DISTRICT DEPARTMENT OF THE ENVIRONMENT

RESPONSE TO COMMENTS ON NOTICE OF PROPOSED RULEMAKING
STORMWATER MANAGEMENT, AND SOIL EROSION AND SEDIMENT CONTROL
59 DCR 009486 (AUG 10 2012)

This document responds to public comments on the District Department of the Environment's proposed rule for Stormwater Management and Soil Erosion Sediment Control, published in the August 10, 2012 issue of the DC Register (59 DCR 009486). The public review and formal comment period began on August 10, 2012 and closed on November 8, 2012.

In response to the publication of the proposed rule, the District Department of the Environment (Department or DDOE) received twenty-one formal comment letters. Overall, the comments received were very useful and resulted in numerous revisions to the proposed rule.

The rule and SWMG were revised and issued for an informal, thirty day public comment period on March 29, 2013. This Response to Comments document only reflects the Department's views and changes up to that point in time.

This Response to Comments document includes a summary of each commenter's comments. It also describes the Department's response to these comments. Specifically, each comment letter is identified by a unique comment number, the organization or agency on behalf of which the comment was submitted (if any), the name of the person submitting the comment (where provided), and the date of the comment. The page number provided refers to the page number in the document submitted by the commenter.

Throughout this document, DDOE refers to the version of the rule published on August 10, 2012 as the "proposed rule" and the accompanying SWMG as the "proposed SWMG." DDOE refers to the March 29, 2013 version of the rule as the "revised rule" and the accompanying SWMG as the "revised SWMG." From the proposed rule to the revised rule, DDOE changed section and subsection numbers to accommodate new sections and provisions. To avoid confusion, this document indicates whether a reference to a section or subsection is a reference to the proposed rule or SWMG or revised rule or SWMG.

Additional information is available on the rule website at ddoe.dc.gov/proposedstormwaterrule.

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Acronyms

AWDZ	Anacostia Waterfront Development Zone
BMP	Best Management Practice
CGP	Construction General Permit
CSS	Combined Sewer System
DDOE	District Department of the Environment
DDOT	District Department of Transportation
DOD	Department of Defense
FTE	Full-time Equivalent
ILF	In-Lieu Fee
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
Offv	Off-Site retention Volume
OTC	Over-the-Counter
PROW	Public Right-of-Way
RSR	RiverSmart Rewards
SESCP	Soil Erosion and Sediment Control Plan
SRC	Stormwater Retention Credit
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Permit
SWRv	Stormwater Retention Volume
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids

USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
WLA	Waste Load Allocation

1. **Anacostia Watershed Society (November 8, 2012)**
   a. The Commenter formally endorses and has signed onto the comments submitted by DC Appleseed and the Natural Resources Defense Council.

      DDOE Response: Understood.

   b. The Commenter contends that a 0.6 inch on-site retention requirement is low by current standards and suggests increasing it to 1.0 inches in order to spur developers to continue to create innovative green infrastructure technologies, as seen in other jurisdictions that have already implemented higher standards, and to drive implementation toward heavily developed areas, where green infrastructure is greatly needed.

      DDOE Response: The Department's analysis indicates that allowing off-site retention has greater potential than strict on-site retention to improve protection for District waterbodies, promote green infrastructure (the rule uses the term retention best management practice or "BMP" rather than green infrastructure, but this response document uses both terms), maximize cost savings and flexibility for regulated projects, and provide other sustainability benefits. Given all of these benefits, the Department has concluded that it is reasonable to establish the on-site minimum at fifty percent (50%) of the SWRv.

      For example, total annual retention achieved by a major regulated project and an off-site location is maximized when retention capacity is split equally between the two sites. This also increases the capture of the most polluted "first-flush" volume, results in the installation of more green infrastructure practices, and provides an opportunity to reduce the overall cost of compliance.

      Though requiring a greater volume of retention on-site may force innovation on sites with challenging circumstances, the Department expects the rule's provisions for Stormwater Retention Credit trading to promote innovation across the private and public sectors in finding the most cost-effective ways to maximize the installation of green infrastructure. Given the vast amount of impervious surface in the District (43% of land area) and the reality of limited private and public funding, the Department sees relatively greater outcomes for the District through this innovation toward finding the most cost-effective opportunities to deploy green infrastructure as opposed to forcing greater retention on site. Moreover, there were still be incentives for major regulated projects to innovate in maximizing retention on site, since on-site retention will reduce their obligation to achieve retention off site. Over the long term, as least-cost opportunities are exhausted, the incentive and pressure to innovate will grow. Rather than focusing that pressure on major regulated projects alone, the Department's approach provides an incentive for continued innovation across the public and private sectors to find more cost-effective technologies and approaches.

      The rule also fosters technological innovation by establishing a performance-based framework for stormwater retention that does not force the use of a specific type of BMP. In addition, the rule also promotes innovation in designing and installing BMPs that

retain relatively large storms by allowing regulated sites to over-retain in one area (up to a 1.7 inch ceiling) to compensate for under-retaining in another area. Similarly, the rule allows properties to earn SRCs up to an SRC ceiling associated with the 1.7 inch storm.

c. The Commenter suggests that a robust database and program administration system will be necessary to lower transaction costs and effectively manage the SRC trading program.

DDOE Response: DDOE agrees and is developing a database to track SRCs and ILF payments. DDOE is also developing a website for the SRC program. Periodically, DDOE will post information from the database to the website. DDOE plans for this to include prices, volume, and sellers with available SRCs and potential buyers in order to help connect market participants.

d. The Commenter contends that the $3.50 amount of the ILF may be too low to cover actual costs and states a need for more detail in order to fully understand how it is calculated.

DDOE Response: DDOE provides an explanation of the ILF calculation on the rule website (ddoe.dc.gov/proposedstormwaterrule). The $3.50 in-lieu fee reflects the estimated annual cost, including capital, maintenance, and administrative costs) for the District Government to install retention BMPs in the District.

e. The Commenter suggests increasing the ILF to create a "penalty" or disincentive from using ILF when it is not truly necessary and to ensure it has the ability to meet the retention requirements under the MS4 permit.

DDOE Response: Though DDOE does not expect the ILF to be a more cost-effective option for major regulated projects, DDOE recognizes that the retention requirements must be met and that it could face relatively high costs in ramping up District programs to install BMPs, if major regulated projects opt to use ILF on a large scale. In addition, it would be inequitable for DDOE to change the ILF from one project to the next, whereas the price of SRCs may change from one transaction to the next.

Consequently, the Department has carefully considered its full costs in determining the ILF and has included data from all of its BMP installations, not just the most cost-effective ones. If implementation shows that the ILF is not high enough to cover its costs and achieve the required retention, the rule allows DDOE, through a public process, to re-base the ILF to adequately cover these costs.

f. The Commenter contends that, despite the potential cost savings to locate off-site retention in low-income areas, developers may find it more convenient to implement them in affluent areas and suggests creating a property inventory or an additional incentive to create market conditions that will favor low-income areas, where environmental justice issues are a concern.

DDOE Response: DDOE is considering developing a portfolio or inventory of potential projects to encourage installation of BMPs in certain areas to support various District objectives, including to address concerns about environmental justice or disproportionate impacts on specific waterbodies and to incentivize focused installation of retention BMPs in areas draining to streams that are undergoing restoration. In addition, DDOE will use the SRC database and SRC serial numbers to track how off-site retention affects the spatial and temporal distribution of retention BMPs in the District.

As data accumulate, DDOE plans to review whether there are disproportionate negative impacts on particular communities or waterbodies. As necessary, DDOE will adaptively manage its off-site retention programs and may also use its other programs to offset these impacts.

h. The Commenter contends that DDOE may not be able to install enough green infrastructure practices to meet the demand if more developers opt to pay the ILF, and that this possibility may also limit DDOE's ability to expend the collected funds.

DDOE Response: The $3.50 in-lieu fee reflects the estimated full annual cost for the District Government to install retention BMPs. DDOE recognizes that it may have to dramatically scale up existing programs and possibly develop additional programs if major regulated projects opt to use ILF on a large scale. DDOE expects that the ILF will be sufficient, at least initially, to cover these costs, and the Department has the ability to increase the ILF, through a public rebasing process, if necessary.

2. Angler Environmental, Jason Murnock (November 8, 2012)

a. The Commenter requests supporting detail to show how the ILF cost was set at $3.50 to retain one gallon for one year.

DDOE Response: DDOE provides an explanation of the ILF calculation on the rule website.

b. The Commenter asks if the ILF includes costs for all federal, state, and local approvals needed for the project.

DDOE Response: The ILF cost data reflects costs related to obtaining the necessary permitting and approval in the District.

c. The Commenter asks what the current demand is for off-site credits.

DDOE Response: Since DDOE has not yet finalized the stormwater rule, including the stormwater retention performance standards and the provisions for certification of SRCs, there is no current demand.

Once the regulations are effective, each site that opts to use off-site retention will have an Offv, measured in gallons of retention per year. Offv represents potential SRC demand, since Offv can be achieved either by use of SRCs or payment of ILF. DDOE anticipates

that SRC demand will increase over time as more and more regulated projects opt to use off-site retention, and the Offv from each additional project is added to the running Offv total.

Because fifty percent is the maximum amount of a major regulated project's required SWRv that can be achieved off site, without applying for relief from extraordinarily difficult site conditions, one can think of the maximum potential for Offv created in a given year as being equal to half of the total stormwater volume required to be retained. A major regulated project must begin achieving its Offv as of DDOE's final construction inspection of retention capacity installed at the regulated site. As of that final construction inspection, a regulated project's Offv would be part of the potential demand for SRCs, though practically speaking it would become part of the potential SRC demand sooner since the regulated project would have to ensure that it had ownership of the required number of SRCs prior to the final construction inspection.

DDOE will track the total Offv and make that information available on its website. DDOE will also have an accurate estimate of the anticipated Offv that will be added to that total in the near to midterm, since a major regulated project will identify its Offv in the SWMP it submits for DDOE approval as a required step in the process of applying for a building permit. DDOE also plans to post on its website its estimate of anticipated Offv.

d. The Commenter inquires about the total amount of ILFs contributed on an annual basis.

DDOE Response: Because the rule has not yet taken effect, no ILF payments have been made. See the explanation above regarding the amount of Offv that may be created after the regulations take effect.

3. Mike Artes (November 8, 2012)

a. The Commenter agrees with the requirement to retain the volume of rainfall associated with a 1.2-inch storm, either on-site or through the use of off-site retention credits. The Commenter contends that this standard is legally required by the District's MS4 Permit and is a smart approach to water management that will yield many benefits.

DDOE Response: Understood.

b. The Commenter contends that the lack of geographical restrictions on credit-generating projects (in relation to the locations of regulated, credit-purchasing sites) may shift net retention outside the MS4 area into the combined sewershed, which could lead to pollution hotspots, uneven environmental benefits, and failure to achieve the MS4 permit's 1.2-inch retention requirement.

DDOE Response: DDOE's analysis indicates that the MS4 area has a higher proportion of relatively cost-effective opportunities to install retention BMPs, as compared to the CSS area, which is largely located in the densely developed downtown core.

Consequently, DDOE expects the rule's off-site retention provisions to tend to result in more retention in the MS4 area than would otherwise be the case through strict implementation of an on-site retention standard.

Also, DDOE will track how off-site retention (via both ILF and SRCs) affects the spatial and temporal distribution of retention BMPs in the District. As data accumulates, DDOE will review whether there are disproportionate negative impacts on particular communities or waterbodies. As necessary, DDOE will adaptively manage its off-site retention programs and may also use its other programs to offset negative impacts. DDOE is considering developing a portfolio or inventory of potential projects to help encourage installation of BMPs in areas where there are environmental justice concerns or concerns about disproportionate impacts on specific waterbodies. No change to the rule is necessary at this time.

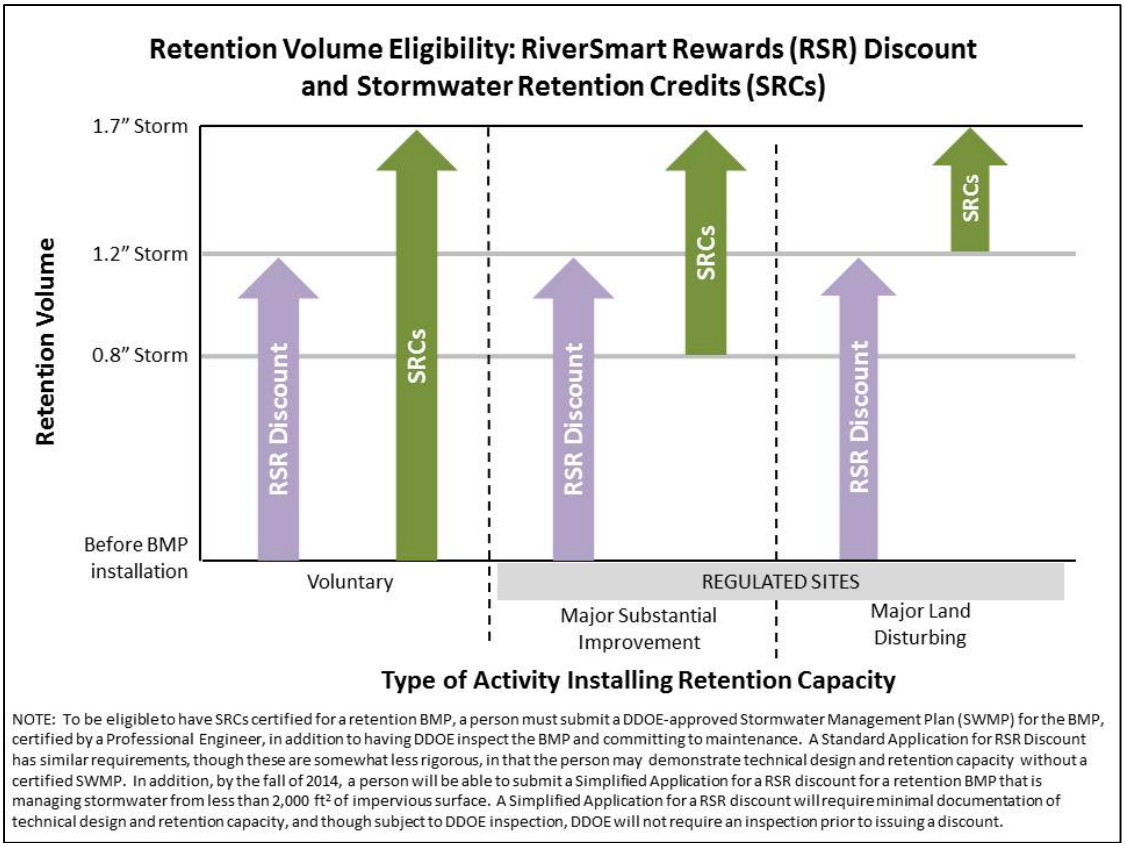
4. Mary Blakeslee (November 6, 2012)

a. The Commenter contends that, under the proposed rule and the stormwater discount fee rule, private property owners appear to need to comply with two different sets of stormwater related permitting, construction, inspection, and compliance requirements. The Commenter suggests including a description of the relationship between the two programs and developing a single set of requirements that apply to and are included in both rules.

DDOE Response: Though there are some differences between the eligibility requirements for the two programs, properties may be eligible to participate in both the SRC and discount programs. DDOE is developing outreach materials, including webpages and guidance for both programs. The figure below highlights key distinctions between the programs.

Though there are distinctions between the two programs' eligibility requirements and though different types of construction projects trigger different requirements for inspection under the permitting process, there is only one permitting process in the District. Generally, both a major regulated project achieving the stormwater retention performance requirements on site under the rule and a project voluntarily installing retention capacity to generate SRCs under the rule would be eligible for a discount. They would follow the same permitting, construction, and inspection requirements. Though some projects installed solely to earn a discount may not require a SWMP or trigger the permitting process at all, those that do require a permit would be subject to the same permitting and construction requirements as are generally applicable in the District.

No change to the rule is necessary at this time.



b. The Commenter asks how the proposed rule would apply to BMPs voluntarily installed by private property owners, and if they would qualify to receive a stormwater fee discount.

DDOE Response: Generally, a voluntarily installed retention BMP is eligible for SRC certification and a discount if it retains eligible volume, is designed and installed in accordance with a DDOE-approved SWMP, passes DDOE inspection, and is being maintained as promised. If a person is only seeking a discount, the requirements are somewhat less rigorous, as described above. DDOE is developing outreach materials to further clarify the distinctions between these programs. No change to the rule is necessary.

c. The Commenter contends that the terms and definitions for qualifying BMPs are unclear because they are defined differently in the proposed rule, the draft guidebook, and the stormwater discount fee rule. The Commenter suggests adopting identical terms and definitions in all three documents and provides recommendations for specific language.

DDOE Response: DDOE is developing outreach materials to provide clarity on the distinctions between these programs and guidance on how to participate.

5. Cohen Companies, Eric L. Siegel (November 8, 2012)

a. The Commenter agrees with the proposed rule for requiring high retention volumes; promoting practices that will provide economic benefits to the District; and providing

flexibility for how and where retention practices are implemented (specifically that: vegetation is not required; off-site locations can be placed anywhere in the District; 50% of the required volume can be retained off-site; and that developers can choose to purchase SRCs, pay the ILF, and/or pay for construction of on-site practices.) The Commenter contends that this flexibility will promote technical innovation and gives an example of a new proprietary product that is currently being used and evaluated in a project on District property.

DDOE Response: Understood.

b. In order to effectively sell SRCs and promote/market related services, the Commenter suggests recording and tracking SRCs in a searchable database that the public can access in real time instead of having DDOE provide the information in a bi-annual report in Excel spreadsheet format.

DDOE Response: DDOE agrees and is developing a database to track SRCs, including a public SRC registry. DDOE expects that the registry will include a list of SRC sellers and SRCs for sale. DDOE is also developing a website for the SRC program, which will include guidance for program participants and additional information from the database, such as the price at which SRC trades occur; anticipated, but not yet certified, SRCs from approved SWMPs; actual Offv (representing potential demand for SRCs); and anticipated Offv from approved SWMPs for which a final construction inspection has not yet occurred. DDOE also plans to post on its website a list of interested SRC buyers to help connect market participants. In addition to the database and website, DDOE plans to issue reports on the ILF and SRC programs.

c. The Commenter requests a detailed explanation of how DDOE will administer the SRC trading program and ensure that it works well.

DDOE Response: Chapter 6 and Chapter 7 of the draft guidebook explain the SRC trading program, including the process for potential participants to buy and sell SRCs in the market. DDOE is developing webpages and other materials to provide guidance to participants. DDOE is also developing market infrastructure such as an SRC registry and planning other initiatives to help support SRC trading, including convening a legal working group to develop template contracts and hosting meetings of potential market participants.

d. The Commenter suggests including a detailed explanation of how the ILF is derived, and asks DDOE to demonstrate that it can retain one gallon of water for the ILF amount and explain how it will ensure that ILF revenue will be used to create sufficient retention to offset development and redevelopment.

DDOE Response: DDOE provides an explanation of the ILF calculation on the rule website. The $3.50 ILF is based on DDOE's full cost to achieve a gallon of retention for one year.

On March 28, 2013, Mayor Gray transmitted the Fiscal Year 2014 Budget Support Act of 2013 to the Council of the District of Columbia. That legislation includes provisions to establish a special purpose revenue fund for ILF payments. Reflecting this, Section 530.6 of the revised rule specifies that ILF payments should be deposited into this fund. This fund would make it easier for DDOE to track and report on the use of ILF and increase transparency for stakeholders. DDOE recognizes that the legislation is subject to Council approval and may be significantly changed. Once the legislation is finalized, DDOE plans to modify the rule accordingly.

6. Contech Engineered Solutions LLC, Derek M. Berg (November 5, 2012)

a. The Commenter refers to the requirement for regulated sites to provide on-site stormwater treatment in instances where they cannot achieve the minimum 50% on-site SWRv, and asks for clarification as to why sites are not required to treat the remaining 50% of Offv.

DDOE Response: The rule provides major regulated projects with flexibility in meeting their SWRv. Once major regulated projects achieve 50% of their SWRV through on-site practices, they may purchase SRCs or pay the ILF to meet remaining Offv requirements. Projects do not need to treat the remaining 50% on site because off site, the corresponding volume is being managed with retention BMPs that generate SRCs or through projects financed with ILF revenue. No change to the rule is necessary.

b. The Commenter contends that, in instances where on-site treatment is required, it will sometimes be necessary to size BMPs based on a "treatment flow" instead of strictly on a volume of runoff. Therefore, the Commenter suggests including a uniform method to convert the volume of runoff to be treated to an equivalent treatment flow. The Commenter also suggests and references a particular method used by Maryland and various other states.

DDOE Response: Flow rate calculations have been included in Appendix T of the SWMG and referenced in SWMG Section 3.12. No change to the rule is necessary.

c. The Commenter suggests requiring treatment when public right of way projects do not meet retention criteria, rather than allowing untreated runoff and pollutants to discharge to receiving waters.

DDOE Response: DDOE has concluded that this is not necessary or appropriate since the rule already requires major land-disturbing activity projects in the existing PROW to either achieve the same retention requirements that would be applicable to other major land-disturbing activities or, alternatively, to demonstrate that they have exhausted all opportunities for retention through the MEP process. The revised rule includes a change specifying that, unless the site drains to the CSS, the entirety of an area intended for use or storage of motor vehicles (e.g., the roadway) shall drain into retention or treatment BMPs so that at least fifty percent (50%) of the 1.2 inch SWRv is managed.

7. **CSX Transportation, Inc., Paul J. Kurzanski (November 8, 2012)**
   a. The Commenter agrees with the effective date and planned transition period because they will allow necessary lead time to incorporate the new rule into planned projects without impeding projects that are underway.

      DDOE Response: DDOE appreciates this input and adds the clarification that the submittal of a SWMP would have to be as part of an application for a building permit. DDOE notes that the preamble to the revised rule includes discussion about DDOE's planned transition period.

8. **DC Appleseed, Walter Smith, Brooke DeRenzis (November 8, 2012)**
   a. **(p. 2)** The Commenter supports numerous requirements and potential benefits of the proposed rule, including: the focus on stormwater retention, the potential for the SRC market to accelerate green infrastructure retrofits of existing impervious surfaces, and the potential for job creation and other social and economic benefits.

      DDOE Response: Understood.

   b. **(pp. 3-4)** The Commenter contends that the fee amounts (plan review, etc.) may not be sufficient and that DDOE should not rely on periodic appropriations. Rather, DDOE should charge fees that cover the cost of program administration. The Commenter also suggests including language to allow DDOE to periodically rebase fees to reflect actual costs to administer permitting, SRC processes, inspections and enforcement. The Commenter states a need to increase fees to cover costs to certify and transfer SRCs, and to make a corresponding increase to the ILF to reflect changes to underlying cost components and maintain an appropriate price ceiling. The Commenter notes that DDOE will need to determine whether to charge the buyer or seller for SRC certification and transfer fees.

      DDOE Response: Generally, the fees in the proposed rule are based on DDOE's analysis of the costs to DDOE to provide these services. Furthermore, to help ensure that these fees remain adequate over time, the rule requires DDOE to annually adjust the fees for inflation. The revised rule specifies that DDOE will adjust for inflation using the Urban Consumer Price Index published by the United States Bureau of Labor Statistics. Also, the rule allows DDOE to re-base the ILF periodically to ensure that it adequately covers DDOE's costs to provide a gallon of retention for one year.

      Though the fees in the rule are generally based on DDOE's cost to provide those services, DDOE has made the policy decision to incentivize SRC retrofit projects and Stormwater Fee discount projects by charging a lower fee for SWMP review for SRC-generating retrofit projects and no fee for SWMP review for a project conducted solely to earn a Stormwater Fee discount. In addition, DDOE's intention is to foster the initial development of the SRC market, and at this time DDOE is not planning to charge additional fees (beyond the initial fee for SWMP review) for SRC certification, transfer of SRC ownership, or similar services. After the SRC market is established and DDOE takes stock of the size of the market and the costs to DDOE for providing these and

related services, DDOE may propose, through a public process, to add fees for such services. No change to the rule is necessary.

c. **(p. 3)** In order to mitigate market uncertainty that might result from unexpected changes, the Commenter suggests requiring public notice in advance of fee changes.

DDOE Response: The revised rule requires DDOE to adjust its fees for inflation annually using the Urban Consumer Price Index published by the United States Bureau of Labor Statistics. It is routine for business plans to account for inflation, and DDOE does not view its annual inflation adjustment of its fees as posing a particular burden on market participants. However, DDOE expects that it will provide some notice through its website, an email notification list, or similar means of when inflation-adjusted fees will take effect.

The rule also allows DDOE to rebase the ILF as necessary to cover its full costs for providing a gallon of retention for one year, and DDOE plans to do this through a public process in the *DC Register*, which would include opportunity for public comment. The has been specified in the revised rule.

Similar to the process for rebasing the ILF, if DDOE plans to add fees or change the fundamental basis of the fees in the rule, DDOE would do this through a public process in the *D.C. Register* with an opportunity for public comment. This is already required of DDOE by District law, and no change to the rule is necessary.

d. **(p. 4)** The Commenter suggests including a numerical explanation of how the $3.50 ILF was derived in order to provide assurance that the amount is adequate.

DDOE Response: DDOE provides an explanation of the ILF calculation on the rule website.

e. **(p. 5)** To encourage prompt payment and compliance, the Commenter suggests revising the flat 10% late fee amount to adopt a mechanism by which the late fees increase over time, on an additive or compound basis.

DDOE Response: Though DDOE does not plan to assess interest on the late fee for the ILF payment, the rule specifies that the Department will annually assess the ILF and the corresponding late fee for a property owner that has lapsed in compliance with an obligation to achieve an Offv. In addition, DDOE points out that an obligation to achieve an Offv is a distinct provision of the regulations and of the approved SWMP for a major regulated project. Consequently, a failure to comply with an Offv is subject to enforcement action under Section 505, which may include fines, penalties, and other costs. No change to the rule is necessary.

f. **(p.5)** The Commenter states a need to establish legislation to create a dedicated special purpose revenue fund for ILFs to ensure that they are only used for off-site retention projects, rather than for other stormwater administration or project expenses.

DDOE Response: DDOE recognizes that such a fund would make it easier for DDOE to track and report on the use of ILF and increase transparency for stakeholders.

On March 28, 2013, Mayor Gray transmitted the Fiscal Year 2014 Budget Support Act of 2013 to the Council of the District of Columbia. That legislation includes provisions to establish a special purpose revenue fund for ILF payments. Reflecting this, Section 530.6 of the revised rule specifies that ILF payments should be deposited into this fund. DDOE recognizes that it is Council's prerogative to approve or modify this legislation, and, once the legislation is finalized, DDOE plans to modify the rule accordingly.

g. **(p. 5)** The Commenter suggests including a requirement for DDOE to issue an annual report on ILF revenue activities to explain the amounts collected and spent and to provide detail about the volume, location and project associated with each expenditure. The Commenter also provides a suggested list of specific report criteria.

DDOE Response: DDOE plans to report annually on the SRC trading and ILF programs. This corresponds to the annual reporting requirement in the MS4 Permit issued to the District by USEPA. It also corresponds to annual reporting by other Chesapeake Bay jurisdictions on their water quality trading programs. For example, see the Virginia Nutrient Credit Exchange Association 2011 Nutrient Trades Report at www.deq.virginia.gov/Portals/0/DEQ/Water/PollutionDischargeElimination/NutrientTradesReport2011.pdf.

h. **(pp. 5-6)** The Commenter suggests that projects funded with ILF revenue should not be able to generate SRCs, in order to avoid "double-counting" required off-site retention volumes.

DDOE Response: DDOE agrees. DDOE will not certify SRCs for retention capacity funded with ILF revenue.

i. **(pp. 6-7).** The Commenter contends that the SWMP review process is unclear and will potentially discourage participation. The Commenter states that Section 518 describes a straightforward SWMP process, but the flow charts of Figure 5.1 illustrate a different, more complicated process, and suggests that DDOE meet with the regulated community to develop ways to streamline the process.

DDOE Response: The revised SWMG contains revised flow charts. No change to the rule is necessary.

j. **(p. 7)** The Commenter suggests including timelines for key SRC milestones (draft guidebook, p. 311), particularly the number of days for DDOE to:

- Review an SRC SWMP;

- Complete a post-construction inspection following a request for such inspection; and

- Review an application for SRC certification upon receipt.

The commenter contends that these timelines will benefit marketing and sales. The Commenter suggests specific language to incorporate in this section, including allowing DDOE the flexibility to extend timelines where appropriate.

DDOE Response: For the review of a SWMP, including one for SRC generation, chapter 5.0.1 of the proposed guidebook notes that this will happen within 10 to 30 working days of the submission date of an accepted complete application.

For a final construction inspection of a BMP, SWMG chapter 5.2.2 specifies that the Department requires one week of notice.

For review of an application for SRC certification, DDOE is reluctant to specify a time, especially given the variability between review for new retention capacity and review for existing retention capacity. For new retention capacity, a person who intends to generate SRCs is expected to secure DDOE approval of a SWMP prior to construction, and that person will submit an as-built SWMP after a final construction inspection. At the time when DDOE receives a complete application for SRC certification, review should be fairly straightforward and quick since the complicated task of reviewing a SWMP to determine eligible retention capacity will have been completed. In this circumstance, DDOE expects that it will be able to complete its review within 15 business days, if not sooner.

By contrast, for existing retention capacity, though DDOE may have previously reviewed a SWMP for the site, such a SWMP would have been designed to meet the existing water quality treatment and detention requirements, before the technical specifications for the new SWMG were finalized. Consequently, DDOE will have to carefully review the as-built SWMPs for these sites to determine the eligible retention volume in light of the technical specifications in the new SWMG, and it is possible that DDOE will require additional information if the as-built SWMP does not contain all of the information required. In such cases, review may take up to 30 business days or, in some cases, even longer.

To avoid penalizing an applicant for a delay by DDOE in reviewing a complete application for SRC certification, DDOE intends to certify SRCs as of the date that the Department receives the complete application, as stated in Section 531 of the proposed rule. No change to the rule is necessary.

k. **(pp. 7-9)** The Commenter states a need for a publicly accessible online database where detailed information about availability, purchase, and sale of certified SRCs is consistently and regularly made available. The Commenter suggests specific data that should be tracked, provides information about an existing database used for a similar

credit trading program, and contends that publicly sharing this information will strengthen the market by assisting buyers and sellers in negotiating transactions.

DDOE Response: DDOE agrees and is developing a database to track SRCs, including the ability to select key information for inclusion in a public SRC registry. DDOE expects that the registry will include a list of SRC sellers and SRCs for sale. DDOE is also developing a website for the SRC program, which will include guidance for program participants and additional information from the database, such as: the price at which SRC trades occur; anticipated, but not yet certified, SRCs from approved SWMPs; actual Offv (representing potential demand for SRCs); and anticipated Offv from approved SWMPs for which a final construction inspection has not yet occurred. DDOE also plans to post on its website a list of interested SRC buyers to help connect market participants.

l. **(pp. 9-10)** The Commenter contends that the environmental impact of banking SRCs is unclear due to multiple variables involving timing, location, and volume, and states a need to annually track, report, and assess specific data (as part of the District's annual MS4 report) in order to determine whether the program is producing intended environmental benefits. Specific concerns include the opportunities for stormwater retention requirements to be fulfilled before or after the related stormwater occurs, and for retention to occur in a different sewershed than the one in which the stormwater originated.

DDOE Response: DDOE will track how off-site retention (through both SRCs and ILF) affects the spatial and temporal distribution of retention in the District. As data accumulates on this, DDOE plans to review whether there are disproportionate negative impacts on particular communities or waterbodies. As necessary, DDOE will adaptively manage its off-site retention programs and may also use its other programs to offset negative impacts. DDOE is considering developing a portfolio or inventory of potential projects to help encourage installation of BMPs in areas where there are environmental justice concerns or concerns about disproportionate impacts on specific waterbodies. No change to the rule is necessary.

m. **(p. 10)** The Commenter states a need (in the proposed rule and the draft guidebook) to clearly and consistently: define and use the terms "SRC seller" and SRC buyer"; differentiate an "SRC owner" from a "BMP owner"; and specify ownership and transfer responsibilities for each of these entities.

DDOE Response: DDOE reviewed its use of the terms, taking into consideration the range of possible scenarios for participation in SRC trading. DDOE has determined that the terms convey the intended meaning, except that the meaning of "original SRC owner" would benefit from clarification. Accordingly, DDOE added a definition for "original SRC owner" to the definitions section in the revised rule.

n. **(p. 10-11)** In order to prevent the possibility of fraud or manipulation when ownership is transferred, the Commenter suggests requiring BMPs that generate SRCs to record a Declaration of Covenants with the District's Recorder of Deeds for the years they are

active and to re-record at time of re-certification. The Commenter also suggests that DDOE create a short Declaration of Covenants template form to make the process easier.

DDOE Response: DDOE is not convinced that it is necessary to impose a requirement to record a declaration of covenants on the property on which SRCs are generated, and DDOE has not made this change. The rule requires the original SRC owner to sign a statement promising to maintain the retention capacity in compliance with the maintenance plan in the SWMP, for the time period for which SRCs are certified (see Appendix D of the proposed SWMG). If the original SRC owner fails to maintain the retention capacity for that period, the rule specifies that the Department will not certify additional SRCs. Furthermore, the Department will require the original SRC owner to compensate for the period of time for which SRCs were certified but maintenance did not occur. The original SRC owner will do that by retiring the SRCs certified for that period (assuming they have not yet been sold or used), retiring other SRCs corresponding to the volume of retention failure, or paying the corresponding ILF. If the original SRC owner does not compensate as required, DDOE can retire the SRCs certified for that period (again, this assumes that the SRCs have not yet been sold or used). If those SRCs have already been used or sold, DDOE will assess the ILF and charge an administrative late fee of ten percent (10%).

o. **(p. 11)** The Commenter suggests removing the exemption and, instead, requiring District-owned regulated sites to record the same Declaration of Covenants as other regulated sites. The Commenter contends that this change will ensure that stormwater obligations are acknowledged and transferred when District property is leased for more than three years or sold to a private owner.

DDOE Response: Under the District's existing stormwater management regulations, District-owned and federally owned properties are not required to file a declaration of covenants. During the informal comment period, DDOE plans to continue reviewing this issue and considering the efficacy of a change.

p. **(pp. 11-12)** The Commenter states a need to include more rigorous inspection requirements in order to ensure sufficient maintenance of BMPs, and suggests requiring annual inspections and allowing the use of third-party nongovernmental inspectors. In addition, the Commenter points out an inconsistency between the regulations, which describe a three-year inspection cycle for BMPs generating SRCs, and the draft guidebook, which describes biannual site inspections for all stormwater BMPs during the first five years and annual inspections in subsequent years.

DDOE Response: DDOE intends to conduct inspections to ensure that retention capacity is adequately maintained and has added language to Section 503 of the revised rule to ensure that this is clear. DDOE has also changed the SWMG to reflect that a maintenance inspection is to occur at least once every three (3) years. DDOE notes that there are some differences in the maintenance requirements for different types of BMPs, especially in the initial years after installation as opposed to thereafter, and this will be reflected as necessary in the approved SWMP.

q. **(p. 12)** The Commenter requests clarification and specific examples showing how penalties will be imposed for violating the regulations, specifically, for violating the terms of an "approved plan." In Sections 502.3, 505.1, and 505.2 the Commenter suggests adding language to explicitly state that the enforcement provisions of the proposed rule apply to a regulated site owner who fails to comply with the terms of their approved plan.

DDOE Response: DDOE expects that its enforcement action and associated penalties will vary based on the circumstances, severity, and impacts from a specific violation. The rule provides DDOE with the authority and discretion to take appropriate enforcement action, including for a site owner who fails to comply with a provision of an approved plan. No change is necessary.

r. **(p. 12)** The Commenter states a need to specify how revenue from fines and penalties for stormwater retention violations will be used, and suggests depositing them in a special purpose revenue fund that is dedicated solely (in excess of administrative costs) to stormwater remediation.

DDOE Response: DDOE is exploring its ability to ensure that revenue from stormwater fines and penalties is used to support the work conducted by enforcement staff and staff administering related programs.

s. **(p. 14)** The Commenter contends that the process for seeking changes to a SWMP (as described in Sections 503.2-503.4) is vague, suggests including a uniform procedure, and provides specific procedural recommendations.

DDOE Response: A person is only required to submit a proposed change to a SWMP to the Department's office for review if it is substantial, meaning the change may result in a failure to comply with the chapter or would have a significant effect on the discharge of pollutants to District waterbodies. However, a person would always have the option of submitting the proposed change to the Department's office. Also, if a person is uncertain, he/she can ask the Department's representative in the field to determine whether a proposed change is substantial and requires submittal of a revised SWMP to the Department's office for approval. No change to the rule is necessary.

Regarding the as-built certification form, DDOE plans to make a change to the SWMG to ensure consistency between the rule and the SWMG.

t. **(p. 14)** The Commenter suggests adding a mechanism to the database to trigger an alert when a regulated project needs to renew SRCs or an ILF.

DDOE Response: DDOE agrees and is working to include this capability in its database, as well as the related ability to automatically provide notification to regulated sites.

u. **(p. 14)** The Commenter suggests revising the proposed rule and draft guidebook to define and consistently use the terms "maintenance agreement," "maintenance schedule," "maintenance responsibility," and "maintenance standards," or, if there is no substantive difference among these terms, to choose a single term and use it consistently.

DDOE Response: DDOE has added definitions of these terms to Appendix V. Definitions in the revised SWMG.

v. **(p. 14)** The Commenter contends that Sections 5.0.1, 5.3.2 of the draft guidebook and Section 518.9 of the proposed rule contain contradictory language and suggests revising them to clarify which should occur first, approving the SWMP or executing a Declaration of Covenants. Alternatively, the Commenter suggests (per Section 518.10), simply requiring the applicant to provide proof that the maintenance agreement or schedule was filed with the Recorder of Deeds (as part of the Declaration of Covenants) in order to receive SWMP approval.

DDOE Response: As described in the rule, after receiving notification that a SWMP and supporting documentation meets the requirements for approval, the applicant submits one Mylar and seven paper copies. At that point, DDOE approves (stamps) the SWMP and gives one copy to the applicant for filing along with the declaration of covenants at the Recorder of Deeds. At this point, the applicant also pays each applicable fee associated with the plan review process (typically via the cashiers supporting DCRA's permitting center) and provides the receipt and proof of the filing of the declaration of covenants to DDOE. DDOE then gives the applicant the remaining copies of the approved SWMP. DDOE is revising the SWMG to be consistent with the process described in the rule.

w. **(pp. 14-15)** The Commenter suggests revising Section 507.1 to include a provision authorizing the Mayor to designate someone to post a notice of health or safety hazard on the shores of a public body of water in the District. As currently written, only the Mayor has this authority. The Commenter also suggests using DDOE's existing authority as a basis to amend this section to allow DDOE to notify the public through the media.

DDOE Response: As currently written, the Mayor has the authority to designate DDOE or another agency to act on the Mayor's behalf. It is not uncommon for District law to refer to the Mayor as having an authority, which the Mayor then delegates to another agency.

x. **(p. 15)** The Commenter suggests revising Section 531.6 to clarify circumstances under which the owner of a BMP would assign SRC rights to another person and the official process used to transfer these rights.

DDOE Response: DDOE has concluded the rule, as written, is consistent with its expectation that the owner of the property with SRC-eligible retention capacity would typically, by default, be the original SRC owner for any SRCs certified. However, DDOE also expects that it will not be uncommon for a property owner to assign the right

to those SRCs to an SRC aggregator or other person who has provided required capital funding and/or installed the retention capacity.

For a property owner assigning the right to an SRC to an aggregator or other person, DDOE expects that the terms of the legal document assigning that right may vary, just as the potential scenarios may vary. Though DDOE plans to leave the terms of that negotiation and the corresponding contract to the property owner and the SRC aggregator, in such a situation DDOE will need to review documentation of the right to the SRC to be certified. Rather than reviewing the contract itself, DDOE is considering developing a separate form that a property owner would sign after indicating the person to whom they have assigned the legal right to the SRC. This would be a relatively simple, consistent, and straightforward form for DDOE to review, and it would not in any way lessen the underlying legal requirement that the person who applies for SRC certification must have the legal right to the SRCs.

9. DC Greenworks (November 5, 2012)

a. The Commenter agrees with the SRC proposal and with allowing sites draining into the combined sewer system to comply without water quality treatment. The Commenter contends that the flexibility offered in the proposed rule will encourage use of green infrastructure technologies, especially green roofs.

DDOE Response: Understood.

b. The Commenter contends that off-site retention options need to be specific and transparent, and suggests developing a template and online calculator to enable property owners and prospective buyers/sellers to determine the value and cost for a given property's stormwater management practices. The Commenter also suggests maintaining historical data of property values and stormwater mitigation costs, and designating funding for additional staffing and consultants to do this work.

DDOE Response: The Commenter provides several suggestions. Regarding the calculator, DDOE does maintain a calculator for property owners to forecast the SRCs generated by installing BMPs or making a land cover change (see ddoe.dc.gov/node/227892). At this time, the calculator does not forecast financial functions for properties that are considering Offv options. It would be difficult for DDOE to include such information because SRC transactions that would provide price information have yet to occur and the costs for installing and maintaining BMPs to generate SRCs varies among properties. DDOE will consider adding these functions in the future.

DDOE does not track property values and the costs for properties to install BMPs. However, DDOE is developing a database that will track SRC transactions and payments of the ILF.

c. The Commenter suggests increasing the ILF to encourage green BMPs.

DDOE Response: As explained in the preamble to the revised rule and on the rule website, the $3.50 in-lieu fee reflects DDOE's full annual cost (i.e., all estimated capital and maintenance costs) to achieve retention. DDOE does not believe it is appropriate to increase the fee beyond its costs. DDOE also notes that whether retention is achieved through ILF or SRCs, the same volume of retention capacity, corresponding to the Offv of the regulated site, will result.

d. The Commenter contends that it is critically important to perform maintenance and verify it with on-site inspections, and suggests requiring annual maintenance reports with soil/media testing and photographs.

DDOE Response: Understood. Section 519 of the revised rule contains information on SWMP maintenance requirements. Also, Section 503 of the revised rule has been revised to clarify that maintenance is required.

10. Department of the Navy, Christine H. Porter (November 8, 2012)

a. The Commenter contends that (pursuant to General Services Administration guidance) federal agencies, including DOD facilities, are not authorized to record an easement or covenant on property owned by the United States. Therefore, in relation to Sections, 518.9, 518.10, 529.1 and 529.2 (and the draft guidebook), the Commenter suggests revising the language to state that an agency of the Federal Government or District Government shall not be required to make or record a Declaration of Covenants.

DDOE Response: Under the District's existing stormwater management regulations, District-owned and federally owned properties are not required to file a declaration of covenants. During the informal comment period, DDOE plans to continue reviewing this issue and considering the efficacy of a change.

b. The Commenter notes that DOD facilities and other federal agencies in the District may already achieve the predevelopment hydrology of a site to the maximum extent feasible, as required by the Energy Independence and Security Act requirements and related USEPA guidance. In reference to Sections 520.5(a)-(c), 522.5(a)-(c), and 531.3, the Commenter suggests verifying in the proposed rule and draft guidebook that DOD projects are eligible for SRC certification for the volume retained in excess of 1.2 inches, providing that they also meet the eligibility requirements in Section 531.

DDOE Response: All properties in the District that meet the eligibility requirements are eligible to generate SRCs. No changes to the rule or guidebook are necessary.

c. Regarding Section 522.3(a), the Commenter contends that major substantial improvement activities usually occur in highly developed areas where little pervious area is available to implement BMPs, and that this provision effectively amounts to an additional stormwater retrofit requirement beyond that already required of the District under its MS4 permit. Therefore, the Commenter suggests removing this requirement unless the added burden can be justified as necessary to meet water quality goals and as more cost effective to apply in this area than in another stormwater sector.

DDOE Response: DDOE is required by Section 4.1.5.5 of the District's current MS4 Permit, to implement retention standards for major substantial improvement projects. DDOE understands that renovation projects have inherent constraints and accordingly has proposed a performance standard that is lower than the requirement for major land-disturbing activities. No change to the rule is necessary.

d. The Commenter contends that, in Sections 530.1 and 530.5, it is unclear how the ILF differs from the existing stormwater fee that District property owners pay, and suggests recognizing the overlap between the two fees and reconciling the differences so that District properties are not charged twice for the same services.

   DDOE Response: Section 527.3 of the revised rule notes that an ILF payment provides regulated sites with an option for achieving their SWRv offsite. SWRv requirements only apply to major regulated projects developed after the rule becomes final. To compare, the stormwater fee is not optional, applies to all District properties regardless of when and if they were developed, and covers the cost to the District of the service it provides in administering and implementing the federally issued MS4 Permit. No change to the rule is necessary.

e. In regard to Section 534.2(a), the Commenter suggests revising the rule to allow BMPs installed during development/redevelopment projects or stormwater retrofit projects before May 1, 2009 to qualify for SRC certification.

   DDOE Response: DDOE will only certify SRCs from BMPs installed or land cover changes made after May 1, 2009. The date corresponds to the retroactive eligibility date for properties that voluntarily installed retention BMPs to receive discounts on their stormwater impervious fee. A consistent date reduces the administrative burden of reporting progress from the financial incentive programs toward meeting goals of the District's MS4 permit.

   RSR provides a discount for the portion of stormwater volume from an ERU that is managed through BMPs installed voluntarily. May 1, 2009 is the date that the stormwater fee changed from a flat fee charged to single family residences and a fee calculated as a percentage of water consumption for multi-family residences and commercial properties to a fee based on square footage of impervious area.

f. In regard to Section 545.5, the Commenter contends that a 25-foot undisturbed buffer may not exist for some current impervious areas (including: roads, sidewalks, parking areas, and recreational or waterfront areas) and suggests including an exception for repair and renovation projects with these constraints, provided that other soil erosion and sediment control provisions are followed (including inspection procedures.)

   DDOE Response: DDOE agrees that flexibility is required for buffers and has added Section 545.6 to the Revised Rule, which allows for exceptions and modifications to the buffer requirement.

g. In Section 599.1, the Commenter states a need to define the term “market value”, which is also necessary to determine whether projects qualify under Section 520, “Requirements for Major Land-Disturbing Activities.

DDOE Response: DDOE agrees and has added a definition to Section 599.1 of the revised rule.

11. District of Columbia Building Industry Association, David Tuchmann (November 8, 2012)

a. **(p. 1)** The Commenter commends DDOE’s substantial outreach and communication efforts following publication of the proposed rule.

DDOE Response: Understood.

b. **(p. 3)** The Commenter contends that not all BMPs are created equal, and while DDOE meant well in including a large number of options, the allowed BMPs do not offer enough flexibility because developers prefer to use proven, durable, cost-effective technologies rather than emerging ones. The Commenter suggests revising the rule to allow for more extensive utilization of favored BMP technologies (proposed rule at 7, 14, 15 and draft guidebook at 18-22).

DDOE Response: The specifications in the SWMG for BMPs are intended to ensure that BMPs are designed and constructed properly, and to provide certainty regarding accepted performance. Several revisions have been made throughout Chapter 3 to allow for greater utilization of some BMPs. The Guidebook also allows Developers to propose proprietary BMPs or other technologies which they can demonstrate meet the stormwater performance requirements.

c. **(p. 5)** The Commenter asks if regulated sites that include private space and PROW will be responsible for stormwater that is properly attributable to the PROW portion of the site, or can the PROW be excluded from the site's required SWRv?

DDOE Response: The area of land disturbance in the PROW will not be included in the SWRv calculation for private space. However, a separate SWRv shall be calculated for the portion of the project in PROW, which must be managed with retention practices to the MEP. DDOE has modified Section 521 of the revised rule to clarify this issue.

d. **(p. 5)** The Commenter gives several specific examples and contends that, if regulated sites will be responsible for SWRv in the PROW, they should be able to utilize the PROW for added retention capacity. Alternatively, if DDOT does not allow use of the PROW, then the Commenter contends that DDOE should not force regulated sites to compensate for the lack of retention capacity in the PROW.

DDOE Response: Regulated sites must restore the PROW to retain the SWRv to the MEP. There are no additional retention requirements on private space to compensate for the lack of retention capacity in the PROW. DDOE has modified Section 521 of the revised rule to clarify this issue.

e. **(p. 5)** The Commenter states a need to clarify how DDOE's discounted stormwater fee program will apply to on-site facilities constructed in the PROW.

DDOE Response: DDOE's stormwater fee discount program will allow property owners to receive a discount for practices that retain stormwater runoff generated by impervious surface on their property. Any retention achieved in the PROW will not be eligible for stormwater fee discounts.

f. **(p. 5)** In addition to discussion with DDOT and DC Water about PROW-related issues, the Commenter states an immediate need for DDOE to include other interested stakeholders in these deliberations, as they have unique perspectives that need to be considered.

DDOE Response: DDOE has done extensive outreach to numerous PROW stakeholders, including sister agencies, utilities, and the general public to understand concerns and define constraints. This extensive outreach effort has informed the revised MEP process in the revised SWMG.

g. **(pp. 5-6)** The Commenter contends that six months will not be sufficient to adapt existing projects to comply with the new requirements (proposed rule at 5), particularly those that are in the final planning stages, and expresses concern that the firm USEPA deadline of July 22, 2013 may not allow for this much, or possibly any, transition period if there is a delay in approving the District's stormwater regulations. Therefore, the Commenter suggests: setting the implementation date as far back as the MS4 permit will allow, exempting projects that have been in development for extended periods of time and are now in the later stages of planning and construction, and separating the stormwater management rule from the building permit process for these projects.

DDOE Response: In the preamble to the revised rule, DDOE has proposed a phased transition period. In the first period, major regulated projects would comply with their existing regulations. In the second transition period, major regulated projects could achieve 100% of their SWRv offsite with no on-site requirement, and would still have to achieve any water quality treatment requirements, as well as detention requirements. Finally, in a third transition period (full effectiveness, with some exceptions), major regulated projects would be required to meet the 50% OSRv requirement before using and Offv option. Please see the preamble to the revised rule for additional detail.

h. **(p. 6)** The Commenter contends that: regulated sites undergoing substantial improvement activities (Section 599.1) are complex projects (often old buildings with very few on-site locations to install new retention facilities); it will be very difficult for them to come into compliance with the new rule; and they would benefit from an extended "learning

period" to allow them reasonable time to prepare for the new rule. Therefore, the Commenter suggests temporarily suspending the requirements for these projects, until a reasonable period of time after July 22, 2013, which could be specified in Section 522.1.

DDOE Response: The transition period described in the preamble to the revised rule does not differentiate between major substantial improvement activities and major land-disturbing activities; however, DDOE will be continuing to consider this issue.

i. **(p. 7)** In order to resolve potential conflict with DC Water's pretreatment requirements for discharges into the District's combined sewer system, the Commenter suggests revising the proposed rule to clarify and explicitly state that the dewatering requirements in Section 542.12 are intended to apply only to water discharged into the District's MS4.

DDOE Response: DDOE agrees and modified Section 542.12 of the revised rule to clarify this issue.

j. **(p. 7)** The Commenter notes that DDOE is in the process of developing regulations for wells, that these regulations are not expected to be introduced until after the proposed stormwater rule is finalized, and suggests that DDOE either: delay implementation of groundwater controls until they are introduced as part of the well regulations; ensure that the proposed rule will not conflict with the well regulations once they are introduced; and/or include a sunset provision in the proposed rule such that the groundwater requirements would automatically lapse upon DDOE's implementation of its well regulations.

DDOE Response: The proposed rule allows DDOE to restrict infiltration on contaminated sites. Additionally, the rule requires the applicant to submit a dewatering pollution reduction plan if contaminated groundwater is encountered. If these requirements conflict with or are no longer necessary after well regulations are finalized, DDOE will remove these provisions.

k. **(p. 7)** In Sections 542.11 and 542.12, the Commenter states a need to clearly define the term "contaminated," and suggests expressly excluding all naturally occurring substances (which regulated sites have no ability to control), and to consider adopting an existing definition already familiar with developers of regulated sites, such as the UST remediation standards which are more applicable to groundwater than other standards. And, because this definition could have such a consequential impact on regulated sites, the Commenter insists that DDOE proceed in an open and transparent manner and refrain from finalizing any definition without further notice and public comment.

DDOE Response: The identification of contaminated groundwater or soil has been clarified in the revised rule to include observable contamination or analytical results that verify the presence of contamination. Any naturally occurring substances can be addressed in a dewatering pollution reduction plan to be prepared by the applicant. In addition, Section 500.9 of the revised rule clarifies that infiltration tests will not require separate Department approval for groundwater quality protection. During the informal

comment period, DDOE plans to continue reviewing this issue and considering the efficacy of further changes.

l. **(pp. 7-8)** Regarding guidebook Appendix R, the Commenter contends that sites that are one acre or larger should not be required to obtain a SWPPP from the District because they are already subject to the USEPA's CGP. The Commenter further contends that adding the District's permit requirement would not be likely to achieve any additional environmental protection and would only create further administrative burdens and delays for regulated sites. Therefore, the Commenter suggests that DDOE simply accept the USEPA's Construction General Permit as proof of compliance in these cases.

DDOE Response: Section 543.9 of the revised rule has been updated to clarify that a SWPPP prepared for USEPA's CGP satisfies this requirement.

m. **(p. 8)** The Commenter contends that demand for field inspections will increase significantly after the regulations go into effect and is concerned that DDOE does not currently have the capacity to meet this demand. Therefore, the Commenter requests that DDOE provide assurances that it can meet the demand, or instead, include a certification process for third party inspectors that would go into effect in advance of the proposed rule to ensure sufficient inspection capacity.

DDOE Response: DDOE agrees that additional staff capacity could be necessary to perform field inspections and conduct other activities associated with the rule. DDOE is increasing its staff capacity. In Mayor Gray's proposed FY2014 operating budget, the Stormwater Management Division receives funding to support four additional FTE employees. The Watershed Protection Division would increase by 6.2 FTEs. In addition, DDOE issued a request for applications in March 2013 to enroll a partner organization with sufficient technical capacity to inspect and verify BMPs with existing retention capacity that could be eligible to generate SRCs. DDOE will continue to increase its staff capacity to support full implementation of the rule. No change to the rule is necessary.

n. **(p. 8)** The Commenter suggests revising the regulation to clearly indicate when during the construction process DDOE intends to inspect on-site stormwater retention facilities and specifically asks if inspections will only be required at selected stages listed in the draft guidebook (Section 5.2) or throughout the installation process.

DDOE Response: General inspection and notice requirements are defined in the revised rule, while inspections for the installation of specific BMPs are identified in the draft guidebook. Both the general inspections, (e.g., pre-construction and completion of land-disturbing activity) and staged inspections for BMPs will be required.

o. **(p. 9)** Regarding Section 501, the Commenter requests more detail about how the fees in this rule were established (for example, by providing data about comparable fees in other jurisdictions and/or estimates of DDOE's actual costs.)

DDOE Response: DDOE calculated fees based on the cost for the Department to manage the SWMP process (e.g., staff and resources to review multiple plans, conduct inspections, and coordinate with sister agencies) and Offv options including the SRC trading program and ILF program. For a representative site with 8,000 ft^2 of land disturbance, DDOE is proposing an increase in plan review fees from $72.98 to $4,800.00. DDOE's proposed fees ($4,800) are similar to the fees in Montgomery County ($5,550), Philadelphia ($4,525), and Seattle ($4,648) and exceed the fees in Chicago ($1,000).

p. **(p. 9)** The Commenter suggests revising the rule to limit the rate at which fees can be adjusted over time in order to enable regulated site owners to better anticipate how fees will be adjusted in the future.

DDOE Response: DDOE intends to provide site owners with sufficient time to anticipate and plan for fee adjustments. As noted in the rule, DDOE will annually adjust the plan review fees and ILF for inflation using the Urban Consumer Price Index published by the United States Bureau of Labor Statistics. DDOE expects that business enterprises, such as those owning or developing the typical regulated site, are familiar with anticipating price changes resulting from inflation. In addition, Section 530.3 of the revised rule allows DDOE to rebase the ILF as necessary, subject to notice in the *D.C. Register*. This is clarified in the revised rule. If DDOE were to rebase the plan review fee, it would also post notice in the *D.C. Register*. DDOE would receive public comments before making a decision to rebase fees.

q. **(p. 9)** The Commenter asks how DDOE will collect fees. Specifically, will DDOE's fees be added to the building permit fee that is due upon submission of the building plan to DCRA, or collected following DCRA's review of the plan? If the fees will be collected by DCRA, then has DDOE coordinated with DCRA regarding how the fees are to be calculated and collected?

DDOE Response: Typically, plan review and other permit-related fees are collected by DCRA cashiers. As specified in Section 501 of the rule, some of these fees are paid upon filing for a permit, and some are paid when the permit is issued. DDOE has the ability to receive and process ILF payments made by check and may be able to establish the ability to do that by credit card.

DDOE would appreciate input from members of the regulated community as to whether they would like to have the ability to make an ILF payment by credit card.

r. **(p. 9)** The Commenter acknowledges that the requirement to maintain an undisturbed 25 foot buffer along all waterways (Section 545.5) is similar to that in other jurisdictions, but contends that there will be some instances where it cannot be met. Therefore, the Commenter suggests revising the rule to permit certain exceptions and to create a process to allow regulated sites to petition DDOE for a waiver.

DDOE Response: DDOE agrees and has added Section 545.6 to the revised rule, which allows for exceptions and modifications to the buffer requirement.

s. **(p. 9)** The Commenter strongly contends that the requirement to impose a 2.5 acre limit on the area that any single regulated site can disturb at any one time is severely burdensome for developers in terms of cost, complexity, and time (to the point of thwarting some projects entirely), and provided several specific examples to illustrate that point. The Commenter further contends that this issue is primarily one of enforcement, not regulation and that DDOE should avoid punishing a majority of responsible developers for specific instances of non-compliance at a minority of regulated sites. The Commenter suggests possible solutions, such as increasing field inspections to ensure compliance with existing requirements or instituting perimeter controls specific to smaller sites and others that would apply on all sites (including: sediment traps, sediment basins, and larger diameter compost filter socks to effectively control sediment from larger sites).

DDOE Response: DDOE has determined that this provision is not necessary, since the other erosion and sediment control provisions, including those for a responsible person, should provide adequate protection. DDOE has removed this requirement from the revised rule.

t. **(p. 10)** In Sections 547.1 and 547.2, the Commenter states a need to clarify exactly what the "Responsible Person" shall be responsible for, what minimum professional qualifications they must have, and which training programs DDOE would approve. The Commenter suggests revising the proposed rule to reflect the responsibilities that it has subsequently identified for a Responsible Person and to clarify that the Responsible Person can be an agent of the regulated site's owner, such as a civil engineer.

DDOE Response: DDOE has clarified, in the revised rule, the responsibilities of the responsible person in Section 547.2 and modified Section 547.3 to allow courses on erosion control, which are provided by other jurisdictions or professional associations, to qualify an individual to be a responsible person.

u. **(pp. 10-11)** In Section 542, the Commenter states a need to clearly define the term "topsoil" and suggests that it should constitute only the uppermost layer of organic material in which vegetation can be grown.

DDOE Response: The primary intent of this section was to limit land disturbance that is not part of the approved plan. DDOE has modified Section 542 in the revised rule to clarify intent and remove the reference to topsoil.

v. **(p. 11)** Pursuant to Section 542.9(n)(1), regulated sites must include "provisions to preserve topsoil and limit disturbance" in their erosion and sediment control plans. The Commenter contends that it is not practical for many regulated sites to preserve topsoil in place, since doing so would only exacerbate the space constraints created by the 2.5 acre limit on disturbed land, or because many sites have poor quality topsoil that contains

stones, litter, and other debris and would have to be sifted and filtered - a process that is time consuming and costly. Therefore, the Commenter suggests revising the rule to simply require use of an organic soil that can be seeded for erosion control measures, but not necessarily require reuse of the original topsoil.

DDOE Response: See response to previous comment.

w. **(p. 11)** The Commenter contends that the requirement to include "details of grading practices." in erosion and sediment control plans is confusing and suggests revising the language to specifically state which "details" should be included and to which "grading practices" this requirement refers.

DDOE Response: Details of grading practices will vary for each individual project but may include phasing, and interim and final contours.

x. **(p. 11)** In Section 542.12, the Commenter contends that the requirement to “provide additional information that the Department considers necessary" is unmanageably vague and could enable DDOE to impose burdensome and costly additional reporting requirements on regulated sites without warning. Therefore, the Commenter suggests revising this requirement to clarify the type of additional information that DDOE might request under this provision and the circumstances in which those requests will be made.

DDOE Response: DDOE has clarified Section 542.14 of the revised rule, to limit additional reporting to technical information which is necessary to demonstrate compliance with erosion and sediment control requirements.

y. **(p. 11)** The Commenter suggests including a 30-day time limit for DDOE’s review of soil erosion and sediment control plans and to consider offering regulated sites an expedited 10 day review option for a premium fee sufficient to cover DDOE's additional costs.

DDOE Response: DDOE will review all soil erosion and sediment control plans in a timely manner, and will add additional resources as necessary to minimize delays in plan reviews. In addition to some equity concerns, DDOE has concerns about providing an option that commits the agency to only ten days for review, since there may be some large and complicated sites for which this is not possible.

z. **(p. 12)** The Commenter suggests revising Sections 543.4 and 543.11 to explain the technical legal term "rebuttable presumption," in language that is accessible to individuals who do not have legal training but who are required to follow the regulations.

DDOE Response: DDOE agrees and has removed references to this the term "rebuttable presumption" in the revised rule.

aa. **(p. 12)** Regarding the requirement to protect all cut and fill slopes in vertical increments of exactly five feet (Section 543.17), the Commenter contends that the specifications are too precise, particularly considering the highly variable topology in the District, and gives

specific examples of scenarios in which this method would not be practical, effective, or useful. Specifically, the Commenter asks for clarification as to whether this requirement will apply to basement excavations where the excavation is laid back and there is no risk of off-site runoff.

DDOE Response: DDOE agrees and has modified Section 543.17 in the revised rule to delete the reference to five foot increments and clarify that protection is only required for cuts or fills that are likely to impact an adjacent property or waterbody.

bb. **(p. 12)** In Section 540.2, the Commenter suggests clarifying which control measures would be required and the circumstances in which each will have to be used, and adding language that ensures that demolition sites will be notified of the required control measures before demolition begins.

DDOE Response: This subsection is included for projects that do not trigger the requirement for a SESCP. For those projects, the requirement would only become relevant when debris, dust, or sediment are leaving the site and after DDOE gives instructions to use specific control measures. For a site that triggers the requirement for a SESCP, these measures are typically specified on the SESCP (see Section K of the existing (2003) *Standards and Specifications for Soil Erosion and Sediment Control*).

cc. **(p. 13)** The Commenter contends that the requirement to cover stockpiles at the end of each workday will provide little environmental benefit , will be a costly and time consuming process for active stockpiles, and conflicts with the already common practice of covering inactive stockpiles using straw mulch and temporary vegetation (as required in Section 543.18(c)). Therefore, the Commenter suggests removing Sections 543.18(a) and (b).

DDOE Response: DDOE agrees and has modified Section 543.15 in the revised rule to require perimeter controls around stockpiles that are being actively used during a phase of construction. The requirement to cover stockpiles has been removed, except that a stockpile must be stabilized within 15 days after its last use or addition.

dd. **(p. 13)** The Commenter notes that final compaction is currently required during final backfill around the perimeter of a building and contends that it will be impossible to comply with this requirement when these areas are used as BMP facilities. Therefore, the Commenter suggests that DDOE consider options to resolve the conflict between compaction and BMP installation requirements and clearly allow non-compaction of areas that are used for specified BMP facilities.

DDOE Response: DDOE's intent is not to prevent final compaction that is required for an area where a BMP will be located. However, the area may need to be decompacted when the BMP is constructed. Consult Appendix K of the revised guidebook for guidance on restoring hydrological function to soils.

ee. **(p. 14)** The Commenter strongly contends that without a clear understanding of SRCs and the market in which they will be bought and sold, regulated sites will simply turn to the ILF as a possibly-more-expensive, but definitely-more-predictable alternative.

DDOE Response: DDOE agrees that communication to regulated sites is necessary for the SRC trading program to become a viable option for offsite retention. DDOE has developed and issued information on the process for major regulated projects to buy SRCs and use them to satisfy an Offv requirement. For example, see Chapter 6 of the proposed guidebook titled "Use of Off-Site Retention by Regulated Sites"; Chapter 7 titled "Generation, Certification, Trading, and Retirement of Stormwater Retention Credits"; and the additional information, including training presentations available at ddoe.dc.gov/proposedstormwaterrule. In addition, DDOE held over 20 training and listening sessions in the past year on the SRC trading program, ILF option, and other requirements in the rule and draft guidebook. Further, DDOE continues to meet with interested members of the regulated community, has hired additional staff to support the SRC and ILF programs, and began development of a database and website to track and report on SRC transactions. DDOE will continue to make information on the programs available to regulated sites and the general public.

ff. **(p. 14)** The Commenter states a need to better understand the reasoning behind the ILF amount and requests that DDOE make public the cost estimations and assumptions that it relied upon to determine the initial $3.50 ILF (Sections 530.1 and 501.8). The Commenter also states a need for a clear explanation of how to compute the ILF, including specific illustrative examples.

DDOE Response: DDOE provides an explanation of the ILF calculation on the rule website. The $3.50 in-lieu fee reflects the estimated full cost, on an annualized basis, for DDOE to install retention practices.

gg. **(pp. 14-15)** The Commenter states a need to clarify how ILF revenue will be spent, suggests depositing this revenue in a special purpose revenue fund that can be monitored easily, and requests an annual report that summarizes the fund's activities and highlights how they are being used effectively to retain stormwater in the District. The Commenter also asks if DDOE knows the types of stormwater retention technologies it intends to utilize and whether these technologies are available for $3.50 per gallon of annual retention.

DDOE Response: Regarding the use of ILF revenue, note the explanation at Section 530.6 of the revised rule that ILF revenue will be used solely to achieve increased retention.

In addition, on March 28, 2013, Mayor Gray transmitted the Fiscal Year 2014 Budget Support Act of 2013 to the Council of the District of Columbia. That legislation includes provisions to establish a special purpose revenue fund for ILF payments. DDOE recognizes that it is Council's prerogative to approve or modify this legislation, and, once the legislation is finalized, DDOE plans to modify the rule accordingly.

In addition, DDOE plans to issue reports on an annual basis. DDOE notes that other Chesapeake Bay jurisdictions report annually on their water quality trading programs. For example, see the Virginia Nutrient Credit Exchange Association 2011 Nutrient Trades Report at www.deq.virginia.gov/Portals/0/DEQ/Water/PollutionDischargeElimination/NutrientTradesReport2011.pdf.

Finally, DDOE provides an explanation of the ILF calculation on the rule website. The $3.50 in-lieu fee reflects the estimated full cost, on an annualized basis, for DDOE to install retention practices. DDOE's analysis is based on the cost for the District Government to install green roofs, bioretention, tree planting, and other BMPs included in the draft guidebook that would be used to achieve Offv.

hh. **(p. 15)** The Commenter suggests revising the ILF adjustment process (Section 530.2) to enable regulated sites to accurately predict their long-term fee obligations while maintaining DDOE's ability to collect sufficient fees to retain the necessary stormwater volume. Specifically, the Commenter suggests: limiting adjustments to no more than once every five years rather than on an annual basis, using the Urban Consumer Price Index as the exclusive benchmark upon which adjustments shall be based, and imposing an absolute cap on the rate of adjustment to guarantee that the fee will never increase faster than a predetermined rate, despite the chance of significant fluctuations in inflation rates.

DDOE Response: The ILF provides a compliance option for retention that will be required under District law and the MS4 permit. The District Government must be able to ensure that it has the flexibility to re-base the ILF so that it can cover the costs to retain the required volume. Failure to achieve that volume would expose the District to enforcement action under the Clean Water Act. Though DDOE does not expect that re-basing will typically be necessary more frequently than every several years, it does not believe it would be appropriate or responsible to artificially limit re-basing to a particular time period.

DDOE also notes that major regulated projects have options for increasing certainty in predicting their costs for achieving Offv, including paying the ILF in one year to achieve Offv requirements for future years or purchasing multiple years' worth of SRCs.

Similarly, DDOE does not believe it is reasonable or appropriate to artificially limit inflation adjustments, since it is important that DDOE be able to increase fee levels to cover the rising costs associated with rising inflation. DDOE does not believe that this poses an undue burden, as it is common for businesses to take inflation into consideration, and it is understood that inflation rates may vary widely over a long period of time.

DDOE appreciates the input from the commenter on the preference for DDOE to base inflation adjustments on the Urban Consumer Price Index published by the United States Bureau of Labor Statistics, and DDOE has specified this in the revised rule.

ii. **(p. 15)** The Commenter strongly suggests that DDOE begin to certify and inventory SRCs now so they will be available when the new regulations take effect.

DDOE Response: DDOE must establish the related regulatory provisions before certifying SRCs. Section 531.5 of the revised rule notes that DDOE will begin accepting applications for SRC certification after that section is published as final in the *D.C. Register*. Since the transition period establishes a 6-month period where major regulated projects may comply with existing regulations, DDOE anticipates that SRCs will be available when demand arises.

DDOE is actively identifying properties with excess retention capacity that could be eligible to generate SRCs upon final publication of the rule.

jj. **(p. 15)** The Commenter requests an estimate of the cost of SRCs and the background information and assumptions that DDOE used to arrive at that estimate.

DDOE Response: Though DDOE has done projections on the price of an SRC that would be required to recoup the costs of generating the SRC (which DDOE plans to share publicly), DDOE has not and does not intend to forecast the market price of SRCs, which is more complicated and would depend on many variables for which information is limited. Given the many assumptions that would go into such an analysis and the inherent uncertainty and limitations to its accuracy, DDOE is not convinced that it would be worth the effort and resources required.

DDOE expects that the ILF will act as a price ceiling on SRCs, since presumably buyers would only buy SRCs priced below the ILF rate. DDOE provides an explanation of the ILF calculation on the rule website and in the preamble to the revised rule.

kk. **(p. 15)** The Commenter states a need to know how long the process of certifying newly generated SRCs is expected to take and suggests instituting a maximum certification period of twenty-one days.

DDOE Response: DDOE is reluctant to specify a time period, especially given the variability between review for new retention capacity and review for existing retention capacity.

For new retention capacity, a person who intends to generate SRCs is expected to secure DDOE approval of a SWMP prior to construction, and that person will submit an as-built SWMP after a final construction inspection. At the time when DDOE receives a complete application for SRC certification, review should be fairly straightforward and quick since the complicated task of review a SWMP to determine eligible retention

capacity will have been completed. In this circumstance, DDOE expects that it will be able to complete its review within 15 business days, if not sooner.

By contrast, for existing retention capacity, though DDOE may have previously reviewed a SWMP for the site, such a SWMP would have been designed to meet the existing water quality treatment and detention requirements, before the technical specifications for the new SWMG were finalized. Consequently, DDOE will have to carefully review the as-built SWMPs for these sites to determine the eligible retention volume in light of the technical specifications in the new SWMG, and it is possible that DDOE will require additional information if the as-built SWMP does not contain all of the information required. In such cases, review may take up to 30 business days or, in some cases, even longer.

To avoid penalizing an applicant for a delay by DDOE in reviewing a complete application for SRC certification, DDOE intends to certify SRCs as of the date that the Department receives the complete application, as stated in Section 531 of the proposed rule. No change to the rule is necessary.

ll. **(p. 16)** In Section 531.9(f), the Commenter contends that allowing DDOE to demand from SRC generators any "documentation that the Department requires to determine that the eligibility requirements are satisfied" is incredibly broad and potentially enables the certification process to become overly burdensome and unattractive to prospective SRC-generating facilities. Therefore, the Commenter suggests significantly narrowing the scope of this provision.

DDOE Response: DDOE does not expect for requests of additional information to cause an overly burdensome effort for those generating SRCs. DDOE would only request information to ensure that the eligibility requirements in Section 531.3 of the revised rule are met.

mm. **(p. 16)** The Commenter contends that, since DDOE will certify SRCs for existing facilities installed since May 1, 2009 (Section 534.2(a)), DDOE should also allow these facilities to retroactively generate SRCs (see Section 531.11) . The Commenter also contends that retroactive SRCs would increase the supply available when the regulations take effect. Therefore, the Commenter suggests revising the proposed regulations to certify SRCs for retention capacity installed since May 1, 2009 and notes that this action would also require a means to determine the proper owner of the retroactively awarded credits, particularly if the facility had been sold during this period.

DDOE Response: Though DDOE will certify SRCs for eligible retention capacity installed after May 1, 2009, DDOE does not intend to certify SRCs retroactively. For example, a 1,000 gallon bioretention installed in June 2009 could apply for SRC certification as soon as the rule is finalized, and, assuming all the requirements are met, DDOE will certify 3,000 SRCs for the upcoming three-year period. DDOE would not certify SRCs for the time between the bioretention's installation in June 2009 and the date on which the application is submitted.

DDOE is balancing competing priorities on this issue. On the one hand, DDOE wants to ensure that SRCs will be available at the beginning of the SRC market and to provide an incentive for maintenance that otherwise might not occur. On the other hand, DDOE's objective is for the SRC market to be primarily composed of SRCs for newly installed retention capacity (above the existing baseline) and not for SRCs from existing retention capacity to flood the market. DDOE notes that an SRC market flooded with an initial supply of SRCs from existing retention capacity will not serve regulated development well over the long term, as this will reduce or eliminate the incentive for property owners to generate SRCs for newly installed retention capacity, which could subsequently cause an SRC shortage and a spike in prices. DDOE is trying to balance these issues and is also undertaking separate efforts to stimulate the installation of new retention capacity for the purpose of generating SRCs.

nn. **(p. 16)** The Commenter states a need to clarify banking and retirement of SRCs and to limit DDOE's ability to retire credits at its own discretion. The Commenter contends that SRCs should be indefinitely bankable in order to increase their value and provide liquidity in the market and suggests removing Section 532.2 in order to clarify that DDOE will have authority to retire credits only upon their redemption by a regulated entity for the associated stormwater retention capacity.

DDOE Response: As noted in Section 532.1 of the revised rule, SRCs may be banked indefinitely. Regulated sites may retain SRCs indefinitely until they are used to satisfy an Offv requirement.

After DDOE certifies an SRC, it is the property of its owner (whether the original or subsequent owner), and DDOE can only take away the value of that property to the extent that it is specifically allowed in the rule. The proposed rule gives DDOE the authority to force the retirement of an SRC that is still owned by the original SRC owner (i.e. it has not yet been sold or used) if the SRC-generating site failed to maintain its retention capacity as the original SRC owner had promised when applying for certification of SRCs (see Section 532.3). Once an SRC has been sold or used, the proposed rule does not give DDOE authority to retire it, but, if the retention capacity is not maintained, it does have authority to require the original SRC owner to purchase replacement SRCs or pay the corresponding amount of in-lieu fee. DDOE is also considering establishing that, for the owner of a regulated property who has lapsed in compliance with the Offv for that property and who also owns an SRC, DDOE could, on its own, apply that SRC to the Offv for the regulated property.

In addition, DDOE will recognize instances where an owner desires to voluntarily retire an SRC solely to realize an environmental benefit (as opposed to achieving an Offv). In such cases, DDOE requires SRC owners to submit an Application to Retire Stormwater Retention Credits when they retire SRCs. DDOE will then record the retirement in its tracking system for SRCs.

oo. **(pp. 16-17)** In cases where on-site retention is excessively expensive, the Commenter suggests allowing regulated sites to retain as much as reasonably possible on-site and make up the difference with additional off-site retention. The Commenter contends that, in most cases, a given volume of retention capacity is equally environmentally beneficial, whether on-site or off-site and references Section 526.2, which allows regulated facilities to increase off-site retention in instances where the on-site retention requirement is "technically infeasible or environmentally harmful."

DDOE Response: DDOE has concluded that the proposed rule adequately addresses this by providing flexibility to use off-site retention after achieving 50% of a SWRv on site and establishing a process to apply for relief (Section 526) and thereby achieve more of the SWRv off site.

pp. **(p. 17)** The Commenter asks if third parties will be allowed to trade in the secondary SRC market and whether they will be able to purchase directly from SRC-generating sites or only from regulated sites. The Commenter suggests allowing third party participation as a means to increase market liquidity.

DDOE Response: Third parties may participate in the SRC trading program and act as agents for any buyers or sellers.

qq. **(p. 17)** The Commenter asks if the secondary SRC market will be structured as an exchange or OTC platform and suggests that DDOE begin considering the benefits and difficulties associated with both structures as soon as possible. The Commenter endorses using an exchange structure and suggests that DDOE could host an exchange via its website without much difficulty.

DDOE Response: DDOE plans for a hybrid exchange/OTC market. As a service to sellers and buyers, DDOE plans to post sellers and their available SRCs and contact information on an SRC website. Also, DDOE plans to post contact information for buyers that want to be listed. DDOE is working with its database and website developers to determine whether information can be posted in real time. If not, DDOE will post information less frequently but often enough to facilitate price discovery.

The sellers and buyers may contact each other to negotiate sales without input or participation by DDOE, as in an OTC market. DDOE will post prices from transactions on the SRC website to aid market participants with price discovery. DDOE will also facilitate periodic meetings that will be open to interested buyers and sellers and during which trading may occur, which would provide an informal exchange market.

rr. **(pp. 17-18)** The Commenter contends that, if DDOE decides to adopt an OTC structure, its plan to initially track transactions through an internal spreadsheet will withhold transaction information from the public and prevent trading levels from rising to the level at which DDOE would consider creating a public interface. The Commenter suggests revising the proposed rule to specify the market's structure and reporting system, rather than providing this information via informal guidance.

DDOE Response: See response above.

ss. **(p. 18)** In order to improve the efficiency of SRC transactions, the Commenter, suggests that DDOE develop one or more standardized sales contract templates that market participants could utilize.

DDOE Response: DDOE agrees that a standard or template contract for SRC trading should help reduce transaction costs for potential participants in SRC trading. DDOE plans to convene a legal working group to draft template SRC trading contracts.

tt. **(p. 18)** Regarding Section 533.3, the Commenter contends that DDOE may not need to review and approve every proposed SRC transaction and asks: what DDOE will look for in its review of individual transactions, what would cause DDOE to deny a transaction, how long will the reviews take, and what are the review standards? The Commenter contends that DDOE's role should not impede the program's efficiency and predictability, either by holding up transactions under indefinite review or by creating uncertainty as to whether transactions will be approved at all. If DDOE retains its approval authority, the Commenter suggests revising the proposed rule to: include a maximum period in which DDOE must approve a proposed transaction; allow automatic transaction approval when DDOE's approval period has passed uncompleted; and include a detailed and exclusive list of the criteria DDOE will use to evaluate transactions.

DDOE Response: As stated in Section 533 of the revised rule, DDOE will verify the ownership and status of an SRC before approving its sale. DDOE would not approve a transaction if, for example, the SRC had already been used to satisfy an Offv requirement. Once participants submit their forms, DDOE does not expect for the review process to take a long time. DDOE does not intend to approve the transfer of ownership for retired SRCs, which the rule implies but does not explicitly state.

uu. **(p. 19)** The Commenter states a need to clarify how SRC-generating facilities and regulated sites will record their SRC balances, if they will need to record a separate document against the property, and whether the site owners or DDOE will be responsible for recording the balances and maintaining the records.

DDOE Response: The rule does not require a declaration of covenants to be recorded against the property. The site is required to maintain the retention capacity in compliance with the maintenance plan in the SWMP for the time period for which the proposed SRC owner requests SRCs to be certified (see Appendix D of the draft guidebook). The application must also include a signed maintenance agreement or maintenance contract covering the time period for which SRC certification is requested. Failure to maintain the retention capacity will result in no additional SRCs being certified as well as the consequences specified in Section 532 of the proposed rule and revised rule.

vv. **(p. 19)** The Commenter contends that some regulated sites may qualify as net-SRC-generating facilities and will, therefore, be required to submit SRCs for compliance

purposes as well as to certify SRCs for generation purposes. Therefore, the Commenter suggests synchronizing the obligations for both property types. In particular, the Commenter suggests only requiring regulated sites to submit SRCs for compliance purposes when they receive a building occupancy permit and, thereafter, requiring them to submit SRCs at the end of each annual compliance period, so there will be sufficient time to determine the ideal balance of SRC and ILF payments. The Commenter also suggests allowing SRC-generating facilities to bank their own SRCs and sell them at any point within a compliance period, which they contend would help reduce the likelihood of either a glut or scarcity of SRCs.

DDOE Response: A major regulated project would only generate SRCs if it meets and exceeds its SWRv. In other words, no SRCs will be certified for retention capacity that a regulated site installs on site to achieve its SWRv. To certify the excess volume for SRCs, it would need to fill out an Application for Certification of Stormwater Retention Credits.

ww. **(pp. 19-20)** Given that DDOE intends to certify up to three years of retention credit at a time (Section 531.10), the Commenter asks DDOE to clarify how it will respond when an SRC-generating facility is no longer able to retain stormwater capacity for which SRCs have been certified. The Commenter contends that forcing an SRC-generating facility to compensate for its lost retention capacity is not a suitable solution unless that facility is also forced to retire those SRCs with DDOE. The Commenter gives an example of a possible loophole in which a facility could be forced to replace an SRC while remaining free to resell the replacement SRC at its discretion. In relation to this issue, the Commenter states a need to clarify the term “original SRC owner” and suggests that it apply to the SRC-generating facility instead of the party that first purchases the SRC from that facility.

DDOE Response: The site owner can be released from his/her commitment to maintain the retention capacity for the period of time for which SRCs have been certified if he/she forfeits the SRCs associated with the time period for which maintenance will not occur, compensates for that time period with other SRCs, or pays the corresponding ILF. In such a scenario, the site owner would be the original SRC owner who applied for certification of SRCs. DDOE would retire SRCs forfeited or used as compensation. If the site owner fails to take one of these steps to be released from his/her commitment to maintenance for an SRC, section 532.3 of the proposed rule explains the actions for a retention failure, and DDOE has added a clarifying definition of “original SRC owner” in the revised rule. If the SRC has not been sold or used (i.e. it is still owned by the original SRC owner), DDOE will retire the SRC. If the SRC has been sold or used, the original SRC owner must compensate with a replacement SRC (which DDOE would retire) or the corresponding ILF payment.

xx. **(p. 20)** The Commenter suggests allowing SRC certification for stormwater retention facilities that have received a public subsidy, such as a green roof rebate or other incentive, either from DDOE or another public authority, and contends that this practice would help to increase the availability of SRCs when the proposed rule goes into effect.

DDOE Response: If sufficient SRCs are not available to fill demand, DDOE can make program changes to increase supply. One option could be to allow projects that receive District Government funding to generate SRCs. In such cases, DDOE may choose to allow SRC generation from the portion of BMPs that are financed through non-government funding. DDOE will explore these options as the SRC trading program goes forward.

yy. **(p. 20)** The Commenter contends that no stormwater rule should be implemented or become effective until it can be demonstrated that achieving the standards is practical and that the basic building blocks (permitting, inspections, the SRC program, interagency coordination) are sound. The Commenter also contends that proceeding with a new rule prior to this juncture will lead to mass confusion, delays and most important, diminished economic development and growth.

DDOE Response: The stormwater rule must be implemented to comply with MS4 permit issued to the District by EPA. DDOE has carefully developed the regulatory framework in the rule to ensure that it leads to the required benefits for District waterbodies and is also practical and clear. After the rule is finalized, DDOE is committed to providing thorough, ongoing training opportunities to explain the regulatory framework to stakeholders and assist regulated stakeholders with compliance. DDOE is also continuing to work aggressively within DDOE and, as necessary, with other agencies to prepare program staff for implementation. DDOE appreciates the importance of economic development to the District and sees this development as a key partner in restoring health to District waterbodies. Recognizing this, DDOE has concluded that detailed guidance has been provided in the revised rule and draft guidebook to allow Major Regulated Projects to comply with the stormwater performance requirements utilizing accepted practices with defined stormwater management performances. In addition, DDOE has provided meaningful flexibility for sites to comply with the stormwater performance requirements utilizing off-site mitigation options. Further, the programmatic requirements for permitting, inspections, and generating and utilizing SRCs have been well defined, including the administrative forms and procedures contained in Chapters 6 and 7 of the draft guidebook. Lastly, DDOE has proposed a transition period that will minimize impacts to projects that are already under design development.

12. Fresh Creek Technologies, Inc, Hans de Bruijn (November 6, 2012)

Note: These comments are addressed in the guidebook Response to Comments instead of in this document.

13. Z. John Lickso (November 8, 2012)

a. The Commenter contends that, ideally, BMPs with landscaping should rely on treated water from BMPs which provide water quality benefits and are easy to maintain. However, the Commenter contends that the proposed rule creates incentives to use vegetated BMPs which encourage use of BMPs that may become sources rather than

sinks for phosphorus and nitrogen, make the maintenance of BMPs more difficult and costly, and limit the use of other beneficial filter media types in BMPs that do not support landscaping.

DDOE Response: DDOE's regulatory approach, as required by the MS4 permit, is primarily focused on retention, which will result in a reduction of pollutant loads from stormwater runoff. No change is necessary.

b. The Commenter contends there is an assumption that the change to the new runoff retention standard will provide added water quality benefits and prevent channel erosion, but that this idea needs to be better supported considering the potential costs associated with the proposed rule.

DDOE Response: DDOE disagrees. A well-established body of scientific literature supports DDOE's approach, which is consistent with nationwide trends. No change is necessary.

c. Regarding control for the 24-hour 2-year frequency storm (Section 520.2(a)), the Commenter contends that: research has found that this practice does not provide adequate protection for stream channels; the proposed discharge needs to be such that it does not cause downstream channel erosion; and this is more often a one-year event and would require an assessment of the streams in DC to be established.

DDOE Response: DDOE agrees that the one-year event is more protective, but has concluded that the two-year requirement is appropriate in the larger context of the new regulatory focus on stormwater retention. No change is necessary.

d. The Commenter states that Section 520.2(b) proposes amendments to modify existing detention requirements for the 24-hour, 15-year storm from peak discharge control for pre-development to pre-project. In relation to that statement, the Commenter asks, "If there was an identified flooding problem downstream of a major land-disturbing activity that occurs frequently (i.e., less than every 15 years) why would you provide an exemption when you have an opportunity to mitigate this problem? A benefit cost analysis done in areas of repetitive or frequent flooding often shows a positive return for mitigation activities."

DDOE Response: DDOE has concluded that the combination of requirements for the 90th percentile storm retention, along with the two-year pre-development detention and 15-year pre-project detention requirements will provide an improved condition that will help mitigate flooding events. No change is necessary.

e. The Commenter notes that page 22 of the preamble states that, "stormwater retention on CSS sites reduces volume and will help to reduce CSOs" and asks if this assumption has been demonstrated using a hydraulic model of the CSO system.

DDOE Response: Combined sewer overflow events are due to inadequate capacity of the existing CSS. Reducing the volume of stormwater entering the CSS will inherently help reduce CSOs.

f. The Commenter notes that page 25 of the preamble states that, "amendments establish a twenty-five foot (25ft) buffer adjacent to a water body" and contends that, ideally, buffers should be an average of 25 feet in width, but may be narrower to accommodate existing infrastructure.

DDOE Response: DDOE has clarified intent by adding Section 545.6 to the revised rule, which allows for exceptions and modifications to the buffer requirement.

14. Dana Minerva (November 8, 2012)

a. The Commenter supports the 1.2 inch retention requirement and the shift from detention to retention. The Commenter agrees with the onsite retention requirement and contends that it will address environmental justice issues in the Anacostia watershed. The Commenter includes an Appendix that discusses the scientific benefits of retention, ways in which detention is less successful, and also references the MS4 permit.

DDOE Response: Understood.

b. The Commenter describes recent stormwater management requirements and achievements in Maryland, including the Discovery Center in Silver Spring, and contends that it is important for the District to increase its efforts and implement the proposed rule, or risk losing companies that will prefer to relocate to beautiful green redevelopments in other jurisdictions.

DDOE Response: Understood.

c. The Commenter agrees that the SRC market will offer developers flexibility that will lower implementation costs and encourage innovation, but contends that there are areas where this flexibility may also make the regulation ineffective. The Commenter suggests removing the exemption for public right of way projects and, instead, requiring them to obtain SRCs or pay the ILF when they cannot meet the onsite retention requirement. The Commenter contends that roadways constitute 25 percent of the impervious surfaces in the District, and suggests evaluating the percentage of road reconstruction projects costs that would be devoted to stormwater controls and giving DDOT the option to retrofit other District properties, such as: buildings, public schools and libraries, impervious surfaces in parking lots at District parks, etc.

DDOE Response: Section 521.2 of the revised rule lists three options for sites in the existing PROW to comply with requirements to meet a SWRv. Those projects may retain 50% of the SWRv onsite and achieve the remaining 50% through Offv options (i.e., ILF, SRCs), achieve the SWRv onsite, or obtain the SWRv to the MEP after proving in the MEP process that additional retention is not possible. Further, Section 521 of the revised rule lists the information that sites going through the MEP process must submit to

DDOE. That information includes documentation of the presence of utilities and structural requirements or statutes, regulations, court orders, or District-approved uses that would make achievement of the SWRv impossible. No change to the rule is necessary.

d. The Commenter contends that the proposed rule does not offer sufficient rationale for allowing SRCs that were created as early as May 1, 2009 to be used by developers as credits against new development and redevelopment. The Commenter suggests that it is fair and reasonable to require new SRCs to mitigate new construction.

DDOE Response: DDOE disagrees and notes that this is important to ensure that SRCs will be available when the regulations become effective. DDOE also notes that this will create an incentive for those properties to maintain those retention practices. No change to the rule is necessary.

e. The Commenter refers to the provision that allows developers and District agencies to locate SRC- and ILF-generating projects anywhere in the District, and not necessarily in the same watershed as the development or redevelopment they mitigate. The Commenter contends that DDOE cannot predict whether severely polluted watersheds like the Anacostia will benefit from this approach, and suggests that DDOE establish a policy to use ILFs to achieve equity if excessive stormwater volumes are not addressed in a particular watershed.

DDOE Response: DDOE will use the SRC and ILF database and SRC serial numbers to track how off-site retention affects the spatial and temporal distribution of retention BMPs in the District. As data accumulates on this, DDOE plans to review whether there are disproportionate negative impacts on particular communities or waterbodies. As necessary, DDOE will adaptively manage its off-site retention programs and may also use its other programs to offset negative impacts. DDOE is considering developing a portfolio or inventory of potential projects to help encourage installation of BMPs in areas where there are environmental justice concerns or concerns about disproportionate impacts on specific waterbodies.

Also, though DDOE considered the possibility of establishing trading ratios to incentivize the installation of off-site retention in the same watershed that the regulated project is in, DDOE determined that the benefit of doing so was outweighed by the complexity that such trading ratios would introduce. However, as required under the Anacostia Waterfront Environmental Standards Amendment Act of 2012, public or publicly financed projects along the Anacostia River would face a 1:1.25 trading ratio if using SRCs from outside of the Anacostia Watershed.

15. Natural Resources Defense Council, Rebecca Hammer (November 8, 2012)

(p. 1) These comments are additionally joined by: American Rivers, Anacostia Watershed Citizens Advisory Council, Anacostia Watershed Society, Audubon Naturalist Society, Chesapeake Bay Foundation, DC Environmental Network, Global Green USA, and National Wildlife Federation.

a. **(p. 4)** The Commenter agrees with requiring development projects to retain stormwater runoff on-site and incentivizing installation of retention practices on existing sites.

DDOE Response: Understood.

b. **(pp. 4-5)** The Commenter contends that the runoff coefficient of 0.00 for natural cover is likely too low, given that other state agencies estimate forests, meadows, and pastures to be within the range of 0.05 to 0.35, consistent with the traditional understanding that natural conditions have about a 10% runoff rate. The Commenter contends that DDOE will underestimate a site's SWRv if it assumes that natural cover generates no runoff whatsoever, and that this calculation will result in requiring the site to retain less than the actual 1.2 inch storm volume. Therefore, the Commenter suggests that DDOE revise this formula to ensure that all of the 1.2 inch storm volume is captured by regulated sites.

DDOE Response: A potential consequence of using a runoff coefficient other than 0.00 would be that regulated sites would be required to install retention capacity around or to serve natural cover, such as forest or meadow. This does not seem appropriate, since a fundamental objective of the regulations is for stormwater to be managed in a way that more closely mimics natural conditions in a forest or meadow. In other words, natural cover can be thought of as the ideal toward which the regulations are striving. Using a runoff coefficient greater than 0.00 for natural cover would reduce the incentive for a site to install such land cover.

c. **(pp. 5-6)** The Commenter contends that the MS4 permit requires a site's 1.2 inches of retention to occur during each storm event, and therefore SRC buyers should not be allowed to bank credits indefinitely (Preamble p. 15), because that practice allows stormwater to be physically retained at one time but potentially assigned as meeting the retention requirement of a previous or future year. The Commenter also contends that the environmental benefit of retaining a large amount of stormwater over a short period of time is not the same as that of retaining a smaller amount of stormwater over a longer period of time, because, during the years when retention is not occurring, pollution continues to enter waterways, stream banks continue to be eroded, and sewage overflows continue to occur. Therefore, the Commenter suggests limiting credit banking to one year.

DDOE Response: DDOE recognizes the potential for time lags (between when a regulated site would achieve retention on site and when retention may occur by use of a SRC) and has considered this carefully. DDOE has concluded that this potential does not justify complicating the SRC program and market by limiting the time for which SRCs can be banked, including for the reasons below, and DDOE has not imposed such limits in the revised rule. However, DDOE intends to track the extent to which SRC trading results in retention time lags, and based on that, DDOE will consider options for adaptively managing the SRC trading program and/or using other programmatic tools to compensate.

- Though there is some potential for time lags, DDOE expects that the extent to which such time lags actually occur will be limited by the regulatory structure and related incentives and may be compensated for on a net basis.

  First, the extent to which SRC trading will result in delayed retention (i.e. retention associated with an SRC that occurs after the time that retention would have occurred on the regulated site) is limited by the rule's provision that DDOE will only certify SRCs for up to three years at a time. In other words, it is not possible for an SRC to exist that corresponds to retention occurring more than three years in the future.

  Second, the extent to which SRC trading will result in early retention (i.e. retention associated with an SRC that occurs before the time that retention would have occurred on the regulated site) is limited by economic incentives. The rule does not prevent indefinite banking of SRCs, so theoretically it is possible that early retention could result in a time lag of many years. However, this is limited by economic incentives. Stormwater retrofits have a relatively high up-front capital cost, and a person who makes that investment and then banks the related SRCs for a long period of time will neither recoup that investment nor earn interest on it during the time SRCs are banked. Though there may be some economically rational individuals who are willing to make such long-term investments, this has not been shown to happen on a widespread basis in similar fields. For example, though the potential financial savings from an energy retrofit makes many energy retrofits economically rational over an appropriate payback period, the reality has been that the up-front capital cost prevents many property owners from retrofitting. Likewise, DDOE expects the opportunity to sell SRCs and earn a discount on stormwater impervious fees to make a stormwater retrofit economically rational over an appropriate payback period, but the up-front capital costs will limit the ability of property owners to participate. This disincentive to participate becomes even stronger for a property owner who is considering installing a retrofit and foregoing any payback during a long period of SRC banking.

  Third, DDOE expects some delayed retention and some early retention to occur, but these countervailing time lags may cancel each other out to some degree on a net basis. In other words, when thinking of regulated sites and SRC-generating sites as a whole, one delayed-retention SRC may cancel out one early-retention SRC, so that the same net retention would occur in a given year as would have occurred under a strict on-site retention scenario. DDOE expects that there will be multiple participants in the SRC marketplace. Consequently, retention time lags should be compensated for, to some degree, on a net basis.

  Fourth, as discussed in the preamble to the proposed rule, SRC trading has the potential to result in greater retention than would occur under strict on-site retention during most storms and on an annual basis. This increased retention volume should also help to compensate for retention time lags and achieve the same net retention in a given year as would have occurred under strict on-site retention.

- If SRC trading results in an increase in early retention, that may be a positive outcome for District waterbodies.

  As discussed above, economic realities limit the likelihood that SRC trading will result in a significant increase in early retention (as discussed above). However, given that the time lag associated with early retention is potentially much greater than the potential time lag from delayed retention, it is worth noting that such an outcome could be positive for District waterbodies. Given the considerable harm that stormwater runoff currently causes to District waterbodies, front-loading retention in this way could bring some welcome relief. In addition, even if that early retention results in somewhat less net retention in a future year than would have occurred under strict on-site retention, that will likely be relatively small compared to the steady increase in retention that will be occurring over time.

  Whereas the District's existing stormwater management regulations require no retention, there will be a significant and steady increase in retention in the District under the proposed rule. Even for regulated sites that retain only the minimum retention volume on site, the volume that those sites retain will be greater than the volume currently being treated (i.e. filtered) under the existing regulations.

  Though DDOE expects the new rule to steadily increase retention in the District and result in retrofits to the approximately 43% of the District's land area that is impervious, this will be a gradual process. Only about 1% of the District's land area triggers the District's stormwater management regulations in a typical year, yet this area is about 10 times the land area that DDOE is able to retrofit through all of its voluntary incentive and subsidy programs combined. Since most of the regulated work being done is the redevelopment of existing developed areas, regulated development will be the biggest driver of stormwater retention retrofits in the District. Against that backdrop, even if early retention results in somewhat less net retention in a future year relative to strict on-site retention, that is likely to occur on a scale that is relatively small compared to the steady increase in retention that will be occurring over time. Put differently, even if early retention resulted in retention increasing at a decreasing rate for a year, it is almost inconceivable that this could result in a decrease in retention that would reverse the overall positive trend.

- Imposing time limits on banking would complicate participation and administration and could have negative consequences including reducing participation in the market and reducing the market's effectiveness as a tool to drive stormwater retrofits.

  DDOE considered the effects of limiting SRC banking on the administration of the program and determined that those limits would make the program significantly more complicated to administer. Likewise, potential participants already face a learning curve to accustom themselves to the new program, and limits on banking would add another layer of complexity to that process. Furthermore, it would complicate the valuation of SRCs. For instance, if an SRC can only be banked for five years, each SRC would presumably be worth more at the beginning of that five-year period than

at the end. Rather than having a market where one SRC offers the same value as any other SRC, this limitation would make a market where SRCs are not all of equal value. Before entering into a transaction, both buyers and sellers would face the challenge of determining the differential value of each of the SRCs involved. This could significantly limit the number of market participants, the number of SRCs in the market, and the market's overall competitiveness and effectiveness at achieving stormwater retrofits at relatively low costs. This would be a disservice to regulated development, and it would also reduce the market's potential as a tool that DDOE can leverage to achieve District water quality goals and requirements at a lower cost to District taxpayers and ratepayers.

- As the first jurisdiction to put such a retention trading program in place in the context of its stormwater management regulations, it is reasonable to begin with a relatively simple framework that DDOE can track and respond to over time.

  Because no other jurisdiction has implemented a similar SRC trading program, DDOE has a limited ability to know how the program will work and what the outcomes will be, including whether significant time lags will occur. Likewise, DDOE faces the challenge that it must familiarize potential participants with the new concepts and program. Moreover, given the District's ultra-urban context and the associated challenges of stormwater management, it is even more important that the Department include flexible options in its regulatory framework.

  In this context, though it is possible to envision various negative outcomes, DDOE has carefully avoided adding regulatory complexity unless convinced it was necessary, including the complexity of limiting SRC banking. Though the program offers a range of potential sustainability benefits, a program that is too complicated has the potential to stifle participation and reduce those benefits. DDOE plans to track outcomes of SRC trading and the consequences of banking, and, if necessary, adaptively manage the program or use other program tools to address problems.

d. **(p. 6)** The Commenter notes that some previously installed retention practices are allowed to apply for and begin earning SRCs as of the date that the regulations are finalized (Preamble p. 21 and Section 534) and contends that this practice means that the full 1.2 inch volume is not being achieved beyond baseline conditions and goes against the spirit and intent of the MS4 permit to actually increase the amount of retention occurring in the District.

   DDOE Response: DDOE understands this concern and the importance of achieving retention above the baseline conditions. However, DDOE has concluded that it has struck an appropriate balance between this and related issues. On the one hand, DDOE wants to ensure that some SRCs will be available at the beginning of the SRC market and to provide an incentive for maintenance that otherwise might not occur. On the other hand, DDOE's objective is for the SRC market to be primarily composed of SRCs for newly installed retention capacity and not for SRCs from existing retention capacity to

flood the market and eliminate the incentive for property owners to generate SRCs for newly installed retention capacity.

DDOE notes that the rule specifies that DDOE will only certify SRCs for existing retention capacity that was voluntarily installed in excess of the regulatory requirements and that SRC certification will only occur after these practices have successfully passed a DDOE inspection. DDOE expects that this will lead many property owners to conduct maintenance that is not currently occurring as part of the baseline. As a result, the performance of these practices will be restored and retention will be achieved that would not otherwise be occurring under baseline conditions.

No change to the rule is necessary.

e. **(p. 6)** The Commenter contends that certifying SRCs for existing practices will artificially inflate the supply of SRCs, depress credit prices, and result in lower demand for new retrofits, slowing down the installation of new retrofit projects in the District.

DDOE Response: Under DDOE's approach, SRCs for existing retention capacity may be a significant portion of the SRC supply initially in the SRC market, but DDOE expects that to promptly begin to change so that such SRCs will represent a steadily decreasing portion of the supply over time. DDOE also plans to take other steps that will encourage property owners to install new retention capacity. Furthermore, as SRC demand increases, DDOE expects that property owners, aggregators and others will continue to look for opportunities to install new retention capacity to meet this demand.

f. **(p. 7)** The Commenter contends that, because the proposed rule does not place geographical restrictions inside the District, sites are free to purchase SRCs that come from a different watershed or that impact a different sewer system (separate vs. combined). Therefore, the Commenter contends that the District may have difficulty meeting its MS4 permit requirements (which only apply to the separate sewer system) if too many credits generated in separate system areas are purchased by sites in combined system areas. The Commenter acknowledges that the reverse situation is also possible and states a need to ensure the requirement will be met in the MS4 area.

DDOE Response: DDOE's analysis indicates that the MS4 area has a higher proportion of relatively cost-effective opportunities to install retention BMPs, as compared to the CSS area, which is largely located in the densely developed downtown core. Consequently, DDOE expects the rule's off-site retention provisions to tend to result in more retention in the MS4 area than would otherwise be the case through strict implementation of an on-site retention standard. No change to the rule is necessary.

g. **(pp. 7-8)** The Commenter contends that SRC trading across the District's three main watersheds – Anacostia, Potomac, and Rock Creek – could potentially lead to pollution hotspots or uneven environmental benefits because each water body flows differently and accumulates pollution at different rates. The Commenter also contends that inter-watershed trading makes it difficult to meet the different TMDL WLAs for each water

body, as required by the MS4 permit. And, that this situation is further complicated given that a single site can deal with different watersheds from year to year, making the environmental impact of inter-watershed trading unpredictable and subject to variation. Therefore, the Commenter suggests restricting trading geographically so DDOE can more predictably account for how it will attain its TMDL WLAs. The Commenter asks DDOE to publicly share any analysis or evidence upon which it bases the belief that the lack of geographical restrictions would lead to a net environmental benefit compared to watershed-restricted trading (Preamble pp. 17-18).

DDOE Response: DDOE has considered how SRC trading may shift the spatial distribution of retention in the District and determined that its approach is likely to produce results that are as good or better overall for District waterbodies.

An important starting point for considering this issue is that the location of a particular regulated development in the District is not necessarily the best location for an increase in retention capacity from the standpoint of District waterbodies. To explain, a regulated development in the District is predominantly redevelopment of existing developed areas that drain to impaired waterbodies, as compared to greenfield areas in less urban jurisdictions draining to relatively healthy waterbodies. Whereas a regulated development project in the District will, under the new rule, almost always result in a significant increase in stormwater retention with a corresponding benefit to a District waterbody, such a project in a greenfield area would typically result in less retention than the pre-project natural conditions and cause corresponding negative impacts on the receiving waterbody. For the greenfield project, it is relatively important that stormwater retention on that particular site be maximized in order to minimize negative impacts on the receiving waterbody and the surrounding community that uses the waterbody. In the District, the fact that a developer has chosen to undertake a regulated project in a particular developed location does not mean that location is the best location for an increase in retention. Even if the developer chooses to achieve the minimum on-site retention under the rule, the new retention is still likely to be a significant improvement relative to the existing conditions and to provide a corresponding benefit for the receiving waterbody. Given the District's ultra-urban context, it is not reasonable to assume that strict on-site retention necessarily results in the best overall outcomes for District waterbodies. In fact, there could be better outcomes, and DDOE has concluded that the SRC trading program is likely to result in as good or better outcomes.

The preamble to the proposed rule explained how SRC trading can result in an overall increase in stormwater retention in the District on an annual basis, an increase in the capture of the dirtiest "first-flush" volume, and a shift in retention from the tidal Anacostia and Potomac Rivers and the Combined Sewer System to the relatively vulnerable tributaries. The preamble also explained that even a site that chooses to achieve the minimum on-site retention volume would be providing better protection for the receiving waterbody than would be provided under the existing regulations.
In addition to the potential benefits to District waterbodies, the increase in the number of green infrastructure practices that is expected to result from SRC trading should provide additional environmental benefits. These include a reduced urban heat island effect and

an increase in habitat. That increased installation of green infrastructure also results in an increase in green jobs and provides human health and aesthetic benefits. Because SRC trading is likely to shift the location of these retention practices from the relatively affluent downtown core to less affluent parts of the District, it also has the potential for improved environmental justice outcomes.

DDOE considered establishing restrictions or trading ratios to encourage SRC trading to stay within each of the three main watersheds that the commenter identified (Anacostia, Potomac, and Rock Creek). DDOE recognizes that SRC trading could shift the amount of retention that happens within each of these watersheds and is concerned about avoiding hotspot impacts, but is not convinced that it is necessary to impose watershed-based restrictions or trading ratios at this time. In part, this is because, as discussed above, the fact that a regulated project, typically redeveloping existing impervious area, chooses to work within a particular watershed does not necessarily mean that is the best location for the installation of retention capacity in the District. In fact, DDOE has concluded that SRC trading has the potential to shift retention from lot-line-to-lot-line developments in parts of the District draining to the tidal Anacostia or Potomac or the Combined Sewer System to areas that drain to relatively vulnerable tributaries. In addition, as discussed in DDOE's response to this commenter's question about the temporal distribution of retention, there are drawbacks to imposing additional complexity on the SRC trading program. Given the small size of the District (approximately 61 square miles of land area) and the limitations and additional complexity that would be imposed on participants by watershed-based restrictions or trading ratios, DDOE has determined not to include these restrictions or trading ratios, except as required by the Anacostia Waterfront Environmental Standards Amendment Act of 2012.

Though DDOE has concluded that the SRC trading program is likely to result in as good or better outcomes for District waterbodies, DDOE recognizes that no other jurisdiction has yet implemented a similar SRC trading program, and it is difficult to know what the outcomes will be. DDOE intends to track and report on how off-site retention affects the spatial and temporal distribution of retention BMPs in the District, using the SRC and ILF database. As data accumulates on this, DDOE plans to review whether there are disproportionate negative impacts on particular communities or waterbodies. As necessary, DDOE will adaptively manage its off-site retention programs and may also use its other programs to offset negative impacts. For example, DDOE is considering developing a portfolio or inventory of potential projects to help encourage installation of BMPs in areas where there are environmental justice concerns or concerns about disproportionate impacts on specific waterbodies.

Regarding the commenter's point about the challenges related to predicting progress from SRC retrofits toward attainment of TMDL WLAs for the MS4, the commenter is right that this will be a challenge, but DDOE has concluded that it is not reasonable to impose watershed-based restrictions or trading ratios on this basis. DDOE notes that this is only a relatively small part of a larger challenge of predicting the drainages in which regulated development will occur over various time periods. As discussed elsewhere in this document, DDOE expects that these regulations will be the biggest driver of stormwater

retrofits in the District, and as such, they will, generally speaking, be responsible for the lion's share of the progress toward attainment of MS4 WLAs. As DDOE develops long-term schedules for attainment of TMDL MS4 WLAs, DDOE will use the best tools at its disposal for projecting where regulated development and SRC retrofits will occur; however, uncertainty is inherent to such projections, especially as they extend out into the future and as they estimate reductions for very short periods of time. DDOE will have to take this uncertainty into consideration in developing long-term schedules for attainment of MS4 WLAs.

h. **(p. 8)** The Commenter suggests requiring all BMP maintenance obligations to be recorded in a Declaration of Covenants, including SRC-generating retrofit properties, in order to put the purchasers of these properties on notice regarding their duty to properly maintain BMPs located on the site. The Commenter suggests that, in the case of retrofit properties, the declaration could be limited to the three-year BMP certification period and then re-recorded subsequently as necessary. (Preamble p. 22)

DDOE Response: DDOE is not convinced that it is necessary to impose a requirement to record a declaration of covenants on the property on which SRCs are generated, and DDOE has not made this change. The rule requires the original SRC owner to sign a statement promising to maintain the retention capacity in compliance with the maintenance plan in the SWMP, for the time period for which SRCs are certified (see Appendix D of the proposed SWMG). If the original SRC owner fails to maintain the retention capacity for that period, the rule specifies that the Department will not certify additional SRCs. Furthermore, the Department will require the original SRC owner to compensate for the period of time for which SRCs were certified but maintenance did not occur. The original SRC owner will do that by retiring the SRCs certified for that period (assuming they have not yet been sold or used), retiring other SRCs corresponding to the volume of retention failure, or paying the corresponding ILF. If the original SRC owner does not compensate as required, DDOE can retire the SRCs certified for that period (again, this assumes that the SRCs have not yet been sold or used). If those SRCs have already been used or sold, DDOE will assess the ILF and charge an administrative late fee of ten percent (10%).

i. **(p. 8)** The Commenter suggests revising the language to clearly require that ILF funds will be used to achieve the specific amount of retention corresponding to the number of Offv gallons for which the regulated site has paid the fee. (Preamble 17-18 and Sections 527.3(b), 530.1, and 530.5(a)). Otherwise, the Commenter contends that the District runs the risk of violating the MS4 permit's 1.2 inch volume retention requirement.

DDOE Response: Note that Mayor Gray transmitted the Fiscal Year 2014 Budget Support Act of 2013 to the Council of the District of Columbia on March 28, 2013. That legislation includes provisions to establish a special purpose revenue fund for ILF payments.

DDOE will track retention from projects financed through ILF revenue and make sure that it is sufficient to account for regulated sites' Offv requirements. No change to the rule is necessary.

j. **(p. 9)** The Commenter contends that the ILF is too low, especially considering maintenance requirements, and recommends that DDOE review AKRF's recent analysis and estimates for projects in Philadelphia. The Commenter contends that, because DDOE must be able to guarantee that it will install and maintain the appropriate amount of retention capacity, it should carefully consider the cost of the in-lieu fee, explain the basis for its derivation of the $3.50 charge, and subject that explanation to public review.

DDOE Response: DDOE provides an explanation of the ILF calculation on the rule website. The $3.50 ILF is based on DDOE's full cost to achieve a gallon of retention for one year. No change to the rule is necessary.

k. **(p. 9)** The Commenter suggests that DDOE also consider raising the price of the ILF in order to create incentives for regulated sites to perform the full 1.2 inches of retention on-site or to purchase SRCs from other private parties, to account for increased administrative costs, and to make the ILF a last resort. The Commenter also contends that the ILF price should escalate over time so that it becomes more and more of a last-choice option.

DDOE Response: DDOE notes that the ILF will be adjusted for inflation annually and can be rebased as necessary to cover increased costs. Generally, DDOE expects that the ILF will cost more than the market price of SRCs, and consequently the ILF will be a last resort. No change to the rule is necessary.

l. **(p. 9)** In order to guarantee MS4 permit compliance, the Commenter contends that, DDOE must also guarantee that ILF funds will be spent to install retrofit projects prior to, or contemporaneous with, the increased imperviousness from the development project, to prevent having any period of time where full retention is not achieved.

DDOE Response: Though DDOE will strive to do this, it may not always be possible. DDOE has not made this change to the rule.

m. **(p. 10)** The Commenter notes that, under the proposed rule, ILF revenue will be deposited in the Stormwater Permit Compliance Enterprise Fund (Section 530.5(b)), a general fund that is used for a number of different stormwater-related activities, and suggests, instead, establishing legislation so this revenue can be deposited in a separate, special-purpose fund that is legally required to be used only for the construction of retention BMPs.

DDOE Response: DDOE agrees and specifies in Section 530.6 of the revised rule that ILF revenue be added to such a fund. In addition, on March 28, 2013, Mayor Gray transmitted the Fiscal Year 2014 Budget Support Act of 2013 to the Council of the District of Columbia. That legislation includes provisions to establish a special purpose

revenue fund for ILF payments. DDOE recognizes that it is Council's prerogative to approve or modify this legislation, and, once the legislation is finalized, DDOE plans to modify the rule accordingly.

n. **(p. 10)** The Commenter contends that the 1.2 inch retention requirement is for existing discharges and the retrofit requirement is for new discharges (new development and redevelopment), and that the two are distinct and independent obligations, as evidenced by the fact that they are housed in two separate sections of the MS4 permit, as well as by the permit's statement that all provisions contained therein are severable from one another. Therefore, the Commenter contends that it would be inappropriate and violate the MS4 permit to allow the same project to both generate SRCs and count toward the city's retrofit quota, and that "double counting" one project for both obligations would undercut the USEPA's determination that the two separate requirements together meet the "maximum extent practicable" standard for MS4s. The Commenter suggests clearly stating that a retrofit project may be counted toward only one of these obligations.

DDOE Response: DDOE disagrees with the comment that redevelopment is not considered a retrofit under the MS4 permit. Also, DDOE notes that there is overlap among multiple provisions of the MS4 permit, and some actions taken under one part of the permit also help the District to comply with other parts of the permit. These comments go beyond the scope of the rulemaking and this comment response document. No change to the rule is necessary.

o. **(p. 11)** The Commenter gives an example of how adding a gallon of capacity to a practice that can already accommodate large storms is not as useful or beneficial as creating a gallon of capacity of a second site to accommodate the much larger number of smaller storms. Therefore, the Commenter suggests either setting the SRC ceiling at the 1.2 inch storm volume or discounting the value of SRCs that are generated by capacity that would only be used during storms generating between 1.2 and 1.7 inches of rainfall to compensate for the fact that they would actually retain stormwater during relatively few storm events. (Section 531.3(a) and Preamble p. 17 Figure 1)

DDOE Response: DDOE recognizes that a gallon of capacity added to a practice that already retains the 1.2 inch storm does not provide as much retention benefit as a gallon of capacity in a practice that retains a smaller storm. However, DDOE's determination is that typically the most cost-effective opportunities for generating SRCs will be where there is little or no existing retention capacity on a site, so DDOE expects that SRCs associated with retention capacity for the 1.2 inch or lesser storm will be much more common than SRCs associated with retention capacity for larger storms. Furthermore, DDOE views the 1.7 inch storm as an appropriate ceiling, noting that this is a 95th percentile storm in the District, which USEPA presents as corresponding to the storm that should be retained to approximate pre-development conditions (see USEPA's *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under the Section 438 of the Energy Independence and Security Act*). DDOE also notes that other stakeholders have suggested that regulated sites should be required or

incentivized to retain storms that are larger than the 1.2 inch storm on site. No change to the rule is necessary.

p. **(pp. 11-12)** The Commenter suggests eliminating the exemption that allows projects in the PROW to have a shortfall in on-site retention without being required to use SRCs or pay ILF (Preamble p. 23 and Section 521.4). The Commenter contends that this exemption creates a huge missed opportunity to protect District water bodies because 25 percent of the District's impervious surface is located in the PROW (Preamble p. 23), and that the District should voluntarily implement the change now because this exemption may not be allowed under the next MS4 permit. The Commenter suggests that, at a minimum, the exemption must expire after five years.

DDOE Response: DDOE has concluded that the rule takes the appropriate approach to projects that are reconstructing the existing PROW. Section 521.2 of the revised rule lists three options for sites in the existing PROW to comply with requirements to meet an SWRv. Those projects may retain 50% of the SWRv onsite and achieve the remaining 50% through Offv options (i.e., ILF, SRCs), achieve the SWRv onsite, or obtain the SWRv to the MEP after proving in the MEP process that additional retention is not possible. No change to the rule is necessary.

q. **(p. 12)** The Commenter contends that DDOE is legally obligated to incorporate the AWDZ standards into this rulemaking and that a placeholder section is not adequate to meet that requirement.

DDOE Response: The revised rule includes these requirements.

r. **(p. 12)** In Section 526.1, the Commenter states a need to define the term "technically infeasible" within the proposed rule and to explain it in further detail in the technical manual using objective, clearly defined criteria. The Commenter contends that is unclear if "infeasible" means that it must it be impossible or something less demanding.

DDOE Response: DDOE has concluded that the Rule and the SWMG adequately describe the process by which technical infeasibility or environmental harm will be demonstrated. To clarify, "infeasible" does not mean "impossible." No change to the rule is necessary.

s. **(p. 13)** In Section 520.5, the Commenter contends that the language regarding "over-control" is not worded clearly, does not clearly explain that the purpose is to compensate for failing to achieve the minimum retention in another drainage area, and seems to imply that the minimum retention requirement of 50% of the SWRv does not apply to sites draining into the combined sewer system. The Commenter suggests revising this provision to make clear that sites in the combined sewer area are only excepted from the requirement to treat volume that is not retained.

DDOE Response: DDOE's intent is that major land-disturbing activities in the CSS are responsible for the 1.2 inch retention volume for the entire site and must achieve 50% of

that retention volume on site, unless DDOE approves an application for relief. In using over-control to achieve on-site retention, such a site is not required to retain or treat 50% of the 1.2 inch SWRv in each drainage area. Please note that Section 520 of the revised rule contains changes, including clarifying changes and a requirement limiting overcontrol for areas that are intended for use or storage of motor vehicles and that are not draining to the CSS.

t. **(p. 13)** In Section 521.3 and 521.5, the Commenter states a need to clarify regulations regarding PROW projects and the term "extraordinarily difficult site conditions." The Commenter states that it is not clear from this text whether demonstrating that an "expanded area" is not feasible is all that is necessary in order to be granted relief, or whether it is additional to the Section 526 process for granting relief from difficult site conditions more generally.

DDOE Response: DDOE has clarified. It has made changes to the revised rule and revised SWMG to distinguish between the MEP process for PROW projects and an application for relief.

u. **(p. 13)** In Section 523.1, the Commenter asks if there is a typographical error where the provision states that the Department may restrict the use of infiltration BMPs if an applicant's proposed land use activity "has the potential to pollute stormwater runoff." The Commenter contends that virtually all stormwater runoff is typically considered "polluted," and asks if DDOE intended language related to infiltration, such as "has the potential to pollute groundwater."

DDOE Response: DDOE notes that the rule refers to specific land use activities in the SWMG that are considered "hotspots" with the potential to pollute runoff. No change to the rule is necessary.

v. **(p. 13)** In Section 530.10, the Commenter states a need to specify the process for fee rebasing and revise the language to clarify that fee rebasing will be done by rule, providing for public input.

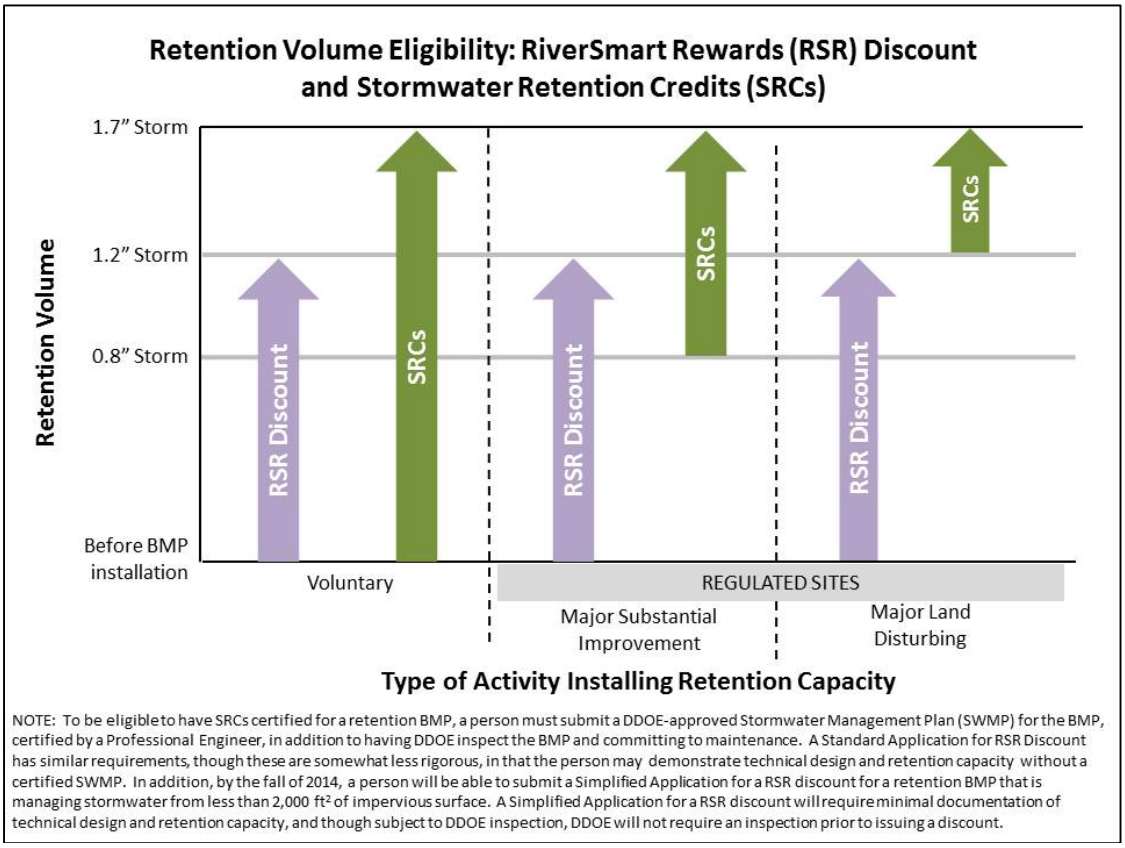
DDOE Response: When rebasing a fee, DDOE will make the change available for public comment in the D.C. Register, as required separately by District law. No change to the rule is necessary.

w. **(p. 14)** Section 533.7 states that the Department will share information that is "not personal, proprietary, a trade secret, or otherwise confidential." The Commenter suggests deleting "or otherwise confidential" or specifying what other types of confidential information will be withheld that would not fall into the first three categories.

DDOE Response: The intent of this is to give DDOE the ability and flexibility to respect confidentiality in the course of implementation. No change to the rule is necessary.

x. **(p. 14)** The Commenter suggests explicitly stating how the retention requirement and off-site mitigation program relate to the District's forthcoming stormwater fee rebate program, specifically, whether retention practices that generate SRCs will also be eligible for the fee discount. The Commenter also notes that the draft guidebook explains how the fee discounts will be calculated, but does not directly address eligibility.

DDOE Response: The Commenter references two separate rulemakings: the Stormwater Management and Soil Erosion and Sediment Control Rulemaking and Stormwater Fee Discount Program Rulemaking. DDOE is developing outreach materials, including webpages, to provide guidance on participation in each program. The figure below shows differences between the two programs in eligible retention volume. No change to the rule is necessary.



y. **(p. 15)** In Section 533.7, the Commenter contends that DDOE should commit to publicly sharing information about the generation and use of SRCs, and therefore suggests striking the words "undertake efforts to" from the phrase "The Department shall undertake efforts to publicly share information…"

DDOE Response: DDOE is committed to publicly reporting on the SRC program and the ILF program, and a change to the rule is not required.

z. **(p. 15)** The Commenter states a need for an openly accessible online database or credit registry where the public can view key details of each SRC transaction.

DDOE Response: DDOE is developing an SRC database, including a portion with a public-facing SRC registry. DDOE is also developing a website for the SRC program. DDOE plans to provide a range of information, including prices, volume, and sellers with available SRCs and potential buyers in order to help connect market participants. No change to the rule is necessary.

aa. **(p. 15)** The Commenter notes that, throughout the proposed regulations, DDOE states that the Department "may" take enforcement action when parties violate the regulations' mandates, and that the regulations provide that parties failing to timely comply with a Department enforcement order (e.g., to replace failed SRCs or pay in-lieu fees) may be assessed a 10% administrative late fee. The Commenter contends that these enforcement provisions are insufficient and that it is critically important that the owners of SRC-generating practices have a strong incentive not to let those practices fail. Therefore, the Commenter suggests making penalty enforcement automatic instead of discretionary, and that penalties should be higher than a nominal 10% late fee.

DDOE Response: DDOE has made changes to the revised rule to clarify the maintenance requirements. The Department has concluded that it is appropriate to have some discretion in how it uses its enforcement as circumstances change from one situation to another. No change to the rule is necessary.

bb. **(p. 23)** The Commenter contends that a minimum 25-foot stream buffer is not sufficient to protect the District's streams from construction and post-construction runoff. The Commenter suggests a buffer width of at least 50 feet, and contends that it is more effective, is supported by the technical literature, and notes that a fact sheet from the Center for Watershed Protection Stormwater Center recommends a buffer width of 100 feet.

DDOE Response: DDOE notes that the existing regulations do not include a stream buffer and has concluded that a 25-foot buffer is appropriate at this point in time. DDOE notes that Section 545 of the revised rule includes changes to specify circumstances and conditions under which DDOE may approve an exception to the buffer requirement.

16. Clean Water Action National Office, Scarlett Sinclair (November 8, 2012)

a. The Commenter agrees with the requirement to retain the volume of rainfall associated with a 1.2-inch storm, either on-site or through the use of off-site retention credits. The Commenter contends that this standard is legally required by the District's MS4 Permit and is a smart approach to water management that will yield many benefits.

DDOE Response: Understood.

b. The Commenter suggests increasing geographical restrictions for credit-generating projects in order to maximize net retention inside the MS4 area and prevent pollution hotspots or uneven environmental benefits.

DDOE Response: DDOE's analysis indicates that the MS4 area has a higher proportion of relatively cost-effective opportunities to install retention BMPs, as compared to the CSS area, which is largely located in the densely developed downtown core. Consequently, DDOE expects the rule's off-site retention provisions to result in more retention in the MS4 area than would otherwise be the case through strict implementation of an on-site retention standard.

Regarding hotspots and uneven environmental benefits, DDOE will use the SRC and ILF database and SRC serial numbers to track how off-site retention affects the spatial and temporal distribution of retention BMPs in the District. As data accumulates on this, DDOE plans to review whether there are disproportionate negative impacts on particular communities or waterbodies. As necessary, DDOE will adaptively manage its off-site retention programs and may also use its other programs to offset negative impacts. DDOE is considering developing a portfolio or inventory of potential projects to help encourage installation of BMPs in areas where there are environmental justice concerns or concerns about disproportionate impacts on specific waterbodies. No change to the rule is necessary.

c. The Commenter suggests collecting ILF revenue in a dedicated special revenue fund to ensure that it is only used to fund projects that achieve stormwater retention, and also suggests producing an annual report to explain how these funds are being used.

DDOE Response: Section 530.6 of the revised rule specifies that ILF revenue is to be deposited in the Stormwater In-Lieu Fee Payment Special Purpose Revenue Fund. On March 28, 2013, Mayor Gray transmitted the Fiscal Year 2014 Budget Support Act of 2013 to the Council of the District of Columbia. That legislation includes provisions to establish a special purpose revenue fund for ILF payments. DDOE recognizes that it is Council's prerogative to approve or modify this legislation, and, once the legislation is finalized, DDOE plans to modify the rule accordingly.

d. The Commenter suggests that projects funded with ILF revenue should not be able to generate SRCs in order to avoid "double-counting" of required off-site retention volumes.

DDOE Response: DDOE agrees that projects funded with ILF revenue should not also generate SRCs. No change to the rule is necessary.

17. Casille Systermans (November 8, 2012)

a. The Commenter agrees with the 1.2-inch retention requirement, either on-site or through the use of off-site retention credits, and states that it is both legally required by the District's MS4 permit and is a smart approach to water management that will yield many benefits.

DDOE Response: Understood.

b. The Commenter contends that allowing SRCs to be "banked" indefinitely divorces the timing of actual, real-world retention from the time when credits are used to achieve

regulatory compliance, and that as a result, the 1.2 inch storm volume obligation may not be met during each storm event or even during each year.

DDOE Response: DDOE does not think that the potential time lags justify complicating the program and market by limiting banking. Recognizing that DDOE is the first jurisdiction to put a retention trading program in place in the context of its stormwater management regulations, DDOE intends to observe the extent to which this is actually a problem before deciding whether or how to adaptively manage the program or take other actions to offset such impacts.

There are a number of points to keep in mind on this issue. First, temporal asynchronicity can cut both ways, with some SRC retention actually occurring prior to the regulatory obligation and some after. Second, off-site retention should generally result in greater overall retention on an annual basis than would otherwise occur, which should help to offset temporal and spatial impacts on the distribution of retention. Third, most development in the District is redevelopment of existing developed (impervious) area, and even if they achieve only half of the required retention volume on site, these regulated sites will typically be achieving much more retention than they currently do.

Finally, limiting banking would complicate the implementation and operation of the SRC trading program. It would make the administration of the program more complicated for DDOE and also complicate participation. From an economic standpoint, one effect would be to complicate the valuation of SRCs. For instance, if an SRC can only be banked for five years, each SRC would presumably be worth more at the beginning of that five-year period than at the end. Rather than having a market where one SRC offers the same value as any other SRC, this limitation would make a market where SRCs are not all equally valuable. Before entering into a transaction, market participants would have to determine the value of all SRCs involved, complicating transactions and increasing the overall cost of participating in the market.

No change to the rule is necessary.

c. The Commenter suggests that ILF revenue should be collected in its own special revenue fund to ensure that it is only used to fund projects that achieve stormwater retention.

DDOE Response: Section 530.6 of the revised rule requires ILF revenue to be deposited in the Stormwater In-Lieu Fee Payment Special Purpose Revenue Fund. On March 28, 2013, Mayor Gray transmitted the Fiscal Year 2014 Budget Support Act of 2013 to the Council of the District of Columbia. That legislation includes provisions to establish a special purpose revenue fund for ILF payments. DDOE recognizes that it is Council's prerogative to approve or modify this legislation, and, once the legislation is finalized, DDOE plans to modify the rule accordingly.

d. The Commenter suggests requiring an annual report to explain how ILF funds are being used.

DDOE Response: DDOE plans to report annually on the off-site retention programs. No change to the rule is necessary.

e. The Commenter suggests that projects funded through ILF revenue should not be able to generate SRCs in order to avoid "double-counting" of required off-site retention volumes.

DDOE Response: DDOE agrees that projects funded with ILF revenue should not also generate SRCs. No change to the rule is necessary.

18. United States Environmental Protection Agency, Region III, Jon M. Capacasa (November 26, 2012)

a. In Section 520.3(a), the Commenter states a need to correct the language to require retention of 1.2 inches of rainfall volume instead of the volume of runoff from a 1.2 inch storm. The Commenter suggests replacing the phrase "post-development runoff" with the phrase "volume of rainfall" and notes that the calculation for this on-site retention volume, as required by the MS4 permit, is 1.2 x surface area of the regulated site x 7.48/12 (a conversion factor).

DDOE Response: DDOE views the language in the proposed rule as achieving the same outcome, but has made changes to the revised rule to ensure that the desired effect is achieved, including using the phrase "retention of the rainfall" instead of "post-development runoff."

b. In Section 520.3(b), the Commenter states a need to explain that this equation is not the one used to calculate the full volume of stormwater required to be retained on site, but rather is a step in the design process to calculate the volume of stormwater that must be retained by management practices (the difference between the full retention volume and the natural retention volume.)

DDOE Response: DDOE has concluded that adding a second equation to the rule for calculating required stormwater retention volume would cause confusion. DDOE also has concluded that it is not necessary, since the language in the revised rule explicitly states that the site must achieve retention for the "rainfall from" a 1.2 inch storm and that the site does so by employing the BMPs required to retain the 1.2 inch SWRv and also by employing the land covers factored into the 1.2 inch SWRv.

c. The Commenter states a need to clarify the term "storm water retention volume". If it is intended to represent the volume required to be retained, as defined in Section 520.3(a), then a different term should be used to represent the volume being calculated in section 520.3(b). The Commenter contends that this is a fundamental inconsistency with the permit and must be corrected, despite any confusion this change may cause among the regulated community.

DDOE Response: As discussed above, the revised rule has been clarified.

d. In Sections 521.2(b) and 521.3, the Commenter states a need to include a quantitative definition specifying what would be considered acceptable MEP for on-site retention in the PROW.

   DDOE Response: DDOE has concluded that the quantity that can be retained in the existing PROW will vary from site to site and that the rule should not specify a minimum. DDOE has developed the MEP process in the SWMG to establish a process to ensure that opportunities for installing retention BMPs have been exhausted. No change to the rule is necessary.

e. The Commenter notes that the exceptions to the 1.2 inch retention standard in the MS4 permit are only for transportation right-of-way projects (not all PROWs) during the current term and are not likely to be extended (the Commenter acknowledges DDOE's clarification that all PROWs in the District are currently transportation rights-of-way). The Commenter suggests including a "sunset" provision in the proposed rule whereby Sections 521.2(b) and 521.3 would only be in force until the permit is reissued.

   DDOE Response: The District has developed a rigorous MEP process for ensuring that opportunities for retention in the PROW are exhausted and does not believe that this provision should be sunsetted. DDOE notes that it is uncertain what the provisions of the MS4 permit will be in the next permit cycle.

f. The Commenter notes that Section 523.3 only addresses pollution controls for oil and grease and states a need to modify the language to categorically address all potential pollutants or add a separate requirement to address them.

   DDOE Response: DDOE notes that this subsection refers to the SWMG section that identifies "hotspot" land uses for which pollution control measure may be required, including for oil and grease, as well as other pollutants.

g. In Section 520.5(a)(2), the Commenter contends that percent removal of TSS is not a good approach for achieving water quality as it rewards the most poorly managed sites. The Commenter states that, per their discussions, DDOE will explore the use of discharge concentrations for all stormwater control measures for which good treatment efficiency data exists, and USEPA has offered to assist with that effort.

   DDOE Response: DDOE has reviewed the literature and discussed this with experts in the field and determined that TSS removal is the most appropriate approach to use in this context.

h. In anticipation that a number of lessons will be learned over the next few years of the new SRC trading program, the Commenter recommends that the District gather data to thoroughly evaluate the program in order to make timely improvements.

   DDOE Response: DDOE agrees and plans to track and report on off-site retention, including both the SRC and ILF programs.

i. In Section 517.2, the Commenter notes that a land-disturbing activity that is conducted solely for the purpose of generating an SRC is exempt from Sections 520 and 529, and expresses concern that certain projects may be improperly presented as a project solely for the purpose of generating an SRC. The Commenter asks if this type of determination is defined somewhere and how the District will determine whether or not a site meets these criteria.

DDOE Response: DDOE recognizes that there may be some instances where a project may improperly present itself as being conducted solely for the purpose of generating an SRC. DDOE has concluded that its plan review engineers will be able to identify most of these cases. DDOE inspectors will also help to verify this as they conduct inspections.

j. The Commenter is concerned that off-site management practices are exempt from the accountability requirements of Section 529 and asks how the District plans to ensure that these practices will be maintained and operated to meet the program's overall retention goals and objectives over multiple permit cycles.

DDOE Response: DDOE is not convinced that it is necessary to impose a requirement to record a declaration of covenants on the property on which SRCs are generated, and DDOE has not made this change. The rule requires the original SRC owner to sign a statement promising to maintain the retention capacity in compliance with the maintenance plan in the SWMP, for the time period for which SRCs are certified (see Appendix D of the proposed SWMG). If the original SRC owner fails to maintain the retention capacity for that period, the rule specifies that the Department will not certify additional SRCs. Furthermore, the Department will require the original SRC owner to compensate for the period of time for which SRCs were certified but maintenance did not occur. The original SRC owner will do that by retiring the SRCs certified for that period (assuming they have not yet been sold or used), retiring other SRCs corresponding to the volume of retention failure, or paying the corresponding ILF. If the original SRC owner does not compensate as required, DDOE can retire the SRCs certified for that period (again, this assumes that the SRCs have not yet been sold or used). If those SRCs have already been used or sold, DDOE will assess the ILF and charge an administrative late fee of ten percent (10%). No change to the rule is necessary.

k. The Commenter states that allowing SRCs to have an indefinite lifespan (Section 532) is inconsistent with Appendix S of the Chesapeake Bay TMDL, Section 6(d), which states that "For NPDES dischargers, credits should be created and used within the periods that are used to determine compliance with effluent limitations." The Commenter contends that it is important to set temporal bounds on the creation and use of credits to prevent the possibility that significant numbers of credits could be used during a period in which no credits are actually generated, which could result in high discharges of stormwater pollutants to local rivers, streams and tributaries. Therefore, the Commenter requests that the District provide a quantitative demonstration of how such a situation would be avoided under the proposed rule.

DDOE Response: DDOE recognizes the potential for time lags (between when a regulated site would achieve retention on site and when retention may occur by use of a SRC) and has considered this carefully. DDOE has concluded that this potential does not justify complicating the SRC program and market by limiting the time for which SRCs can be banked, including for the reasons bulleted below. However, DDOE intends to track the extent to which SRC trading results in retention time lags, and based on that, DDOE will consider options for adaptively managing the SRC trading program and/or using other programmatic tools to compensate. DDOE also notes that there is limited value in comparing DDOE's SRC trading program to the Water Quality Trading Programs described in Appendix S. This is an apples-to-oranges comparison in many ways, including that SRC buyers would not be purchasing credits as NPDES dischargers and are typically not NPDES permit holders. DDOE also notes that some temporal bounds do apply to SRCs, including that DDOE will only certify up to three-year's worth of SRCs at one time and, though an SRC may be banked for an indefinite period, it lasts only one year when used to satisfy an Offv requirement.

- Though there is some potential for time lags, DDOE expects that the extent to which such time lags actually occur will be limited by the regulatory structure and related incentives and may be compensated for on a net basis.

  First, the extent to which SRC trading will result in delayed retention (i.e. retention associated with an SRC that occurs after the time that retention would have occurred on the regulated site) is limited by the rule's provision that DDOE will only certify SRCs for up to three years at a time. In other words, it is not possible for an SRC to exist that corresponds to retention occurring more than three years in the future.

  Second, the extent to which SRC trading will result in early retention (i.e. retention associated with an SRC that occurs before the time that retention would have occurred on the regulated site) is limited by economic incentives. The rule does not prevent indefinite banking of SRCs, so theoretically it is possible that early retention could result in a time lag of many years. However, this is limited by economic incentives. Stormwater retrofits have a relatively high up-front capital cost, and a person who makes that investment and then banks the related SRCs for a long period of time will neither recoup that investment nor earn interest on it during the time SRCs are banked. Though there may be some economically rational individuals who are willing to make such long-term investments, this has not been shown to happen on a widespread basis in similar fields. For example, though the potential financial savings from an energy retrofit makes many energy retrofits economically rational over an appropriate payback period, the reality has been that the up-front capital cost prevents many property owners from retrofitting. Likewise, DDOE expects the opportunity to sell SRCs and earn a discount on stormwater impervious fees to make a stormwater retrofit economically rational over an appropriate payback period, but the up-front capital costs will limit the ability of property owners to participate. This disincentive to participate becomes even stronger for a property owner who is considering installing a retrofit and foregoing any payback during a long period of SRC banking.

Third, DDOE expects some delayed retention and some early retention to occur, but these countervailing time lags may cancel each other out to some degree on a net basis. In other words, when thinking of regulated sites and SRC-generating sites as a whole, one delayed-retention SRC may cancel out one early-retention SRC, so that the same net retention would occur in a given year as would have occurred under a strict on-site retention scenario. DDOE expects that there will be multiple participants in the SRC marketplace. Consequently, retention time lags should be compensated for, to some degree, on a net basis.

Fourth, as discussed in the preamble to the proposed rule, SRC trading has the potential to result in greater retention than would occur under strict on-site retention during most storms and on an annual basis. This increased retention volume should also help to compensate for retention time lags and achieve the same net retention in a given year as would have occurred under strict on-site retention.

- If SRC trading results in an increase in early retention, that may be a positive outcome for District waterbodies.

  As discussed above, economic realities limit the likelihood that SRC trading will result in a significant increase in early retention. However, given that the time lag associated with early retention is potentially much greater than the potential time lag from delayed retention, such an outcome could be positive for District waterbodies. Given the considerable harm that stormwater runoff currently causes to District waterbodies, front-loading retention in this way could bring some welcome relief. In addition, even if that early retention results in somewhat less net retention in a future year than would have occurred under strict on-site retention, that will likely be relatively small compared to the steady increase in retention that will be occurring over time.

  Whereas the District's existing stormwater management regulations require no retention, there will be a significant and steady increase in retention in the District under the proposed rule. Even for regulated sites that retain only the minimum retention volume on site, the volume that those sites retain will be greater than the volume currently being treated (i.e. filtered) under the existing regulations.

  Though DDOE expects the new rule to steadily increase retention in the District and result in retrofits to the approximately 43% of the District's land area that is impervious, this will be a gradual process. Only about 1% of the District's land area triggers the District's stormwater management regulations in a typical year, yet this area is about 10 times the land area that DDOE is able to retrofit through all of its voluntary incentive and subsidy programs combined. Since most of the regulated work being done is the redevelopment of existing developed areas, regulated development will be the biggest driver of stormwater retention retrofits in the District. Against that backdrop, even if early retention results in somewhat less net retention in a future year relative to strict on-site retention, that is likely to occur on a scale that is

relatively small compared to the steady increase in retention that will be occurring over time. Put differently, even if early retention resulted in retention increasing at a decreasing rate for a year, it is almost inconceivable that this could result in a decrease in retention that would reverse the overall positive trend.

- Imposing time limits on banking would complicate participation and administration and could have negative consequences, including reducing participation in the market and reducing the market's effectiveness as a tool to drive stormwater retrofits.

  DDOE considered the effects of limiting SRC banking on the administration of the program and determined that those limits would make the program significantly more complicated to administer. Likewise, potential participants already face a learning curve to accustom themselves to the new program, and limits on banking would add another layer of complexity to that process. Furthermore, it would complicate the valuation of SRCs. For instance, if an SRC can only be banked for five years, each SRC would presumably be worth more at the beginning of that five-year period than at the end. Rather than having a market where one SRC offers the same value as any other SRC, this limitation would make a market where SRCs are not all of equal value. Before entering into a transaction, both buyers and sellers would face the challenge of determining the differential value of each of the SRCs involved. This could significantly limit the number of market participants, the number of SRCs in the market, and the market's overall competitiveness and effectiveness at achieving stormwater retrofits at relatively low costs. This would be a disservice to regulated development, and it would also reduce the market's potential as a tool that DDOE can leverage to achieve District water quality goals and requirements at a lower cost to District taxpayers and ratepayers.

- As the first jurisdiction to put such a retention trading program in place in the context of its stormwater management regulations, it is reasonable to begin with a relatively simple framework that DDOE can track and respond to over time.

  Because no other jurisdiction has implemented a similar SRC trading program, DDOE has a limited ability to know how the program will work and what the outcomes will be, including whether significant time lags will occur. Likewise, DDOE faces the challenge that it must familiarize potential participants with the new concepts and program. Moreover, given the District's ultra-urban context and the associated challenges of stormwater management, it is even more important that the Department include flexible options in its regulatory framework.

  In this context, though it is possible to envision various negative outcomes, DDOE has carefully avoided adding regulatory complexity unless it was convinced it was necessary, including the complexity of limiting SRC banking. Though the program offers a range of potential sustainability benefits, a program that is too complicated has the potential to stifle participation and reduce those benefits. DDOE plans to track outcomes of SRC trading and the consequences of banking, and, if necessary, adaptively manage the program or use other program tools to address problems.

l. The Commenter expresses concern that the proposed rule lacks a discussion of programmatic transparency and notes that Appendix S of the Chesapeake Bay TMDL states that offset programs should provide "maximum transparency, operational efficiency, and accessibility to all interested parties." The Commenter requests that the District provide a detailed plan explaining how it will provide access to information on the offsets program to all interested parties.

DDOE Response: DDOE is developing a database to track SRCs and ILF payments. Selected data from the database will be presented in an on-line SRC registry that will list SRCs. DDOE is also developing a website for the SRC program that will include data on existing and anticipated demand for off-site retention and guidance on participation in the program.

DDOE plans to issue annual reports on the off-site retention programs. Other Chesapeake Bay jurisdictions report annually on their water quality trading programs. For example, see the Virginia Nutrient Credit Exchange Association 2011 Nutrient Trades Report at www.deq.virginia.gov/Portals/0/DEQ/Water/PollutionDischargeElimination/NutrientTradesReport2011.pdf. No change to the rule is necessary.

19. U.S. National Arboretum (USNA), Cary Coppock (November 8, 2012)

a. The Commenter states that they support the proposed rule, but believe that some areas, particularly federal properties, will be asked to accept mitigation responsibilities far beyond the stormwater impacts they contribute. The Commenter suggests instituting a waiver process that will allow sites to remove specific impervious surface areas from their runoff calculation provided that these areas do not contribute significantly to stormwater volume and impact (such as areas where land use inherently reduces runoff well beyond the 1.2 inch requirement).

DDOE Response: DDOE does not agree that a waiver process is necessary. The proposed rule has consistent requirements for all impervious surfaces. In cases where stormwater run-off from impervious surfaces is being sufficiently retained, in accordance with the SWMG, additional mitigation measures are not required.

b. The Commenter expresses concern that Federal properties will be under pressure to accept credit trades under conditions that may become onerous in terms of maintenance burdens, and leave other parts of the Anacostia River perhaps upstream of USNA, vulnerable to pollution.

DDOE Response: Sellers are responsible for maintaining their BMPs that generate SRCs. Thus, if the USNA is a buyer, it will not have maintenance responsibility for the BMPs that generate SRCs. However, if the USNA generates SRCs, it must meet the maintenance requirements of Section 531.3.

It is unclear why the Commenter feels that the rule would leave parts of the Anacostia River upstream of the USNA vulnerable to pollution. If the commenter is concerned

about hotspots from the SRC trading program, note that DDOE will use the SRC and ILF database and SRC serial numbers to track how off-site retention affects the spatial and temporal distribution of retention BMPs in the District. As data accumulates on this, DDOE plans to review whether there are disproportionate negative impacts on particular communities or waterbodies. As necessary, DDOE will adaptively manage its off-site retention programs and may also use its other programs to offset negative impacts. No change to the rule is necessary.

c. The Commenter contends that they are unique among District stormwater utility users because they have significant green space that includes large areas of native surface soil, and much of their impervious surface drains to areas that do not use District stormwater infrastructure. Therefore, the Commenter suggests adding a waiver that removes impervious areas that exceed 1.7 inches of infiltration (95% percentile storm) in 24 hours from impervious surface calculations. The Commenter contends that this exemption will prevent the USNA from being pressured to accept a trade that would result in constructing a stormwater management feature with questionable benefit and loosing the runoff from small storms at the remote Land-Disturbing Activity.

   DDOE Response: The calculation for SWRv assumes that no stormwater runoff is produced by natural cover (see Section 520.3), and preservation of the existing natural cover at the USNA would not be eligible to generate SRCs. Moreover, the regulatory requirements in the rule are only triggered during construction. The rule does not require sites that are not undergoing construction to install stormwater management retrofits.

20. Washington Metropolitan Area Transit Authority, Regina Sullivan (November 8, 2012)

a. The Commenter quotes an earlier DCBIA comment and DDOE's response regarding the requirement to limit the maximum disturbed area during construction to 2.5 acres, and contends that the answer does not assure them that they could continue to construct important transportation projects under the proposed rule. Specifically, the Commenter contends that the broad definition of "grading" overlaps with the definition of "construction activity" and appears to create situation where they would not be able to construct a bus or rail heavy maintenance facility in the District, and that it may also make it difficult for them to maintain and rehabilitate existing facilities.

   DDOE Response: DDOE has modified the Revised Rule to remove this requirement.

b. The Commenter contends that the response does not fully answer the questions or underlying concerns, specifically, whether these sites can be built in phases based on sediment and erosion concerns alone, whether waivers will be granted, and if so, what would be the basis for granting a waiver and what types of projects would be likely to receive them?

   DDOE Response: Please see response above. Further, Section 543.13 of the revised rule has been modified to allow a licensed geotechnical engineer to determine appropriate protection measures for cuts and slopes for sites that are likely to result in erosion by

stormwater of sediment onto an adjacent property or waterbody. The Department will not restrict phasing as long as appropriate protective measures are in place.

c. The Commenter suggests clarifying how a property owner will be able to build large-footprint sites under the proposed rule; providing a waiver from these requirements or clarifying that the 2.5 acre limitation no longer applies when a site moves to construction (after initial grading).

DDOE Response: Please see the preceding response.

d. The Commenter suggests clearly stating that ballasted track and at-grade alignments are permanent pervious areas that support the goals of the proposed rule and should not be considered "exposed" surface that counts against any grading area limitation.

DDOE Response: The revised rule does limit the extent of grading. Additionally, land areas that are not being disturbed, including ballasted track, will not be included in calculating a site's SWRv.

e. The Commenter states a need to define the term "contaminated", preferably by referring to an existing District statute.

DDOE Response: The identification of contaminated groundwater or soil has been clarified in the Revised Rule to include observable contamination or analytical results that verify the presence of contamination. Any naturally occurring substances can be addressed in a dewatering pollution reduction plan to be prepared by the applicant. In addition, Section 500.9 of the Revised Rule clarifies that infiltration tests will not require separate Department approval for groundwater quality protection. During the informal comment period, DDOE plans to continue reviewing this issue and considering the efficacy of further changes.

21. World Resources Institute, Evan Branosky, John Talberth (November 7, 2012)

a. The Commenter supports the SRC trading program and contends that it is likely to reduce the cost of meeting the retention standard, extend green infrastructure in the District, and provide District residents with new revenue sources.

DDOE Response: Understood.

b. The Commenter suggests adding flexibility for updating the ILF rate by adjusting it to actual implementation costs (which could rise or fall based on practices used by DDOE), and provides an example of how this method has been successful in the Neuse Nutrient Offset Payment Rule in North Carolina. The Commenter contends that advantages of Neuse's approach are: allowing the fee rate to be revised quarterly if costs rise dramatically; providing an upper-bound on rate increases (i.e., 10 percent), which helps potential credit sellers that want to compare the cost of their planned credits to the fee rate; and allowing for nuanced rate adjustments when just one of many life cycle costs (e.g., land acquisition and not project design, project management, administration, etc.)

increase substantially. The Commenter acknowledges that the disadvantage of the Neuse approach is that it is clearly more complex.

DDOE Response: DDOE plans to adjust the ILF for inflation annually. The rule gives DDOE the flexibility to change the basis of the ILF ("re-base") as needed, which DDOE has concluded is the appropriate approach. DDOE notes that other commenters have suggested limiting re-basing to once every several years, and DDOE does not expect that it would typically be necessary to re-base more frequently than that. However, DDOE concludes that it is important to have that ability, as this commenter suggests, if the underlying costs change dramatically in a way that is not captured by a simple inflation adjustment. Re-basing would be done through a public process using the *D.C. Register*.

c. The Commenter suggests developing outreach materials for credit sellers because they are not likely to read regulatory language and need a generic understanding of the trading program before they consult aggregators or others with technical expertise. The Commenter lists several groups that have developed similar outreach materials and recommends them as resources for DDOE.

   DDOE Response: Chapters 6 and 7 of the draft guidebook provide details on participating in the SRC trading program. In addition, DDOE is developing outreach materials, including webpages and related guidance on participation.

d. The Commenter suggests recording credits in a publicly available registry/database, including trading program functions listed in Sections 527.7, 531.2, and 533.7 (such as: credit offers and purchases, prices, and implementation terms and conditions). The Commenter recommends some specific registries available through third parties and contends that a registry would provide an invaluable source of information for program monitoring and reporting, as well as a research tool for DDOE staff and others in academic or non-governmental institutions.

   DDOE Response: DDOE is developing a database to track SRCs, including a publicly available SRC Registry. DDOE is also developing webpages for the SRC program that will provide additional information for those interested in buying and selling SRCs.