CITY OF BALTIMORE

BERNARD C. "JACK" YOUNG,
MAYOR

DEPARTMENT OF RECREATION AND PARKS

REGINALD MOORE, *Executive Director*
Dr. Ralph W. E. Jones, Jr. Building
3001 East Drive - Druid Hill Park
Baltimore, Maryland 21217
410-396-7900

Thursday, January 21, 2021

Attn: Dr. Raymond D. Bahr
Maryland Department of the Environment (MDE)
Sediment, Stormwater & Dam Safety Program
1800 Washington Boulevard, Baltimore, MD 21230
Email: Raymond.Bahr@Maryland.Gov

RE: Baltimore City 2021 NPDES MS4 Permit Renewal

Dear Dr. Bahr,

The Baltimore City Department of Recreation & Parks (BCRP) appreciates the opportunity provided by the Maryland Department of Environment (MDE) to provide comments pertaining to the NPDES MS4 permit for the City of Baltimore. BCRP is fundamentally committed to supporting efforts that improve the water quality of the Chesapeake Bay and is pleased to strengthen our partnership with the Department of Public Works (DPW) to meet our jurisdictional MS4 credit requirements. Our recommendations are outline below; additionally responses/inquiries pertaining to draft permit language based upon lessons learned under the Phase III NPDES MS4 Permit are included.

Context

Under the Phase III NPDES MS4 Permit, DPW sought to maximize the City's opportunities to obtain credit through the design and implementation of stream stabilization projects, commonly referred to as Urban Stream Restoration (USR). These projects typically course through public forested lands, otherwise under the care and management of BCRP, for access to the streams. While the scientific evidence has yet to weigh-in decisively on the long-term benefit of USR, one of the apparent impacts that has resulted over the past four years is the loss of 34 acres of mature forest stands - or roughly the equivalent of three square city blocks from public parks. An additional 43 acres of public forest is proposed to be cleared for USR in the next three years. This combined loss of 77 acres represents a total of more than 3% of Baltimore City's public forested lands specifically to address the City MS4 permit - a figure that is difficult to reconcile with considering parallel mandates favoring urban canopy growth to which both the City of Baltimore and State of Maryland have committed.

In the draft Phase IV permit, MDE has placed a renewed emphasis on the significance of forested natural areas as the archetype for natural storm water infrastructure. Although, BCRP is in support of this update, the agency remains concerned that without sufficient language or crediting opportunities demonstrating the superiority of forest preservation measures over conversion BMPs, Baltimore City's "good woods" will continue to disappear at an alarming rate. We urge MDE to reconsider how the language of the permit, not only by what it states, but also by what is not stated;

it governs decisions in relation to the long-term impacts of MS4 practices through forested land. Additionally, we urge MDE to reconvene with the City's permit manager to reassess the feasibility of achieving assigned storm water Equivalent Impervious Acreage (EIA) goals given the dearth of impervious acreage (6%) owned by Baltimore City.

Draft Permit Comments

1. Part IV(D)(4)(c)(iii) We support the good housekeeping plan (GHP) requirement, though request that the language regarding herbicide applications be modified. BCRP is actively growing a forest conservation program focused on professional natural area land management. Strict Integrated Vegetation Management (IVM) practices are in place, though our reports *will* display an increased usage of total herbicide as we actively increase our capacity to manage more of our forested lands to address non-native invasive species. We believe forest conservation efforts under IVM programs should be promoted in this section—with a recognition of the essential use of target-specific, low-volume herbicide applications.

2. Part IV(D)(4)(d) With guidance from the Department of Transportation (DOT), we support the City Salt Management Plan (SMP) and assist with a modified tracking, monitoring and training program, where appropriate.

3. Part IV(D)(5) Educational outreach and private landowner incentives are one of the most significant areas of support that Baltimore City can offer in helping Maryland meet its NPDES requirements. Credit application or increased support for Baltimore City public outreach is recommended. We also recommend the requirement extend beyond 15 outreach efforts per year to expand opportunities for engaging private residents and corporations (i.e. rain barrel distribution, rain garden trainings, plant giveaways, stewardship events and corporate incentives).

4. Part IV(E)(3) The current draft permit requirement for restoring 3,969 impervious acres is more than double that of Montgomery County's requirements. BCRP was not engaged in providing feedback for this restoration acreage, and we do not believe the figure is a reasonable expectation due to the amount of pressure placed on public park land in order to meet the goal of our last permit. USR is a default MS4 practice when Baltimore City struggles to find IA conversion opportunities.

   As the state's sole inner-city MS4 jurisdiction, Baltimore City faces serious constraints regarding feasible storm water practices. With only 6% of imperviousness managed by Baltimore City, soil characteristic limitations for ESD practices, and our geographic location at the base of Baltimore County watersheds, our jurisdiction encounters severe pressure on our storm drain system. Therefore, we request that the amount of required restoration acreage be determined based on the actual feasibility of implementing practices that do not require disturbance of public park "good woods."

MS4 Accounting Guidance Comments

1. Section V (3)(a)(1) Please consider reducing Forest Planting land cover conversions to a minimum of 0.5 acres as a more practical metric for Baltimore City—considering our urban constraints.

Forest Planting with an associated long-term IVM commitment or maintenance plan should be awarded higher credit, as the likelihood of survival will increase.

Section V (3)(a)(4) Street Trees planting credit should be maximized for Baltimore City where planting feasibility is more challenging than bordering jurisdictions. We would also like to ensure that newly created street tree pits receive double credit for removing impervious areas, as well as the credit for a new tree. TreeBaltimore and their tree planting partners typically open upwards of 2,500 new pits annually.

Section V (3)(a)(N/A) We recommend the inclusion of a category for Professional Forest Conservation management. Due to extreme urban pressures, our forests are under severe threats from excessive deer disturbance and non-native invasive plants and pests. Baltimore City is working to manage its forests, and actively planting native trees to close new and existing interior forest canopy gaps [where natural regeneration does not occur due to deer browse]. We request a level of credit consideration for this type of tree planting and land management as a concerted effort for maintaining forest public infrastructure.

2. Section V (3)(b)(1) Please clarify that Riparian Forest Buffer planting credit cannot be applied for mitigation requirements resulting from construction disturbance. Many urban riparian areas are already forested, though would benefit greatly from non-native invasive management and replacement of native vegetation. Oftentimes, existing beneficial floodplain trees can be left in place while IVM occurs. If a total acre is improved, though not entirely cleared and replanted, this improvement should still qualify for full credit.

3. Section V (3)(b)(2) "Unmanaged" meadow condition terminology is misleading and should be clarified. Meadow maintenance is essential for a successful conversion to native landscapes. Low-volume herbicide spot treatment applications are necessary for meadow maintenance, especially in the absence of prescribed burns which are not permitted in Baltimore City.

4. Section V (3)(d) While restoration and mitigation requirements in response to construction activity should not receive credit (to disincentivize forest disturbance), the Soil Restoration credit should apply to *any* scenario where soils are stressed due to compaction. Soil restoration is a trending BMP that will be further supported with incentives (i.e. MS4 credit) as is applied in this scenario. This is an excellent addition to the permit and will amplify the City's ability to implement this BMP. It may be beneficial to incorporate specific metrics for measuring degree of compaction.

5. Section V(6) Recent publications suggest that the benefits of USR often do not meet the anticipated level of total phosphorous (TP) reductions originally anticipated in early MS4 permits; and that the reduction of total nitrogen (TN) may only be a short-term improvement resulting from the temporary impacts of clearing riparian tree canopy cover. Additionally, we have not found data indicating the direct measure of inner-city stream restoration through forested natural areas that would otherwise support the increase of MS4 credit applicable to USR. Our Department would like to better understand the decision by MDE to further incentivize this practice.

We recognize that USR can be an excellent stormwater practice in the proper location, but not all projects achieve equivalent levels of success. Construction access disturbances reduce the benefits provided by established public forests and require high-level post-project maintenance—neither of which have historically been accounted for when assessing ultimate USR project costs. BCRP intends to protect the integrity of the ecosystem services provided by public forests and asks for support from MDE to ensure that all other means of addressing urban storm water issues be considered, with disturbance to public forests permitted only as a last resort. To address USR incongruences, a practical metric for assessing applicable credit for each project is the amount of forest disturbance associated with construction.

6. Appendix H (5) In Baltimore, we have found that the success of Vegetative Establishment is contingent upon a minimum two-year monitoring and maintenance regiment, with associated IVM (beyond a two-year term). USR construction permits should extend to a minimum of five-years for joint permit applications (JPA) to ensure proper establishment of mitigation plant species.

7. Appendix J (Table 28) Current USR practices are estimated to withstand 7-10 years of storm water stress before major repairs or reconstruction is necessary. Upland or riparian disturbance associated with recurring construction should be considered in association with the award of credits for stream work. More frequent monitoring and maintenance of implemented stream projects should be expected to improve the efficacy of this practice.

BCRP would again like to extend our sincerest gratitude for the opportunity to review and comment on the excellent efforts of MDE and its partners in generating this next MS4 permit. Upon recognition of Baltimore City as Maryland's most densely populated and urban city located at the mouth of multiple watersheds, we ask that MDE regard our jurisdiction with the constraints at hand and reconsider the standards to which we are held in comparison to the surrounding suburban and rural counties. MS4 requirements must be prescribed according to each jurisdiction's unique characteristics and long-term development plans.

The City should pursue *all* alternative measures prior to major disturbance to the urban forest canopy as a byproduct of stream restorations. We are pleased that Baltimore's tree canopy — the measure of the proportion of the city shaded by trees— boasted an increase from 27 percent to 28 percent between 2007 to 2015. This one percent increase of tree canopy was a major feat, though Baltimore remains well below the citywide goal of 40 percent canopy coverage by 2037 to ensure we meet 'healthy city' standards. We are committed to progressing towards our canopy goal and ask for support in preventing the further degradation of our city forests to meet MS4 goals.

One alternative opportunity is the potential for shoreline restoration and aquatic habitat creation along significant stretches of the 11 miles of the Middle Branch. Such a project would generate opportunities to increase shoreline resiliency, create natural habitat, reduce water pollution, and repurpose dredge material. Additionally, the connection to shoreline resiliency during sea level rise makes many of these projects eligible for Federal funding.

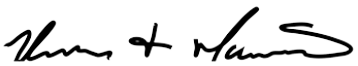
We thank MDE for considering our comments and ask for continued support in achieving our MS4 goals with the health and wellbeing of our City residents at the forefront of permit management. Again, we commend your commitment to the oversight of Maryland's Clean Water Act goals and

will be pleased to address any questions regarding our above input on the 2020 draft MS4 permit for Baltimore City.

The mission of BCRP is to improve the health and wellness of Baltimore through quality recreational programs, preserving our parks and natural resources, and promoting fun, active lifestyles for all ages. The vision of BCRP is to build a stronger Baltimore one community at a time through Conservation, Health and Wellness, and Social Equity.

Thank you for your time and consideration.

Respectfully,



Reginald Moore
Executive Director
City of Baltimore, Department of Recreation and Parks (BCRP)