or that the average rate of tree planting cannot be sustained." EPA also correctly 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." Here, it is clear that it is practicable for the District to plant more than 7,200 trees each year during the upcoming permit term. The District achieved significantly more than this level of tree planting in three of the four most recent years. Thus, as EPA itself recognized, these higher numbers are not anomalies. Because EPA explicitly found that it is no information indicating this level of effort cannot be sustained, EPA cannot rationally conclude that this level of effort is not practicable.

EPA Response to Comment 3:

EPA reevaluated the Permittee's annual reports from 2016-2022 as well as the Urban Tree Canopy Plan and revised the limit appropriately. The Final Permit now requires that a minimum net increase of 38,850 trees be achieved in the MS4 Permit Area in the five-year permit term. The Final Permit further requires a net annual average benchmark of 7,770 tree plantings. See Section 1.5.3.2 in the Fact Sheet for the discussion and rationale.

1.5.3.3 Numeric Trash Capture/Removal Requirements

4. Comment, Earthjustice et al (footnotes removed):
   The amount of trash required to be removed must be increased because it does not meet the MEP standard.

The 2023 Draft Permit requires that 108,347 pounds of trash be captured, removed, or prevented from reaching the Anacostia River in the MS4 area. This number is the same as the trash removal requirement in the 2018 permit. But EPA has not, and cannot, demonstrate that 108,347 pounds of trash removed represents the maximum practicable level of effort. The District has reported that it is annually achieving an average removal of 137,014 pounds of trash, and in 2021 and 2022, the District removed 163,847 pounds and 164,037 pounds, respectively. The District has further reported that it will continue these current trash removal practices, and has given no indication it cannot continue this pace of removal. Because the District is currently achieving far more than 108,347 pounds of trash removal, and neither the District nor EPA has identified any reason its current level of removal is not practicable to continue, 108,347 pounds of trash removal is not the MEP and it must be increased.

EPA Response to Comment 4:

EPA disagrees that the amount of trash required to be removed does not constitute MEP. As noted above (see response to Comment #2), the MEP analysis is a wholistic analysis, and comparing numbers on a sub-component basis from one permit term to the next is not necessarily appropriate. In addition, EPA notes that it is exercising its discretion for this permit requirement to address water quality in addition to the MEP analysis. This permit requirement is consistent with 40 C.F.R. §122.44(d)(vii)(B), which states that effluent limits in NPDES permits developed to protect water quality must be consistent with the assumptions and requirements of any available wasteload allocation for the discharge. The Anacostia trash TMDL contains a wasteload allocation (WLA) of 108,347 pounds of trash removed from the discharges from the MS4 area of the District. Therefore, the permit will continue to use this numeric WLA as the limit for trash in this permit term.

5. Comment, Earthjustice et al (footnotes removed):

The green roof requirement must be added back into the draft permit. The 2023 Draft Permit impermissibly backslides from the 2018 permit because it removes the requirement to install a minimum number of square feet of green roofs during the permit term. The 2018 permit required that the District install a minimum of 350,000 square feet of green roofs in the MS4 area during the permit term, as did the 2011 permit. This permit requirement must be added back in, and in fact increased, in order to meet the MEP standard. The District is already well exceeding the 350,000 square feet over five years minimum in the two previous permit terms. For example, in the most recent four year period alone, the District achieved 1,041,511 square feet of green roof installation. Neither EPA nor the District has provided any information to support a conclusion that this current level of effort cannot be sustained. As a result, EPA must add this requirement back into the permit, and increase it to at least match the current level of effort, in order to satisfy the MEP standard.

The removal of the green roof program also constitutes impermissible backsliding. EPA offers three justifications for this backsliding, none of which are logical.

First, EPA reasons that the green roof requirement originated in a 2007 Letter of Agreement between EPA and the District, for a permit that is nearly fifteen years old. But the fact that the green roof requirement originated from an old agreement is irrelevant. If anything, the longstanding nature of the requirement strengthens the case for keeping it because it has successfully been implemented and proven practicable for many years.

Second, EPA argues that the green roof requirement is "not as applicable" in 2023 because the permit now includes the "acres managed" metric. The fact that the permit now includes an acres managed milestone is also irrelevant. Changes in different permit terms over time cannot justify backsliding. Moreover, the 2018 permit included the same exact acres managed metric, at the same numeric level. There is no logical reason why the continuation of the acres managed milestone, which does not itself require a minimum amount of green roof installations, somehow negates the need to continue the green roof requirement.

Finally, EPA states that because the District has already installed a "substantial number" of green roofs, "there is concern that the amount of space available for future additional green roof installation is limited." But the success of the program over the last two permit terms, and ability of the District to far exceed the minimums in those permit terms, does not justify removing the requirement. To the contrary, the ability of the District to nearly triple the minimum requirement over the last four years demonstrates, if anything, the practicability of continuing this requirement. Neither EPA nor the District has pointed to any data regarding the number of potential future green roofs remaining in the District to substantiate EPA's vague "concern" that this number might be small. In fact, the District indicated in its 2022 Revised Stormwater Management Plan that it intends to keep installing green roofs, and that "[p]roperties of all sizes, including residential, commercial, and institutional, are encouraged to apply." Furthermore, in its 2022 Consolidated TMDL Implementation Plan, the District notes that the installation of green roofs, along with other "retention-based BMPs," has increased since 2013. The District does not report any slowing trends or limits on available green roof sites in either of these relevant 2022 reports.

EPA Response to Comment 5:

As already explained, the MEP analysis and determination is wholistic and sub-components of that determination may not be directly comparable from one permit term to the next. EPA has provided a rationale in the Fact Sheet for the removal of the specific numeric green roof requirement in the Final Permit. The District has been successful in implementing green roofs for a number of years and although there is not a numeric limit in the Final Permit the District is not precluded from continuing to implement this practice as it also can be counted towards the overall "acres managed" metric.

EPA also notes that the green roof requirement in the 2018 Permit was part of the overall acres managed requirement – i.e., it was only a submetric that fed into the overall acres managed requirement. As noted above, the MEP analysis is wholistic and it is not necessarily appropriate to compare submetrics from one permit term to another. Even if one did, however, given that the 2023 Final Permit increases the acres managed requirement from 1,038 to 1,175, the overall requirement is no less than the previous permit.

EPA further acknowledges that each five-year permit reissue presents a new opportunity to determine what is practicable for the next permit term. As part of the iterative process, terms and conditions are not required to remain the same and increase with each reissuance. Rather, EPA considers the most the Permittee could practicably do for each metric/requirement as well as wholistically considering all the requirements in making the MEP determination.

Draft Permit Part 2: Stormwater Management Program Planning

2.2 TMDL Planning

2.2.1 Maintaining and Refining TMDL Databases and Modeling Tools

6. Comment, District Department of Energy and Environment (DOEE):
Section 2.2.1 includes a requirement that "milestone and benchmark databases shall be accessible through a graphical user interface for effective utilization by multiple audiences, including the public."

   The District currently includes tables summarizing progress toward milestones and benchmarks in each year's annual report, not via a publicly-accessible "graphic user interface". Developing and hosting such a publicly-accessible tool would require considerable effort and expense, and the District believes the objective of informing the public is already met by the current approach. As a result, the District requests this section be revised to read as follows:

   "The Permittee shall continue to update the *Consolidated TMDL Implementation Plan* modeling tool and associated databases, which shall be used in the development of revised plans, schedules, or strategies. The modeling tool and/or associated databases shall also be used to provide consistent tracking of progress against milestones and benchmarks. Milestone and benchmark progress shall be demonstrated in each year's annual report."

EPA Response to Comment 6:

EPA agrees that the District currently makes this information available via annual reports and has made the requested language revision in Section 2.2.1 of the Final Permit.

2.2.2 Milestones and Benchmarks for the Next Permit Term

7. Comment, DOEE:
   Sections 2.2.2.1 and 2.2.2.2 require the District to consider the results of ongoing investigations (related to bacteria sources and toxic contaminants) when developing new benchmarks and milestones in the next Consolidated TMDL Implementation Plan. This requirement does not account for the critical step of updating TMDLs with new Wasteload Allocations (WLAs). New milestones and benchmarks will be developed once new TMDLs (with updated WLAs) are approved by EPA. The District requests the language directing DOEE to develop new milestones and benchmarks prior to new approved TMDLs be removed from the permit.

   Section 2.2.2.3 similarly directs the District to consider its BMP Opportunity Assessment when updating the TMDL Implementation Plan and developing new milestones and benchmarks. The District's BMP Opportunity Assessment was developed to identify *potential* sites in the MS4 area on public lands for stormwater BMP implementation. DOEE and other District agencies will use this list when looking to design and implement voluntary stormwater BMPs. While DOEE did calculate *potential* pollutant load reductions for these BMP sites as part of the TMDL Implementation Plan update, this list of voluntary BMP opportunities is not related to TMDL milestone and benchmark development. In other words, any BMP implemented from these potential opportunities will help to achieve milestones and benchmarks, but the overall assessment will not change the milestones and/or benchmarks themselves. Therefore, the District requests the second sentence of Section 2.2.2.3 be removed.

EPA Response to Comment 7:

As stated in the permit, "while the Permittee may opt to revise existing TMDLs, pursuant to Subsection 2.2.5.2 of this permit, milestones and benchmarks must be developed and implemented, as relevant, for existing WLAs until such time as a revised TMDL is approved." EPA has not changed this language in the Final Permit, since revising TMDLs can be a lengthy process and there is no guarantee that TMDLs will be revised prior to new milestones and benchmarks being developed.

EPA has revised the second sentence in Section 2.2.2.3 of the Final Permit to instruct the Permittee to incorporate any new information gained from the BMP Opportunity Assessment into the revised Consolidated TMDL Implementation Plan.

8. Comment, Earthjustice et al (footnotes removed):
   While we strongly support the District's use of the Bacteria Source tracking Study to identify high priority bacteria sources, this section of the 2023 Draft Permit impermissibly allows for self-regulation by the permittee because the District would be able to choose how it handles any high priority bacteria sources, without public input or EPA approval. Under the draft permit terms, the District would decide on its own

whether there are high priority bacteria sources that need immediate implementation. If the District chooses not to identify any high priority sources, the District's proposed bacteria-related changes to the milestones and benchmarks would be shifted to the Consolidated TMDL Implementation Plan process, where they would not even be proposed to EPA (much less approved) until fifteen months prior to the end of this MS4 permit term. This relegation of the bacteria source reductions to the Consolidated TMDL Implementation Plan significantly delays mandatory implementation requirements and allows the District to avoid taking action on the study results in the interim. To avoid that outcome, EPA must instead require the District to use the Bacteria Source Tracking Study to identify high priority bacteria sources and implement bacteria source reductions from those sources during this permit term.

EPA Response to Comment 8:

The Final Permit requires, in Section 4.5.2, that the Permittee implement specific actions in the Anacostia and Rock Creek watersheds based upon the results from Bacteria Source Tracking studies that were undertaken during the last permit term.

Regarding the issue of self-regulation, EPA does not consider strategies, schedules and plans developed and proposed by the Permittee to be self-regulation. It is a standard and viable approach (especially in NPDES MS4 programs) for the Permittee to propose strategies that will meet water quality objectives within the context of other considerations, e.g., staffing, policies, funding. In fact, this is contemplated by the federal regulations, which stipulate that MS4 permittees shall submit proposed management programs to the permitting authority and that those programs will be considered by the Director when developing permit conditions to reduce pollutants in discharges to the maximum extent practicable (MEP). See 40 C.F.R. § 122.26(d)(2)(iv). To that effect, it is EPA's intent to continue this practice whereby the Permittee provides information with its permit application, in the form of reports, studies, etc. and EPA uses that information when determining permit requirements for subsequent permit terms.

2.2.4 Updating Stormwater Management Regulations

9. Comment, DOEE:

Section 2.2.4.1 requires the District to publish in the D.C. Register proposed updates to its existing stormwater management regulations, as feasible dependent upon obtaining pre-clearance for the proposal. The District requests there be no deadline for new draft regulations to be proposed in the D.C. Register. If clearance is obtained during the permit term, the new regulations shall be proposed as soon as possible and reflected in the subsequent annual report. The District requests the December 31, 2027 deadline be removed from Section 2.2.4.1 as well as from the corresponding row of Table 2 in Section 2.8.

EPA Response to Comment 9:

EPA does not concur with DOEE's position that the permit should not include a deadline for publishing proposed updates to the existing stormwater regulations. MS4 permits should include terms and conditions that are clear, specific, and measurable. EPA believes that inclusion of a date with this condition is warranted and necessary; DOEE has not provided a justification in its comment that would cause EPA to revise this assertion. Therefore, no revisions were made, and the Final Permit requires the proposed regulations to be published no later than four years from the effective date of the Final Permit, pending pre-clearance from the Mayor's office. The language in the permit recognizes that pre-clearance is part of the District's procedures and is necessary for the District to proceed with proposed regulations.

10. Comment, Earthjustice et al (footnotes removed):
The 2023 Draft Permit lists the adoption of stormwater regulations for small area projects (presumably less than 5,000 square feet), as well as the revision of peak discharge requirements, as recommended updates. We strongly support the adoption of regulations for small area projects because applying the retention standard to every site in the District, including the smallest sites, will be necessary to achieve all WLAs. We also strongly support the revision of peak discharge requirements in order to accommodate the larger, more intense storms we are seeing in our region due to climate change.

However, despite the fact that DOEE has determined these are cost-effective regulatory changes, EPA is not requiring these two regulatory changes, and is only requiring that the District make the changes if it is feasible to obtain "pre-clearance." This permit approach inappropriately delegates to the Permittee the discretion not to proceed with implementing these regulatory changes.

Moreover, in a change from the 2018 permit, EPA is no longer requiring the District to consider increasing the regulatory stormwater retention volume from 1.2 inches to 2 inches. We urge EPA to require the District to revisit this regulatory change, especially in light of the District's predictions that WLAs will not be attained until the year 2189 under the current regulatory regime. Moreover, EPA previously recognized that "a 2" retention requirement would no doubt increase the amount of overall retention in the MS4 Permit Area," but found it was premature to make the increase in 2018 because additional analyses were needed. But in fact, DOEE already undertook an evaluation of implementing a 2 inch standard as part of the modeling efforts for the development of the Consolidated TMDL Implementation Plan and found that the new standard would bring "noteworthy water quality benefits." Now, five years have passed and in contrast to DOEE's earlier assumptions, developers have become increasingly comfortable with some of the most innovative stormwater regulations in the nation. Indeed, in conversations with developers in 2022, none expressed the slightest trepidation about meeting the 1.2 inch standard and in fact touted their compliance as part of "greening" their buildings. Despite this, EPA is not even requiring additional analyses in this draft permit, much less the needed increase to a 2 inch retention standard. Given all this, EPA

must add, at a minimum, a requirement that the District study the effects of a 2 inch retention standard on water quality and WLA attainment timelines.

EPA Response to Comment 10:

Proposing and adopting new stormwater regulations is a significant undertaking for the District. There is a specific process required by District regulations that must be followed which is why the language in the Final Permit requires the Permittee to obtain "pre-clearance" since that part of the process is out of the Permittee's control. The Final Permit requires that these updates be proposed by a specific date, if the Permittee obtains the necessary pre-clearance.

Additionally, Section 2.2.4.3 has been added to the Final Permit, requiring the Permittee to submit to EPA a more detailed analysis (in the form of a study/plan/report, etc.) as to the effect that increasing the current 1.2" retention standard to 2" would have on water quality improvements and time to achieve WLAs. The study shall further consider cost compared to the environmental benefit to be realized should the standard be increased. This analysis shall build upon the description provided in the attachment to the 2020 Annual Report.

2.5.2 Other Controls or Management Measures

11. Comment, Earthjustice et al (footnotes removed):

We support EPA's inclusion of section 2.5.2, providing the District the opportunity to submit methods for estimating quantitative pollutant reductions from programmatic activities (though we would prefer for this submission to be mandatory, rather than voluntary). The development of methodologies for estimating load reduction for activities such as illicit discharge detection and elimination, source control, public outreach and education, and pollution prevention programs would allow the District to better assess the efficacy of these activities and evaluate their contribution towards WLA achievement.

However, we disagree with EPA's draft permit language stating that "[t]he method may include an equivalency translation to 'Acres Managed' . . . ." This language reiterates that broader programmatic activities that do not involve on-site stormwater retention may count towards satisfaction of the acres managed milestone in the MS4 permit. EPA also confirms in its 2023 Fact Sheet that any new quantitative methods developed pursuant to section 2.5.2 may be used to count programmatic activities towards the acres managed standard. This interpretation further waters down the acres managed milestone because the more programmatic activities the District can count towards its stormwater management acres, the less stormwater retention will be required in the District.

As clearly indicated in the District's 2022 Consolidated TMDL Implementation Plan, the District needs to greatly reduce the amount of effective impervious surface in the MS4

permit area, which must be accomplished by implementing retention-based stormwater controls. This is especially true now because the District's amount of impervious area has increased in recent years, meaning it will take even longer to meet all WLAs. The retention-based stormwater controls needed to combat this trend are not functionally comparable to programmatic activities like illicit discharge detection and elimination, source control, and public outreach and education, which are important efforts, but do not directly reduce stormwater volume. These categories of activities are not fungible. The broader programmatic activities will be needed regardless of how many acres are managed with on-site retention, and vice versa. As a result, any quantification of programmatic activity benefits must be used solely to inform their efficacy in contributing to TMDL attainment, and not counted towards "acres managed."

EPA Response to Comment 11:

There are a variety of opportunities for implementing effective stormwater pollutant reduction projects throughout the District. EPA encourages the Permittee to continue these efforts and expects many types of projects to be included in permit implementation tallies, including in the "acres managed" totals, to the extent the Permittee has a method to convert those projects to "acres managed", can document implementation of those projects, and can account for ongoing performance/function of those measures.

The definition of "acres managed" is intended to be inclusive and does not restrict the types of projects that may be counted. EPA has provided reporting elements for voluntary and other types of projects in the Annual Report Template, and the Permittee has also included these types of projects in its on-line "story map" that it uses to keep the public informed.

2.7 Flood Management for Water Quality

12. Comment, DC Water:

This section addresses measures to improve water quality of discharges from the MS4 system during flood events. DC Water requests adding the red text "to the maximum extent practical" to this section as follows:

The Permittee shall implement the activities below to ensure that flood management projects assess the impacts of flooding on the quality of receiving water bodies and ensure that discharges to, from, and through the MS4 are not, to the maximum extent practicable, contributing pollutants to receiving waters.

Even after best management practices to the maximum extent practicable are applied to MS4 discharges, those discharges contain a wide range of pollutants. This is especially true during the flooding events this requirement seeks to address. Accordingly, we ask that EPA include our proposed clarification above to implement the overarching requirement for MS4 discharges under Clean Water Act Section 402(p).

EPA Response to Comment 12:

The Final Permit in Section 2.7 was revised and reads as follows:

"The Permittee shall implement the activities below to ensure that flood management projects assess the impacts of flooding on the quality of receiving water bodies and ensure that flood management projects control discharges of pollutants to, from, and through the MS4."

EPA does not feel that it is proper to include the language "to the maximum extent practicable" in this instance, especially given the change in language. The provision now requires the permittee to ensure that flood control projects "control" discharges; this does not mean "eliminate". To the contrary, EPA understands that some flooding events might cause discharges.

13. Comment, DOEE:

As currently drafted, elements of Section 2.7 are beyond the scope of what an MS4 permit can require. Section 2.1 of this draft permit explains that the "SWMP Plan…will reduce the discharge of pollutants to the maximum extent practicable for this permit term…" Consequently, the District requests slight changes to the text that the phrase "to the maximum extent practicable" be added to the flood management requirements in Section 2.7 so it reads as follows:

"The Permittee shall implement the activities below so that flood management projects assess the impacts of flooding on the quality of receiving water bodies with the goal of reducing discharges and pollutants to, from, and through the MS4 to the maximum extent practicable."

Section 2.7.1 requires that District to develop an integrated flood model. While the District recognizes that flood events do result in pollutant loading to receiving water bodies, the main drivers of the District's efforts to develop an integrated flood model are infrastructure and community resilience to climate change. Development of the integrated flood model will not identify actions to minimize the impacts of flood events on the water quality of receiving water bodies; these actions will be taken subsequent to the model's development to comply with Section 2.7.2. To clarify that point, the District requests Section 2.7.1 be revised to read as follows:

"By the end of the permit term, the Permittee shall develop a comprehensive, integrated flood model to show how coastal, riverine, and inland flooding interact, and to identify areas of the District that are more susceptible to flooding."

Section 2.7.2 requires the District to identify areas of highest risk for impact on water quality due to flooding as candidates for the development of stormwater management

plans. The District request the deleted component from Section 2.7.1 serve as Section 2.7.2 so it reads as follows:

"Upon completion of the integrated flood model's development, the Permittee shall identify actions for areas of high flood risk that could minimize the water quality impacts on receiving water bodies."

Section 2.7.3 requires the District to complete the development of the FloodSmart Homes program. The District requests this section be deleted because the FloodSmart Homes Program has no direct connection to water quality improvements. The program provides a free resilience assessment to homeowners regarding flood risk and installs free home flood-proofing and resilience upgrades such as electrical and mechanical equipment evaluation, sealing of HVAC ducts, or installation of anchoring straps on water heaters, HVAC equipment, or other appliances.

EPA Response to Comment 13:

There are multiple statements contained in this comment; therefore, the responses will be broken out accordingly.

(1) See Response to Comment #12 regarding the request for the inclusion of language related to the "maximum extent practicable".

(2) Section 2.7.1 of the Final Permit has been revised and now reads:

2.7.1 By the end of the permit term, the Permittee shall:

2.7.1.1 Develop a comprehensive integrated flood model to show how coastal, riverine, and inland flooding interact, and to identify areas of the District that are more susceptible to flooding;

2.7.1.2 Identify actions for areas of high flood risk that could minimize the water quality impacts of a flood event on receiving water bodies; and

2.7.1.3 Identify areas of highest risk for impacts on water quality due to flooding as candidates for the development of stormwater management plans.

(3) EPA believes the FloodSmart Homes program does have a connection to water quality improvements; therefore, this requirement has been retained in the Final Permit in Section 2.7.2. Flood proofing homes and making them resilient does impact water quality by reducing any potential pollutants that could come from the home because of a flooding event. Development of the program (which is currently being undertaken by the Permittee) is due to be completed no later than two years from the effective date of the permit.

14. Comment, Earthjustice et al (footnotes removed):
Commenters strongly support the requirements in the 2023 Draft Permit to develop a comprehensive flood model by the end of the permit term, identify high-risk flooding areas, and establish a FloodSmart Homes Program by the end of 2025. We urge EPA to strengthen these important flood management provisions further by requiring the development of a comprehensive flood model and identification of high-risk flooding areas by 2025, rather than the end of the permit term. We understand that the District has already begun work on these tasks, and it is important to bring relief to District neighborhoods affected by flooding sooner than 2028.

In addition, we support EPA's allowance for the District to use new climate-change adjusted Intensity, Duration, Frequency ("IDF") curves developed for the Chesapeake Bay watershed, so that the District need not duplicate the efforts of others and develop their own IDF curves.

EPA Response to Comment 14:

EPA appreciates the commenters' support for these permit requirements. The Agency believes that the timelines outlined in the Final Permit reflect a reasonable amount of time to complete each of the tasks in Section 2.7. The FloodSmart Homes program is to be developed within two years of the effective date of the Final Permit. Furthermore, the integrated flood model, identification of areas of high flood risk, and areas of highest risk for impacts on water quality due to flooding as candidates for stormwater management planning are collectively required to be completed no later than the end of the permit term-which does not mean that they will not be completed until that time.

The MS4 permit requires the District to complete many activities in a five-year term. EPA considers all the requirements collectively when making the determination as to how much time to allow for activities to be due, which is part of the MEP analysis.

2.8 Submittals to EPA

15. Comment, DOEE
The District requests a line under "Regular Reporting" that includes the Story Map, since the deadline for completion will change under this permit (two (2) months after completion of the MS4 Annual Report instead of the current one (1) month).

EPA Response to Comment 15:

EPA has made this requested adjustment and the Final Permit in Table 2 now reflects the correct deadline for completion of the MS4 Story Map consistent with Section 5.3.1.

Draft Permit Part 3: Stormwater Management Program Implementation

3.2 Achievement of the Acres Managed Numeric Limit

16. Comment, DOEE
    Sections 3.2.2, 3.2.4, and 3.2.5 each include a statement that reads "If modifications to stormwater regulations are made in conjunction with Section 2.2.4, that increase the retention standard, the Permittee shall implement the new standard upon its promulgation." The District requests the removal of the phrase "that increase the retention standard" from each of those sections. Neither of the two regulation changes currently being considered and previously reported to EPA in the District's 2020 Annual Report (Attachment 2 – Analysis of Updating Stormwater Regulations) would increase the current retention standard.

EPA Response to Comment 16:

EPA concurs with this comment and the Final Permit has been updated appropriately.

3.2.3 Stormwater Retention Credit Program

17. Comment, Earthjustice et al (footnotes removed)
    The High Impact Rule must be implemented to strengthen the Stormwater Retention Credit Program.

    The stormwater retention credit trading program is an innovative approach to stormwater management that could yield additional pollution reduction benefits, but only if properly structured. The District's failure to implement the proposed High Impact Rule is presently limiting the ability of voluntary projects in the MS4 to survive on the market. The High Impact Rule would require developers to buy credits from new voluntary projects constructed in the MS4. Currently projects that were previously constructed and grandfathered in are able to undercut the market pricing and potentially drive out new stormwater projects. The proposed High Impact Rule would further the goal of the market to encourage new stormwater projects in the areas where they would have the most impact. Accordingly, we urge EPA to require that the District implement the High Impact Rule.

EPA Response to Comment 17:

The District has not yet finalized the High Impact Rule; EPA understands that the District needs to re-propose the Rule before it can be finalized. As the Rule is not yet in effect, the permit does not require the implementation of it.

Nevertheless, regulated site owners in the District can purchase and use Stormwater Retention Credits (SRCs), including High-Impact SRCs-which are generated when new green infrastructure practices are built as voluntary retrofits in areas draining to the MS4.

Regulated development projects located in the Combined Sewer System area can meet up to 100% of the required stormwater retention by using High-Impact SRCs. Moreover, DOEE supports new, voluntary green infrastructure in the MS4 through the SRC Price Lock Program. As a part of this program, DOEE pays SRC Price Lock Program participants to offer their SRCs to buyers at reduced rates. This ensures it is affordable for developers to use High-Impact SRCs to comply with stormwater management requirements.

3.2.4 Implementing the Standard for Projects in the Public Right-of-Way

18. Comment, Earthjustice et al (footnotes removed)
Regulated PROW projects should be required to obtain off-site mitigation when they cannot achieve 1.2 inches of retention.

Approximately 25% of the impervious area in the District is in PROWs. As a result, it is critical that the District utilize all opportunities to maximize management of stormwater through PROW projects. The 2023 Draft Permit proposes to continue applying the same stormwater management requirement to PROW projects as in the 2018 and 2011/2012 permits: such projects must retain stormwater volume on-site to the maximum extent feasible, but they are not required to make up the remainder off-site or purchase SRCs if the on-site retention volume is less than 1.2 inches. This loophole for PROW projects must not be extended through another permit term.

Excusing PROW projects from making up their stormwater retention volume shortfall off-site fails to meet the maximum extent practicable standard for MS4 permits. While we concede that PROW projects may face special technical constraints that sometimes preclude them from achieving the full 1.2-inch retention volume on-site, neither EPA nor the District has made any showing why it is not practicable for the District agencies undertaking PROW projects to make up the remaining volume through either off-site mitigation projects or the purchase of stormwater retention credits from other entities who install retention practices.

EPA attempts to compensate for the loophole by requiring PROW projects to achieve more than 1.2 inches of retention on-site if feasible. While we disagree that it makes up for the failure to require off-site mitigation on sites that fall short of 1.2 inches, we agree that sites that can go beyond 1.2 inches should be required to do so, and point out that any additional volume captured could be used to offset locations where 1.2 inches was not feasible. However, the proposed language in the Draft Permit does not clearly require PROW projects to do this. The proposed text merely states that “these projects are subject to design and site plan review requirements to ensure ‘maximum extent practicable’ combinations of on-site SWRv, water quality treatment, and design options, including in some situations stormwater management of more than the 1.2” volume.” If EPA intends to mandate that PROW projects retain more than 1.2 inches when feasible, it must clearly say so, including by defining the “situations” in which it is

required. As it stands, the 2023 Draft Permit language is impermissibly vague on this point. However, even if the proposed condition were clarified, it is still irrelevant to any findings about the practicability of off-site mitigation and cannot make up for the existence of the loophole.

Finally, in its 2018 response to comments on this issue, EPA points out that closing a different PROW loophole, for stormwater management in PROW projects less than 5,000 square feet, would bear greater stormwater reduction gains for the District. But the District has not yet adopted stormwater regulations for small PROW projects, and it is unclear if or when such a regulatory chance will occur. More importantly, the District should be required to address both regulatory loopholes. There is no need to maintain one loophole so that the District can close another. EPA also noted in 2018 that future permits could include off-site mitigation requirements for PROW projects, but that EPA wanted to wait until further study of the "most cost-effective advances" was conducted. It is unclear whether the District has conducted any studies regarding the cost-effectiveness or benefits of requiring off-site mitigation for regulated PROW projects that do not achieve 1.2 inches of stormwater retention. Because neither EPA nor the District has identified any information indicating it is not practicable for the District to close this loophole, EPA must add this requirement to the permit.

EPA Response to Comment 18:

EPA agrees that the public rights-of-way (PROWs) provide excellent opportunities for targeted implementation of stormwater control measures. EPA further notes that implementing these on-site retention controls on roads or sidewalks presents its own unique set of challenges. As a result, the District requires, via its local regulations, that projects in the PROW meet the District's "maximum extent practicable" standard (not to be confused with the MS4 Permit Standard of MEP). This means the design process of all PROW projects shall evaluate and implement all applicable and effective BMPs except those shown to be technically infeasible. EPA does not consider this a "loophole". As projects located in the PROW are subject to a wide variety of site constraints, the District's regulations account for this and have made available a separate review process. EPA feels that it would be inappropriate to include conditions in the MS4 permit that contradict local regulations.

3.3.2 Industrial Activities at Municipal Operations

19. Comment, Earthjustice et al (footnotes removed)

The requirements for industrial activities at municipal operations should be strengthened.

Commenters generally support the 2023 Draft Permit's requirements for industrial activities at municipal operations and urge EPA to strengthen these requirements further. In June 2018, EPA entered an Administrative Order on Consent ("AOC") regarding the District's violations of its MS4 permit and the Clean Water Act. One of the

key violations identified in this AOC was the District's failure to implement required good housekeeping practices, ensure the proper operation of stormwater treatment management practices, and implement an annual inspection schedule at municipal facilities in the District. While some improvements have been made pursuant to the enforcement of this AOC, much work remains to address basic stormwater management deficiencies at District industrial facilities.

Publicly available information in EPA's ECHO database shows that District agencies continue to fall short on stormwater management, and numerous District industrial facilities continued in 2022 to exceed benchmarks for concentrations of pollutants in stormwater. The District's 2022 annual MS4 program report under the AOC reveals that "the completion of routine maintenance according to the approved SWMP's schedule is an ongoing challenge," and that some BMPs at District facilities are in "poor condition and require maintenance." The District further reports that some of its industrial facilities continue to struggle to implement good housekeeping measures and to implement their stormwater pollution prevention plans ("SWPPPs"). For example, "[s]ome facilities are still working to purchase the tools and materials needed to implement their SWPPP, such as secondary containment and storage containers." Alarmingly, the report also reveals that when stormwater spills and violations occur that require corrective actions, "many corrective actions remain[ed] unaddressed for over 45 calendar days" due to "District procurement processes and scarcity of funding."

The District's continuing struggle to achieve basic stormwater management implementation at District industrial facilities underscores the need to strengthen this section of the District's MS4 permit. Commenters urge EPA to 1) require that the District conduct quarterly, rather than annual, inspections at District facilities that have violated any benchmark monitoring limits under the multi-sector general permit, and 2) require that the District commit specific funding for individual District agency stormwater management funding requests.

EPA Response to Comment 19:

Many of the industrial facilities under the purview of the District maintain coverage under EPA's Multi-Sector General Permit (MSGP) for discharges of stormwater from industrial activities. As these facilities maintain coverage under a separate NPDES permit, EPA does not feel it necessary to include additional requirements beyond what is already contained in the MS4 permit.

In addition, as stated by the commenter, there is a current AOC between EPA and the Permittee for past permit violations related to industrial activities. This document is tracked via EPA Region 3's Enforcement and Compliance Assistance Division.

3.3.4 Catch Basin Operation and Maintenance

20. Comment, DOEE

Section 3.3.4.1 requires the District to operate a catch basin maintenance program. This program, however, is DC Water's responsibility. The draft permit requires a catch basin to be cleaned within 21 days of inspection if it is determined to require cleaning. DC Water uses a work order system for maintenance tasks and occasionally needs to prioritize more urgent matters (e.g., buildings with no water, flooding, etc.) over catch basin maintenance. In order to ensure continued operations across DC Water's maintenance program, the District requests this requirement to change from 21 days to "as soon as possible but no later than 45 days."

EPA Response to Comment 20:

As described in Section 3.3.4 of the Final Fact Sheet, based upon EPA guidance on this topic, EPA has determined that 30 days is a reasonable amount of time to complete catch basin cleaning, barring any obstructions or access issues. Thirty days should be plenty of time to accommodate urgent issues and balance the schedule with those and more routine issues. As such, the Final Permit has been revised to reflect this change.

21. Comment, DC Water

The draft permit requires cleaning catch basins within 21 days if they are found to require cleaning after inspection. DC Water requests changing the time for cleaning to 45 days. The Authority uses a work order system to perform maintenance tasks and to respond to customer service calls. The Authority prioritizes these tasks based on their urgency and impacts to customers. As an example, a customer reporting a service issue (no water, building sewer not working) or flooding will receive higher priority than other matters. An individual catch basin with debris that requires cleaning does need to be addressed immediately but needs to be prioritized with more urgent customer service issues. As a result, we request changing the time for response from 21 days to as soon as possible but no later than 45 days to provide flexibility to schedule the catch basin cleaning while considering other customer service and maintenance priorities.

EPA Response to Comment 21:

See Response to Comment #20.

3.3.5 Storm Drain Outfall Operation and Maintenance

22. Comment, Earthjustice et al (footnotes removed)

The storm drain outfall operation and maintenance requirement should be increased and paired with a requirement to prioritize and conduct appropriate stream restoration projects.

Commenters support the proposed change in the 2023 Draft Permit to require outfall repairs without the possibility of substituting alternative stream restoration pollution reductions if they cannot achieve the permit requirement. This removal of the substituted demonstration option ensures that the District receives the benefit of

physical outfall repair contemplated by this permit term. However, commenters have two concerns regarding the changes in this permit term.

First, the outfall repairs should be coupled with appropriate stream restoration projects where possible, and should include a requirement that directs the District to prioritize for such projects those streams that are most degraded, and which could most benefit from ecologically sensitive in-stream restoration techniques. Generally, the District currently pairs outfall restorations with stream restorations. Some stretches of stream have many outfalls and some do not. Moreover, contracting for these projects is time-consuming. As a result, pairing outfalls and linear feet of stream restoration is optimal, to reduce the number of transactions. Because the District is presently performing stream restorations that contribute to stormwater reductions, and because EPA is removing the stream restoration alternative demonstration option, we are concerned the District's incentive to continue stream restorations where they are most needed could disappear. Accordingly, we urge EPA to accompany the outfall repair requirement with a requirement to prioritize District streams in need of restoration and pair those streams with that outfall repair requirement.

Second, commenters urge EPA to raise the minimum number of outfall repairs required in this permit. The 2023 Draft Permit only requires the repair of 20 outfalls, compared with 50 outfall repairs, or substitute demonstrations, required in the 2018 permit. While the District is likely to only complete the repair of nine outfalls during this current permit term (and use alternative demonstrations to make up the balance), EPA has made no showing that 20 outfall repairs is the maximum extent practicable, or otherwise justified this backsliding.

EPA Response to Comment 22:

EPA appreciates commenters' support of removal of the ability of the Permittee to substitute a portion of the outfall repair requirement with an alternative pollutant reduction calculation. The purpose of this permit requirement is to ensure that outfalls in need or repair are actually being mended and/or replaced as appropriate.

EPA notes, however, that stream restoration projects will still count toward the overall acres managed requirement. As a result, there is incentive for the Permittee to complete those types of projects, but there is no specific requirement to perform stream restoration in this permit.

As part of the MEP determination, EPA reviewed the planned upcoming stream restoration projects in the District for the next permit term and the associated outfall repairs/replacements that were anticipated to take place as part of those projects. As explained in the Fact Sheet in Section 3.3.5, there are approximately 24-30 outfalls proposed to be repaired and/or replaced as part of those projects; however, the projects may not all be completed before the end of the permit term. Therefore, EPA

has concluded that 20 outfalls is an adequate number of outfalls to be completed by the end of the permit term.

Further, EPA feels that although the number of required outfall repairs may at first seem significantly lower (20 compared to 50), the District was not able to even come close to achieving that level of implementation in the last permit term. In fact, the District only completed 9 outfall repairs during the previous permit term (though it was able to comply with the permit requirement by making up the remainder with equivalent pollutant reduction via stream restoration projects). The MS4 program is an iterative process, whereby the continual course of evaluation and assessment must be revisited with each permit cycle. EPA does not intend to increase the number of outfalls simply because that was what was in the previous permit. EPA has carefully considered planned future projects and decided what is practicable for the next five years.

3.3.6 Maintenance of Conveyance System Piping Infrastructure

23. Comment, DC Water

This section seeks to address maintenance of the District's MS4 pipe infrastructure. DC Water requests the modification of the text shown in redline/strike-out below as follows:

> By ~~July 1, 2027~~ the end of the permit term, the Permittee shall develop a program to inspect ~~(no less than once every five years)~~ and clean the conveyance system piping infrastructure on a rotating basis of sufficient frequency, which shall be outlined in the program, to mitigate sedimentation and prevent obstruction of the conveyance system piping infrastructure. The program shall give priority to areas with known or suspected sedimentation and areas where the conveyance system discharges to waterbodies impaired by toxics such as PCBs, which are known to be found in legacy sediments. The Permittee shall implement the program upon its completion. The Permittee shall continue to perform its existing inspection and cleaning program until that time.

There are more than 500 miles of MS4 conveyance piping in the District. Pipe diameters typically range from 18 inches to more than 10 feet in diameter. In addition, the storm sewers are configured in a variety of different hydraulic configurations ranging from steep slopes in upland areas to flatter sloped in areas which are subject to backwater from river tides. We can't overemphasize what a complex planning, technical, and operational challenge it is to inspect and clean this massive and disparate system. These challenges are exacerbated by a nationwide shortage of front line environmental workers who will be needed to perform this work.

Experience has demonstrated that storm sewers warrant different inspection frequencies based upon a number of factors including, but not limited to: the risk of blockage or failure; consequence of blockage or failure; history of issues; size, type of

material; date of installation; and other factors. Rather than a one-sized-fits-all inspection frequency, we believe the District can accomplish better outcomes such as reduced flooding, greater system reliability, and greater environmental protection (i.e., pollutant reduction) if it has the discretion to develop a tailored/dynamic inspection program rather than inspecting all storm sewers on a five year schedule.

The proposed language would require the Permittee to continue its existing inspection and cleaning program while preparing a written plan to identify enhanced inspection and cleaning frequency of the wide variety of storm sewers comprising the District's MS4. The plan would be developed based on sound engineering data and, most importantly, the District's operating experience. The plan would consider data including the size of asset, pipe slope/velocity, presence of backwater from river tides, pipe material, purpose of asset (local sewer, interceptor, trunk sewer), data on past inspections and cleaning, data from the maintenance management system regarding trouble calls, known inverted siphons or other pipe configurations and other factors. Evaluation of these data would enable development of a scientifically sound plan based on good engineering judgment. In addition, we envision data collected subsequent to plan development would allow refinement of the frequency on an asset or asset-class basis for optimization in an adaptive management manner.

Adopting a minimum frequency prior to development of such a plan is premature and will require expenditures of a large number of resources (more than 100 miles of pipe per year) without accomplishing optimal inspections. As an example, large diameter pipes on steep slopes in upstream areas are highly unlikely to require inspection/cleaning at five-year intervals. Experience with the sanitary/combined system has shown that frequencies tailored to the asset class and configuration are a more effective and efficient way to proceed. Adoption of a minimum frequency of once every five years for such a large and diverse MS4 system absent data that warrants such frequencies will likely have us over inspecting certain assets/asset classes while under inspecting other assets/asset classes.

We ask that EPA allow the District this important flexibility to optimize its inspection program in this permit renewal. EPA might require a report by the District in four or five years following plan development and implementation, on the efficacy of the flexible/dynamic/adaptive inspection approach as compared to a one-size-fits-all five-year requirement.

In addition, we request that the time for development of the program be modified to the end of the permit term rather than July 1, 2027. This establishes a deadline triggered by issuance of the permit and therefore accounts for unknowns regarding when the final permit will be issued and the final language in the permit given public comments on the draft. In addition, it provides adequate time to develop the program on a data-driven basis for a large system (more than 500 miles).

EPA Response to Comment 23:

The Final Permit has been revised and the inspection frequency removed to allow for the Permittee to determine the appropriate frequency while it develops the program. Nevertheless, the Final Permit requires that the program be completed no later than four years from the effective date of the permit, rather than the end of the permit term, so that information contained in the program can be used by EPA to inform the next iteration of the permit.

24. Comment, DOEE

Maintenance of the MS4 conveyance system is DC Water's responsibility, whose staff are leading experts in their fields. Their staff, which has years of experience with inspecting and maintaining the 500+ miles of storm sewers, believes an arbitrary inspection and maintenance schedule of "no less than once every five years" is not prudent or environmentally defensible. The District agrees with this assessment. DC Water still intends to prepare a written plan to identify the inspection and cleaning frequency that reduces flooding, provides for greater system reliability, and protects receiving water bodies. This plan will be tailored to the various pipe diameters, configurations, and slopes to identify the appropriate inspection/maintenance frequencies that achieve the best outcomes and are operationally feasible. Accordingly, the District requests the removal of the text "no less than once every five years" from the first sentence of Section 3.3.6. Additionally, the District requests the deadline of July 1, 2027, be replaced with "by the end of the permit term" in order to provide adequate time for plan development.

EPA Response to Comment 24:

See Response to Comment #23.

3.3.7 Street Sweeping

25. Comment, Earthjustice et al (footnotes removed)

The street sweeping requirement must be increased because it does not meet the MEP standard.

The 2023 Draft Permit includes the same requirement for street sweeping in the 2018 permit, a minimum of 8,000 miles per year. This requirement must be increased because it continues an unlawful backsliding from 44,000 miles per year to 8,000 miles per year in the 2018 permit, and it does not satisfy the MEP standard because the District is already conducting far more than 8,000 miles of street sweeping per year.

EPA maintains that because the District was piloting its georeferencing-based street sweeping system in 2019-2022, and because Covid interfered with street sweeping during this time, it is "difficult to interpret" the numbers of miles of streets swept. For this reason, EPA is keeping the 2018 permit requirement of 8,000 miles the same. But the District has been able to report exact numbers of streets swept in the MS4 area for

2019-2022, and those annual numbers are higher than 8,000 miles in all years except 2021 (when the District only swept 6,119 miles, but the street sweeping program was suspending for a portion of the reporting period due to Covid). In 2022, the District swept 11,995 miles, in 2020 the District swept about 8,195 miles, in 2019 the District swept 12,606 miles. Clearly, the District can, and consistently does, sweep more than 8,000 miles of streets annually. Because neither EPA nor the District has identified any information indicating this current level of effort is not practicable to sustain, the 8,000 mile requirement for street sweeping must be increased.

EPA Response to Comment 25:

To the extent that this is a comment on the 2018 permit, that permit has been finalized for five years and is not open for public comment. As discussed in the Fact Sheet Section 3.3.7 for the 2023 permit, EPA has revised this requirement based on information obtained from Annual Reports for the years 2019-2022 and as part of the wholistic MEP analysis and determination. The Final Permit now requires the Permittee to sweep no less than 10,932 miles annually in the MS4 Permit Area, which is an increase from the proposed 8,000 miles in the draft permit.

3.3.9 Snow and Ice Management

26. Comment, DOEE

The District recognizes the impacts that road salts have on receiving waters and downstream infrastructure and is poised to make incremental changes to snow management operations based on the results of the road salt alternatives pilot. However, identifying and implementing any significant changes to the District's snow management operations within one year is not feasible due to planning, cost, and staffing considerations. The District requests clarifying the language in the permit allowing for incremental changes to the snow management operations to be based on the results of the road salt alternatives pilot. The District also requests the deadline of December 1, 2026, in this section be changed to read "no later than one year after completion of the road salt alternatives pilot."

EPA Response to Comment 26:

EPA understands DOEE's concerns with this provision and agrees to change the permit language as requested. Accordingly, Section 3.3.9.2 of the Final Permit has been revised to read as follows:

> "Per the requirement to continue the pilot program to investigate alternatives to improve water quality as described in Section 2.6 of this permit, should pilot results show that an alternative is operationally and financially feasible, the Permittee shall begin implementing new ice and snow management procedures and practices as outlined in the District Snow and Ice Removal Plan no later than one year after the completion of the road salt alternatives pilot."

3.5.3 Inspections

27. Comment, DOEE

The draft permit's schedule for routine compliance monitoring inspections is based on those included in the Construction General Permit (CGP) and is not appropriate for DOEE's construction inspection program. The District's regulatory thresholds are substantially lower than the CGP's 1-acre of land disturbance threshold, with local stormwater management requirements being triggered upon 5,000 square feet of land disturbance, and erosion/sediment control requirements being triggered upon 50 square feet of land disturbance. As a result, DOEE's construction inspection team inspects substantially more projects than those covered under the CGP. Adhering to the CGP's requirements for inspection timelines would require significantly increasing staff capacity for negligible environmental benefit. The District requests section 3.5.3(c) be revised to read as follows:

"Routine compliance monitoring inspections throughout the duration of land disturbing activity performed on a schedule based upon project and activity phases that ensures compliance with erosion and sediment requirements."

In addition, DOEE interprets the language in Section 3.5.3(e) to mean the final inspection may not take place until "full stabilization" (e.g., all plants are fully established, grass is grown, any expected settling of materials is complete, etc.). Currently, final inspections are conducted when construction of a project is complete and all erosion and sediment requirements in the project's permit have been met. The District requests this section be revised to read as follows:

"DOEE issues a final approval notice upon full compliance with the project's erosion and sediment control plan and completion of land disturbance activities."

EPA Response to Comment 27:

In the Final Permit, EPA specifies separate procedures for inspections based upon the size threshold of construction sites. Those that meet the District's local 5,000 square foot threshold incorporate the comment above from DOEE, while those that disturb greater than one acre mimic the federal requirements that are similar to EPA's Construction General Permit. See also the discussion in Section 3.5 of the Fact Sheet.

3.9 Stormwater Training

28. Comment, DOEE

The District government firmly recognizes the importance of incorporating diversity, equity, inclusion, and justice (DEIJ) practices into all programs. However, the language proposed in the fourth paragraph of Section 3.9 presents several challenges.

First, there are a wide variety of positions within District government whose job functions support compliance with the MS4 permit. While DOEE does require racial equity training for all staff, it may be a significant challenge for other agencies to do the same. For instance, will the Department of Public Works (DPW) be expected to develop and provide CWA-specific DEIJ trainings for snow plow or trash truck drivers? Will the Department of Small and Local Businesses need to train their street ambassadors?

Second, DOEE's racial equity training does not intersect with Clean Water Act objectives, and aligning DOEE's DEIJ goals and efforts with how pollutants discharge through the District's separate storm sewer system is not obvious or clear. Determining appropriate DEIJ material (and audiences) for CWA-related training will take time and resources. The District requests this section to be revised to read as follows:

"By the end of the permit term, the Permittee shall conduct an inventory of all existing Clean Water Act-related training programs and identify which of those would be appropriate for including diversity, equity, inclusion, and justice content. Additionally, the Permittee shall develop appropriate DEIJ content for, and incorporate that content in, those identified training programs."

EPA Response to Comment 28:

EPA has taken this comment into consideration and has revised the paragraph in Section 3.9 accordingly. The Final Permit requires the Permittee to conduct an inventory of existing CWA-related training programs and identify those programs that would be appropriate for inclusion of DEIJ content within three years of the permit effective date. In addition, one year after completion of the inventory, the Final Permit requires the Permittee to develop appropriate DEIJ content and incorporate that content into the identified training programs.

Draft Permit Part 4: Water Quality Assessment

4.4.1 Maintaining the Receiving Waters Assessment Program

29. Comment, DOEE

The District requests Section 4.4.1.2's reference to the Maryland Biological Stream Survey be removed because our protocols are modified versions of the MBSS protocols. The District requests this section be revised to read as follows:

"The Permittee shall ensure that all receiving water assessment activities required by this permit adhere to those documented in the QAPP."

EPA Response to Comment 29:

EPA agrees with this comment and has revised the Final Permit in Section 4.4.1.2 to require the Permittee to follow the protocols outlined in its approved Quality Assurance Project Plan (QAPP).

4.4.2 Receiving Water Quality Sampling

30. Comment, Earthjustice et al (footnote removed)

Chloride should be added back to the list of receiving water quality sampling parameters.

In Table 9 of the 2023 Draft Permit, EPA removed chloride from the list of receiving water quality sampling parameters, compared with the 2018 permit. EPA has not explained why this parameter is no longer necessary to sample, nor has the agency addressed the potential negative effect this revision will have on the public's ability to compare apples to apples when assessing water quality changes over time. Accordingly, commenters request that EPA add chloride back to the list of pollutants sampled in receiving waters.

EPA Response to Comment 30:

The information to support the removal of chloride from the list of sampling parameters was inadvertently omitted and has been included in the Fact Sheet discussion for Section 4.4.2.

Draft Permit Part 7: Other Requirements

7.3.2 Environmental Justice Considerations

31. Comment, DOEE

Section 7.3.2 requires the District to develop a strategy to support diversity, equity, and inclusion into Clean Water Act objectives in the MS4 Permit Area. In order to streamline reporting requirements, the District requests to submit the strategy with the 2027 Annual Report instead of December 31, 2027. This deadline should also be reflected in Table 2 in Section 2.8.

EPA Response to Comment 31:

EPA concurs with this comment and has made the appropriate revisions to Section 7.3.2 and Table 2 in Section 2.8 of the Final Permit.

32. Comment, Earthjustice et al (footnotes removed)

Commenters strongly support EPA's addition of an environmental justice section to the 2023 Draft Permit. We also appreciate that EPA has required that the District use the findings of its BMP distribution analysis to prioritize the implementation of future stormwater projects. Because this permit provision does not explain the contents of the BMP distribution analysis or specify the criteria used for prioritization, this provision

should be clarified to ensure the District is required to implement future stormwater projects in areas that are disproportionately burdened by pollution, including communities of color in the MS4 area. Without this clarification, it is not clear that this requirement would further environmental justice goals and reduce pollution for overburdened communities. In addition, we recommend that EPA require public reporting on this prioritization of BMPs, including reporting on the demographic makeup of residents who are benefiting from BMP installations.

Commenters also support the draft permit's requirement to develop a diversity, equity, and inclusion "strategy" by 2027. However, we worry such a four-year-long paper exercise will be insufficient, alone, to address the inequities present in the District's distribution of pollution and pollution reduction projects. Below, we include some specific ideas for concrete actions that would tackle these injustices.

The District's fish consumption rate should be increased to between 120-142.4 g/day, and ambient water quality criteria tightened accordingly.

EPA should consider requiring the District to increase its fish consumption rate to between 130-142.4 g/day, based on the consumption rates of subsistence fishing communities within the District and the impacts stormwater pollution has on the safety of eating fish caught in District waters. Subsistence fishing along the Anacostia and Potomac rivers, practiced for generations by many Black residents, continues to be an important way to combat food insecurity in the DMV area, including in the District. And for Piscataway people, fishing along the shorelines of the Potomac is an activity that is intrinsically tied to their cultural identity and their traditions. Some of the more popular destinations for subsistence fishers in the District include Anacostia Park, where the majority of anglers fish throughout the entire year. It is estimated that at least 17,000 people in the lower Anacostia eat fish from the river every year. Fish harvested from the Anacostia is not only consumed by the anglers who catch them and their families. Instead, studies show that there is a "widespread sharing of fish in extended social networks." A 2015 subsistence fishing survey on the lower Anacostia showed that 7% of respondents ate fish from the river every day, and 35% ate river fish at least once per week or more. And 39% of all participants reported eating all or most of their catch. This is why EPA recommends the use of "default fish consumption rates of . . . 142.4 g/d for subsistence fishers." In fact, because fish consumption rates among subsistence fishing communities often vary significantly, EPA recommends that agencies conduct local studies to identify the consumption rates for "groups that might be at greater risk of exposure to contaminants in fish due to higher consumption rates, such as subsistence fishers." Because stormwater pollution affects the health of the fish in District waters and of the subsistence anglers who eat these fish, raising the District's fish consumption rate and its attendant benefits for water quality would combat the disproportionate pollution burdens falling on subsistence anglers, who are predominantly Black, Indigenous, and People of Color.

1. Flood management is a matter of environmental justice

   While federal properties along the National Mall and at Joint Base Anacostia-Bolling might have the most exposure to tidal and riverine flooding, residential neighborhoods in the District are most vulnerable to inland storm-driven flooding. One of the MS4 neighborhoods most at risk in the entire city is the Watts Branch watershed in Ward 7. The District has recognized the unique high risk of Watts Branch, where 266 buildings are in the Special Hazard Area (100-year floodplain) and 119 are in the even more hazardous 25-year flood plain, with modeling showing that even more will be at risk in the future due to climate change. Ward 7's demographics of 91% Black and 21.5% of families living in poverty (twice the District's overall rate) make the unique threat of flooding that occurs in Watts Branch also an environmental justice issue. The District should continue to accelerate flood management studies, policies, and programs, with a particular continuing focus on the Watts Branch watershed.

EPA Response to Comment 32:

EPA appreciates commenters' support for inclusion of an environmental justice section in the Final Permit. EPA notes that the permit does require the Permittee to incorporate the findings of its BMP distribution analysis as one of the criteria for ranking projects for future implementation. See Section 7.3.1 of the Final Permit. EPA has included a presentation that provides an overview/explanation of the analysis in the Administrative Record for the Final Permit. EPA also notes that public reporting on this prioritization of BMPs, including reporting on the demographic makeup of residents who are benefiting from BMP installations, is part of the District's story map.

With respect to the other aspects of the comment, EPA notes that:

(1) Increasing the District's fish consumption rate and tightening ambient water quality criteria are outside of the purview of the MS4 permit. As such, EPA has not made the requested changes to the permit.

(2) EPA recognizes that flood management is important as has included an entire section of the permit to address this issue. Once the District's comprehensive flood model is completed, EPA can work to ensure that areas such as Ward 7 that were featured in this comment, are identified as areas for the development of stormwater management plans. Furthermore, some of the bacteria reduction activities required in Section 4.5.2 of the Final Permit are located in the Watts Branch watershed.

33. Comment, Merchant Wentworth

We appreciate the efforts of the U.S. Environmental Protection Agency ("EPA") and the District of Columbia ("District") to improve the District's MS4 stormwater management program. While the 2023 Draft Permit includes some positive changes, it fails to require the level of stormwater management the District is capable of, and must achieve, in order to meet legal pollution limits and restore clean water for District residents as

quickly as possible. We urge EPA to work with the District to strengthen this draft permit and curb stormwater pollution to the maximum extent practicable, as required by the Clean Water Act.

Looking at the overall water quality of District's waters, there is reason to be optimistic. For example, DC Water has made great progress in stemming combined sewer overflows (CSOs) and collecting trash to Anacostia through its Clean Rivers Program. The final segment of the Northeast Boundary Tunnel will likely go into operation in the spring of 2023. The tunnel now in planning for Piney Branch, when completed in March of 2030, will dramatically reduce overflows from the largest pollution source on Rock Creek. Similarly, the Potomac tunnel, when completed in 2030, will also cut combined sewer overflows to the Potomac.

In addition, DC Water, working the Department of Environment and Energy (DOEE), has undertaken sewer rehabilitation and stream restoration efforts in a variety of tributaries including Fenwick, Portal, Pinehurst and Soapstone in the Rock Creek watershed, as well others in the Anacostia and Potomac watersheds. All of this work will result in water quality improvements.

Yet despite all these efforts, water quality in both Rock Creek and the Anacostia will remain impaired. Stormwater pollution now remains the primary culprit that erodes water quality in these water bodies. Stemming that pollution is vital to reduce the health impacts posed by polluted water and deliver the water quality improvements that District residents deserve and should be the primary purpose of the stormwater permit we have before us.

Other commenters have observed the variety of shortcomings of the draft permit and we associate ourselves with the comments offered by Earthjustice on behalf several Washington DC environmental organizations. The purpose of this letter is to buttress those comments by detailing the need to increase the retention standard to 2 inches.

The present standard of 1.2 inches of retention is clearly inadequate to protect the resource. Crippled by a variety of exemptions, this level has failed to result in water quality improvements. While ideally, closing these exemptions would be hugely helpful towards making progress, we hold out little hope that the District would take these actions. In lieu of these improvements, we suggest that increasing the retention standard is the quickest and easiest way to reduce stormwater pollution in the District.

In the 2020 MS4 Annual Report, DOEE offered two reasons why the 2 inch standard would be prohibitive -- both bogus.

For example, DOEE claimed that the cost of the 2 inch standard would be very high relative to the environmental benefit because a best management practice of attaining

1.2 inch manages 94 percent of the annual volume that would have been managed by 1.7 inches with the same drainage area.

But we fail to understand the logic of this claim.

It tells us nothing about the cost of retaining 2 inches. Moreover, using a percentage of an annual volume ignores the environmental impact of each storm.

In another example, DOEE claimed that "feedback from the project development community " indicated that many regulated projects struggle to meet the current 1.2 inch standard. This is outdated news. EPA, in their response to comments in 2018, observed that DC's development community now has several years of experience with some of the most innovative stormwater regulations in the country. My personal experience with several developers during zoning discussions revealed that none of them had any trepidation about the 1.2 inch standard and in fact touted their compliance as part of the
"greening" of their projects.

A glance at the building permits issues over the years is instructive. In the District, between 2015 and 2022, the number of permits issued remained relatively static, ranging from a low of 47,907 during the pandemic year of 2022 to a high of 50,424 in 2018 - a difference of only 5 percent. While admittedly, all sorts of renovations are included in these numbers, we detect no discernible impact of stormwater regulations on the pace of development in the District.

DOEE's concern about costs, is refuted by their own Stormwater Management Plan. In that plan DOEE said:

"DOEE's primary regulatory focus in developing the Stormwater Rule was on major development projects, particularly relatively large new and renovated buildings and parking lots. *For these projects, the cost to design and install green infrastructure (GI) is minimal relative to total project costs*. (emphasis added).

In EPA's response to Comments in 2018 and the Consolidated TMDL Implementation Plan 5.2.3c and Figure 5-4 found that the evaluation of the efficacy of implementing a 2 inch standard as part of the modeling effort of developing the Consolidated TMDL Implementation Plan demonstrated that "noteworthy water quality benefits" would be achieved if this approach were implemented.

We urge EPA to strengthen the District's MS4 permit by proposing a 2 inch retention standard.

EPA Response to Comment 33:

EPA appreciates the positive feedback on the improvements to the stormwater program in the District to date. The MS4 process has always been and will continue to be one of an iterative nature, which is the continuous process of implementing, evaluating, revising, or adding new practices and programs to address stormwater pollution.

With regard to the request to propose a 2-inch retention standard, EPA has revised Section 2.2.4.3 in the Final Permit, which requires the Permittee to submit to EPA a detailed analysis (in the form of a study/plan/report, etc.) as to the effect that increasing the current 1.2" retention standard to 2" would have on water quality improvements and time to achieve WLAs. The study shall further consider cost compared to the environmental benefit to be realized should the standard be increased. This analysis shall build upon the evaluation of data and subsequent description provided in the attachment to the 2020 Annual Report.

34. Comment, Coalition to Prevent Stream Destruction (photos not included)
All stream "restoration" projects should be removed from the District's MS4 permit. Stream restorations do not address the root cause of stream erosion - the huge volume of uncontrolled upland stormwater runoff from impervious surfaces that are fire-hosing streams. As a result, stream restorations are being blown out across the region by large rainstorms. This renders them useless and a waste of taxpayers' money.

First and foremost, the term stream "restoration" is a misnomer since they do not actually restore streams (with some exceptions such as "daylighting" piped streams and concrete culvert removal). Most "stream restorations" convert sections of natural stream valleys into artificial, engineered stormwater conveyances. And to be clear, we do not oppose necessary utility or infrastructure protection projects (for example, for exposed sewer lines, fiber optic cables, stormwater outfall pipes, bridges, and roads) – these are not even "stream restorations."

Stream restorations fail due to uncontrolled or inadequately controlled stormwater. Adding insult to injury, since stormwater is not being controlled at its source (e.g., runoff from impervious surfaces such as roads, roofs, etc.), stream restorations have failed or will fail, especially given the more intense storms that are expected due to global warming. All the rocks, boulders, fill dirt, and soil stabilization fabrics brought in by these projects will eventually get blown out by future storms. A blow-out means the disruption of the armor-plating and stream bank engineering caused by large rainstorms. This renders them useless and a waste of taxpayers' money.

We are also concerned that "stream restoration" projects are proceeding without sufficient transparency in the selection process, without adequate public input, and without due consideration of, and preference for, upland (out-of-stream) alternatives that would protect our natural areas and streams by controlling stormwater within previously disturbed areas before even entering streams.

We cannot accept the loss of our irreplaceable natural resources to meet regulatory requirements when there are viable, non-destructive alternatives.

The complex web of interactions between fauna, flora, geology, and hydrology that interact in natural areas is irreplaceable and cannot be recreated by engineering projects using chainsaws, bulldozers, trucked-in rock rubble, and some replanted saplings to create artificial structures in our natural areas. We should be guided by the principal of "Do No Harm" in our stream valleys.

Just as the Chesapeake Bay has environmental value, so do the rich fauna and flora of our stream valleys. There are better ways to protect the Bay than by using so-called "stream restorations" to destroy existing streams and streamside forests and wetlands by utterly replacing them with engineered stormwater conveyances.

EPA Response to Comment 34:

The Final Permit does not contain any conditions that specifically require the Permittee to complete stream restoration projects. The Final Permit requires the Permittee to achieve 1,175 "acres managed" but does not require stream restoration to be used to meet this requirement. Therefore, EPA believes that no changes can be made to the content of the permit related to stream restoration that would address this comment.

Comments Received on July 2023 Draft

Many comments received during the second notice and comment period were outside of the scope of comments requested on the July 2023 draft permit as the Agency only sought comments on changes made between the January and July drafts. As such, these comments are technically outside the scope of public notice and comment. Specifically, comment numbers 35, 40, 41, 43, 47-49, 50-52, 55, 60, and 61 were outside the scope. That being said, the Agency has responded to most of those comments as appropriate below.

Draft Permit Part 1: Discharges Authorized Under this Permit

1.5 Discharge Limits

Compliance with Water Quality Standards

35. Comment, Earthjustice et al (footnotes removed):
EPA has not demonstrated that the best management practices in the Revised 2023 Draft Permit would be adequate to ensure compliance with water quality standards, as required by the Clean Water Act and its implementing regulations, as well as EPA's Environmental Appeals Board. Commenters accordingly request that EPA explicitly prohibit discharges that would cause or contribute to a violation of water quality standards, require periodic reviews of whether best management practices will meet water quality standards, and require the submission of supplemental best management practices if reviews show that water quality standards will not be met.

The District's MS4 discharges indisputably cause and contribute to violations of water quality standards. District reports and the 2022 Stormwater Management Plan show that existing conditions in the District's waters violate water quality standards and that those violations are caused in major part by stormwater discharges. The District's most recent draft listing of waters pursuant to Clean Water Act § 303(d) reveals that none of the thirty-six assessed waterbody segments support all designated uses, and accordingly all are impaired. Furthermore, this draft 303(d) list identifies "unspecified urban stormwater" and discharges from the MS4 system as the two top probable sources of impairment in District waters. Monitoring data confirms that violations of water quality standards are occurring. For example, the District's MS4 2022 Annual Report reveals that geometric means of all nine stormwater outfall samples for the wet weather monitoring program exceeded the water quality criteria for E. coli, most by enormous margins.

The Revised 2023 Draft Permit does not explicitly prohibit discharges that would cause or contribute to a violation of water quality standards, as it must. The 2023 Revised Draft Permit directs the District to "use its existing legal authority to control discharges to and from the MS4 to prevent or reduce the discharge of pollutants to achieve water quality objectives, including but not limited to, applicable water quality standards, and

all provisions of this permit." It also "[e]ffectively prohibit[s] pollutants in stormwater discharges or other unauthorized discharges to, from, and through the MS4 as necessary to comply with existing District of Columbia Water Quality Standards (DCWQS)." Finally, the draft permit requires that "[w]ith the annual report in the fourth year of the permit (2027) the Permittee shall provide a synopsis of progress made towards meeting all WLAs applicable to the DC MS4, and a summary of program elements that shall be enhanced in the updated SWMP to make timely progress towards Clean Water Act objectives and meeting the District's water quality standards." But none of these provisions is a legally acceptable substitute for "facts or technical analysis" in the record showing that the permit will in fact achieve water quality standards. Furthermore, the "effective" prohibition of pollutants in stormwater discharges or other unauthorized discharges is apparently based on the Clean Water Act's prohibition of non-stormwater discharges to the MS4, but it has been rendered in a form different from and potentially weaker than required under that "non-storm water" prohibition—which is absolute as set forth in the Clean Water Act. It is unclear what the cited language is intended to cover or how it is enforceable as a practical matter, particularly given other elements of the draft permit. Likewise, a requirement for the District to report out on progress towards making "timely progress" in meeting water quality standards in no way ensures those standards will not be violated.

EPA Response to Comment 35:

These comments are reminiscent, and in some parts identical, to comments made by some of these same commenters two permit cycles ago, on the 2011 draft permit. EPA does not agree with commenters that the permit does not prohibit discharges that would cause or contribute to a violation of water quality standards.

First, Section 1.5.2 of the Final Permit provides that the Permittee must "[e]ffectively prohibit pollutants in stormwater discharges or other unauthorized discharges to, from, and through the MS4 as necessary to comply with existing District of Columbia Water Quality standards (DCWQS)." If the District does not comply with this requirement, it would be in violation of the Permit. In addition, Section 1.4.1 of the Final Permit requires the Permittee to "use its existing legal authority to control discharges to and from the MS4 to prevent or reduce the discharge of pollutants to achieve water quality objectives, including but not limited to, applicable water quality standards, and all provisions of this permit." Moreover, Part 3 of the Final Permit describes the programs that the Permittee is required to maintain to achieve pollutant reductions, demonstrate progress toward achieving applicable TMDL WLAs, and meet other Clean Water Act objectives.

Second, EPA acknowledges that such standards attainment may not occur in its entirety during this Permit cycle. This is consistent with EPA's Phase II Stormwater Final Rule, National Pollutant Discharge Elimination System--Regulations for Revision of the Water Pollution Control Program Addressing Stormwater Discharge,64 Fed. Reg. 68722, 68731 (Dec. 8, 1999) (available at: http://cfpub.epa.gov/npdes/regresult.cfm?program_id=6&type=1&sort=name&view=all) ("At this time, EPA determines that water quality-based controls, implemented through the

iterative processes described today are appropriate for the control of such pollutants and will result in reasonable further progress towards attainment of water quality standards. See Sections II.L and II.H.3 of the preamble."); id. at 68753 ("EPA envisions application of the MEP standard as an iterative process."); id. at 68754 ("EPA also believes the iterative approach toward attainment of water quality standards represents a reasonable interpretation of CWA section 402(p)(3)(B)(iii).").

Some of these same commenters did not accept EPA's responses to their comments and challenged the Final 2011 permit. EPA and those commenters ultimately resolved the litigation via negotiated settlement which, in part, added the requirement found in Section 1.6 of this 2023 Final Permit stating that "Compliance with all provisions contained in this permit, including permit limits and final dates for the attainment of applicable TMDL WLAs, shall constitute adequate progress toward compliance with DCWQS and WLAs for this permit term" – that language has not changed since resolution of the 2011 litigation and the accompanying 2012 modification to the permit.

1.5.3.1 Numeric Acres Managed Limit

36. Comment, DOEE:
    Section 1.5.3.1 requires the District to achieve 1,175 acres managed over the course of the new permit term, which represents a substantial increase from the 1st draft (published January 1/31/23) and the 2018 permit. While the District has been successful in meeting the 2018 permit term's requirement to manage 1,038 acres, the actual total acres managed during the 5-year term is approximately 1,048 (including an estimated 116 acres managed during the 2023 reporting year and excluding the 129 acres managed in 2019 prior to the permit's effective date. Accomplishing the permit requirement by a slight 10 acre margin demonstrates how closely the 2018 permit's requirement represented the maximum extent practicable. DOEE believes the 1,175 acres managed requirement in the proposed permit to be both technically and economically infeasible, due to several factors explained below:

    1) Approximately 73% of the acres managed achieved during the 2018 permit term resulted from development and redevelopment in compliance with the District's stormwater management regulations. The District's regulations are among the strongest in the nation and serve as a model for other MS4 permittees. However, the amount of area these regulations control in any given year is entirely dependent on economic investment in the District for development and redevelopment, which are factors beyond the District government's control. As the District recovers from the COVID-19 pandemic, there is an observed downward trend in the acres managed through regulated development and redevelopment during the 2018 permit term (148 acres in Reporting Year (RY) 2019, 274 in RY2020, 122 in RY2021, 113 in RY2022, and an estimated 111 in RY2023). Should this trend continue into the next permit cycle, meeting a 1,175 acres managed requirement (and possibly even the current 1,038 acres

requirement) would likely prove impossible. DOEE reviewed development forecasts while updating its Consolidated TMDL Implementation Plan
and found that development activity over the next five years is likely to match levels from 2018-2023. As a result, DOEE sees no reason to expect regulated development will increase to keep pace with the proposed permit's increased requirement.

2) If development and redevelopment under the existing stormwater management regulations cannot be relied upon at levels similar to those observed during the current permit term. One way to increase performance would be to update the regulations. While DOEE continues to work toward this goal, doing so is unlikely to contribute meaningfully toward achieving the acres managed requirement during the next permit term. The District performed an evaluation of potential updates to its stormwater management regulations in 2020. One potential update identified was to lower the regulatory threshold below 5,000 square feet. However, a rulemaking process of this nature and subsequent phase-in of updated regulations would take several years. Therefore, the District likely would not realize any additional acres managed from such a policy change until the end of the upcoming 5-year permit term, at best. As a result, even a substantial change to the District's stormwater management regulations would not assist with achieving the proposed permit's increased requirement.

3) If regulated development under the District's current regulations or even potentially updated regulations cannot be relied upon to aid in meeting the proposed permit's increased requirement. One of the only remaining options for the District would be to increase voluntary stormwater management projects. During the 2018 permit term 27% of the acres managed achieved came from voluntary projects implemented by DOEE and sister agencies. Beginning in 2018, to help meet the then-new 1,038 acres managed requirement, District agencies prioritized "low hanging fruit" projects: relatively cost-effective and feasible to complete within the permit term. However, as more impervious acres are managed, the remaining opportunities for voluntary projects will be more challenging and costly. Increasing the acres managed requirement as opportunities for voluntary projects are fewer and more costly is again, technically and economically infeasible.

The District remains committed to retaining stormwater, reducing pollutants and achieving applicable water quality standards. District agencies achieved, and in some cases, exceeded every obligation from the 2018 permit, in spite of the impact of the COVID-19 pandemic on the District and the operations of its government. However, increasing the acres managed requirement to 1,175 exceeds what the District can accomplish in a 5-year permit term. Addressing the permit's new (and substantial) racial equity, flood management, and bacteria source management requirements will take considerable time and funding to complete. Beyond the resources required for these efforts, it will also become increasingly challenging to find areas within the District's MS4 to implement projects that address racial equity, flood management, and other community considerations while also maximizing stormwater management. Given the

challenges highlighted here and in light of the circumstances facing the District today, managing stormwater from 1,038 impervious acres in this next permit term is *already* a more stringent requirement than managing 1,038 acres from the 2018 permit term. Consequently, increasing the permit's performance requirement to manage 1,175 acres unnecessarily exacerbates those challenges and exceeds what the District can accomplish in a 5-year permit term.

Similarly, Section 1.5.3.1 requires 175 of the overall acres managed to be located in Public Rights-of-Way (PROW). This represents an increase of 105 acres from the 1st draft and 113 acres from the 2018 MS4 permit. The District requests that the PROW acres managed requirement stays as 70 acres as written in the 1st draft, which is still an increase from the 2018 permit. A significant portion of the PROW acres managed are achieved through development and redevelopment projects, over which the District has little control (see #1 above). Additionally, PROW projects have multiple uses competing for the same limited space, for example, stormwater, utilities, pedestrian traffic, and parking. Appropriately planning for, designing, and constructing PROW projects, considering these competing uses, takes considerable time and funding. As DDOT continues to retrofit the PROW, prioritizing the most feasible sites, remaining available areas for stormwater retrofits will become more restrictive and time intensive to implement (similar to #3 above).

EPA Response to Comment 36:

EPA understands that opportunities for implementation of stormwater controls depend somewhat on where and how much development occurs. However, as DOEE provided in its updated Consolidated TMDL Implementation Plan, it is anticipated that development will continue on the current trajectory and there also exist other programs and incentives in the District to supplement the implementation of stormwater BMPs associated with development activities. Based upon this information, as well as information from the annual reports from the previous permit term, EPA has determined that 1,175 represents a practicable limit for this permit term. See detailed discussion in the Fact Sheet section 1.5.

Regarding the number of acres managed in the PROW, EPA concurs that the District has little control over development and redevelopment, however that is not the only method to achieve the acres managed threshold. See also the discussion in Fact Sheet Subsection 1.5.3.1 regarding calculation of the acres managed requirement for the PROW.

See also Responses to Comments # 1, 2, 11, and 18.

37. Comment, Earthjustice et al (footnotes removed):

A. The 1,175 Acres Managed Standard Must be Increased.

Beginning with the 2011/2012 permit, the District's MS4 permits have included numeric performance standards for on-site retention of stormwater. This measurable, enforceable discharge limit is now a core requirement of the District's MS4 permits. But since 2012, the numeric on-site retention requirement has been progressively weakened with each permit, not strengthened as EPA recognizes must occur in order to eventually meet water quality standards in receiving waters. The version of the numeric on-site retention limit originally proposed in the 2023 Draft Permit, requiring 1,038 "acres managed," was an even weaker version of the same standard for 1,038 acres managed in the 2018 permit, which itself was weaker than the 2012 on-site retention standard. The Revised 2023 Draft Permit requires 1,175 "acres managed. While this increase in the numeric on-site retention limit is a good step forward, it still falls short of the Clean Water Act's maximum extent practicable ("MEP") standard.

The Revised 2023 Draft Permit does not comply with the Clean Water Act's MEP standard. Courts have held that the phrase 'to the maximum extent practicable' does not permit unbridled discretion. It imposes a clear duty on the agency to fulfill the statutory command to the extent that it is feasible or possible." While the term "practicable" is not defined in the municipal stormwater context, "practicable" as used in a different section of the Clean Water Act has been defined as meaning that technology is required unless the costs are "wholly disproportionate" to pollution reduction benefits. State hearing boards have applied this interpretation to the stormwater context as well. Neither courts nor EPA have taken the position that practicability is defined exclusively by what a permittee can achieve with its current level of funding. Here, there is ample evidence that DOEE not only can practicably achieve a higher level of on-site retention, but already is achieving a higher level of retention.

EPA has determined that 1,175 "acres managed" constitutes MEP for this permit term. But the District has previously achieved more than 1,175 "acres managed" in a five-year period. In the five-year period between 2016 and 2020, the District achieved 1,292 acres managed, which is an annual average of 258.4 acres. EPA points to no data demonstrating that 1,292 acres managed, or even more, cannot practicably be achieved in the next permit term. Absent some clear demonstration that the District can no longer practicably achieve at least this level of retention, a permit limit that is less than the current level of performance cannot meet the MEP standard.

To support the new acres managed figure in the Revised 2023 Draft Permit Fact Sheet, EPA inserted a new table with data on the acres managed during 2021 and 2022, which was not included in the originally proposed draft permit fact sheet. The average acres managed during 2021 and 2022 was substantially less than what was averaged during the previous two year and five year periods (172 and 183 acres in 2021 and 2022,

compared with 362 and 344 acres in 2019 and 2020, and an average of 258.4 acres per year in 2016-2020). As a result, the inclusion of 2021 and 2022 data in EPA's average of recent years' totals brings down the annual average to 235 acres managed, or a five-year total of 1,175 acres managed. But EPA does not explain why there was a substantial decrease in acres managed during 2021 and 2022, including whether the decrease was attributable to the effects of Covid-19. Because the 2021 and 2022 reporting periods ran from July 1, 2020 to June 30, 2022, the majority of the pandemic-related slowing of construction would have occurred during those reporting years. EPA has not explained why a return to the average rate between 2016-2020, at a minimum, is not practicable.

B. The Acres Managed limit lacks any objective performance standard

The Revised 2023 Draft Permit's numeric discharge limit was originally intended to apply to stormwater controls that "directly" retain stormwater through development and redevelopment projects, as well as retrofit projects, that result in 1.2 inches of retention.43 However, the limit is now so diluted that there is no numeric standard to which runoff from this area must be managed.

The Revised 2023 Draft Permit explains that no performance standard whatsoever will apply to the acreage target. Rather, any amount of retention will receive full acreage credit, even if it is significantly less than the 1.2 inch standard established in the development rules. In its examples of how projects will be assigned acreage credit under the 1,175-acre milestone, EPA reveals that any amount of retention will be granted full acreage credit (as long as the project satisfies any independently applicable standard), with no floor for the minimum amount of on-site retention required. In fact, EPA clarified that the standard may be applied to activities that do not fall under any numeric on-site retention standard whatsoever, such as voluntary homeowner installations of stormwater controls. Although the 1.2-inch standard still separately applies to regulated development and redevelopment sites, other types of projects will be given equal acreage credit despite achieving far less volume retention and pollution reduction. EPA makes no showing that this shortfall will be made up by projects that achieve more than 1.2 inches of retention. The formerly separate and distinct requirements of the 2011/2012 permit for tree planting, the voluntary RiverSmart incentive program, and green roofs were rolled into the acres managed limit in the 2018 permit, meaning actions taken under those programs could be counted toward the 1,038-acre milestone in that permit, despite the fact that they do not achieve 1.2 inches of direct on-site retention. This ability to count non-onsite retention programs towards the on-site retention standard continues in the Revised 2023 Draft Permit.47 Additionally, the formerly separate stream buffer and floodplain restoration program can now be counted towards the acres managed standard, diminishing the retention requirement further. In this way, the Revised 2023 "acres managed" milestone is weaker than the version in the 2018 permit.

The lack of any objective performance standard associated with the milestone itself violates the MEP standard. Because such a wide range of volume retention could be achieved through compliance with this mandate, there is simply no way for EPA to know whether it will result in the maximum practicable pollution reduction by the Permittee. Permitting agencies must "ensure that the measures that any given operator of a[n] MS4 has decided to undertake will in fact reduce discharges to the maximum extent practicable." Envtl. Defense Center v. EPA, 344 F.3d 832, 855 (9th Cir. 2003). Without any associated performance metric, the 1,175-acre milestone therefore results in "impermissible self-regulation."

C. The proposed 1,175 acre milestone eliminates the prior retrofitting requirement

The "acres managed" requirement in the 2018 Permit removed any obligation for retrofitting – a problem that continues in this Revised 2023 Draft Permit. The 2011/2012 permit required the District to both enforce its stormwater regulations on new development and redevelopment projects and implement 413 acres of retrofits on previously developed land, but the separate requirement for retrofitting was removed from the 2016 Draft Permit and replaced by the new "1,038 acres managed" milestone. For the 2018 permit's 1,038 acres managed requirement, this new requirement could be met without any retrofitting simply by enforcing the development rules against regulated third parties because more than 1,038 acres of new development and redevelopment were projected to occur in the District in the permit's five year term. Consequently, the 2018 permit was weaker than the mandates of the 2011/2012 permit, which EPA previously found to be practicable, without any explanation as to why the previous permit's level of effort was no longer achievable or appropriate. Unfortunately, the Revised 2023 Draft Permit continues this elimination of a separate retrofit standard. Given the urgency of reversing the current trend in increasing imperviousness, this unexplained and unsupported weakening of the District's acres managed requirement is clearly unlawful.

The reversal of course from the 2011/2012 permit regarding the elimination of a retrofit requirement—unsupported by any factual evidence or rational basis that explains why present circumstances justify a weaker requirement—is impermissible under the Clean Water Act's MEP standard. EPA must at a minimum establish a performance standard that is objective and quantifiable, and that equals or exceeds the mandates of the 2011/2012 permit by requiring the District to enforce its existing stormwater regulations for all new development and redevelopment and implement at least 413 acres of retrofits. Because MS4 permits should increase stormwater protections over time, though, EPA should require even greater stormwater volume reductions in this new permit.

EPA Response to Comment 37:

This comment, as submitted during the second comment period, is nearly identical to the same comment from the first public notice version of the draft permit. See Response to Comment #1.

In addition, EPA notes that it did increase the acres managed requirement after recalculating the metric, informed in part by comments these commenters made on the first draft of the permit. The acres managed requirement is clear and measurable, is built on a performance standard stated in District regulations, and is part of the wholistic analysis of what constitutes the "Maximum Extent Practicable". As EPA has stated numerous times, this analysis is done each permit term to determine, both at the level of individual metrics and overall permit requirements, the MEP for that permit term.

38. Comment, Wentworth Green Strategies:

The Revised 2023 Draft Permit includes some positive changes in acres managed as compared with the originally proposed 2023 Draft Permit. For example, we strongly support the increases in acres managed in public right-of-way ("PROW"). We observe that previously, DC Water rejected projects in the PROW because the relocation of utilities allegedly made the project's cost prohibitive. However, we believe that DC Water failed to adequately investigate the potential of applying green infrastructure (GI) construction techniques to alleys where the conflict between utility relocation would be minimized because most underground utilities are in the street and sidewalk areas. Therefore, the District's MS4 management program should dramatically expand its efforts to coordinate with the District Department of Transportation (DDOT) to install permeable paving and other GI measures when rehabilitating old alleys. Everyone loves to get new alleys. This would provide a popular solution to the potentially pesky problem of constructing stormwater retention projects in PROWs.

EPA Response to Comment 38:

EPA appreciates the commenter's support for this provision.

1.5.3.2 Numeric Tree Planting Limit

39. Comment, Earthjustice et al (footnotes removed):

The Number of Trees Required to be Planted Must be Increased Because it does not Meet the MEP Standard.

The Revised 2023 Draft Permit requires that 38,850 trees be planted in the MS4 area over the five year permit term, with an annual average of 7,770 trees planted. The draft permit also allows for this tree planting to be translated into "acres managed" and counted towards the acres managed requirement. In contrast, in the 2018 permit, the District was required to plant an average of 6,705 trees annually, for a total of 33,525 trees planted over the five year term. This increase in the tree planting requirement is

laudable. Yet, as with the acres managed requirement, the tree planting requirement cannot meet the MEP standard because the District has already achieved a greater amount of tree planting.

EPA concluded that an annual average of 7,200 trees could practicably be planted in the MS4 area in part based on the District's Urban Tree Canopy Plan and records of the District's tree planting efforts in the MS4 area from 2019-2022. The Urban Tree Canopy Plan calls for 10,800 trees to be planted annually across the entire district. EPA reasons that because the MS4 area represents approximately two-thirds of the District's entire area, it should establish the MS4 tree planting requirement at two-thirds of this 10,800 tree goal, or 7,200 trees. While this math may satisfy the Urban Tree Canopy Plan, it cannot satisfy the Clean Water Act because it does not meet the MEP standard.

In the originally proposed 2023 Draft Permit Fact Sheet, EPA included a chart that included tree planting information for the previous four years. In the years 2019-2022, the District has been planting an average of 8,188 trees per year, and 32,751 trees total during the four year period. This chart was also included in the Revised 2023 Draft Permit Fact Sheet, but the chart was expanded to include the years 2016 and 2017, during which time the District planted markedly fewer trees on average. The most recent four years presented in the originally proposed 2023 Draft Permit Fact Sheet would, if the average pace over those years this is continued in 2023, put the District on pace to plant 40,939 trees over this most recent five year period, or an average of 8,188 trees per year. In contrast, by adding the older data from 2016 and 2017 in this Revised 2023 Draft Permit Fact Sheet, EPA reasons that MEP should be based on the six-year total of 46,630 trees and average of 7,770.

While Commenters strongly support the tree planting increase proposed in this Revised 2023 Draft Permit compared with the initially proposed draft, EPA offers no explanation for why an annual average of 8,188 trees, based on the 2019-2022 data, cannot be sustained. In fact, just months ago, EPA conceded that it "has no information to suggest that the past four years have been an anomaly or that the average rate of tree planting cannot be sustained." EPA also correctly 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." Here, it is clear that it is practicable for the District to plant more than 7,770 trees each year during the upcoming permit term. The District achieved significantly more that this level of tree planting in three of the four most recent years. Thus, as EPA itself recognized, these higher numbers are not anomalies. Because EPA explicitly found that it has no information indicating this level of effort cannot be sustained, EPA cannot rationally conclude that this level of effort is not practicable.

EPA Response to Comment 39:

As EPA has already explained, and commenters accept, simply because the District has already achieved a greater amount of tree planting, does not mean that the limit in the

Final Permit is inconsistent with the MEP standard. As explained in the Fact Sheet (see discussion at Fact Sheet Section 1.5.3.2), EPA used available information from annual reports from 2016-2022 as well as the District's future planning for tree planting as part of the rationale for making its MEP determination. EPA also reiterates that the MEP analysis is a wholistic analysis of what the Permittee can do in any given permit term. The analysis of each provision (e.g., trees, street sweeping, etc.) is not done in a vacuum ignoring the requirements of each other provision. The permit requires an increase in almost every single sub-metric over the last permit term, and an overall increase in the acres managed requirement. EPA notes that this increase may not be sustainable from permit term to permit term; i.e., simply because EPA's MEP analysis has yielded increased numbers for this permit term does not mean that the analysis will have the same result in future permit terms.

1.5.3.3 Numeric Trash Reduction Limit

40. Comment, Earthjustice et al (footnotes removed):
The Amount of Trash Required to be Removed Must be Increased Because it Does Not Meet the MEP Standard.

The Revised 2023 Draft Permit requires that 108,347 pounds of trash be captured, removed, or prevented from reaching the Anacostia River in the MS4 area. This number is the same as the trash removal requirement in the 2018 permit. But EPA has not, and cannot, demonstrate that 108,347 pounds of trash removed represents the maximum practicable level of effort. The District has reported that it is annually achieving an average removal of 137,014 pounds of trash, and in 2021 and 2022, the District removed 163,847 pounds and 164,037 pounds, respectively. The District has further reported that it will continue these current trash removal practices, and has given no indication it cannot continue this pace of removal. Because the District is currently achieving far more than 108,347 pounds of trash removal, and neither the District nor EPA has identified any reason its current level of removal is not practicable to continue, 108,347 pounds of trash removal is not the MEP.

EPA Response to Comment 40:
This comment, as submitted during the second comment period, is nearly identical to the same comment from the first public notice version of the draft permit. See Response to Comment #4.

41. Comment, Earthjustice et al (footnotes removed):
The green roof requirement must be added back into the draft permit.

The Revised 2023 Draft Permit impermissibly backslides from the 2018 permit because it removes the requirement to install a minimum number of square feet of green roofs during the permit term. The 2018 permit required that the District install a minimum of 350,000 square feet of green roofs in the MS4 area during the permit term, as did the

2011 permit. This permit requirement must be added back in, and in fact increased, in order to meet the MEP standard. The District is already well exceeding the 350,000 square feet of green roof installation over five years minimum in the two previous permit terms. For example, in the most recent four year period alone, the District achieved 1,041,511 square feet of green roof installation. Neither EPA nor the District has provided any information to support a conclusion that this current level of effort cannot be sustained. As a result, EPA must add this requirement back into the permit, and increase it to at least match the current level of effort, in order to satisfy the MEP standard.

The removal of the green roof program also constitutes impermissible backsliding. EPA offers two justifications for this backsliding, neither of which is logical.

First, EPA reasons that the green roof requirement originated in a 2007 Letter of Agreement between EPA and the District, for a permit that is nearly fifteen years old. But the fact that the green roof requirement originated from an old agreement is irrelevant. If anything, the longstanding nature of the requirement strengthens the case for keeping it because it has successfully been implemented and proven practicable for many years.

Second, EPA states that because the District has already installed a "substantial number" of green roofs, "there is concern that the amount of space available for future additional green roof installation is limited." But the success of the program over the last two permit terms, and ability of the District to far exceed the minimums in those permit terms, does not justify removing the requirement. To the contrary, the ability of the District to nearly triple the minimum requirement over the last four years demonstrates, if anything, the practicability of continuing this requirement. Neither EPA nor the District has pointed to any data regarding the number of potential future green roofs remaining in the District to substantiate EPA's vague "concern" that this number might be small. In fact, the District indicated in its 2022 Revised Stormwater Management Plan that it intends to keep installing green roofs, and that "[p]roperties of all sizes, including residential, commercial, and institutional, are encouraged to apply." Furthermore, in its 2022 Consolidated TMDL Implementation Plan, the District notes that the installation of green roofs, along with other "retention-based BMPs," has increased since 2013. The District does not report any slowing trends or limits on available green roof sites in either of these relevant 2022 reports.

EPA Response to Comment 41:

This comment, as submitted during the second comment period, is nearly identical to the same comment from the first public notice version of the draft permit. See Response to Comment #5.

Draft Permit Part 2: Stormwater Management Program Planning

2.2.2.1 Bacteria Milestones and Benchmarks for the Next Permit Term

42. Comment, Earthjustice et al (footnotes removed):
While we strongly support the District's use of the bacteria source tracking studies to identify high priority bacteria sources, section 2.2.2 of the Revised 2023 Draft Permit impermissibly allows for self-regulation by the permittee because the District would be able to choose how it handles any high priority bacteria sources, without public input or EPA approval. Under the draft permit terms, the District would decide on its own whether there are high priority bacteria sources that need immediate implementation. If the District chooses not to identify any high priority sources, the District's proposed bacteria-related changes to the milestones and benchmarks would be shifted to the consolidated TMDL implementation plan process, where they would not even be proposed to EPA (much less approved) until fifteen months prior to the end of this MS4 permit term. This relegation of the bacteria source reductions to the consolidated TMDL implementation plan significantly delays any mandatory implementation requirements and allows the District to avoid taking action on the study results in the interim. We urge EPA to instead require the District to use the bacteria source tracking studies to identify high priority bacteria sources and implement bacteria source reductions from those sources during this permit term.

EPA Response to Comment 42:
Regarding the issue of self-regulation, see the Response to Comment #8.

Section 4.5.2 of the Final Permit contains the requirement for the Permittee to implement bacteria source reduction activities. These activities are based upon the results of bacteria studies that were conducted during the previous permit term. See also the discussion in the Final Fact Sheet Section 4.5.2 regarding this provision.

2.2.4 Updating Stormwater Management Regulations

43. Comment Earthjustice et al (footnotes removed):
The Revised 2023 Draft Permit lists the adoption of stormwater regulations for small area projects (presumably less than 5,000 square feet), as well as the revision of peak discharge requirements, as recommended updates. Commenters strongly support the adoption of regulations for small area projects because applying the retention standard to every site in the District, including the smallest sites, will be necessary to achieve all WLAs. We also strongly support the revision of peak discharge requirements in order to accommodate the larger, more intense storms we are seeing in our region due to climate change.

However, despite the fact that DOEE has determined these are cost-effective regulatory changes, EPA is not requiring these two regulatory changes, and is only requiring that

the District make the changes if it is feasible to obtain "pre-clearance." This permit approach inappropriately delegates to the Permittee the discretion not to proceed with implementing these regulatory changes.

EPA Response to Comment 43:

This comment, as submitted during the second comment period, is nearly identical to the same comment from the first public notice version of the draft permit. See Response to Comment #10.

2.2.4.3 Analysis of the 1.2" Retention Standard

44. Comment, Wentworth Green Strategies

The District's present retention standard of 1.2 inches is inadequate to protect the resource. The new draft permit term requires the District to provide an analysis of "why the current 1.2 inch retention standard continues to be the appropriate level of stormwater management in the District." In our view, this is precisely backward. Instead, the District should provide (a long overdue) analysis of why the District should raise the retention standard to 2 inches and the benefits that would accrue to Rock Creek and other water bodies. In fact, the District Department of Energy and Environment has already undertaken an evaluation of implementing a 2-inch standard as part of the modeling effort for the development of the Consolidated TMDL Implementation Plan and found that the 2-inch standard would bring "noteworthy water quality benefits." We ask, at a minimum, that the DOEE specifically study the effects of a 2-inch retention standard on water quality and wasteload allocations (WLA) timelines, particularly regarding Rock Creek and other streams that are predominantly affected by stormwater discharges. We have not seen any data from developers or others that suggest that a 2-inch standard would impose dire hardship on the industry. Our experience with development projects suggests that the majority of large developers achieve the stormwater standard through the use of cisterns. The incremental cost of building a bigger cistern to accommodate a 2-inch standard may not be significant in the overall cost of construction. A detailed study by DOEE that looks at the incremental costs as well as benefits that would accrue to the surrounding resource would help answer some of these questions.

In conclusion, we applaud the improvements suggested in the Draft Permit but strongly urge the agency to adopt language that requires the District to study the benefits to the resource of adopting a 2-inch standard.

EPA Response to Comment 44:

EPA concurs with this comment and has revised Section 2.2.4.3 of the Final Permit to require the Permittee to submit to EPA a detailed analysis (in the form of a study/plan/report, etc.) as to the effect that increasing the current 1.2" retention standard to 2" would have on water quality improvements and time to achieve WLAs. The study shall further consider cost compared to the environmental benefit to be

realized should the standard be increased. This analysis shall build upon the data evaluation and subsequent description provided in the attachment to the 2020 Annual Report.

45. Comment, Earthjustice et al (footnotes removed):
In a change from the 2018 permit, EPA is no longer requiring the District to consider increasing the regulatory stormwater retention volume from 1.2 inches to 2 inches. We urge EPA to require the District to revisit this regulatory change, especially in light of the District's predictions that WLAs will not be attained until the year 2189 under the current regulatory regime, and the urgent need to further decrease stormwater pollution to aid in the recovery of the endangered Hay's spring amphipod.

Commenters generally support the new draft permit term in this Revised 2023 Draft Permit that requires the District to provide an analysis of "why the current 1.2" retention standard continues to be the appropriate level of stormwater management in the District." But this requirement falls short of an instruction to analyze a retention standard of 2 inches and to consider increasing the regulatory retention volume to 2 inches. The current permit language puts a thumb on the scale for keeping the 1.2" retention standard and simply instructs the District to explain why it is keeping this standard. Such a requirement is insufficient and represents backsliding from the 2018 permit, which required consideration of a regulatory change to a 2 inch standard.

EPA previously recognized that "a 2 [inch] retention requirement would no doubt increase the amount of overall retention in the MS4 Permit Area," but found it was premature to make the increase in 2018 because additional analyses were needed. But in fact, DOEE already undertook an evaluation of implementing a 2 inch standard as part of the modeling efforts for the development of the Consolidated TMDL Implementation Plan, and found that the new standard would bring "noteworthy water quality benefits." Now, five years have passed and in contrast to DOEE's earlier assumptions, developers have become increasingly comfortable with some of the most innovative stormwater regulations in the nation. Indeed, in conversations with developers in 2022, none expressed the slightest trepidation about meeting the 1.2 inch standard and in fact touted their compliance as part of "greening" their buildings. But despite this, EPA is not even requiring consideration of a 2 inch standard in this draft permit, much less the needed increase itself. We ask that EPA add, at a minimum, a requirement that the District specifically study the effects of a 2 inch retention standard on water quality and WLA attainment timelines.

EPA Response to Comment 45:
See Response to Comments #10 and #44.

46. Comment, DOEE:
Section 2.2.4.5 requires the District to provide an analysis of why the current 1.2" retention standard continues to be appropriate. This exercise was completed in

compliance with Section 2.2.4 of the 2018 MS4 permit, where the District conducted an analysis of potential changes to the stormwater management regulations. This assessment was provided with the 2020 annual report. DOEE evaluated potential options to improve stormwater management through regulation changes, and two of those options were determined to be the most cost-effective and feasible opportunities: lowering the area threshold for regulated projects and revising the peak discharge requirements to account for changing precipitation patterns. While the District recognizes that increasing the retention standard from 1.2 to 2 inches could certainly have beneficial impacts on receiving waters, the reality is that many regulated projects already struggle to meet the 1.2" standard and must seek compliance with off-site retention. Additionally, given that the 1.2" standard represents the 90% storm in the District, raising the standard would become very costly for development projects with diminishing returns. Large stormwater management practices would not be fully utilized during most storm events. As already provided in the 2020 annual report's assessment, increasing the retention standard to 2" is not considered to be cost-effective. The District believes that pursuing the two identified regulatory changes is a better use of staff time during the upcoming permit period than re-analyzing the 1.2" standard, which is already among the strongest retention requirements of any U.S. city.

EPA Response to Comment 46:

The analysis that was undertaken by the Permittee to address the retention standard is not adequate for EPA to make a determination as to the impact that a 2" standard would have on District water quality. In the absence of such information, it is difficult, if not impossible, to determine whether the current 1.2" retention standard will remain adequate for future permit terms. Therefore, in the Final Permit, EPA is requiring the Permittee to submit to EPA a detailed analysis (in the form of a study/plan/report, etc.) as to the effect that increasing the current 1.2" retention standard to 2" would have on water quality improvements and time to achieve WLAs. The study shall further consider cost compared to the environmental benefit to be realized should the standard be increased. This analysis shall build upon the description provided in the attachment to the 2020 Annual Report.

2.7 Flood Management for Water Quality

47. Comment, DOEE:

Section 2.7.2 requires the District to complete the development of the FloodSmart Homes program. The District again requests this section be deleted because the FloodSmart Homes Program has no connection to the discharge of pollutants from the MS4 or water quality improvements in general. The program provides a free resilience assessment to homeowners regarding flood risk and installs free home flood-proofing and resilience upgrades such as electrical and mechanical equipment elevation, sealing of HVAC ducts, or installation of anchoring straps on water heaters, HVAC equipment, or other appliances. While the District will continue to implement the FloodSmart Homes program, it is inappropriate to include as a stormwater discharge permit requirement.

EPA Response to Comment 47:

This comment, as submitted during the second comment period, is nearly identical to the same comment from the first public notice version of the draft permit. See part (3) of Response to Comment #13.

48. Comment, Earthjustice et al (footnotes removed):

Commenters strongly support the requirements in the Revised 2023 Draft Permit to develop a comprehensive flood model by the end of the permit term, identify high-risk flooding areas, and establish a FloodSmart Homes Program by end of 2025. We urge EPA to strengthen these important flood management provisions further by requiring the development of a comprehensive flood model and identification of high-risk flooding areas by 2025, rather than the end of the permit term. We understand that the District has already begun work on these tasks, and it is important to bring relief to District neighborhoods affected by flooding sooner than 2028.

In addition, we support EPA's allowance for the District to use new climate-change adjusted Intensity, Duration, Frequency ("IDF") curves developed for the Chesapeake Bay watershed, so that the District need not duplicate the efforts of others and develop their own IDF curves.

EPA Response to Comment 48:

EPA appreciates commenters' support for these permit provisions.

This comment, as submitted during the second comment period, is nearly identical to the same comment from the first public notice version of the draft permit. See Response to Comment #14.

2.10 Application for the Next Permit Term

49. Comment, DC Water

This section requires submittal of a new permit application 270 days (9 months) prior to permit expiration. This conflicts with 40 CFR 122.21(d)(2) which specifies an application is due 6 months prior to expiration and that the deadline can be extended up to the permit expiration date at the discretion of the EPA Regional Administrator. We request that this section be modified to match the applicable regulation in 40 CFR 122.21(d)(2).

EPA Response to Comment 49:

This comment was outside of the scope of comments requested on the July 2023 draft permit as the Agency only sought comments on changes made between the January and July drafts. As was required in the previous permit term, the application for permit renewal must be submitted 270 days prior to the permit's expiration date to allow ample time to be able to review the materials and develop a draft permit prior to the expiration of the permit. The timeline for revision of the plans that form the basis for

the application (SWMP, TMDL IP) have also been established based upon this schedule.

Draft Permit Part 3: Stormwater Management Program Implementation

3.2.4 Implementing the Standard for Projects in the Public Right-of-Way

50. Comment, Earthjustice et al (footnotes removed):
Regulated PROW projects should be required to obtain off-site mitigation when they cannot achieve 1.2 inches of retention.

Approximately 25% of the impervious area in the District is in PROWs. As a result, it is critical that the District utilize all opportunities to manage stormwater through PROW projects. The Revised 2023 Draft Permit proposes to continue applying the same stormwater management requirement to PROW projects as in the 2018 and 2011/2012 permits: such projects must retain stormwater volume on-site to the maximum extent feasible, but they are not required to make up the remainder off-site or purchase SRCs if the on-site retention volume is less than 1.2 inches. This loophole for PROW projects should not be extended through another permit term.

Excusing PROW projects from making up their stormwater retention volume shortfall off-site fails to meet the MEP standard for MS4 permits. While Commenters concede that PROW projects may face special technical constraints that sometimes preclude them from achieving the full 1.2-inch retention volume on-site, neither EPA nor the District has made any showing why it is not practicable for the District agencies undertaking PROW projects to make up the remaining volume through either off-site mitigation projects or the purchase of stormwater retention credits from other entities who install retention practices.

EPA attempts to compensate for the loophole by requiring PROW projects to achieve more than 1.2 inches of retention on-site if feasible. While we disagree that it makes up for the failure to require off-site mitigation on sites that fall short of 1.2 inches, we agree that sites that can go beyond 1.2 inches should be required to do so. However, the proposed language in the Revised Draft Permit does not clearly require PROW projects to do this. The proposed text merely states that “these projects are subject to design and site plan review requirements to ensure “maximum extent practicable” combinations of on-site SWRv, water quality treatment, and design options, including in some situations stormwater management of more than the 1.2” volume.” If EPA intends to mandate that PROW projects retain more than 1.2 inches when feasible, it must clearly say so, including by defining the “situations” in which it is required. As it stands, the Revised 2023 Draft Permit language is impermissibly vague on this point. However, even if the proposed condition were clarified, it is still irrelevant to any findings about the practicability of off-site mitigation and cannot make up for the existence of the loophole.

Finally, in its 2018 response to comments on this issue, EPA points out that closing a different PROW loophole, for stormwater management in PROW projects less than 5,000 square feet, would bear greater stormwater reduction gains for the District. But the District has not yet adopted stormwater regulations for small PROW projects, and it is unclear if or when such a regulatory change will occur. More importantly, the District should be required to address both regulatory loopholes. There is no need to maintain one loophole so that the District can close another. EPA also noted in 2018 that future permits could include off-site mitigation requirements for PROW projects, but that EPA wanted to wait until further study of the "most cost-effective advances" was conducted. It is unclear whether the District has conducted any studies regarding the cost-effectiveness or benefits of requiring off-site mitigation for regulated PROW projects that do not achieve 1.2 inches of stormwater retention. Because neither EPA nor the District has identified any information indicating it is not practicable for the District to close this loophole, EPA should add this requirement to the permit.

EPA Response to Comment 50:

This comment, as submitted during the second comment period, is nearly identical to the same comment from the first public notice version of the draft permit. See Response to Comment #18.

3.2.3 Stormwater Retention Credit Program

51. Comment, Earthjustice et al:

The High Impact Rule must be implemented to strengthen the Stormwater Retention Credit Program.

The stormwater retention credit trading program is an innovative approach to stormwater management that could yield additional pollution reduction benefits, but only if properly structured. The District's failure to implement the proposed High Impact Rule is presently limiting the ability of voluntary projects in the MS4 to survive on the market. The High Impact Rule would require developers to buy credits from new voluntary projects constructed in the MS4. Currently, projects that were previously constructed and grandfathered in are able to undercut the market pricing and potentially drive out new stormwater projects. The proposed High Impact Rule would further the goal of the market to encourage new stormwater projects in the areas where they would have the most impact. Accordingly, we urge EPA to require that the District implement the High Impact Rule.

EPA Response to Comment 51:

This comment, as submitted during the second comment period, is nearly identical to the same comment from the first public notice version of the draft permit. See Response to Comment #17.

3.3.2 Industrial Activities at Municipal Operations

52. Comment, Earthjustice et al (footnotes removed):
The requirements for industrial activities at municipal operations should be strengthened.

Commenters generally support the Revised 2023 Draft Permit's requirements for industrial activities at municipal operations in section 3.3.2 and urge EPA to strengthen these requirements further. In June 2018, EPA entered an Administrative Order on Consent ("AOC") regarding the District's violations of its MS4 permit and the Clean Water Act. One of the key violations identified in this AOC was the District's failure to implement required good housekeeping practices, ensure the proper operation of stormwater treatment management practices, and implement an annual inspection schedule at municipal facilities in the District. While some improvements have been made pursuant to the enforcement of this AOC, much work to remains to address basic stormwater management deficiencies at District industrial facilities.

Publicly available information in EPA's ECHO database shows that District agencies continue to fall short on stormwater management, and numerous District industrial facilities continued in 2022 to exceed benchmarks for concentrations of pollutants in stormwater. The District's 2022 annual MS4 program report under the AOC reveals that "the completion of routine maintenance according to the approved SWMP's schedule is an ongoing challenge," and that some BMPs at District facilities are in "poor condition and require maintenance." The District further reports that some of its industrial facilities continue to struggle to implement good housekeeping measures and to implement their stormwater pollution prevention plans ("SWPPPs"). For example, "[s]ome facilities are still working to purchase the tools and materials needed to implement their SWPPP, such as secondary containment and storage containers." Alarmingly, the report also reveals that when stormwater spills and violations occur that require corrective actions, "many corrective actions remain[ed] unaddressed for over 45 calendar days" due to "District procurement processes and scarcity of funding."

The District's continuing struggle to achieve basic stormwater management implementation at District industrial facilities underscores the need to strengthen this section of the District's MS4 permit. Commenters urge EPA to 1) require that the District conduct quarterly, rather than annual, inspections at District facilities that have violated any benchmark monitoring limits under the multi-sector general permit, and 2) require that the District commit specific funding for individual District agency stormwater management funding requests.

EPA Response to Comment 52:
This comment, as submitted during the second comment period, is nearly identical to the same comment from the first public notice version of the draft permit. See Response to Comment #19.

3.3.4 Catch Basin Operation and Maintenance

53. Comment, DOEE:

Section 3.3.4.1 requires the District to operate a catch basin maintenance program. This program is DC Water's responsibility. The initial draft permit required a catch basin to be cleaned within 21 days of inspection if it is determined to require cleaning, and this second draft permit requires cleaning to be completed within 30 days. The District requests the permit draft to read "as soon as possible but no later than 45 days" to accommodate DC Water's operations that occasionally need to prioritize more urgent matters (e.g., buildings with no water, flooding, etc.) over catch basin maintenance.

EPA Response to Comment 53:

This comment, as submitted during the second comment period, is nearly identical to the same comment from the first public notice version of the draft permit. See Response to Comment #20.

54. Comment, DC Water:

The first draft of the permit required cleaning catch basins within 21 days if they are found to require cleaning after inspection. The second draft of the permit increased this time to 30 days. DC Water requests changing the time for cleaning to 45 days. The Authority uses a work order system to perform maintenance tasks and to respond to customer service calls. The Authority prioritizes these tasks based on their urgency and impacts to customers. As an example, a customer reporting a service issue (no water, building sewer not working) or flooding will receive higher priority than other matters. An individual catch basin with debris that requires cleaning does need to be addressed, but, in the majority of cases, can be addressed after more urgent customer service issues are investigated. In addition, there are more than 15,000 catch basins in the MS4 system. The sheer number of basins combined with the responsibility of addressing other critical customer matters makes response to every single basin that may require cleaning within a hard 30 day limit impractical. As a result, we request changing the time for response from 30 days to "as soon as practicable but no later than 45 days" to provide flexibility to schedule the catch basin cleaning while considering other customer service and maintenance priorities.

EPA Response to Comment 54:

This comment, as submitted during the second comment period, is nearly identical to the same comment from the first public notice version of the draft permit. See Response to Comment #20.

3.3.5 Storm Drain Outfall Operation and Maintenance

55. Comment, Earthjustice et al (footnotes removed):

The storm drain outfall operation and maintenance requirement should be increased and paired with a requirement to prioritize and conduct appropriate stream restoration projects.

Commenters support the proposed change in the Revised 2023 Draft Permit to require outfall repairs without the possibility of substituting alternative stream restoration pollution reductions if they cannot achieve the permit requirement. This removal of the substituted demonstration option ensures that the District receives the benefit of physical outfall repair contemplated by this permit term. However, commenters have two concerns regarding the changes in this permit term.

First, the outfall repairs should be coupled with appropriate stream restoration projects where possible, and should include a requirement that directs the District to prioritize for such projects those streams that are most degraded, and which could most benefit from ecologically sensitive in-stream restoration techniques. Generally, the District currently pairs outfall restorations with stream restorations. Some stretches of stream have many outfalls and some do not. Moreover, contracting for these projects is time-consuming. As a result, pairing outfalls and linear feet of stream restoration is optimal, to reduce the number of transactions. Because the District is presently performing stream restorations that contribute to stormwater reductions, and because EPA is removing the stream restoration alternative demonstration option, we are concerned the District's incentive to continue stream restorations where they are most needed could disappear. Accordingly, we urge EPA to accompany the outfall repair requirement with a requirement to prioritize District streams in need of restoration and pair those streams with that outfall repair requirement.

Second, commenters urge EPA to raise the minimum number of outfall repairs required in this permit. The Revised 2023 Draft Permit only requires the repair of 20 outfalls, compared with 50 outfall repairs, or substitute demonstrations, required in the 2018 permit. EPA has explained that the permit term of 20 outfalls is based on anticipated restoration projects that are expected to be completed during the permit term, and specifically notes that 24-30 outfalls are proposed to be repaired/replaced as part of these projects. EPA lowers that 24-30 figure on the grounds that "the projects may not all be completed before the end of the permit term," but does not explain how it estimated that 4-10 outfall repairs/replacements would not be completed by the end of the term. Moreover, EPA has made no showing that 20 outfall repairs is the MEP, or explained why 50 outfall repairs/replacements are not practicable, to justify this backsliding.

EPA Response to Comment 55:

This comment, as submitted during the second comment period, is nearly identical to the same comment from the first public notice version of the draft permit. See Response to Comment #22.

Draft Permit Part 4: Water Quality Assessment

4.5.2 Bacteria Source Reduction Activities

56. Comment, DOEE:
    Section 4.5.2 requires the District to conduct illicit discharge investigations in the Fort Dupont, Fort Chaplin, and Broad Branch catchments. While the District agrees that conducting these investigations will be helpful in identifying and eliminating potential sources of bacteria to those streams, it's not clear why the timeframes to complete the studies are different. Developing and implementing a thorough IDDE investigation takes considerable time and coordination between DOEE and DC Water. In order to dedicate adequate time to completing comprehensive IDDE investigations in all three catchments, the District requests the entire permit term to complete all three IDDE investigations.

EPA Response to Comment 56:
    The timeline for completion of the Broad Branch investigation is driven by the high detection rates of human-derived bacteria in the surface water samples. A 100% detection rate of human bacteria recorded at a site in the Broad Branch make this a priority; therefore, EPA has placed a more aggressive timeline on identifying and eliminating the sources of bacteria to the Broad Branch. The permit allows additional time to complete investigations in the other catchments as EPA recognizes that resources are finite and to enable the investigation regarding the Broad Branch to be prioritized.

57. Comment DC Water:
    This section requires completing an illicit discharge investigation of the land draining to Broad Branch in Rock Creek within two years of effective at of the permit. The Broad Branch sewer shed comprises more than 1,600 acres with many miles of piping and private connections. Investigating the sewer shed to track alleged illicit connections is time consuming in such a large shed. It may involve CCTV pipe inspections, dye testing, smoke testing, visual observation, obtaining access to private property, sample collection and laboratory analysis. Many of these require careful coordination with private property owners, especially smoke and dye testing. Given the magnitude of the sewer shed we request the deadline be adjusted to the end of the permit term. This will match the deadline for comparable work in the Anacostia sewer shed.

EPA Response to Comment 57:
    See Response to Comment #56.

58. Comment, Earthjustice et al (footnotes removed):
The bacteria source reduction activities for Anacostia River and Rock Creek watersheds should be expanded.

Commenters strongly support the Revised 2023 Draft Permit's inclusion of additional bacteria source reduction activities for the Anacostia River and Rock Creek watersheds, based on two prior studies conducted in those areas. Commenters urge EPA to strengthen and expand these requirements in order to more comprehensively investigate and reduce bacteria sources in these watersheds.

Commenters specifically support illicit discharge investigations in the Fort Dupont and Fort Chaplin catchments in the Anacostia River watershed to determine the source of human waste markers (section 4.5.2), as those two catchments had the highest fecal scores for human waste in a recent study. In addition, Commenters seek clarification regarding the decision to limit the illicit discharge investigations to those two catchments, as measurable levels of human waste were also found in Fort Stanton, Alger Park, and Fort Davis. Commenters also support targeted pet waste disposal education and outreach in the Fort Chaplin catchment, as it ranked highest for dog fecal sources. Given the urgency in reducing stormwater pollution in District waters, Commenters urge EPA to also add a requirement for immediate implementation of bacteria source reduction strategies from any discovered sources of human waste, such as repair of leaking sewer lines, during this permit term.

Regarding the Rock Creek watershed, Commenters support the requirement for an illicit discharge study for the land draining to the Broad Branch monitoring station. However, the available data strongly supports the need for illicit discharge studies at additional locations. First, the study data that supports an illicit discharge study for Broad Branch equally supports studies at the other two sampling locations in the same study: one just upstream of Rock Creek Park at the border with Maryland and the other below the National Zoo, further downstream on Rock Creek at the P Street Bridge. The human waste fecal source marker was found in 80 of 96 total samples (83.3%) and was present at all three sites. Therefore, Commenters request illicit discharge studies be required for all three sites where human waste markers were found.

Moreover, citizen water quality monitoring in 2018-2021 has demonstrated there are routine exceedances of E. coli levels at all community science monitoring locations within the Rock Creek watershed. Normanstone Run E. coli levels have been particularly high. Commenters believe study and repair of leaking sewer lines throughout Rock Creek's stream valleys would be useful, and further request that the District be required to replicate the microbial source tracking in all of the Rock Creek tributaries. Finally, Commenters urge EPA to add a requirement for immediate implementation of bacteria source reduction strategies, such as repair of leaking sewer lines, from any discovered sources of human waste during this permit term.

EPA Response to Comment 58:

The Final Permit requires the Permittee to complete three illicit discharge investigations during this permit term. As the watersheds where the investigations are to take place are large and the investigations are complex and require time to complete, EPA has made the determination that these three investigations constitute the MEP for this permit term. Should the Permittee be able to conduct additional investigations there is no prohibition in the permit against doing so. However, EPA notes that there is concern already regarding the Permittee's ability to complete these three required investigations. See comments #56 and #57 above.

Regarding the request for "EPA to add a requirement for immediate implementation of bacteria source reduction strategies, such as repair of leaking sewer lines, from any discovered sources of human waste during this permit term", EPA notes that, as provided in Section 2.2.2.1 of the Final Permit, the Permittee can implement activities to address high priority sources of bacteria immediately.

Draft Permit Part 7: Other Requirements

7.2 Endangered Species Act

59. Comment, Earthjustice et al (footnotes removed):

EPA has concluded that the proposed permit is not likely to adversely affect any Endangered Species Act listed species (section 7.2). EPA has specifically determined that the proposed permit "will have no effect on the long-eared bat and is not likely to adversely affect the Hay's spring amphipod." EPA offers no support for these blanket conclusions, and has not explained whether there are any differences in its findings regarding the two species, to support the different language regarding the two (e.g. "will have no effect" versus "is not likely to adversely affect."). As the Hay's spring amphipod is endemic to the District, occurs only within a 2.5 mile area of the Rock Creek watershed, and is primarily threatened by stormwater pollution, it is critical that impacts to this species be fully evaluated and explained in this permit. Commenters are especially concerned that the terms of this draft permit are insufficient to protect this critically endangered species, particularly given the large flushes of stormwater that Rock Creek now receives from massive storms due to climate change. Commenters request that EPA include additional support in this permit for its consultation and conclusion that the Hay's spring amphipod will not likely be adversely affected, and strengthen the draft permit's terms in accordance with Commenters' recommendations in order to protect this endangered species.

EPA Response to Comment 59:

As is required when undertaking a federal action such as NPDES permit issuance, EPA prepared a Biological Evaluation to support its determinations regarding both the long-eared bat and Hay's spring amphipod related to the proposed MS4 permit for the District of Columbia. Pursuant to the Endangered Species Act, EPA consulted with and

received concurrence from both the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (together, "the Services") on the Biological Evaluation. All correspondence with the Services as well as the Biological Evaluation are included in the Administrative Record for this permit.

7.3 Environmental Justice Considerations

60. Comment, Earthjustice et al (footnotes removed):
Commenters strongly support EPA's addition of an environmental justice section to the Revised 2023 Draft Permit, in section 7.3. We also appreciate that EPA has required that the District use the findings of its BMP distribution analysis to prioritize the implementation of future stormwater projects. Because this permit provision does not explain the contents of the BMP distribution analysis or specify the criteria used for prioritization, this provision should be clarified to ensure the District is required to implement future stormwater projects in areas that are disproportionately burdened by pollution, including communities of color in the MS4 area. Without this clarification, it is not clear that this requirement would further environmental justice and reduce pollution for overburdened communities. In addition, we recommend that EPA require public reporting on this prioritization of BMPs, including reporting on the demographic makeup of residents who are benefiting from BMP installations. As part of this public reporting, Commenters request that EPA hold an annual roundtable discussion or listening session in order to hear from, and engage in dialogue with, community members who are impacted by the MS4 permit and stormwater pollution.

Commenters also support the draft permit's requirement to develop a diversity, equity, and inclusion "strategy" by 2027. However, Commenters worry such a paper exercise will be insufficient, alone, to address the inequities present in the District's distribution of pollution and pollution reduction projects. Below, we include some specific ideas for concrete actions that would tackle these injustices.

(1) The District's fish consumption rate should be increased, and ambient water quality criteria tightened accordingly.

First, EPA should consider requiring the District to increase its fish consumption rate to approximately 142 g/day, based on the consumption rates of subsistence fishing communities within the District and the impacts stormwater pollution has on the safety of eating fish caught in District waters. Subsistence fishing along the Anacostia and Potomac rivers, practiced for generations by many Black residents, continues to be an important way to combat food insecurity in the DMV area, including in the District. And for Piscataway people, fishing along the shorelines of the Potomac is an activity that is intrinsically tied to their cultural identity and their traditions. Some of the more popular destinations for subsistence fishers in the District include Anacostia Park, where the majority of anglers fish throughout the entire year. It is estimated that at least 17,000 people in the lower Anacostia eat fish from the river every year. Fish harvested from the

Anacostia is not only consumed by the anglers who catch them and their families. Instead, studies show that there is a "widespread sharing of fish in extended social networks." A 2015 subsistence fishing survey on the lower Anacostia showed that 7% of respondents ate fish from the river every day, and 35% ate river fish at least once per week or more. And 39% of all participants reported eating all or most of their catch. This is why EPA recommends the use of "default fish consumption rates of . . . 142.4 g/d for subsistence fishers." In fact, because fish consumption rates among subsistence fishing communities often vary significantly, EPA recommends that agencies conduct local studies to identify the consumption rates for "groups that might be at greater risk of exposure to contaminants in fish due to higher consumption rates, such as subsistence fishers." Because stormwater pollution affects the health of the fish in District waters and of the subsistence anglers who eat these fish, raising the District's fish consumption rate and its attendant benefits for water quality would combat the disproportionate pollution burdens falling on subsistence anglers, who are predominantly Black, Indigenous, and People of Color. In addition, Commenters request that the District and EPA immediately collaborate to incorporate additional signage on the banks of the District's waters, concentrated in frequent fishing locations,161 to educate the public about the consumption of fish and health risks.

(2) Flood management is a matter of environmental justice.

While federal properties along the National Mall and at Joint Base Anacostia-Bolling might have the most exposure to tidal and riverine flooding, residential neighborhoods in the District are most vulnerable to inland storm-driven flooding. One of the MS4 neighborhoods most at risk in the entire city is the Watts Branch watershed in Ward 7. The District has recognized the unique high risk of Watts Branch, where 266 buildings are in the Special Hazard Area (100-year floodplain) and 119 are in the even more hazardous 25-year flood plain, with modeling showing that even more will be at risk in the future due to climate change. Ward 7's demographics of 91% Black and 21.5% of families living in poverty (twice the District's overall rate) make the unique threat of flooding that occurs in Watts Branch also an environmental justice issue. The District should continue to accelerate flood management studies, policies, and programs, with a particular continuing focus on the Watts Branch watershed. In addition, the District should expedite the assessments of properties in the flood plain and expeditiously begin mitigation.

EPA Response to Comment 60:

EPA appreciates commenters' support for these permit provisions.

This comment, as submitted during the second comment period, is nearly identical to the same comment from the first public notice version of the draft permit. See Response to Comment #32.

Draft Permit Part 8: Permit Definitions

61. Comment, DC Water:
The definition of "Illicit discharge" reads as follows:

"Illicit discharge" means any discharge to the MS4 that is not composed entirely of stormwater except discharges pursuant to an NPDES permit (other than the NPDES permit for discharges from the MS4) or applicable District regulation and discharges resulting from firefighting activities, pursuant to 40 C.F.R. §122.26(b)(2).

Section 1.3 Authorized Discharges identifies multiple types of non-stormwater discharges that are authorized when certain conditions are met. We suggest referencing Section 1.3 in the definition to clarify that these types of non-stormwater discharges are not illicit discharges as follows:

"Illicit discharge" means any discharge to the MS4 that is not composed entirely of stormwater except discharges pursuant to an NPDES permit (other than the NPDES permit for discharges from the MS4) or applicable District regulation and discharges resulting from firefighting activities, pursuant to 40 C.F.R. § 122.26(b)(2), except as provided for in Section 1.3 of this Permit.

EPA Response to Comment 61:
EPA agrees with DC Water's comment and has revised the Definition in Part 8 for Illicit discharge to clarify that the discharges listed in Section 1.3 of the permit are allowable and not considered illicit.

Fact Sheet – Section 4.4

62. Comment, DOEE:
DOEE requests a correction in the first paragraph to say "Macroinvertebrate communities must be assessed every other year" to reflect the current and draft permit requirements.

DOEE requests a correction in the second paragraph that removes chloride from the required instream sampling parameters.

EPA Response to Comment 62:
EPA agrees with this comment and has made the requested revisions to the Final Fact Sheet.