



MAFSM 3rd Annual Conference Stormwater and Floodplain Management in Maryland – The Local Perspective

Register Now!

Linthicum Heights, MD • Conference Center at the Maritime Institute • October 24-25, 2007

The Maryland Association of Floodplain and Stormwater Managers (MAFSM) will hold its **Third Annual Conference October 24-25, 2007, at the Conference Center at the Maritime Institute in Linthicum Heights, MD.** The theme for this year's conference is **Stormwater and Floodplain Management in Maryland – The Local Perspective.** An eight hour Certified Floodplain Managers (CFM[®]) refresher training and a half-day field trip of Coastal Plains Outfalls sites in Anne Arundel County on October 24th will precede a day of lectures. Details on these two events can be found later in this newsletter in the *Coastal Plains Outfalls Tour In Anne Arundel County* and *Certified Floodplain Manager Training Offering* articles.

Conference attendees are encouraged to arrive early on October 25th for refreshments and pre-conference exhibit viewing. The conference will be kicked off by keynote speaker, Gerry Galloway, noted expert on floodplains and levees. As a civil engineer, public administrator, soldier, educator, and geographer, Mr. Galloway's expertise has been requested and implemented throughout the nation and internationally. He has served as a consultant to the Executive Office of the President and has been the recipient of numerous awards. We are privileged to have him open our conference.

The conference will continue with breakout sessions in two tracks:

STORMWATER TRACK	FLOODPLAIN TRACK
<p>A Simple Water Balance for a Constructed Shallow Wetland Stormwater BMP Gary Guhl, P.E., CFM; PBS&J</p>	<p>Community Rating System Workshop Tom Brett, CFM, Insurance Services Office, Inc.</p>
<p>Design, Construction, and Benefits of Integrated Sand Seepage Stream and Wetland Stormwater Restoration Projects Keith Underwood and Erik Michelsen; Underwood and Associates; Joe Berg; Biohabitats, Inc.</p>	<p>Dorchester County, Maryland: Sea Level Rise Inundation Study Angela Carlisle, Coastal GIS LLC, Caleb Conn, USACE, and Steven Fabijanski, CGIS</p>
<p>Land Use Planning as the "First BMP" Julie Tasillo, Center for Watershed Protection</p>	<p>Activities of the Maryland Hydrology Panel Wilbert O. Thomas, Jr., Michael Baker Jr Inc</p>
<p>Patterns of Headwater Stream Burial Due to Urbanization in the Gunpowder-Patapsco Watershed Andrew J. Elmore, University of Maryland Center for Environmental Science, Appalachian Laboratory</p>	<p>Post-Flood Risk Evaluation - North Eastern Pennsylvania Deepa Srinivasan, AICP, CFM, Vision Planning and Consulting, LLC and Hilary Stephens, Greenhorne and O'Mara</p>
<p>Stormwater Management versus Storm Drain Standards (Why do Downstream Properties Continue to be Flooded?) Martin Covington, III, P.E., CFM, Carroll County Government</p>	<p>Map Modernization DFIRMs: What are they, How do I use them, and How will they impact insurance rates? Dr. Shane Parson, P.E., CFM, URS Corporation</p>
<p>Overview of Low Impact Development Neil Weinstein, P.E., R.L.A., AICP, Low Impact Development Center</p>	<p>A Status of the State of Maryland Dave Guignet, MDE and Ken Pensyl, MDE</p>
<p>Using the Q7, 10 As An Indicator of the Affect of Urbanization on Low Flow Katie Blansett, Watershed Concepts and Arthur Miller, Phd, P.E., Watershed Concepts</p>	<p>Dam Failure Analysis and the Implications for Emergency Action Planning Brad Newlin, P.E., Arthur Miller, P.E., and Andrew Bonner, P.E., CFM all of Watershed Concepts</p>

The breakout sessions will be punctuated by exhibit viewing, a business meeting, election results, and an address from Jeffrey Sparrow, the Association of State Floodplain Managers' (ASFPMs') Region 3 Director. Ken Pensyl, of the Maryland Department of the Environment will provide our closing remarks and we will finish the conference with a final look at the exhibitors and networking.

New features this year include exhibitor's booths, dual-track lectures and more time scheduled for networking. Lecture topics were selected based on abstract submittals.

Continuing Education Credits (CECs) through ASFPM have been awarded for this event. The CFM training is worth six (6) core CECs; the field tour is worth four (4) core CECs; and the full day conference is worth seven core (7) CECs.



The campus of the Conference Center at the Maritime Institute, location of MAFSM's 3rd Annual Conference

This conference is an ideal, low-cost opportunity for floodplain managers and stormwater professionals to obtain industry information from fellow colleagues. This year's conference promises to be first-rate.

Register to attend today! Visit our website at www.MAFSM.org for more details and to complete the registration form. For questions about the meeting and conference events, please contact Mike Gilliam at MGILLIAM@G-and-O.com.

Coastal Plains Outfalls Tour In Anne Arundel County

As part of MAFSM's Third Annual Conference a field tour has been scheduled for October 24, 2007. Designed by Underwood and Associates, outfalls are a series of engineered ponds with stone weirs to hold back runoff to allow it to infiltrate through a deep sand and organic bed. The number of outfall ponds is dependent on the site, as the ponds fill with rainwater, one after the next in descending order to absorb energy, store water, and allow gradual infiltration.

The process also removes nutrients and pollutants that would otherwise get flushed into the Bay.

These projects are engineered to restore deeply eroded streams and their floodplains to a more natural condition, while providing infiltration of runoff for stormwater management, and preventing erosion in the receiving stream. Outfalls can and should be used in lieu of piping for stormwater conveyance.

Four sites will be viewed illustrating different size projects and conditions, from steep narrow outfall areas to fairly flat and wide stream valleys, with the tour beginning and ending at Arlington Echo Outdoor Education Facility.

The Field tour is scheduled for noon to 4 p.m. It will begin Arlington Echo to provide an opportunity to view the displays. At 1 pm, after attendees have completed the self tour of the facility, they will be bused to four outfalls sites and return to Arlington Echo.

A map and driving directions can be found at: http://www.arlingtonecho.net/Images/maps/ae_directionmap.gif. Advanced registration is required. Please visit www.MAFSM.org for more details.

Certified Floodplain Manager Training Offering

Are you looking for training to prepare you for the Association of State Floodplain and Managers Certified Floodplain Manager (CFM[®]) exam? Are you a current CFM looking to earn Continuing Education Credits (CECs) to maintain your certification?

MAFSM will be offering CFM training as a precursor to their **3rd Annual Conference**. This training covers 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 is an excellent supplement for those studying for the CFM exam. For those who are already CFMs, it is a great refresher course and its completion earns six core CECs.

As part of our conference, the training will occur in Michael Baker, Jr.'s Linthicum, MD office at 1304 Concourse Drive, Suite 200 on October 24th from 9 am – 4:30 pm. Lunch will be provided. The training is free of charge for MAFSM members and \$40 for non-members. The registration deadline for the training is September 28, 2007. You may register for the training by visiting MAFSM's website at www.MAFSM.org and completing the conference registration form.

A CFM exam will also be held at Michael Baker, Jr.'s Linthicum, MD, office at 1304 Concourse

Drive, Suite 200 on Friday, October 26, 2007, from 9am - noon. To register for the exam please visit ASFPMs' website at <http://www.floods.org/pdf/certapp.pdf>. **Exam registration is completely separate from course registration, as the course is being provided through MAFSM and the exam is administered through ASFPM** – please contact Jen Marcy if you have any questions about either of these registration processes at jkmarcy@pbsj.com.

Become a Conference Sponsor

Sponsors are an important part of our conference. Sponsorships help offset MAFSM's costs in exchange for your organization's promotion. To view the benefits you'll receive as a sponsor, visit our website at <http://www.mafsm.org>.

Conference Exhibit Space Still Available

This year MAFSM's conference includes exhibits and scheduled time for viewing and networking. Booth space is limited, but still available. Please visit our website at <http://www.mafsm.org> for more information.

MAFSM Volunteers for Committee and Conference Sought

We are looking for volunteers to serve on our committees and to serve as moderators at our upcoming Third Annual Conference. Committees include Program, Membership, Public Relations & Outreach, Mapping & Technology, Mitigation, and Stormwater. Please contact Jason Stick at jstick@ccg.carr.org if you are interested in becoming a committee member. Please contact Mike Gilliam at MGILLIAM@G-and-O.com if you are interested in volunteering for the conference.

Treasurer's Report

As of August 23, 2007, MAFSM has 93 members and five corporate sponsors. We currently have \$8095.15 in the treasury.

Maintaining Your CFM

In order to maintain your Certified Floodplain Manager (CFM[®]) status, the Association of State Floodplain Managers (ASFPM) requires that you obtain 16 Continuing Education Credits over your two-year renewal period, and you cannot claim more than 12 credits in either one of those years.

Here are some ways you can get those credits and maintain your certification:

Don't just join them, get involved! If you present and/or attend ASFPM's or a companion organization's conference, like MAFSM's upcoming **Third Annual Conference**, you can obtain credits – sometimes enough for a whole year!

ASFPM's Pre-Approved CEC list! ASFPM has a list of courses that carry pre-approved credits on their website. Check it out at www.floods.org/Certification/ceclist.asp.

Don't think that if a course is not pre-approved, you can't use it for credits! Keep information about any course you take, even if it's not on the pre-approved list! ASFPM will review it at the time of your renewal and assign credits if the course is applicable to floodplain management, mapping, H&H, GIS, or just about anything remotely related to floodplain or emergency management or mapping. Courses generally get one credit per hour, and a full day course is usually assigned six credits. This includes college courses and courses at FEMA's Emergency Management Institute (EMI), both online and in person. EMI offers online courses free of charge to U.S. citizens at www.training.fema.gov. As long as an online course has an exam at the end (and you pass!), you can submit it for credit.

Join a companion organization! Being a member of a companion organization (like MAFSM, the American Society of Civil Engineers, the American Planning Association, and the International Association for Emergency Management) can also get you credit. Up to two credits (one for each organization) can be obtained over your two-year renewal period in this manner.

Spread your knowledge! Teaching a course can get you credits as well! Up to 12 credits can be obtained for teaching a full-day course. If you teach the same course on a regular basis, you can only claim it once in a 5-year period of time for your renewals.

Managing the Floodplain through the NFIP Training Offered

The Maryland Emergency Management Agency and the Maryland Department of the Environment are offering the Managing the Floodplain through the National Flood Insurance Program training in Cumberland, MD, on September 24-28. For more information, please call Lilah Haxton at 410-517-5123 or visit the following website http://www.mema.state.md.us/MEMA/content/pdf/exercise_and_training/092407_E273.pdf

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 Terry McGee, our Western Regional Representative.

For those of you who work in the engineering disciplines associated with water resources, you better get ready to change the way you do business. Two bills were passed in the last two legislative sessions (2006 and 2007) that may impact you on a day-to-day basis. Specific guidance from the State on what the bills will mean is slow in coming. Much of the actual implementation effort will fall to the local governments, who because of limited resources will most likely find this difficult.

In the 2006 legislative session, HB 1141, entitled Land Use – Local Government Planning, was passed and signed into law. This bill includes a requirement that will directly affect stormwater and floodplain professionals. All local Comprehensive Plans (each local jurisdiction is required to have one by law) must now include a comprehensive water resource element that in part, "identifies suitable receiving waters and land areas to meet storm water management and wastewater treatment and disposal needs of existing and future development proposed in the land use element of the plan, considering available data provided by the Department of the Environment." While we need to start looking at this issue on a long term basis, how to do it is not necessarily straight forward.

The Maryland Departments of Planning, Environment, and Natural Resources released a **guidance** document in June 2007 that describes their interpretation of that requirement. The 75 page document is entitled *The Water Resources Element: Planning for Water Supply and Wastewater and Stormwater Management* (Document No. 26) and can be downloaded directly from the Department of Planning's website (www.mdp.state.md.us). The document is very comprehensive and, if complied with, most likely will significantly change the way local jurisdictions do business. From my standpoint, the most significant element is the need to determine the pollutant loadings that could be expected from future development and to evaluate against allowable pollutant loadings (TMDL's) for the receiving waters. In short, the standard one-size fits all approach to SWM may very well become a thing of the past as enhanced methods or, quite possibly, development moratoriums may be

needed because of existing or forecasted water quality problems. Pollutant loadings come from many sources, both point source (industrial, WWTP, etc.) as well as non-point sources (agriculture, development, etc.). The implications are significant as all are competing for a finite assimilative capacity of the affected receiving waters.

The last legislative session produced the Stormwater Management Act of 2007 (HB 786). A primary focus of the Act involves mandating to the maximum extent practicable the use of Environmental Site Design. Low Impact Development (LID) as well as Chapter 5 of the 2000 SWM Design Manual that contains the Design Credits are all part of the concept of Environmental Site Design. More conventional SWM BMP's, such as ponds, are to be used only when it can be shown that Environmental Site Design cannot be implemented. The corresponding regulatory changes needed to implement this Act have not occurred as of this writing. MDE recently convened a stakeholder meeting to begin the process. I was included in that meeting and observed that there is wide disagreement between the participants on many of the key issues. I do not know how this will turn out insofar as the details are concerned, but I would strongly encourage those working in this field to educate themselves on Low Impact Development (LID).

One of the items that has caught my attention in both of these pieces of legislation is the focus on water quality, with minimal, if any, attention or mention given to water quantity, (i.e., flooding). It remains a very important goal of MAFSM to foster better coordination between stormwater and floodplain efforts throughout the state. I will continue to do what I can to make sure this very important initiative is not lost in this process. I encourage each of you to raise this concern every chance you get, especially if you are in a position to provide comments to the local jurisdictions as they revise their local ordinance to address these issues.

No Adverse Impact Presentation to the Coastal and Watershed Advisory Committee

On April 20, 2007, John Joyce gave a presentation to the Coastal and Watershed Advisory Committee (CWAC) on No Adverse Impact Floodplain Management Principles. The Committee consists of local officials in the coastal zone communities

who advise the Secretary of the Department of Natural Resources (DNR) on coastal and watershed policies.

The presentation focused on how local jurisdictions can use the guiding principle of No Adverse Impact (NAI) for the betterment of their communities. Since land use authority rests with local jurisdictions, only they have the power to take control of development in the watershed to prevent poor development practices that lead to increased runoff and flooding problems. NAI is a guiding principle of “do no harm”, deeply rooted in common law, that says that the action of one property owner may not adversely affect another. Further, local governments have a primary responsibility to protect their citizens and their property from harm and are more likely to be successfully sued for permitting development that harms others than from prohibiting that development.

To successfully implement a NAI approach, a community should consider taking a watershed approach, incorporate water resource management into long range planning, combine floodplain and stormwater and floodplain review, and require low impact development (LID) techniques that keep runoff on site to allow it to infiltrate. Under NAI, development must demonstrate NAI before it can be approved. This puts the onus on the developer to engineer a design that can be certified as NAI, which should be attainable through proper implementation of LID techniques and innovative technology.

Not only is applying a NAI approach the right thing to do; also it helps solve water quality, flooding, aquifer recharge, and stream erosion problems caused by past poor development. It can result in better communities, a better environment, more open space, less pollution, less flooding, and conserves water using cost effective natural processes.

Hazard Mitigation Funding

The Maryland Emergency Management Agency administers several hazard mitigation grant programs. Eligible projects include acquisition, elevation, or relocation of structures in mapped floodplain areas. Some programs can also fund structural hazard controls such as berms, floodwalls and the installation of sewer back-flow valves. The cost share for these programs is 75% federal and 25% local. All Maryland local governments, counties and municipalities, are eligible to apply. Additionally, local governments

may apply on behalf of certain private, non-profit organizations. More information on all these programs can be found on FEMA’s website www.FEMA.gov.

Hazard Mitigation Grant Program (HMGP)

Funds are awarded to the Maryland Emergency Management Agency after a presidential declaration. On July 2, 2006, the State of Maryland received a presidential declaration. New funding is available under this program. Funds from this disaster can be used for a variety of projects including elevation of homes and acquisitions. Applications for projects are due November 6, 2007.

Flood Mitigation Assistance Program (FMA)

This program offers both planning and project funds. The State’s annual allocation is based on the number of NFIP insurance policies issued in the state. Eligible jurisdictions submitting a project application must have an approved FMA plan. For local jurisdictions that do not have a plan, planning funds are available to assist in developing a plan. Projects are limited acquisition and demolition and elevation of flood prone structures. Property owners must have a current flood insurance policy at the time of application. We anticipate that this grant will open in November 2007 with applications due January 2008.

Pre-Disaster Mitigation Grant Program (PDM)

This is a nationally competitive program that is available annually. This grant is an all-hazard program that can provide funding for flood mitigation projects. PDM grants are to be awarded on a competitive basis and without reference to state allocations, quotas, or other formula-based allocation of funds. Several of Maryland’s local planners from Carroll, Harford, and Worcester counties served on national review panels for the 2007 grant round. We anticipate that this grant will open in November 2007 with applications due in January 2008.

If you are interested in any of these programs, please contact the State Hazard Mitigation Officer, Carver Struve at 410-517-3624 or cstruve@mema.state.md.us. Please feel free to contact Carver at anytime throughout the year. He is willing to work with you to develop project applications.

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We welcome your input and ideas. If you would like to contribute to the newsletter, please contact Necolle Maccherone, editor at necolle.maccherone@mapmodteam.com