



## Maryland Prepares for New Maps

### FEMA DFIRM MAP STATUS

Most communities in Maryland have completed or are in the process of converting their FEMA 100-year floodplain maps from a paper format into a digital product. The following schedule, developed by MDE and FEMA Region III, lists the status of each Maryland County with the date of the latest map upgrade (effective date) or the scheduled release date of the Preliminary DFIRM. The time frame necessary to progress from Preliminary DFIRM release to the effective map is typically six additional months. This year, for the first time, the list includes the final four Maryland counties in the digital conversion process. Kent, Queen Anne's, Caroline, and Worcester counties have been added by FEMA Region III to next year's budget request for digital map conversions and are listed below pending approval of the federal budget.

County	Effective Date or Anticipated Preliminary Date
Harford County	January 2000
Saint Mary's County	October 2004
Montgomery County	August 2005
Frederick County	July 2005
Baltimore County	Preliminary Sept / Dec 2008
Baltimore City	Preliminary February 2009
Prince George County	Preliminary September 2009
Somerset County	Preliminary December 2008
Dorchester County	Preliminary March 2009
Wicomico County	Preliminary April 2009
Howard County	Preliminary May 2009
Anne Arundel County	Preliminary June 2009
Calvert County	Preliminary May 2009
Cecil County	Preliminary June 2009
Carroll County	Preliminary September 2009
Washington County	Preliminary November 2009
Allegany County	Preliminary December 2009
Garrett County	Preliminary July 2010
Charles County	Preliminary August 2010

County	Effective Date or Anticipated Preliminary Date
Talbot County	Preliminary September 2010
Queen Anne's County	Preliminary September 2011 *
Kent County	Preliminary September 2011 *
Worcester County	Preliminary September 2011 *
Caroline County	Preliminary September 2011 *

\* Note: Funding Requested / Mapping Depends on (Federal) Budget Approval

Due to federal budget allocations, the funding provided for converting paper floodplain maps into a digital product has been limited to map production, and does not include a public outreach component. Many communities in Maryland and nationwide have struggled with public outreach related to the new maps. MDE will be working with each county to develop an outreach strategy at the local level for distributing floodplain updates to property owners to ensure they are aware of regulatory issues and potential insurance changes. Any community or NFIP official that needs outreach material or assistance in developing a plan for their community should contact Dave Guignet by email at [dguignet@mde.state.md.us](mailto:dguignet@mde.state.md.us) or call 410-537-3775.

Article provide by Dave Guignet,  
State NFIP Coordinator





## **Message from MAFSM Chair, Mary Roman, PE, CFM**

*Greetings Fellow Stormwater and Floodplain Practitioners!*

Our wish is that 2009 finds you gainfully employed with challenging work assignments. We are hopeful that the economic conditions aren't significantly affecting your work and trust that you are keeping busy providing services in areas related to an increased focus on green infrastructure, the upcoming new regulatory stormwater management requirements in Maryland, and FEMA's continued focus on updating and improving identification of flood risks.

We have already started planning our fifth annual conference, which is scheduled for October 22, 2009, at the Maritime Institute in Linthicum. Mark your calendars and consider identifying an interesting project that you would like to have considered for presentation at the 2009 conference.

While our most visible activity is our annual conference, the MAFSM board meets every other month to ensure continued growth of our organization and, of course, to prepare for our annual conference. We are grateful to have an active conference committee, lead by Mike Gilliam, who works diligently to iron out the incredible number of conference details.

Over two years ago, the MAFSM board has had extensive discussions pertaining to what we felt MAFSM's mission should be. The board decided that providing educational opportunities through our conferences, field trips, and workshops was the best focus for MAFSM. There are numerous related regional and national organizations with full time staff that are able to provide more extensive complementary activities. Our organization, powered by volunteers, strives to provide Maryland-focused educational opportunities and networking opportunities for floodplain and stormwater professionals.

One of the biggest challenges the MAFSM board sees is the continuation of an energetic group of professionals committed to providing a clearing house and forum for discussion of cutting edge stormwater management and floodplain technology, regulations, and practices in Maryland. We are personally committed to long term success of MAFSM. However, it is essential to have your support, ideas, and energy to keep our organization moving forward. We welcome your participation in our bi-monthly meetings. We are always looking for new ideas on training opportunities.

*Email me or call me at (410) 487-8954 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.*

## MAFSM 4th Annual Conference Recap



MAFSM held our 4th Annual Conference on October 23rd, 2008 at The Conference Center at the Maritime Institute in Linthicum Heights, Maryland. This year's conference was themed *From the Mountains to the Coast - Stormwater and Floodplain Management in Maryland* and was attended by 120 people. Along with the theme a logo, pictured above, was created that enhanced the correspondence used by the Conference Committee throughout the conference planning process.



*Registration booth manned by volunteers from PBS&J and Greenhorne and O'Mara prepare for the conference to begin*

This year's event featured two pre-conference activities—a tour of several Low Impact Development sites in Prince George's County, and a Certified Floodplain Manager (CFM) training, both held on October 22nd. These activities were followed by a full-day conference with 16 breakout sessions on a wide array of local floodplain and stormwater issues, Exhibitor's Hall, lined with tables featuring nine exhibitors, and a concluding networking social hour. On the following day, MAFSM facilitated an opportunity for members to take the CFM exam in conjunction with the conference. Both the CFM Training and the CFM Exam were held at the nearby Linthicum, MD offices of Michael Baker, Jr.



*Keynote Speaker, Dr. Arthur Miller and MAFSM Chair, Mary Roman*

The conference was kicked off by keynote speaker, Arthur Miller P.E., D.WRE, Ph.D., Distinguished Professor Emeritus of Civil Engineering, Pennsylvania State University. We were privileged to have him open our conference.

Dr. Miller's address was followed by concurrent sessions that included *Regenerative Stormwater Conveyance as a Stormwater Best Management Practice: The Example of the Preserve at Severn Run*, *Levees in the NFIP*, *eLOMA – A Faster Way to get LOMA Determinations*, and more.

Our business meeting was held during lunch. The meeting included the announcement of new MAFSM officers, an update on ASFPM activities by Region III Director, Jeff Sparrow, and a presentation by Jen Marcy on the ASFPM Foundation. Following lunch, attendees had time to network in the exhibit hall before the afternoon concurrent sessions began.

The afternoon sessions included *New Advances in Bay-wide Management of Stormwater Runoff*, *MDE Field Data Collection Tool in Relation to Limited Detailed Modeling*, and *Maryland Floodplain Mapping Update*, *Mid-term Levee Inventory Status for Maryland Counties*, and others.



*Tom Schueler speaks on Bay-wide management of stormwater runoff*

The technical portion of the conference was closed by Ken Pensyl, Program Manager, Sediment and Stormwater Division of the Maryland Department of the Environment. The conference concluded with a delightful networking social that included light refreshments and drinks.



*Members Dave Guignet and Andreas Wohlsperger relax at the post-conference social*

Many thanks to Programs Chair, Michael Gilliam: without his hard work and attention to detail this event would not be possible.

MAFSM would also like to thank everyone who attended the conference. We look forward to seeing even more attendees at our 5<sup>th</sup> Annual Conference, scheduled for October 22, 2009 at the Maritime Institute in Linthicum Heights.

## Stormwater Notes

In order to recognize the importance of stormwater issues, "Stormwater Notes" is a regular column in the Runoff Review. This issue's article has been brought to us by our Stormwater Committee Co-Chair, Rahul Kesarkar, PE.

### MD Stormwater Management Act Update

This article is a follow-up to our February 2008 newsletter article on "Maryland's Stormwater Management Act of 2007". Since that time, MDE has hosted several focus group meetings and presentations and has solicited comments regarding updates to the stormwater management regulations.

MDE initiated the formal process for adopting new regulations and revisions to the 2000 Maryland Stormwater Design Manual last October by publishing the proposed final regulations on MDE's website. A Public Hearing was held on December 8, 2008. MDE's original goal was to adopt the Final Regulations in first week of January 2009, but due to various comments and concerns raised at the Public Hearing and comment letters received from various agencies throughout the state, adoption of Final Regulations has been postponed. No formal word from MDE has been issued regarding when the regulations will be adopted.

Major changes to the MDE regulations are reflected in revisions to Chapter 5 of the 2000 Maryland Stormwater Design Manual. A draft version of Chapter 5 was published by MDE in December 2007. Chapter 5 and other chapters of the manual were subsequently revised to incorporate comments from the stormwater community. These were published on October 17, 2008. An overview of Chapter 5 changes is provided below.

***The most significant change that will result from the SWM Act of 2007 is that Environmental Site Design (ESD) is required to the maximum extent practicable (MEP) and to ensure that the structural practices are used only where absolutely necessary.***

What is ESD? Title 4, Subtitle 201.1(B) of the Act defines ESD as "...using small-scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and

minimize the impact of land development on water resources." Guidance to achieve ESD is provided in the revised Chapter 5, which expands on ESD practices, allow for planning techniques to improve implementation and overall performance. The SWM Act of 2007 emphasizes use of practices to treat runoff at the source using micro-scale practices instead of traditional centralized

**In a nutshell, ESD is a comprehensive design strategy for maintaining predevelopment runoff characteristics and protecting available natural resources.**

structural practices.

Now the question is what and how do these changes affect our designs?

These changes

will require designers to think about stormwater management concepts from the planning phases to achieve ESD to the MEP. This will result in reduction of costly stormwater infrastructure and maintenance while providing treatment closer to the source. New Chapter 5 provides design process guidance such as:

- Following the Design Process for New Development as outlined in the step wise procedures in Figure 5.1.
- Developing a map that identifies natural resource areas and drainage patterns and devising strategies for protection and enhancement.
- Minimizing total site imperviousness by implementing clustered development and other better site design techniques.
- Demonstrating that all practical options for meeting stormwater requirements using ESD have been explored by using natural areas and landscape features to manage runoff from impervious surfaces.
- Participating in the comprehensive review process for interim plans review and approval at the conceptual, site development, and final phases of project design.
- Integrating strategies for erosion and sediment control and stormwater management into a comprehensive development plan.

Chapter 5 also focuses on addressing the unified sizing criteria for ESD. Alternative surfaces,



treatment using nonstructural and micro-scale practices are discussed. This chapter also includes special criteria for sensitive areas such as, Critical Areas, Wetlands and Waterways, Forest Conservation and how to implement ESD to MEP in these areas.

Another significant change is the threshold for redevelopment classification. Sites that have more than 40 percent existing impervious surface coverage will be subject to redevelopment requirements.

The manual also contains construction specifications for ESD practices and guidance to compute stormwater credits for innovative site planning.

This act will significantly affect the approach to controlling stormwater in Maryland. To obtain more detailed information on the implementation of the SWM Act of 2007, visit <http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater/swm2007.asp>

### **2008 Conference Training and Exam Certified Floodplain Manager**

A Certified Floodplain Manager (CFM) training session was held in conjunction with our annual conference on Wednesday, October 22, 2008. The session was lead by Jen Marcy of PBS&J. The CFM training covered topics such as the National Flood Insurance Program (NFIP) regulations, community participation in the NFIP, reading and using Flood Insurance Rate Maps, insurance, mitigation, and other topics. It was an excellent supplement for those studying for the CFM exam, a great refresher course for CFMs, and an inexpensive way to obtain Continuing Education Credits (CECs) to maintain your CFM. Twenty-six people registered for the training and it received universal positive evaluations.

A CFM exam was also held for 16 people October 24<sup>th</sup>. We would like to congratulate all those that passed the exam and are now CFMs!

Both the training session and exam were held at Michael Baker Jr. Inc. in Linthicum, Maryland which provided a convenient location for all that attended the conference.

### **2008 Conference Field Trip PG County - LID**

MAFSM offered conference attendees the opportunity to see how a local community uses an environmentally sensitive approach to controlling storm water runoff. On October 22, 2008, Mow-Soung Cheng, PhD, Special Assistant, Department of Environmental Resources, Prince George's County, Maryland gave a group of storm water and flood management professionals a tour of six Low Impact Development (LID) sites in the County. Tours of green highways along MD Route 202 (Landover Road) and MD Route 201 (Kenilworth Avenue) provided participants with examples of how LID facilities can contribute to the beautification of an area while functioning as controls for storm water runoff. The trash rack at Green Street demonstrated one of the newer tools that the County uses to control the amount of litter that enters our streams. Participants were given the opportunity to field-explore bioretention facilities that are being used to treat storm water for residential communities, commercial/business parks and a local university campus. For all sites, Dr. Cheng provided guidance on typical design, construction and maintenance aspects of LID. The tour group expressed great interest in the LID sites and appeared to be inspired by the County's use of simple to elaborate LID designs for storm water management.

MAFSM would like to thank Dr. Cheng and Prince George's County for providing this tour to supplement our annual conference and showcase LID designs.

## Election Results

MAFSM recently held an election for its Board and Regional Representatives. These terms began January 1, 2009 and are in effect until December 31, 2011.

The following results were reported at the 4th Annual conference:

**Chair** - Mary Roman

**Vice-chair** – Paul Slonac

**Treasurer** – Jason Stick

**Secretary** – Necolle Maccherone

**Western Regional Representative** –  
Martin Covington

**Eastern Regional Representative** –  
Kevin Wagner

**Central Regional Representative** –  
Dawn Hawkins-Nixon.



*2009 Elected Board (from left) Jason Stick, Mary Roman, Paul Slonac. Necolle Maccherone, Martin Covington, Kevin Wagner, and Dawn Hawkins-Nixon not pictured*

## Skipjack Tour Panned by MAFSM

Be on the look out for a late spring MAFSM sponsored event. We are making plans for a half-day skipjack trip out of Annapolis. This will be a great chance to network with your peers and to learn about the environmental conditions of the Chesapeake Bay. More information will be sent to our members as the event draws near.

## MAFSM to Sponsor ASFPM Conference Scholarships

As a benefit to our members, MAFSM plans to offer two scholarships to the upcoming ASFPM conference in Orlando in June. These scholarships will cover the cost of registration. More details on the application process will be sent via email soon.

## Treasurer's Report

As of March 25, 2009 MAFSM has \$12,669.85 in the Treasury.

## Membership Renewal Time

Thank you all for your continuing support of the Maryland Association of Floodplain and Stormwater Managers. Membership renewal time is upon us again. We encourage your continued participation and membership in MAFSM.

Membership renewal notices will be sent to current members whose member has expired. Or you may go to [www.MAFSM.org](http://www.MAFSM.org) and click on "Join MAFSM."

Questions regarding membership should be directed to our Membership Chair, Barbara Litten at [blitten@g-and-o.com](mailto:blitten@g-and-o.com).

## Ideas for Articles

We welcome your input and ideas. If you would like to contribute to the newsletter, please contact Necolle Maccherone at [necolle.maccherone@mapmodteam.com](mailto:necolle.maccherone@mapmodteam.com).

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