

DRAFT
The Future of Stormwater Management in the COG Region
Addressing the Emerging Legislative and Regulatory Requirements

August 2007

New Challenges for the Region's Stormwater Programs - As new Maryland and Virginia legislation takes effect and as the Bay Program Partners prepare for the "Baywide TMDL," it's apparent that there will be increasing pressure on local government stormwater programs to do more, both in terms of correcting past problems and in imposing greater requirements on new development. In Maryland, this increasing emphasis on stormwater is likely to have an effect on agencies with land use planning responsibilities.

In Maryland, state agencies are working on the Stormwater Management Act of 2007 and HB1141 that requires a Water Resources Element in each jurisdiction's Comprehensive Plan. Also, in the recently released Tributary Strategy "Implementation Plan," one of the long-term actions provides that MDE will, "Revise general MS4 permits on a 5-year cycle to ensure consistency with water quality standards."

In Virginia, per communication from DCR staff, House Bill 1177 changed the landscape regarding the State's ability to address impacts from new land development. MS4 permit conditions will require consistency with the Virginia Stormwater Management Act and regulations, which is different than implementing Tributary Strategies.

At the regional level, advance planning is underway for the development of a Baywide TMDL, which is to be completed no later than 2011. In some of the advance materials distributed by the Bay Program, one of the issues to be addressed is:

"How do we incorporate MS4's and other regulated sources into the waste load allocations?"

At another point in the same document, it noted that the TMDL provides a "regulatory backstop" whose advantages include:

"Compels quantifiable loads/performance measures for MS4 permits as they become part of the WLA."

COG's Proposal for the Stormwater Interest Group of the WRTC - It's too early to determine with certainty the collective impact of these initiatives but they are likely to be substantial. Accordingly, COG is proposing to keep a continuing focus on these collectively, working with and through those with stormwater management responsibilities in the COG region. This topic, "Emerging Stormwater Management Requirements," will be a regular focus of the stormwater portion of the bi-monthly WRTC meetings. These will be designed in order to:

- Inform COG members of the latest developments related to federal and state actions;
- Share and discuss recent and/or pending regulatory developments (e.g., draft permit language) with peers;
- Share and discuss recent program experience (e.g., Montgomery County's LID initiative and Prince William County's side-by-side assessment of traditional and LID-based development at Hopewell Landing) with peers;
- Provide a forum to discuss and provide comment on pending actions with federal and state agency staff; and
- Formulate technical and policy recommendations as appropriate. Depending on circumstances, these could be the basis for correspondence or testimony and/or be forwarded to the Chesapeake Bay Policy Committee (CBPC) and the COG Board.

Focus for the September 13 WRTC Meeting – The Stormwater Worksession (beginning at 12:00 at September 13's WRTC meeting) will consist of two parts. The first half hour will be a presentation by Pam Rowe of the Montgomery County DEP staff who will provide a briefing on the county's Raingarden Initiative which provide for implementing raingardens on private property at county expense. Ms. Rowe will discuss the genesis of the program, the numerous technical, administrative and legal issues to be addressed to ensure success and the long-term prospects.

The next hour will be a roundtable discussion of the emerging stormwater regulatory requirements from both the Bay Program and the Commonwealth of Virginia. The former will include proposals being considered by the Bay Program's Urban Stormwater Workgroup and the latest information related to the Baywide TMDL. The latter will address implementation of House Bill 1177 and recent examples of draft language being prepared for inclusion in MS4 permits.

In anticipation of this meeting, Ted Graham sent a set of questions to Doug Fritz of the DCR staff. Those questions and his thoughtful and informative responses are included in the attachment.

Focus for the November 8 WRTC Stormwater Worksession – MDE staff has indicated that they are working intensely to get a draft proposal prepared related to the implementation of the Stormwater Management Act of 2007. While not final, the proposal is expected to be far enough along by November 8 to facilitate a healthy discussion and also to provide a forum to make comments and recommendations. Thus we anticipate a "Maryland Emphasis" at the November 8 meeting.

Despite their differences, both Maryland's and Virginia's programs have the provisions of the Clean Water Act and the Bay Program in common. Accordingly, COG staff plans to frame the issues and the discussion to be of full regional interest, even when one state is being emphasized.

Attachment
Questions Posed to Doug Fritz of the DCR Staff Related to MS4 Permitting

Note: These responses reflect Mr. Fritz's perspective and the best information he has at this time. They do not necessarily reflect the official position of DCR. They are included here to help inform the roundtable discussion at September's WRTC Stormwater Worksession. It is expected that a similar set of questions will be addressed at November's WRTC Stormwater Worksession where the focus will be on Maryland.

Q - What new requirements should local governments prepare for in their next MS4 renewal cycle? (If your crystal ball is clear enough, what about the following cycle?)

A - MS4 permits are one tool in Virginia's toolbox to improve water quality in urban areas. They are not the only tool. I see future permits continuing to refine MS4 programs in a manner that ensures consistency with statutes and regulations designed to implement the Commonwealth's goals and objectives. Given the tremendous attention given to the MS4 program, it is impossible to tell where the MS4 program may be in 5 years. In fact, 40 CFR 122.37 requires EPA to evaluate the small MS4 stormwater permit regulations after December 10, 2012 and make any necessary revisions. Virginia will be required to implement any of these revisions into its program if it intends to remain the authorized MS4 permitting authority.

For this upcoming permit cycle, regulated facilities should expect to see:

1. Continued streamlining of Virginia Stormwater Regulations, when appropriate. Permits will be written in a manner consistent with existing state programs such as those conditions required under the Virginia Erosion and Sediment Control Law and regulations.
2. Inclusion of permit conditions that require updates to MS4 Program Plans that ensure consistency with TMDLs when waste loads have been allocated.
3. Discharge authorization to specific hydrologic units as defined by the National Watershed Boundary Dataset instead of individually named waters.
4. More descriptive permit requirements that refine minimum standards (measurable goals) for the six minimum control measures for small regulated MS4s. This is being done to ensure that similar effort is expended by the regulated MS4s.
5. Conditions to assess and evaluate MS4 programs based on their ability to reduce pollutants to the MEP and protect water quality. For example, how effective is a program that conducts 1,000 land disturbing permit inspections but conducts no enforcement activities in a watershed impaired due to sediment? Similarly, how effective is an educational program that does not include programs that discuss home fertilizer application when the receiving waters are impaired for nutrients? The quality of and impacts to receiving waters must be incorporated as part of all MS4 programs. These are water quality discharge permits.
6. A greater reliance on the MS4 program plan developed by the permitted facility. It must be developed and kept updated. A plan does not have to be wholly contained in one document; however, sufficient reference must be made to existing programs to assure that the relationship between existing programs and the MS4 are defined.

My basic comment is that a MS4 Program Plan should be developed sufficiently so if the entire staff quit tomorrow, new staff could fully implement the MS4 Program. Many MS4s have suffered and continue to suffer from staff turnover. A MS4 Program that is designed to reduce pollutants to the MEP can be viewed as similar to a POTW pretreatment program. Are POTW pretreatment program procedures and requirements documented?

Q - What connection do you anticipate between TMDLs and MS4 permit requirements? As Virginia requires its TMDLs to have an Implementation Plan, is this or will this be reflected in some way in a permit?

A - Implementation Plans are plans developed to remove an impaired water from the impaired waters list. An IP addresses all discharges, non-point and point. The IP relies on the appropriate permit to implement permit conditions to address the impairment and WLA and is not responsible for determining permit conditions. A MS4 must implement strategies, policies and other BMPs to meet water quality standards under conditions established by permit. This means that the MS4 cannot wait and rely on the development of an IP. The IP may provide additional information such as the identification of additional BMPs that are effective in reducing the pollutant of concern, which the MS4 may then incorporate into its MS4 Program Plan.

Q - Since TMDL regulations specify a WLA, which include loads from MS4 areas, will MS4 permits reflect this in some manner, including perhaps an explicit reference to "maximum extent practicable" practices?

A - MEP is the technology based effluent limit established by state and federal regulation. A WLA is a type of water quality based effluent limit. Under federal regulation, the more protective effluent limit must be employed. DCR relies on, and agrees with, existing federal guidance to establish effluent limits for wet weather discharges. Under this guidance, the utilization of an iterative process of BMPs implementation, evaluation and refinement is the appropriate method of meeting water quality effluent limits. Under the MEP standard, you are reducing all pollutants through one plan, evaluating their effectiveness and refining it as necessary. When a WL is allocated, the MS4 Program Plan must be updated to include mechanisms to reduce the discharge of a specific pollutant identified in a WLA. The iterative process of BMPs implementation, evaluation and refinement is the same whether it is directed at holistic MS4 Program Plan to reduce to the MEP or updated portions of the plan directed towards the specific pollutant identified in the WLA. It is important that we recognize that the pollutant identified in the WLA is the pollutant that must be addressed; however, the actual number may be fairly rudimentary and should not be placed in permits as an enforceable limit until sufficient data is collected to guarantee its accuracy in protecting water quality. The key is to provide maximum flexibility for the regulated MS4 to implement BMPs appropriate for the community.

Q - Maryland and the District of Columbia are on track to list the Anacostia River as impaired for trash, spurred in part by the "Trash Treaty" (pledging a Trash Free Potomac by 2013) that was signed by officials from throughout the Potomac watershed. There has been a lot of discussion (but no decisions) of including some provision in the MS4 permits for Montgomery and Prince George's Counties and the District of Columbia to reflect this. Although no portion of the Potomac itself has been listed and there does not appear to be any movement to list other tributaries than the Anacostia, many Virginia officials did sign on to the Treaty. Might there be some recognition of this in any MS4 permits?

A - The "Trash Treaty" did not commit the Commonwealth of Virginia to any action. In fact, I cannot see where the Governor of Virginia signed the document. Many NOVA local government officials did sign the document; however, their signatures do not dictate its inclusion into a MS4 permit without their consent. MS4 Programs in NOVA are already

addressing trash as Phase I regulations require the control of “floatables”. Phase II programs should view the “Trash Treaty” as a local water quality issue and propose, develop and implement appropriate BMPs as necessary. Compliance with the MS4 permit will help a local government meet the desire of the document. Signing the document will not guarantee permit compliance.

It is DCR’s intention to utilize the TMDL development process to determine the pollutant of concern and the allocation of a Waste Load TMDL approved by the Virginia State Water Control Board to act as the condition requiring the MS4 Program Plan update. If the State Water Control Board approves a TMDL for trash that includes a WLA to certain MS4s, the MS4 would be subject any permit conditions regarding TMDLs. This method of implementation is still in negotiation with EPA.

Q - A PCB TMDL for the Potomac River is in the works, with the draft TMDL posted on the ICRPB web site. The "TMDL Implementation and Reasonable Assurance" section of the draft TMDL (p. 12) states that "NPDES regulated stormwater permits and permits for CSO systems may incorporate Best Management Practice-based controls as described above ..." It also lists (p. 16) a number of provisions to be included on MS4 permits "when issued or renewed" that may include greater monitoring activity and potential source characterization. Do you anticipate the Potomac TMDL for PCBs will be reflected in some way in future MS4 permits in the Potomac basin?

A - Yes. We are working with DEQ central office staff in development of the TMDLs that will allow DCR to include what it feels are appropriate permit conditions. This TMDL is not the only PCB TMDL that must be developed in VA. We want MS4s addressed similarly in all PCB and other problematic legacy pollutant TMDLs.

Q - The Virginia Tributary Strategy for the Potomac and Shenandoah, dated March 2005, (pp. 53-54) states that the "new Virginia Stormwater management Act offers an opportunity to better address the impacts from land development ..." It goes on to list 15 discrete actions related to urban stormwater and indicates that there might be forthcoming program changes if deemed warranted. Do you anticipate any new MS4 requirements tied to the implementation of the Tributary Strategies? What about once a Baywide TMDL is completed (anticipated in 2010/2011)?

A - House Bill 1177 changed the landscape regarding the State’s ability to address impacts from new land development. MS4 permit conditions will require consistency with the Virginia Stormwater Management Act and regulations, which is different than implementing Tributary Strategies. The development of minimum standard requirements for local programs such as those being discussed in the current, separate stormwater regulatory action will define the required changes.

As additional information such as an approved Bay TMDL is available, additional permit conditions may be applicable. It is anticipated that the implementation mechanism for a Bay TMDL will be the same as for any other impaired water in Virginia.

Q - Are there any topics that the local governments in the COG region might address to assist DCR in carrying out its MS4 responsibilities?

A - It is apparent that MS4 programs are not sufficiently "telling the world" of their accomplishments. MS4 programs are doing a tremendous amount of work. However, this work is going largely unnoticed. MS4s could do themselves, and DCR a lot of good, by spending time and effort to promote their actions to the community. If no one knows what you are doing, the belief is that you are not doing anything.

MS4s programs, especially those located in the same geographical area or watershed, must continue to find more ways to work together. Discussion between MS4s programs about what works and what doesn't and how costs can be reduced is something that is necessary but something DCR cannot provide. Is it reasonable for 10 different MS4s to develop 10 different public education programs that are not related and do not promote the same thing at the same time? The goal is to develop effective, efficient programs. Individual MS4 programs need to look outside their box.

Q - What are the prospects for cost-share money, if any, for implementation of MS4 requirements.

A - We can only consider financial assistance when we have money to give and most available money has restrictions that prevent it from being used to implement requirements of a permit.

I, personally, believe that there is a difference between developing a program and implementing certain projects that result from the proper implementation of required program. For example, a MS4 may develop and implement a program to identify potential areas for retrofit. The actual retrofit project should be able to be consideration for assistance, if available. I believe that this mindset is beginning to spread.

In addition, it is important that future TMDLs identify areas within a regulated jurisdiction that do not drain through a MS4 and provide a Load Allocation for those areas. This may free some monies previously unavailable to the community. A MS4 should be able to say, "here are my outfalls and their associated drainage that is regulated under my MS4 permit." Areas outside of those areas are not covered under the regulations and should be given load allocations as non-point source.

Finally, DCR is working on a report identifying several issues involving urban BMP funding. I cannot tell you if the report lead to any funding. However, Delegate Bulova played an active part in this study and He has shown great interest in trying to fund ways to encourage the implementation of BMPs in urban areas. He was given a summary of the findings for use at the recent Potomac Forum.