

Runoff Review

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FLOODPLAIN DEMOS CONTINUE TO BUILD MOMENTUM

In an effort to become more involved in local communities and to reach potential engineering students at a young age, MAFSM applied for and was awarded a 3D Floodplain Simulator Model in 2011. This model is used to teach about floodplains and impact of development within floodplains in a hands-on environment.



Since that time MAFSM volunteers have held two train-the-trainer sessions and conducted workshops that have reached hundreds of children and young adults in Maryland and Virginia.

In 2012, MAFSM won an award for their outstanding efforts in education and outreach conducted with the 3D model by [Outreach Process Partners](#), a MD firm. MAFSM held train-the-trainer sessions at their 2011 and 2012 conferences. A train-the-

trainer for MAFSM Board Members is planned for April and another train-the-trainer will take place for general membership in the late spring. MAFSM is excited to grow their cadre of trainers on the 3D Model program.

Some of our trainings have included the following below. For a full list please visit our website at <http://mafsm.org>:

December 21, 2011 Demonstration – Frost Elementary School – Frostburg, MD

Kevin Wagner of the Maryland Department of the Environment was the first from our Association to demonstrate the model. Kevin presented to two kindergarten classes at Frost Elementary School in Frostburg, MD. Students learned about watersheds, wetlands, and floodplains; absorption of rainwater and runoff; impervious surfaces, and the dangers of flooding.



March 22, 2012 Demonstration – Carroll County Envirothon– Westminster, MD

The Envirothon is a problem-solving, hands-on natural resources education program for high school students. Students work and study under the guidance of local and regional natural resource professionals to hone their knowledge of Maryland's natural resources and conservation efforts. The structure of the Envirothon program also encourages development of student's problem solving, communications, team building, and decision making skills.

Martin Covington of the Carroll County Government led all day demonstrations using the 3D Flood Simulator Model to seven teams of high school students from six different high schools in Carroll County. He covered Hydrology, Hydraulics, the effects of development and methods for mitigation, traditional stormwater control and low impact development.

June 13, 2012 Demonstration Boy Scout Troop 601– Alexandria, VA

Mark Hoskins of Dewberry lead a discussion and demonstration of the model for Boy Scout Troop 601 in Alexandria, VA. He conducted several scenarios with his demonstration such as wetlands and parking lot scenarios to demonstrate the impacts of development on watersheds. The scouts measured the discharged volume Mark also explained hydrographs and provided an example to scouts based on the demonstration



MAFSM received a letter of thanks from the Scout Troop leader, Nathan Ball who said, “Many, many thanks for visiting with my Scout Troop earlier this week to demonstrate the floodplain model... I was pleased to learn from Scout leaders present that the boys and adults really enjoyed it. Success!”

February 2013 Demonstration to Luther Jackson – Virginia

Mark Hoskins of Dewberry had a great series of session for the 3D model at Luther Jackson Middle School in Fairfax Virginia. The demonstration was performed to five classes of 30 students per class. The children were very attentive and Mark developed a PowerPoint for use in future presentations.

MAFSM is committed to continue its efforts to reach youth and teach them about floodplains. If you are interested in learning more about our program or would like a demonstration in your school, event, or organization please contact Outreach and Public Relations Chair, Necolle Maccherone at necollemaccherone@gmail.com.

Message from the Chair



Since I have last addressed the group we have successfully hosted our annual conference and are already planning for this year’s conference. As we move into 2013 I would like to take a few moments to comment on some of 2012’s events that impact us in the Floodplain and Stormwater communities. Congress passed a five year extension for the National Flood Insurance Program in July 2012 as the Biggert-Waters Flood Insurance Reform Act. As some of the new policies and requirements begin to be implemented we will be closely watching and updating our membership as necessary.

Looking forward, 2013 is already shaping up to be an extremely productive year. We have already conducted numerous trainings to local schools using the 3D Floodplain Simulator to teach the children about flood risk and floodplain management and have more visits planned over the next few months. I am very thankful for the amazing support provided by these volunteers because without you this organization would not be half as successful as it is. We will also begin the planning for our annual conference to be held in October. I am very excited to represent MAFSM again this year as Chair. Don’t forget to visit our website at [mafsm.org](http://www.mafsm.org) for more information.

Email me at paul.slonac@mbakercorp.com with your suggestions for MAFSM activities, improvement suggestions, or opportunities for training/education. Your continued support of the Maryland Association of Floodplain and Stormwater Managers is greatly appreciated.

Floodplain Mapping Update

Digital Flood Insurance Rate Maps (DFIRMs) are being updated at a steady rate throughout Maryland. As of March 2013, an effective DFIRM is available for the following counties: Anne Arundel, Baltimore, Baltimore City, Calvert, Dorchester, Frederick, Harford, Montgomery, St. Mary's and Somerset. The data are available for download from the FEMA Map Service Center website at: www.msc.fema.gov.

However, this initial update did not include a new coastal analysis for counties with coastal or tidal floodplain. The Base Flood Elevation (BFE) from the previous Flood Insurance Study (FIS) was used, a datum transformation was performed, and the flood elevation was redelineated using better topographic data (i.e. LiDAR data).

A preliminary DFIRM is available for: Allegany, Carroll, Cecil, Charles, Garrett, Howard, Kent, Prince George's, Queen Anne's, Talbot, Washington and Wicomico counties. Only two counties haven't received an effective or preliminary DFIRM yet, Caroline and Worcester. It is projected Caroline will receive a preliminary DFIRM in August 2013 and Worcester in June 2013.

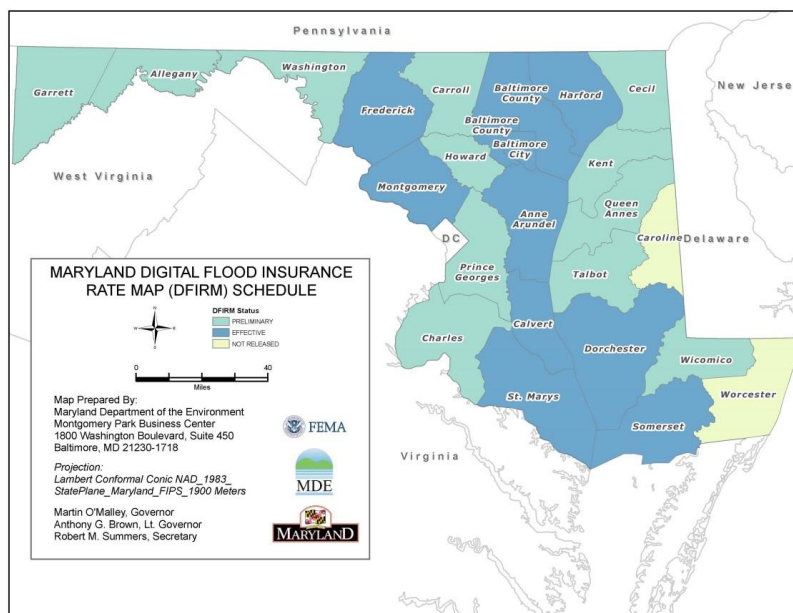
In addition, a new coastal analysis has been completed by FEMA, and will incorporate the new Risk MAP products. Kent and Queen Anne's were the first two counties to receive the new

coastal analysis and updated riverine analysis rolled into one map. With the exception of Caroline and Worcester, other counties will receive revised map panels. More information on the coastal mapping process can be found on the FEMA Region III Coastal Analysis & Mapping website at: <http://www.r3coastal.com/>.

When a FIRM is updated, part of the process requires the community to update their floodplain management regulations. For many communities, this was completed during Map Modernization, however, for others it may require the adoption of additional regulatory language to account for new flood zones added to their community (ex. VE Zones and/or Coastal A Zones).

The preliminary and effective 100-year floodplain layer can be viewed using the Flood Risk Application tool on the Maryland DFIRM Outreach Program website at: www.mdfloodmaps.com. The website also includes regular schedule updates, and a copy of the Maryland Model Floodplain Management Ordinance. In addition, schedule updates and access to preliminary map panels can be found on the FEMA Risk Assessment, Mapping and Planning Partners (RAMPP) website at: <https://www.rampp-team.com/md.htm>.

If you have any questions, please contact Kevin Wagner at kwagner@mde.state.md.us or 301-689-1495.



MDE Issues Draft Industrial Stormwater Discharge Permit

Tiffany Lee, URS Corporation Environmental Compliance Specialist

Since 1990, Maryland industries falling under one of 12 designated classifications have been required to maintain coverage under a Maryland Department of the Environment (MDE) Permit for Stormwater Discharges from Industrial Activities to comply with the National Pollutant Discharge Elimination System (NPDES) stormwater program. Under the permit, these industries have been required to develop Stormwater Pollution Prevention Plans (SWPPPs); implement improvements that reduce discharge of pollutants into stormwater runoff; and, in some cases, conduct chemical monitoring of stormwater runoff on their site. The General Permit expired in 2007 and has been extended administratively.

In 2012, MDE issued a new draft General Permit (Permit 12-SW) that will replace the expired permit. This permit is similar to the U.S. EPA's Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) and also includes requirements to help Maryland reach the Chesapeake Bay Total Maximum Daily Load (TMDL) target reductions in nitrogen, phosphorus, and sediment. Draft permit requirements include the following:

Water Quality-Based Effluent Limitations.

Permitted facilities discharging stormwater to impaired waters must demonstrate and document that their discharge will not cause or contribute to a water quality standards exceedance.

Corrective Actions. Permit 12-SW outlines conditions requiring corrective actions to permitted facilities' control measures and presents deadlines and guidelines for submitting corrective action reports.

Inspections. Permit 12-SW identifies three types of inspections to be conducted at least quarterly, plus an annual comprehensive site compliance evaluation. A report summarizing the annual comprehensive site compliance evaluation and any observations made must be submitted to MDE.

Benchmark Monitoring. Benchmark concentrations are specified for pollutants based on permitted facilities' industrial activities, as well as the industrial activities of co-located facilities. Monitoring of each permitted outfall and summary

reports of monitoring results are required for each quarter using the EPA's electronic tool, called NetDMR.

Sector-Specific Requirements. Permit 12-SW groups more than 600 SIC and activity codes into generalized groups, or "sectors", of industrial activities. Each sector has additional permit requirements, including benchmark concentrations, technology-based effluent limits and other effluent limitations, inspections, SWPPP components, reporting and recordkeeping items, and limitations on coverage.

Restoration of Impervious Areas. Within four years of submitting an NOI, facilities must treat runoff from at least 20% of existing impervious areas that are not currently treated. It is required that the "Maryland Stormwater Design Manual, Volumes I & II" be used as a guide. An initial Restoration Plan and annual progress report must be submitted to MDE for review. Completed restorations must be certified by a professional engineer.

Reporting and Recordkeeping. MDE requires submission of quarterly benchmark monitoring reports, corrective action reports, spill reports, comprehensive site compliance evaluation reports, and progress reports on the treatment of runoff from impervious areas under Permit 12-SW. Copies of these reports should be kept on file with permitted facilities' records.

Overall, Permit 12-SW takes a more conservative approach to stormwater management by requiring additional inspections, monitoring, and reporting. The largest obstacle for permitted facilities will be the treatment of runoff from impervious areas as required to meet Chesapeake Bay TMDL goals. MDE is currently reviewing comments received on the draft permit. Because Permit 12-SW contains items necessary for the State to achieve the target reductions based on limits set by the EPA, it is unlikely that the finalized permit will significantly change from its current draft. Once the permit is issued, permittees will have 90 days to submit a Notice of Intent for coverage and a copy of their SWPPP, which must be updated to incorporate the new permit requirements. Based on a recent conversation with MDE, the permit will likely be issued after July 2013. If you have any questions or require additional information, please contact Tiffany Lee at Tiffany.Lee@urs.com or Mary Roman at Mary.Roman@urs.com.

MAFSM 8th Annual Conference Recap

MAFSM held our 8th Annual Conference, "Lessons Learned and Shared" on October 25th, 2012 at The Conference Center at the Maritime Institute in Linthicum Heights, Maryland. This year's conference was attended by over 100 people. Events featured were one pre-conference activity – a Certified Floodplain Manager (CFM) training held on October 24th at Greenhorne and O'Mara Headquarters. It also included two post-conference activities held on October 26th - a CFM exam at Greenhorne and O'Mara Headquarters and a field tour at the Robinson Nature Center.

The conference was kicked off by keynote speaker Dr. Michael Scott who spoke about flood risk communication. Our full-day conference had over 20 breakout sessions on a wide array of local floodplain and stormwater issues such as a Train-the-Trainer workshop on the Ward's 3D Flood Simulation Model.

Our exhibitor's hall was lined with tables featuring exhibitors from local and national businesses. We concluded with a networking social hour.

The conference was opened by Chair, Paul Slonac, CFM followed by talks Dr. Scott as well as Dave Guignet and Brian Clevenger of the Maryland Department of the Environment. We very much appreciate their participation and contribution to our conference.

MAFSM would like to thank everyone who attended the conference, especially our sponsors and exhibitors:



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We look forward to seeing even more attendees at our 9th Annual Conference to be held in October 2013 at the Maritime Institute in Linthicum, MD. The conference will include a day of speakers and pre and post activities.

2013 Annual Conference SAVE THE DATE

Our next annual conference is scheduled for Thursday October 17th 2013 at the Maritime Institute in Linthicum, MD.

New Contact information?

It is important for us to update all of our members on our latest news and events. If your contact information has changed since last year please email tward@g-and-o.com with your updates.

Treasurer's Report

The current balance in the Treasury is \$10093.64.

Ideas for Articles

We welcome your input and ideas. If you would like to contribute to the newsletter, please contact Necolle Maccherone at NecolleMaccherone@gmail.com.

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