

Recommendations of the Howard County Commercial Stormwater Solutions Work Group

29 September 2016

I. The Challenge

On April 11, 2016, County Executive Allan Kittleman signed Executive Order 2016-02 creating the Commercial Stormwater Solutions Work Group. This work group shall “provide recommendations to the County Executive and the County Council on effective strategies to incentivize commercial property owners to better manage stormwater run-off and assist the County in complying with its MS4 Permit.” The work group consists of the 11 commercial business owners, developers, and associated experts listed below.

This Municipal Separate Storm Sewer System (MS4) permit requires that the County treat 20% of its total impervious acreage not currently treated, an action that cannot be accomplished by only treating impervious areas on government property. Specifically, the County must treat stormwater runoff from 2,044 acres of impervious surfaces not currently treated to the maximum extent practicable by the end of 2019. The County intends to maximize treatment of impervious surfaces on public lands, but, based on best estimates, this work will only treat 30% of the impervious surfaces that need treatment, with the remaining 70% of impervious surfaces needing to be treated on private lands.

II. Work Group

Members:

Mark Charles, *City of Rockville*
Michael Corso, *JLL*
Chip Doetsch, *Apple Ford*
Carl Gutschick, *Gutschick, Little and Weber, P.A.*
Abby Glassberg, *KLNB, LLC*
Leonardo McClarty, *Howard County Chamber of Commerce*
Pete Mangione, *Turf Valley Resort*
Dan Nees, *Maryland Environmental Finance Center*
Carl Nelson, *COPT*
Cole Schnorf, *Manekin*
Mark Southerland, *AKRF and Environmental Sustainability Board (chair of work group)*

Staff:

Lindsay DeMarzo, *Office of Community Sustainability (staff to work group)*
Jim Caldwell, *Office of Community Sustainability (Director of OCS)*

III. Background

The work group recognizes the formidable challenge that Howard County faces in complying with its MS4 permit and wishes to be part of the solution. As stated above, the County must treat stormwater runoff from 2,044 acres of impervious surfaces not currently treated to the maximum extent practicable by the end of 2019. This means that hundreds of buildings, parking lots, and streets constructed before 2003 need to be treated with stormwater control measures, such as wetland ponds, bioretention (raingardens), stream restoration, or other best management practices (BMPs). The County has already conducted studies, developed BMP designs, and constructed numerous BMPs throughout its public lands. Based on best estimates, this work will only treat 30% of the impervious surfaces that need treatment, with the remaining 70% of impervious surfaces needing to be treated on private lands. In addition to its public land BMPs, the County has instituted stormwater programs for residences and nonprofit properties in the county. The final critical component needed to meet its MS4 stormwater treatment requirements is a stormwater program for commercial properties. Residences make up approximately 60% of private lands and commercial/nonprofit properties 40%. In addition to the absolute need to treat stormwater on commercial properties, many of the least expensive treatments are available on these lands.

IV. Recommendations

To help meet this challenge, the work group discussed in detail the barriers to involvement of the commercial sector and potential incentives to increase participation. Our specific recommendations are described below; they are numbered for convenience but are not in priority order.

1 Focus on High-priority Properties

Target the largest, owner-occupied, commercial and industrial properties with significant areas of land not in use. Recognize that the vast majority of properties will not meet these criteria and will have to be engaged as well.
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While all properties should be eligible to participate, the County should target the largest, owner-occupied, commercial and industrial properties. A desktop analysis should be completed to determine the amount of untreated impervious area within Howard County that falls into each group. Rough estimates, however, are that only 10-25% of industrial properties are owner-occupied and these tend to be the smaller buildings. Properties with significant areas of land not in use are likely to be few as well. Therefore, outreach and stormwater treatment cannot be limited to owner-occupied properties as the majority of untreated impervious area is on leased properties. A focus on property management firms with multiple commercial properties may provide opportunities to increase the scale of stormwater projects and reduce costs per treated impervious area.

Commercial property owners will be most receptive to projects that take the least valuable land and that provide the most direct benefit to the owner. Enhancement of existing stormwater ponds with increased retention, infiltration, and vegetation to provide the needed treatment would be most acceptable to owners. Office and retail owners could also be most receptive to stormwater

facilities that create amenity value (e.g., beautiful ponds or landscaping) that would attract customers.

The work group can facilitate the identification of the first candidate commercial property sites for stormwater management projects through their professional networks and the organizations they represent, including the Howard County Chamber of Commerce, Building Owners and Managers Association (BOMA), and National Association of Industrial and Office Properties (NAIOP).

2 Conduct Effective Outreach and Education

Make outreach and education of the commercial sector as simple and relevant as possible, answering the questions of “why is it their problem?” and “how can participation benefit the owner?” Include messages that (1) there are consequences of the County not meeting its MS4 stormwater permit and (2) the burden of participation will be fairly distributed among all sectors of the county.

It is essential that outreach and education of the commercial sector be as simple and relevant as possible. Stormwater management is not the business of commercial property owners and it is still poorly understood by the general public. Outreach to commercial property owners needs to answer the questions of “why is it their problem?” and “how can participation benefit the owner?” Also, it is important that commercial property owners (1) understand the consequences of the County not meeting its MS4 stormwater permit and (2) believe that the burden of participation is fairly distributed among all sectors of the county. Howard County should emphasize that the costs of improving regional stormwater facilities will be equitably shared among the properties that contribute runoff. Similarly, the County should ensure that existing and future fees and credits are fairly assessed among sectors.

Outreach should involve face-to-face meetings to guarantee that program information gets to the right person within the commercial firm. In some cases, the property management firm may be more local and more motivated to enhance their property than a remote owner. In general, simple explanations that focus on the actual project construction, rather than concepts like “obtaining stormwater credits,” are better understood. Terms like “treating impervious surfaces” should be replaced with “reducing polluted runoff from oil/grease, road salt, etc.” Before and after photographs are effective ways to communicate with property owners. Outreach and program language should be explicit that any stormwater upgrades (e.g., pond retrofits) included in Chapter 3 of the 2000 Maryland Stormwater Manual are acceptable, not just Environmental Site Design (ESD) practices.

The County should (1) draw on lessons learned from finance companies that regularly engage business landowners and possibly (2) hire a consultant to develop an effective outreach campaign and act as “local agent” to engage commercial property owners. While the central message is that the County wants (and is required) to improve water quality in our local streams, and cannot do this without the involvement of business owners, outreach should also emphasize the benefits of economic development and creation of local jobs. The economic prosperity of Howard County has resulted in large part from its status as a “green” location with high environmental quality. Therefore, another message should be that implementing these stormwater projects may improve environmental quality or arrest the decline in quality seen by the public.

Although some commercial property owners may view punitive actions by the Maryland Department of the Environment (MDE) and U.S. Environmental Protection Agency (EPA) on Howard County for not complying with their MS4 permit as a “remote” risk, EPA is currently negotiating a consent decree with Montgomery County (which did not meet its MS4 permit requirements), so it is unlikely that corrective actions will not be taken. Therefore, the commercial sector, and the larger community, should be educated about the following possible consequences to the County and businesses of not meeting the MS4 permit requirements:

- Daily fines on Howard County
- Institution of new permits with accelerated schedules or increased requirements
- Withdrawal of federal and state highway funding to Howard County
- Reduction or elimination of new construction permits in Howard County
- Imposition of individual stormwater permits on commercial properties

It is also possible that failure of voluntary participation of the commercial sector could result in the County (1) creating special protection areas with stricter stormwater regulations on development or (2) mandating management of stormwater runoff from legacy impervious surfaces on commercial and/or residential properties through regulations. At a minimum, if stormwater projects cannot be constructed on commercial properties, more expensive projects will have to be constructed elsewhere and additional County funds will have to be raised.

3 Develop Standard Access and Maintenance Agreements

Develop standard and separate access and maintenance agreements for stormwater projects to meet the MS4 permit obligations. Provide owners with the option of self-performing maintenance or having the County or a third-party perform maintenance.

The County should develop standard access and maintenance agreements for stormwater projects needed to meet the MS4 permit obligations. Example agreements from Rockville and Philadelphia should be reviewed and customized with provisions suggested by the work group. Separate agreements should be developed to address pre- and post-construction activities, i.e., (1) access and easement/lease agreement for design and construction, and (2) inspection and maintenance agreement. Also, the County should streamline the process by waiving new development agreements (DAs and DOCs) and bonds. One option is for property owners to take on the maintenance, but to reduce the stormwater fee on commercial properties by the amount estimated to be spent by the owners in maintenance of the stormwater facilities. Many property owners may choose to have the County or a third party (such as a nonprofit watershed group or land trust) conduct the maintenance and all owners should have the ability to transfer maintenance to the County and return to paying their stormwater fee.

4 Streamline Design, Permitting, and Construction Process for Stormwater Management under MS4 Permit

Streamline the permitting process for stormwater management projects needed to meet MS4 permit obligations and consider the options of (1) using standard stormwater designs, (2) hiring a dedicated stormwater permit reviewer, and/or (3) allowing “peer-review” of stormwater permits.

The County should streamline the permitting process for stormwater management projects needed to meet MS4 permit obligations. Ideally, these projects would be permitted within the 3-week timeline for redline applications. To approach such an expedited timeline, the County would need to work with MDE and U.S. Army Corps of Engineers (USACE) to expedite any needed state and federal reviews. We understand that MDE is currently working to expedite their review for stream restoration projects. We also understand that the County is using the lessons of the current pilot stream restoration project at Patrick Farm to ultimately reduce obstacles and permitting time on private land.

We recommend three approaches for streamlining the County permitting process for stormwater management and stream restoration projects:

- The County should consider developing and requiring standard, acceptable stormwater management designs to simplify and expedite permitting and to be more cost-effective.
- The County should consider hiring a new dedicated, stormwater reviewer for the County, so that MS4 stormwater projects could move through the system on their own track, decreasing permitting time for everyone. The benefits of expedited implementation would far outweigh the cost of an additional reviewer.
- Alternatively, the County should consider allowing owners to use County-approved, private “peer reviewers” to conduct stormwater plan reviews. Montgomery, Prince George’s, and recently Anne Arundel Counties are accepting peer reviews for various development applications.

5 Provide County Funding and Incentives

Reduction or elimination of the stormwater fee is an insufficient financial incentive for commercial property owners to construct stormwater projects. Therefore, the County program should consider (1) funding up to 100% of stormwater projects, (2) reducing the stormwater fee for owner-performed maintenance, (3) tax credits for stormwater projects, (4) relief from parking space requirements, and (5) green certification.

The work group recognizes that the County has various options to incentivize the commercial sector’s participation in stormwater management. Currently the County is pursuing voluntary incentives but may have to consider mandatory requirements if participation is insufficient. Rather than a piecemeal approach, we recommend that the County create a commercial stormwater program that specifically focuses on the needs of commercial property owners.

Currently, reduction or elimination of the stormwater fee only provides a monetary payback on capital projects over many decades, so there is insufficient financial incentive for commercial property owners to construct stormwater projects in trade for stormwater fee reductions. Therefore, if participation remains voluntary, the County program should consider including the following incentives:

- County Funding up to 100% of Stormwater Projects. The County should realize that significant funding will be required to engage commercial property owners in a program for controlling legacy stormwater runoff and complying with the MS4 permit. While some businesses would consider contributing financial resources to these stormwater projects, the majority would require that the County pay 100% of design and

construction costs. This is especially true of investor-owned properties that require a certain return on investment and do not have the discretion of owner-occupied commercial properties. Commercial property owners that wish to contribute financially to stormwater management could be further incentivized by County matching funds and partnerships with nonprofits that obtain grant funds. The County can reduce its overall costs by embracing public-private-partnerships (P3) and other program elements that minimize the transaction costs of implementing large numbers of stormwater projects.

- Reduction of Stormwater Fee for Owner-performed Maintenance. In contrast to design and construction costs, maintenance costs of many stormwater projects are comparable to current stormwater fees for many commercial property owners. Some owners will likely choose to conduct maintenance in exchange for reduction of their stormwater fee, while others would prefer to continue paying their fee and have the County or a third party conduct maintenance.
- Tax Credits for Stormwater Projects. Commercial property owners are reluctant to convert land to stormwater projects unless they receive some value for that land. Depending on applicable tax laws and whether the stormwater facility is deemed an enhancement or public service, commercial property owners may be eligible for depreciation or other tax reductions. The County should consider providing tax credit for stormwater projects similar to the credits given for constructing buildings to “green building” (e.g., LEED) standards.
- Relief from Parking Space Requirements. Losing parking spaces with the installation of a stormwater facility is a concern of many commercial property owners, especially given the County requirements for parking. A waiver from those requirements in the case of stormwater management needed to meet MS4 permit obligations would remove that regulatory barrier from commercial property owners.
- Green Certification for Stormwater Projects. Recognition of “green efforts” is not a major incentive for most commercial property owners, but it would be welcomed by some. As an example, the County could award a CleanWaterHoward certification to any commercial property owner that contributes to constructing stormwater projects at the following levels:
 - Credit for treating less than all untreated impervious acres on the property to MS4-permit-required 2000 Manual standard – CleanWaterHoward Certification
 - Credit for treating all untreated impervious acres on the property to the MS4-permit-required 2000 Manual standard – CleanWaterHoward Silver Certification
 - Credit for treating all untreated impervious acres on the property to the ESD (exceeding the 2000 Manual standard) – CleanWaterHoward Gold Certification

6 Create a Commercial Stormwater Program

Create a commercial stormwater program, ideally modeled after the current County nonprofit program and similar turnkey programs from other counties. The County would contract with design-build teams to provide site selection, design, construction, and initial maintenance for stormwater projects on commercial properties throughout the county.

The work group recommends that the County create a commercial stormwater program using elements from the three options described below. Elements that involve public-private-partnerships (P3) have the potential for the greatest cost savings. We believe it would be most straightforward for the County to model their commercial stormwater program after the current County nonprofit program. As part of creating a commercial stormwater program, the County should ensure that all easements and agreements required for stormwater work to support the MS4 permit be allowed on private property.

County Turnkey Program

This approach would mimic the current County nonprofit program (and similar turnkey approaches by other counties), wherein the County contracts with design-build teams to provide site selection, design, construction, and initial maintenance for stormwater projects on commercial properties throughout the county (future maintenance could be conducted by the property owner, County, or third party). Such a County Turnkey Program would simplify the involvement of commercial property owners. Selection of the turnkey teams would be based on proposals that commit to treating the most impervious area. In this way, the most cost-effective stormwater projects, such as enhancing existing detention ponds, would be implemented first. The turnkey program approach should dramatically reduce the transaction costs of contracting out individual design and construction projects. Creation of a design guide for this program with simple, standard designs of perhaps six different types of stormwater projects, such as that used in Philadelphia, could lead to additional cost savings.

The County has an inventory of projects from its current watershed plans that could be used by bidders to propose costs to treat impervious acres on commercial properties. The County could expedite the implementation process by identifying willing commercial landowners through a consultant, as DC is doing, and providing this to turnkey bidders.

Design Assistance Program

This option would entail more involvement and initiative from commercial property owners. It would be a design assistance program, wherein the County would contact high-priority commercial property owners, obtain agreements, and provide stormwater designs acceptable to the owners. The owner would then contract from a County-provided list of construction and maintenance firms to install and maintain the project.

Stormwater Credit Program

This option would mimic the current DC Stormwater Retention Credit (SRC) Program wherein the County offers to purchase credits for treated impervious acres. Individual property owners or private aggregators would design and construct approved stormwater projects and sell their credits to the County or others seeking the credits. The initial price for an acre of treated impervious area would be determined by the current market rate, which would likely increase as the least expensive projects are constructed. Unless the County agrees to purchase all the credits, this option requires a private market based on extensive redevelopment, which would generally only be applicable to Downtown Columbia and Historic Ellicott City. In addition to reducing the transaction costs and achieving the cost efficiencies of a P3, the ability to treat stormwater on locations where the cost of land is less would reduce overall program costs to the County.

7 Ensure Financial Integrity of the Program

Ensure a balance of revenue and costs (i.e., monies to provide needed funding, rebates, and fee/tax credits) through cost-effective implementation and adequate funding. Recognize that the County will need to increase its stormwater fee or property tax, or reduce expenditures from other programs, if funds cannot be obtained from other sources.

Providing the funding and incentives included in these recommendations necessitates that the County ensures a balance of revenue and costs, i.e., adequate monies to provide needed funding, rebates, and fee/tax credits. The County Financial Assurance Plan approved July 2016 states that Howard County will spend \$41M in FY17-18 and \$87M in FY19-20 on stormwater projects required by its MS4 permit. This amount significantly exceeds the approximately \$40M that will be raised by the stormwater water fee over this period, so bonds and other sources of funding will also be used. It is likely that the funds required will be larger as the cost of stormwater projects will increase above the average \$50,000 per treated acre used in the estimates (as the easiest sites to manage stormwater on are completed and more expensive sites must be treated). Therefore, all parts of the county economy will need to contribute to funding stormwater projects in the future.

Currently the incentives provided by the reduction in the stormwater fee and rebates offered for installation of stormwater projects are insufficient. Typically the payback periods under the current incentives are many decades. Jurisdictions with higher stormwater fees, such as DC and Philadelphia, have found that stormwater fee reductions provide incentives in some cases. In DC the combined fees levied by the District Office of Energy and Environment (DOEE) and DC Water are about \$300 per 1000 ft², while the fee in Howard County is \$30 per 1000 ft². The fee in the City of Rockville is \$50 per 1000 ft², but has been in place since 1978 and has increased regularly to meet the budget of the stormwater program. The work group recognizes that the County may need to increase its stormwater fee or property tax, or reduce expenditures from other programs, if funds cannot be obtained from other sources.

The current version of the Howard County stormwater fee has restored an approximate balance of contributions by residential and commercial property owners based on the extent of their impervious surfaces. Prior to the latest amendments to the Howard County stormwater fee, commercial properties paid more than their proportion of impervious area. When this amendment is fully implemented commercial properties will pay somewhat less than their proportion of impervious area. The work group is amenable to adjusting the fee structure to attain exact equitability among all property owners.

Appendix—Work Group Deliberations and Minutes

The deliberations of the work group consisted of seven meetings from May 13 to September 21, and included presentations by experts, questions and answers, and evolving discussions. Strawman recommendations were developed and debated over two meetings, leading to the final recommendations that were discussed and approved in the final meeting. Detailed minutes of each meeting are attached to this report as an appendix. A brief summary of each meeting and the materials presented are provided below.

May 13—Howard County Administration and Council staff welcomed the work group members, read the charge to the work group, and described the operation of the work group under the open meetings law.

Jim Caldwell, *Howard County OCS*, presented “The Stormwater Challenge” facing Howard County.

Dan Nees, *Maryland Environmental Finance Center*, presented “Commercial Stormwater Overview” with relevant concepts and examples.

Mark Southerland and Shandor Szalay (by phone), *AKRF*, presented “Philadelphia Tackles Stormwater” as a detailed example.

Mark Southerland and Lindsay DeMarzo distributed 10 “homework” questions for review by the work group and discussion at the next meeting.

May 31—Mark Southerland reviewed the work group mandate and the process going forward, and Lindsay DeMarzo provided an overview of the Basecamp (file share) method of sharing agenda, minutes, resources, and work products.

The work group discussed the homework questions and asked that presentations on the permitting process be provided in the next meeting.

June 22—The work group continued discussion of the homework questions and participated in questions and answers from the following presentations.

Chad Edmondson, *Howard County Department of Planning and Zoning (DPZ)*, presented “Plan Review Process and Case Study.”

Lindsay DeMarzo, *Howard County OCS*, presented “Examples of Stormwater Retrofits on Commercial and Nonprofit Properties.”

Jennifer Smith, *MDE Sediment, Stormwater and Dam Safety Division*; Paul Busam, *MDE Waterway Construction Division*; and Amanda Sigillito, *MDE Nontidal Wetlands Division* presented an overview of state permitting requirements and answered work group questions.

July 13—The work group continued discussion of issues raised and participated in questions and answers from the following presentations.

Brian Van Wye, *District Department of Energy and Environment*, presented “DC Stormwater Reduction Credit (SRC) Program.”

Mark Charles, *City of Rockville*, presented “Overview of Rockville Stormwater Program.”

Mark Southerland distributed a strawman of recommendations derived from the work group for review and discussion at the next meeting.

August 17—The work group discussed the strawman recommendations and decided to convene a second August meeting to get input from additional work group members on a revised strawman.

September 2—The work group continued detailed discussion of the revised strawman recommendations, which were incorporated into the draft report and distributed to the work group on September 16.

September 21—The work group discussed the draft report and revisions were incorporated into a “track changes” version and was distributed for final comment before the final report was submitted to the County Executive and County Council.