Alexandria Chesapeake Bay TMDL 5% Action Plan Public Comment and Responses

COMMENTS RECEIVED FROM: Peter Pennington, City resident	
Comment	**Response**
1. It's no good creating BMPs if they are not maintained. Like other parts of the built environment, drainage needs upkeep. The City has traditionally passed the BMP issue, whenever it can, to the private sector. Who is inspecting these installations and how frequently and with what redress if a BMP is found to be not doing the job for which it was designed? I have only ever inspected one BMP: it was on City land and clearly had never been cleaned.	Per ordinance, the City requires the owner of the BMP to ensure that facilities are maintained and performing for the long-term. The many localities in the Bay require that private owners maintain their BMPs, while a smaller number of localities perform maintenance on private and public facilities. The City has a BMP Inspection and Enforcement program for both public and private facilities. The City performs needed maintenance on public facilities. The City also performs street sweeping and catch basin cleaning to remove dirt and debris.
2. I think I read something about sites being able to hold half an inch of rain. Yes, I know, we can't write the Building Regs etc etc but new build should be able to hold at least 1.2 inches of rain, a figure based on our rainfall statistics.	Effective July 1, 2013, the City amended local ordinances to incorporate the Virginia Stormwater Management Regulations requiring the water quality requirements for the design of post-construction stormwater BMPs be predicated on the 1" storm event – which is roughly 90% of all storms being treated. The City has gone beyond the state regulations and requires that the first ½" of stormwater runoff from all impervious surfaces – the Alexandria water quality volume default - be treated with a stormwater BMP as well. This provides a level of water quality protection beyond the state mandate.
3. Buildings that exceed the basic requirement, either at first commissioning or as a result of renovation, ought to be able to create credits that that can be sold to those new build sites that, for insuperable reasons, cannot achiever the minimum levels.	Per the state stormwater regulations, new development must meet the 0.41 lbs/ac/yr loading rate – or no net increase in phosphorus. Redevelopment $\leq$ 1 acre must reduce phosphorus by 10%, and sites $\geq$ 1 ac. Must decrease the load by 20%. Sites not able to meet onsite reductions may purchase offsite nutrient credits per 9VAC25-870-69. These sites must also meet the Alexandria water quality volume default as described above.
4. The statutory requirement will always be subject to ramping up. That's life: the City should look now at encouraging existing buildings and landowners to start thinking about retention measures now. All those large car parks at schools and churches need at least swales for water collection. And our City Arborist must get on top of replacing street trees where necessary. All streets should be re-examined to see if swales etc can be added.	The City requires new development and redevelopment to meet ordinance requirements for water quality and water quantity, which may require onsite detention. The City completed the Green Sidewalks Guidelines in June 2014, which provides specifications for implementing BMPs for treatment of roads and sidewalks for the development community and City projects. The City continues to examine opportunities to implement these practices, and has installed tree box filters at multiple sites that treat roadway runoff.

resident	
5. Is there a plain English summary of what this means for citizens of Old Town not in SE quadrant? We are in the SW quadrant, from Franklin St to Church St and S Washington St to Rt 1. Would this involve any construction or other action in our neighborhood or just in SE quadrant closer to the Potomac?	Thank you for your question about the draft Chesapeake Bay TMDL Action Plan, which outlines requirements through June 30, 2018 for the separate storm sewer system with respect to nutrients and sediment. This plan does not lay out any actions for the Old Town area in that timeframe. There may be some synergies between the Storm sewer system and the Combined Sewer System (CSS) – found in parts of Old Town – in the out years. But those activities would be driven by the CSS requirements.
COMMENTS RECEIVED FROM: **Rebecca Hammer, Staff Attorney** **Natural Resources Defense Council** **Together with:** **Michael Bochynski, Virginia Program Organizer** **Clean Water Action** **Pamela Goddard, Senior Manager,** **Chesapeake & Virginia Program National Parks Conservation Association** **Phillip Musegaas, Legal Director** **Potomac Riverkeeper Network** **Betsy Nicholas, Executive Director** **Waterkeepers Chesapeake**	
Comment	**Response**
Thank you for the opportunity to comment on the City of Alexandria's Chesapeake Bay Total Maximum Daily Load (TMDL) Action Plan for 5% Compliance. These comments are submitted on behalf of the Natural Resources Defense Council, together with Clean Water Action, National Parks Conservation Association, Potomac Riverkeeper Network, and Waterkeepers Chesapeake. This plan is a critically important document that lays out the initial steps the City will take in the near term to reduce pollution.	Thank you for your comments. The City of Alexandria is committed to protecting our local water quality resources, the Potomac River, and the Chesapeake Bay. The City has been a leader in requirement to implement stormwater management best management practices (BMPs) for development and redevelopment, and take a proactive approach to identifying and retrofitting City properties. The City previously drafted and

Additionally, these steps will chart the City's course on a longer-term path over the coming years to achieve clean water locally and downstream in the Chesapeake Bay. We support many elements of this plan while also suggesting several improvements that are needed to make the plan fully effective and to bring it into line with the requirements of the City's municipal separate storm sewer system (MS4) permit.	implemented the *City of Alexandria Supplement to the Northern Virginia BMP Handbook* and coined the term *Ultra Urban BMP* in support of the types of technologies that can and should be implemented in an ultra-urban environment to protect water quality. During the development of local ordinances to implement the Chesapeake Bay Act, as an ultra-urban locality the City did not exercise the right to forego designation of Resource Protection Areas (RPAs) and Resource Management Areas (RMAs). The City decided to be more protective of local water resources and designated 100' RPA buffers associated with perennial streams. The City went a step further and designated 50' buffers for intermittent streams. The remainder of the City was then designated as RMA. We believe the Action Plan complies with the requirements of the MS4 general permit and the May 18, 2015 Guidance provided by the Virginia Department of Environmental Quality (VDEQ), and the strategies that have been implemented or that are planned to be implemented far exceed the 5% required reductions found in the permit.
I. Setting an Informal Goal That Exceeds Minimum Requirements We strongly support the City's proposal to set an ambitious internal planning goal of achieving 15-20% of its total required pollution reductions during this permit term, exceeding the 5% minimum target established in the permit. This type of foresight will help set up the City for success in future permit terms, when its pollution reduction requirements will rise sharply. Making additional progress now will ease the future burden on the City by spreading out its pollution reduction efforts more evenly over time. Several of the larger MS4 permittees in nearby jurisdictions, such as Maryland and Washington, DC, are required by their permits to develop long-range plans during this permit term that will establish methods and a comprehensive schedule for fully attaining applicable wasteload allocations. In a sense, the City of Alexandria is at a disadvantage in not being required to complete a similar comprehensive plan at the outset of the process. Developing a series of shorter-range plans will require the City to essentially start over	The City's plan commits to the 5% reductions requirements specified in the MS4 general permit. However, the City has indeed set an internal goal closer to 20%. The plan provides for projects and credits for approximately 20% of the total requirements. Most of the strategies are in place and generating credits or are underway and will be completed soon. This approach will allow for the City to be closer to the second permit cycle goal for the 40% total.

again at the beginning of each permit term and develop a new strategy for the upcoming five years. By aiming for a target higher than the current minimum, the City will start to think about the efforts that will be necessary in upcoming permit terms, laying the groundwork for future plans. One additional advantage of "aiming high" during this permit term is that it will help compensate for the fact that Virginia's delayed permitting cycle has pushed back the estimated date for Chesapeake Bay TMDL compliance to 2028 (rather than the 2025 deadline established in the TMDL). Achieving extra pollutant reductions during this permit cycle will help contribute to earlier improvements in the health of the Bay, as intended by the TMDL.	
II. Pollution Reduction Schedule with Benchmarks The Virginia Phase II MS4 permit requires the permittees' Chesapeake Bay TMDL Action Plans to include "a schedule to achieve those reductions [required during this permit term]. The schedule should include annual benchmarks to demonstrate the ongoing progress in meeting those reductions."[1] While the City of Alexandria's plan sets forth various methods and strategies for achieving pollutant reductions, as discussed in more detail below, it does not contain a schedule for implementing any of those strategies, or any annual benchmarks, either in the form of pollutant reductions or implementation milestones. The plan must be revised to include a schedule with annual benchmarks in order to comply with the terms of the City's MS4 permit.	As evidenced in the plan and discussed in the last response, the majority of strategies have either been implemented or they are currently being implemented. Counting those strategies are currently in place, the City is meeting approximately 18% of the total goal, which surpasses the 5% goal of this permit cycle. Given that we are currently achieving the required 5% reduction, a specific schedule and annual benchmarks do not apply. The City will include any activities and the number of credits in place annually for each MS4 reporting period. Aside from the completed strategies, a wetlands/stream restoration currently underway and scheduled to be completed during 2016 in the Four Mile Run watershed will increase this to over 20%. Finally, the planned retrofit to Lake Cook is currently in the design phase and scheduled to be completed late 2016.
III. Means and Methods for Achieving Pollutant Reductions The plan appropriately estimates the pollutant reductions that could be achieved through each type of strategy under consideration by the City, but we urge the City to go further and provide more details about its intended approach where possible. While we recognize and appreciate the City's desire to preserve flexibility in the implementation process, specificity in planning can only improve the	As discussed in the action plan, the City has performed planning estimates coinciding with the development of the Virginia WIPs with the "Chesapeake Bay Analysis and Options" report draft at the end of 2011 and final draft in August 2012. This planning-level exercise estimated target reductions based in the WIP requirements and explored a range of strategies to meet the overall reductions. Some of these strategies were refined and included in the current 5% action plan. Other strategies will be included in subsequent plans to meet the

likelihood of achieving success. The City does not have to commit to any particular course of action at the outset in order to perform a more detailed planning analysis of the strategies available to it, or to consider how those strategies might be deployed in combination to achieve the required results. We provide more specific suggestions about certain implementation strategies below.	increased requirements. While an unconstrained overall strategy could include early implementation, prudent fiscal policy requires that strategies are explored and implemented when practicable.
• Projected Redevelopment – While the City is correct that development projections are speculative, it is still possible to put rough estimates on the amount of redevelopment expected to occur in the City over the next five years so that pollution reductions can be estimated for planning purposes. Doing so will help the City to better understand the proportion of the required reductions that it will need to achieve through the other strategy options that are under its control.	• This includes projects of reductions from redevelopment. Given the speculative nature of these estimates, they were not included in the action plan. However, actual reductions from redevelopment will be included in associated annual reports to quantify the amount of reductions actualized by implementation of stormwater facilities during redevelopment.
• Retrofits on City Property – The per-acre costs of completed projects described in this section are relatively high. We urge the City to seek out lower-cost retrofit options so that it does not underestimate the pollutant reductions that can be practicably achieved through retrofits. For example, a retrofit costing analysis performed for Montgomery County, Maryland found that a number of practices are available to retrofit existing impervious surfaces at a cost of roughly $50,000 per acre or less, compared to Alexandria's $250,000 per-acre expenditures.	• The retrofits on City property are not estimates but are actual costs and have already been implemented and are currently achieving credits.
• Retrofits of City Right-of-Way – We encourage the City to work with the Transportation Department to develop an estimate of the opportunities for integrating stormwater management into planned road construction projects over the next five years. Again, while these estimates may not be exact, they would provide valuable information that could inform the City's planning process.	• The City has explored likely City ROW locations for retrofits and identified likely candidates. The City also views any infrastructure and road projects as likely candidates for retrofits and explores these on a case-by-case basis.
• Nutrient Trading – If the City requests the option of selling credits generated by its excess pollutant reductions beyond the 5% minimum, and if Virginia grants this request, the City and DEQ must ensure that any potential trades do not result in pollution "hotspots" by only authorizing and participating in	• The City is exploring the opportunity to sell nutrient credits beyond the required reductions until such time as the credits are needed by the City to comply with requirements. This is consistent with the point-source trading program and would help to offset the overall

trades that occur within the same watershed, as required by EPA policy.[3] Any credits acquired through trades must also be used the same year they are generated; this is the policy Virginia currently applies to point-source-to-point-source trades.[4] However, we encourage the City not to sell credits to other jurisdictions, as doing so would undermine some of the benefits of achieving early reductions, as discussed above.	cost of retrofits to meet the overall reduction requirements.
In addition to the means and methods already discussed in the plan, we encourage the City to consider other potential strategies as part of its compliance "toolbox." It may be the case that the current set of strategies is sufficient to achieve the 5% reductions required during this permit term, but they will almost certainly need to be augmented by additional or strengthened policies and programs in order to achieve the steeper reduction requirements that will apply during future permit terms. The City should start considering these options now so that it is ready to implement them when the requirements increase.	As discussed in the action plan, the City began planning for the overall reduction requirements as far back as 2010 during the development of the WIPs and the TMDL. The "all of the above" or "toolbox" discussed is consistent with DEQ's Guidance document and the expert panel reports.
For example, the City should consider the pollution reduction benefits that could be achieved by strengthening the stormwater management requirements for new development and redevelopment. The 0.5-inch treatment standard, while exceeding statewide minimums, still falls short of what other jurisdictions in the region are practicably implementing (for example, the 1.2-inch retention standard in the District of Columbia). In addition, the City should consider collaborating with Virginia DEQ to use "residual designation authority" (RDA) as a tool to require private properties to implement stormwater retrofits at the most problematic pollution-generating sites. Under the RDA provisions in the Clean Water Act and its implementing regulations, the Environmental Protection Agency (and all states delegated to administer the Act's permitting program) must require a stormwater discharger to apply for a permit if the discharge is contributing to a violation of a water quality standard or is a significant contributor of pollutants to waters of the	During the process for delegation of the Virginia Stormwater Management Program (VSMP) from DEQ to the City and the required amendments to the existing Environmental Management Ordinance (Article XIII of the Alexandria Zoning Ordinance), the City retained a more stringent standard for the definition of the "site" and requiring the projects to treat the first ½" of runoff from all impervious surfaces, or the Alexandria water quality volume default. This is in addition to the phosphorus (ad associated nitrogen and sediment) reductions required by the state based on the 1" storm event. Virginia is a "Dillion Rule" state. Localities in the Commonwealth of Virginia must follow the state requirements and do not have the ability to set standards at the local level unless given the ability by the state.

United States.[5] Congress specifically created RDA as a mechanism for permitting authorities to extend permit coverage to stormwater dischargers not otherwise captured by the MS4 regulatory program. Once RDA is exercised, DEQ, working together with the City, can issue permits to those facilities that include mandates for pollution controls, including stormwater retrofits.	
COMMENTS RECEIVED FROM: Glenda Booth, President, Friends of Dyke Marsh	
Comment	**Response**
While it seems that legally, the city of Alexandria, has "According to the WIP II and MS4 general permit … three full MS4 permit cycles to implement the required reductions (Phase I: 2013-2018; Phase II: 2018-2023; and Phase III: 2023-2028)," we are strongly disappointed with the implications for significantly improved water quality anytime soon. For instance, according to the city's proposed *Action Plan for 5% Compliance*, the plan will not be required to be implemented until the end of their MS4 permit period (June 30, 2018)." More disturbing is to realize that the plan for full TMDL compliance, which is based on its 2013 MS4 permit, leaves the city until 2028 to fully implement its plan. We strongly urge Alexandria to accelerate compliance with the Chesapeake Bay Total Maximum Daily Load.	Thank you for your comments. The City of Alexandria is committed to protecting our local water quality resources, the Potomac River, and the Chesapeake Bay. We believe the Action Plan complies with the requirements of the MS4 general permit, and the strategies that have been implemented or that are planned to be implemented far exceed the 5% required reductions found in the permit. While an unconstrained overall strategy could include early implementation, prudent fiscal policy and the reality that retrofitting nearly 2,400 acres of the City will require a great deal of financial resources, the City must identify and implement strategies when practicable.
While we understand that regulations and permits regarding the city's sewage overflow during storms are not addressed in an MS4 permit and therefore not addressed in the city's action plan for 5% compliance, the Dyke Marsh Wildlife Preserve is nonetheless already significantly and negatively impacted by Alexandria's sewage outfall, as we have previously expressed to you, and we feel, this makes it all the more imperative to accelerate the city's TMDL compliance.	The Chesapeake Bay TMDL sets a "pollution budget" to control sources of nitrogen, phosphorus and sediment. This Action Plan is a requirement of the MS4 general permit. The MS4 general permit does not apply to the City's combined sewer system (CSS) area. However, there is a Bacteria TMDL for Hunting Creek that affects the CSS area and the City's CSS permit issued by the state. The City is working to address the CSS permit requirements related to the combined sewer overflows which occur in the Hunting Creek embayment.
We are concerned with the apparent absence of effective monitoring, public reporting and public accountability. Legal	MS4 general permit Section I C.4.b. requires that the City include "a list of control measures implemented during the reporting period and

precedents set in April 2015 in the Court of Special Appeals in Maryland, in the case of Maryland Department of the Environment, et al v. Anacostia Riverkeeper, et al, while not necessarily legally applicable to Virginia, nonetheless shed light on the importance of meaningful public engagement in the permitting process, and the courts sent Montgomery County's stormwater plans/permit back for revisions. The court ruled that their stormwater plan "must contain some discernible and meaningful milestones of planning, implementation, or achievement that can be understood and measured" in order to meet the standards for adequate public review and comment. We question whether Alexandria's Chesapeake Bay TMDL Action Plan for 5% compliance meets Virginia's standard of intent for public notice and comment either. The stormwater permit process in Montgomery County, Maryland, unnecessarily cost taxpayers in both dollars and time towards the goal of improving water quality.	the cumulative progress toward meeting the compliance targets for nitrogen, phosphorus, and total suspended solids" in each annual report that is submitted to VDEQ. Section I C.4.d. requires that "Each annual report shall include a list of control measures that are expected to be implemented during the next reporting period and the expected progress toward meeting the compliance targets" is reported to VDEQ annually. The City's annual reports and program plan are posted on the City's website. The City's identified strategies are consistent with the recommendations of the Chesapeake Bay Program's Urban Stormwater Workgroup and the May 18, 2015 Guidance provided by VDEQ. Pollutant reduction efficiencies set by the Urban Stormwater Workgroup on behalf of the Chesapeake Bay Program are used to calculate reductions provided by these strategies. The current 5% Action Plan identifies strategies that are currently in place and those that will be implemented prior to June 30, 2018 which will achieve far beyond the 5% requirements. In actuality, the City has already met the 5% requirement for the first permit cycle. The City's MS4 annual reports and the MS4 Program Plan are available on the City's website, consistent with general permit requirements. The draft Action Plan was noticed for public comment and can be found on the City's website, consistent with general permit requirements. The Final Action Plan will be posted on the City's website as well, consistent with general permit requirements.