

**Stormwater Act of 2007
Focus Group Meeting
Maryland Department of the Environment
Fairland Regional Park
Laurel, Maryland
February 27, 2008 9:30 AM – 12:00 PM**

Participants

American Engineering and Surveying, Inc.: Kordell Wilen
Anacostia Watershed Society: Steven Reynolds, Jim Connolly, Masaya Maeda
Anacostia Watershed Citizens Advisory Committee: Mary Barber
Bay Engineering: Jeff Smith
Beaverdam Creek Watershed Watch Group: Brian St. George, Shirley Middleton, Mark Christal
Bohler Engineering: Rennie Friedman
City of Annapolis: Frank Biba, Maria Broadbent
City of Gaithersburg: Donald Boswell, Greg Ryberg, Erica Shingara
Clean Water Action: Andrew Fellows
Friends of Lower Beaver Dam: Dan Smith
Friends of Still Creek, Greenbelt: Hariette Phelps
Gutschick, Little, & Weber, P.A.: Tim Longfellow, Seth Churchill
HACK: Bill Orleans
LSA, Associates: Mike Wegner
McCrone, Inc: Tom Voisinet
Maryland Department of the Environment (MDE): Ken Pensyl, Brian Clevenger, Stewart Comstock, Deborah Cappuccitti, Dela Dewa
Maryland Department of Natural Resources (DNR): Carrie Decker
Maryland Environmental Service: Megan Simon, Marisa Olszewski
Maryland Ready Mix Concrete Association: Tom Evans
Maryland Stormwater Consortium: Diane Cameron
Mehaffey Associates: Jay Hopson
Montgomery County Dept. of Environmental Protection: Amy Stevens, Gene Gopenko
Prince George's County Department of Environmental Resources: Sam Moki
Prince George's County Department of Public Works and Transportation: Mary Rea, George Holmes, Tajendra Singh, Rey de Guzman, Elizabeth McKinney
Reinaman Engineering Group: Tania Reinaman
RJK Engineering: Andrew Barrow, Megan Lombardi
Sierra Club: Sarah Leshers
Maryland DNR Tributary Strategies: Patty Larson
Unaffiliated: Larry Silverman
University of Maryland (UMD): Chris Mattingly, Carol Hearle, Andrew Lala
US Dept. of Agriculture (USDA): George Meyers
US Environmental Protection Agency (EPA): Robert Goo
US EPA Chesapeake Bay Program: Peggie Parrish
VEP: Vince Berg
Z Con, Inc.: Tom Zinchiak

Handouts

“The Stormwater Management Act of 2007 – Proposed Time Line for Regulation Adoption”
http://www.mde.state.md.us/assets/document/sedimentStormwater/SWM_Act_Regulation_Schedule.pdf.

Mitchie’s Legal Resources: “§4-201.1. Definitions.” and “§4-203. Duties of Department.”
http://mlis.state.md.us/asp/web_statutes.asp?gen&4-201.1

“Stormwater Management Act of 2007 Focus Group Meetings” (schedule)
http://www.mde.state.md.us/assets/document/sedimentStormwater/Focus_Group_Schedule.pdf

Introduction

Mr. Clevenger began the meeting by providing background information on the development of the draft revised Chapter 5 of the 2000 Maryland Stormwater Design Manual (Manual) as implementation of the Stormwater Management Act of 2007 (Act). Mr. Clevenger indicated that the intent of the Act, which was signed into law by the Governor in spring of 2007, is to institute Environmental Site Design (ESD) into stormwater management practices to the “Maximum Extent Practicable” (MEP). Details of the Act were provided in handouts.

Mr. Clevenger reviewed the progress to date with regard to implementation of the Act and indicated that a one-day public outreach meeting was held in July of 2007 to gather insight from a cross-section/representative group of those affected by the change, including environmental advocates, designers, developers, plans reviewers and public works officials. As a result of input from the July 2007 meeting, the Maryland Department of the Environment (MDE) developed an outline of the plan and schedule for implementation, which was posted on their website in September 2007. A draft revised Chapter 5, containing placeholders for sections to address redevelopment, retrofits and protected waters, was also posted to the website for public input. Mr. Clevenger introduced the other primary authors of the draft revised Chapter 5 from MDE in attendance at the meeting: Ken Pensyl, Stewart Comstock, Deborah Cappuccitti, Dela Dewa.

Mr. Clevenger stated that the current meeting is the last in a series of six focus group meetings to discuss the draft Chapter 5 revisions with interested parties. He explained that the draft revised Chapter 5 being presented should be seen as a dynamic document. The purpose of the focus group meetings is to accept comments and suggestions from the public and plans review and design community to help MDE develop the draft into a useful and informative document. Mr. Clevenger noted that, in addition to comments made publicly at the meeting, MDE would accept written comments, including hand-edited hardcopies of the draft Chapter 5 in addition to edits and comments received electronically. He stressed the importance of public feedback for the information and practices that had been drafted into Chapter 5 in order to determine which practices would and would not work on a practical level. Mr. Clevenger also explained that MDE and its subcontractors will be adding graphics to the document and completing situational model runs for some of the included practices.

Mr. Clevenger reviewed the evolution of Maryland’s stormwater management regulations from the policies of managing for flood protection volume (two and 10-year frequency storm events),

conserving post-development peak discharge rates, and attempting to force infiltration. It was later recognized that design practices such as peak shaving often resulted in scouring of downstream banks from increased mid-bank full flows. Mr. Clevenger stated that the Manual attempted to encourage designers, planners, and developers to move away from such practices and consider reducing runoff at the source rather than relying on end of pipe treatment or ponds. However, before the Act, such practices were optional. Mr. Clevenger indicated that a narrative of the State's perspective on stormwater regulations is available on the MDE website.

Mr. Clevenger noted that the planning, design, and review workloads following the release of the draft regulations will most likely increase, especially for county planning and permitting officers. In addition to the increased workload, the transition will require a paradigm shift in thinking. He noted the challenge of defining MEP and achieving practical compliance coherence between newly required ESD and competing county planning codes and ordinances. In conflict with ESD, which would reduce impervious surface in an attempt to maximize infiltration and reduce stormwater runoff, such ordinances often require increased impervious surface area to accommodate citizens with disabilities, emergency response vehicles, and the like. Mr. Clevenger also noted the difficulty that MDE had regarding determining the appropriate scale for ESD practices regarding design simplicity and providing the appropriate level of guidance to meet MEP. MDE anticipates that there will be disagreement between designers and plans reviewers on the minimum requirements. As the new regulations are drafted, MDE will try to strike an appropriate balance between defining a minimum standard and still allowing for flexibility in design.

Mr. Clevenger introduced the "Sandbox" issues that had that had been recorded at the five meetings prior, as well as from one "in house" planning meeting at MDE. The issues included were:

- Including ESD in currently exempt (in some counties) agricultural buildings
- Conflicts in defining MEP
- Plans review workload increase
- Construction maintenance and inspection workload increase
- Expedited review incentives for higher design standards in recognition that time is money
- Including considerations for forestation/deforestation and other state/federal law in planning
- Rules for redevelopment
- Education for homeowners, regulators, designers/engineers, etc.
- Appropriate scale for practices and difficulty in addressing large-scale watershed issues

Open Discussion

A member of the Maryland Stormwater Consortium presented to the group a flow-chart, developed by the Consortium, that is their step-by-step vision of achieving MEP for designers. She also explained that the 35-member Consortium has written a document outlining 13 "Core Principles" for stormwater design and management. She offered this by email to anyone interested. She offered copies of the documents to anyone interested.

In recognizing that the Baltimore-Washington metropolitan area is approximately 50% developed, a participant asked Mr. Clevenger if there would be new stormwater requirements for redevelopment. Mr. Clevenger stated that MDE would be updating the current regulations for redevelopment in the revised Chapter 5. Mr. Clevenger explained to the group that prior to the Manual there had been no regulation for redevelopment to address stormwater. When the Manual was written, the decision to have 20% of a site's impervious area controlled was chosen as a way to take advantage of the opportunity for increased stormwater management that redevelopment presented, while not creating a disincentive in the way of excessive requirements and subsequently promoting sprawl. Mr. Clevenger stated that MDE will be revisiting the 20% figure and he expects to assemble a group from various entities in the stormwater community to offer specific guidance on this section of the regulation. He added that it has been called to MDE's attention in recent focus group meetings that it is first necessary to better define redevelopment for stormwater management purposes.

The participant from the Maryland Stormwater Consortium voiced her support for MDE re-addressing redevelopment in the updated Chapter 5. She also stated that the flow-chart that the Maryland Stormwater Consortium has developed would be redrafted to include redevelopment scenarios. On behalf of the Consortium, she also invited MDE to visit some "green" redevelopment sites located in and around Washington, D.C., including the Eastern Village Co-housing project in Silver Spring. Another participant encouraged MDE to promote performance standards to encourage redevelopment in urban areas. He also recommended strong language in the regulations that will minimize local government involvement, which he believed will establish inconsistent standards.

Continuing the redevelopment conversation, a participant mentioned that Bob Summers, Deputy Director of MDE, had been at a meeting in Laurel the previous Saturday and made positive statements about addressing redevelopment in the new stormwater regulations. She noted that it did seem possible to use a step-wise process, like that developed by the Maryland Stormwater Consortium to address redevelopment requirements. She also asked if MDE distinguishes retrofitting from redevelopment. Mr. Clevenger answered that MDE cannot require retrofitting of existing developed areas, only the improvement of stormwater management practices when a property is redeveloped. Responding to her statement about using a step-wise process, Mr. Clevenger added that additional Chapter 5 revisions, which MDE is considering at this time, are similar to a step-wise process. He stated that MDE is conducting the needed research to determine runoff volumes and other numerical values of ESD practices for use in modeling efforts to be provided to designers and planners as a resource. Mr. Pensyl added that there is already a step-wise process of sorts included in the regulations for redevelopment. Regarding the percentage of impervious area that needs to be addressed in redevelopment, Mr. Pensyl stated that although the State requires 20%, local jurisdictions can (and often have) set a higher minimum standard.

A participant representing the Anacostia Citizens Advisory Committee stated that she would provide MDE with a list of concerns she had compiled from the proceedings of the previous Saturday's Stormwater Regulation Workshop. The participant commented that it seems the tendency for developers to favor greenfield sites for development over redevelopment projects is diminishing as the user population moves back into urban areas. The participant thought that this idea supports raising the stormwater design and management standards for redevelopment. The

participant suggested MDE review environmental design standards currently being instituted in Washington, DC. Another participant suggested redefining redevelopment to provide increased stormwater management requirements for commercial and industrial sites.

A participant from the US EPA recommended that MDE and the meeting participants review an EPA paper that demonstrates how effective ESD can actually be less expensive than traditional BMPs. Ms. Cappuccitti, who has been assembling cost information on various ESD practices for MDE, responded that she has seen evidence of this sentiment in literature: when constructed properly, ESD can be cost effective. A designer present disputed this statement because the cost analyses do not include the costs incurred when development projects are delayed due to disagreements between planning officials on design requirements. He requested that MDE give local officials more specific guidance to mitigate the time spent having plans approved by various offices. Mr. Clevenger pointed out that a similar request had been made at the Salisbury meeting and subsequently added to the “Sandbox.” Mr. Clevenger stated that public works standards and other local zoning ordinances would have to change to accommodate the requirements of the Act. The designer reiterated that clear instruction and education from MDE to local code officers would be very helpful.

Another participant stated that, if better stormwater management practices are not implemented now, any perceived savings from the use of traditional BMPs will be canceled by the increased costs to Maryland taxpayers in the State’s continued challenge of restoring the water quality of the Chesapeake Bay. The participant recommended that MDE establish a technical advisory group to assist them with the remainder of the process of creating regulations for the Act. Finally, the participant asked Mr. Clevenger to clarify his statement that Smart Growth could suffer if stricter regulations were imposed on redevelopment.

Mr. Clevenger responded to the participant’s last comment by explaining that MDE has received feedback that it has been easier for developers to build new communities outside of metropolitan areas than to rehabilitate older structures within established communities. Ms. Cappuccitti supported Mr. Clevenger’s statement and added that participants in the Cumberland focus group meeting indicated that City of Cumberland is instituting an incentive plan to promote urban redevelopment because it has been very easy, in that rural part of Maryland, to develop in the rural areas and not have to face all of the challenges that come with building on and around existing infrastructure. Mr. Pensyl commented that this example demonstrates the need to find a balance that will work across Maryland.

A participant from St. Mary’s County stated that local authorities are already requiring that designs comply with the Act, even though MDE has not finished writing the regulations for the new law. He also questioned that efficiency of adding multiple micro-scale practices in stormwater control as opposed to constructing a single drainage pond to serve the entire site.

Mr. Clevenger noted the multitude of stormwater best management practices (BMP’s), nearly 30,000, that have either failed since their implementation, that are outdated or otherwise in need of repair or renovation. He recommended that the regulations provide for a mitigation option to repair BMPs in instances where ESD cannot be integrated into redevelopment projects (or would be too costly and discourage the project).

A participant suggested a system of fee and credit schedules for developers to encourage the use of ESD in redevelopment. Mr. Pensyl and Mr. Comstock responded to this reminding the participant that the Act makes using ESD practices mandatory in new development, MDE does not believe it is within the scope of the law for MDE to impose fees or allow credits explicitly for redevelopment projects. Mr. Comstock added that any fees that could be interpreted as an additional tax would not be received favorably by the public.

Another participant presented three points about stormwater management. He encouraged MDE to be as specific as possible in defining MEP. He suggested that there might be some way, beyond imposing fees, to make it prohibitively expensive to build in sprawl areas (and encourage Smart Growth). Finally, the participant recommended that the regulations be written to work in tandem with stormwater permits to encourage compliance.

A participant asked how MDE would require counties to remove impediments, especially those that are part of Department of Public Works' codes, safety regulations, and zoning codes. Mr. Clevenger stated that the law establishes that ESD requirements supersede any local codes. He expects that, although local departments that permit or approve designs do not currently coordinate, this will have to change to accommodate new stormwater regulations. A participant stated that there are creative solutions to merging ESD requirements with public works and zoning codes. He gave an example of adding a greenway buffer on the sides of streets that would allow for emergency vehicle passage when necessary, but also provides narrower streets with less impervious surface.

Another participant suggested a different way of planning for stormwater management by first assessing the attributes of the receiving stream, including geomorphic stability, connectivity with the vegetated floodplain, and water quality. She stated that the central management focus for redevelopment projects should be to restore a potentially degraded stream to optimal conditions, while new development should be structured toward maintaining the receiving stream's current water quality and bank conditions. Additional participants stated that some counties have already begun to institute watershed management approaches in planning by factoring in the condition of existing natural resources into the determination of the development potential of an area. Mr. Clevenger noted that, although concurrent with the intent of the Act, watershed approaches would be difficult to mandate statewide. A participant stated that House Bill 1141 could be used as a guide to the implementation of watershed-wide stormwater management.

A participant requested that MDE include guidance on the maintenance of stormwater practices in Chapter 5. She stated that these practices need a lifetime of care and written guidance is an important element in their success. Mr. Clevenger agreed that both education and maintenance are very important for the long-term success of stormwater management practices.

A participant from Montgomery County stated that the County is in the process of rewriting county codes that deal with forestation and reforestation. He asked for suggestions on how to include considerations for the new stormwater management requirement in these new codes. Mr. Clevenger responded that the draft Chapter 5 revisions require planners to consider stormwater upfront by first identifying, maintaining and using a site's natural resources including trees. He commented that this step could help to bolster reforestation. A participant stated that the EPA had funded a study that demonstrates a measurable benefit of tree canopies in reducing

stormwater. The participant also recommended considering the US Forest Services iTree inventory software as a planning tool for modeling the benefits of trees on various sites. An additional participant suggested a recent research on dam issues produced by UMD to address the potential to reduce peak runoff and reduce discharge volume.

A representative from the Maryland Stormwater Consortium stated that the consortium did feel that it was important for the entire Manual to be rewritten at some point, with the understanding that currently MDE is in a strict time schedule to produce the new regulations to comply with the Act. Mr. Clevenger responded that MDE's priority right now is completing the revisions to Chapter 5 and corresponding changes to the Code of Maryland Regulations. In addition, MDE feels that the full potential of the Manual has not been realized due to the short timeframe between the implementation of projects based on the manual guidance and the enacting of the Act. Another participant asked for information regarding the revised model ordinance. Mr. Comstock stated that a draft model ordinance (from the Eastern Shore) for incorporating ESD in site design is on the MDE website as an example. Mr. Pensyl stated that the ordinance on the website was developed in reaction to House Bill 1141 to provide guidance to the Counties.

Concluding Statements

Mr. Clevenger explained the process for the adoption of the Act into regulatory code, as it would follow this meeting. The schedule is available on the internet at: http://www.mde.state.md.us/assets/document/sedimentStormwater/SWM_Act_Regulation_Schedule.pdf. He reminded the participants to submit their comments and suggestions on the draft revised Chapter 5 to MDE. Electronic mail submissions can be sent to Brian Clevenger: Bclevenger@state.mde.md.us or to Stewart Comstock: Scomstock@state.mde.md.us. Mr. Clevenger suggested that interested participants continue to monitor the webpage for updates on the process.

The meeting was adjourned.