

Runoff Review

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Conference Save the Date

Spring is when the MAFSM board begins planning our annual conference. This year's conference will be held at the Maritime Institute of Technology in Linthicum Heights, MD, on October 20, 2016. Mark your calendars and save the date!



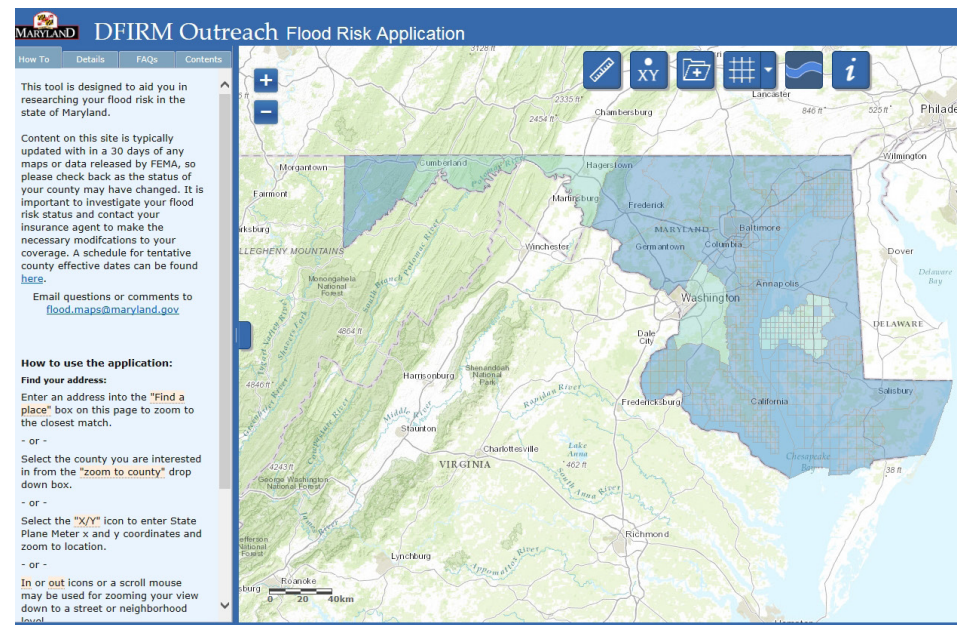
WARD'S 3D Flood Simulation Model, Recent Demonstrations

- Children and Company Preschool, Columbia, MD
- Discover Engineering Family Day, National Building Museum, Washington, DC
- Lake Seneca Elementary School, Germantown, MD
- Take Your Daughters and Sons to Work Event, Michael Baker International, Alexandria, VA
- Cub-scout Pack 169 Webelos, Monrovia, MD

If you are interested in using the Flood Model at a local school or event, please contact Paul Slonac (PSlonac@mbakerintl.com) or Ben Kaiser (benjamin.kaiser@aecom.com).

Maryland Floodplain Mapping Update

By Kevin Wagner, CFM, Maryland Department of the Environment



We are pleased to report that nearly the entire state has an effective or preliminary Digital Flood Insurance Rate Map (DFIRM). The data are available for download from the FEMA Map Service Center website at: www.msc.fema.gov, and can also be viewed on www.mdfloodmaps.com.

Most recently, Harford County went effective on April 19, 2016, the Talbot County coastal panels will become effective on July 20, and Prince George's County will become effective on September 16. In addition, a preliminary DFIRM is now available for Allegany and Washington Counties. Enhancements are planned for Baltimore County and City, Montgomery County, and Frederick County.

When a FIRM is updated, the community is required to update its floodplain management regulations. For many communities, this was completed during Map Modernization; however, other communities may need to adopt additional regulatory language to account for new flood zones on their updated map (e.g., Zone VE, Limit of Moderate Wave Action, or Coastal A Zone).

Preliminary and effective floodplain layers can be viewed using the Flood Risk Application tool on the Maryland DFIRM Outreach Program website, www.mdfloodmaps.com, where users can also find a regularly updated DFIRM release schedule and a link to the Maryland Model Floodplain Management Ordinance. Once a DFIRM goes effective, downloadable HEC-RAS models become available for detailed studied floodplains, and in many

Flood Insurance Program Updates: New NFIP Video Tutorial!

Reprinted from April 6, 2016 FEMA Daily Digest Bulletin

More changes are coming to the National Flood Insurance Program. This new video summarizes the changes to the [NFIP Flood Insurance Manual](#) that took effect on April 1, 2016. Many of these changes are a result of the Homeowner Flood Insurance Affordability Act of 2014 and the continued implementation of Biggert-Waters 2012. [Go to the Video.](#)

What You Will Learn

Significant recent changes to the NFIP covered in this video include:

- Elimination of subsidies for certain pre-FIRM properties with policies that lapse and are reinstated
- Further guidance for determining building occupancy
- Revised definition of business buildings
- Additional instructions for pre-FIRM buildings that were substantially improved on or after April 1, 2015
- Updated Elevation Certificate and Non-Residential Floodproofing Certificate

Suggested Additional Reading

FEMA periodically issues [Write Your Own Program Bulletins](#) related to legislative changes and clarifications to the NFIP *Flood Insurance Manual*. FEMA recently published [Bulletin w-16022 – October 1, 2016 Program Changes](#).

The NFIP offers free online courses covering basic and advanced flood insurance topics through the FEMA Emergency Management Institute's Independent Study Program. Visit the NFIP [agents](#) or [claims adjusters](#) training pages for course details, or view this [list of NFIP courses](#) offered through the Independent Study Program.

cases approximate studies are available as well. In addition, bridge and culvert data can be viewed and downloaded.

Schedule updates and preliminary map panels can also be accessed on the FEMA Region III Risk Mapping, Assessment and Planning (Risk MAP) website at: <http://www.riskmap3.com/>.

If you have any questions, please contact Dave Guignet at dave.guignet@maryland.gov or 410-537-3775.

Changes to the Policy for Flood Risk Analysis and Mapping

By Paul Slonac, CFM, Michael Baker Jr. Inc.

Under its Risk Mapping, Assessment and Planning (Risk MAP) program, FEMA maintains guidelines and standards that define how to implement the statutory and regulatory flood risk analysis and mapping requirements for the National Flood Insurance Program (NFIP). The guidelines also cover assessing the performance of flood risk reduction projects, processing Letters of Map Change (LOMCs), and related Risk MAP activities. Policy memo "Flood Risk Analysis and Mapping," published in August 2013, outlines FEMA requirements to produce maps with better overall consistency and conduct mapping activities more efficiently. FEMA established a maintenance plan for the Risk MAP guidelines and standards and updates them in May and November of each year. The changes for May are being finalized now for release in the next few weeks.

The May 2016 maintenance cycle includes routine updates and ongoing



Choptank Lighthouse by Brent Jett

transformation of legacy guidelines and specifications to produce new guidance documents that align with the current structure of Risk MAP standards, guidance, and related documents. In addition to this routine maintenance, FEMA plans to issue new and updated standards, guidance, technical references, and related documents to implement Biggert-Waters Flood Insurance Reform Act and the Homeowner Flood Insurance Affordability Act elements that can be completed without new regulations. These changes for May will ensure that mapping programs consider areas of possible population growth within the 100-year and 500-year floodplains and account for non-structural flood mitigation features.



Crab Pots by Brent Jett



Sunset on the Narrows by Kevin Wagner

In addition, mapping partners should work with communities to identify non-structural flood mitigation features and introduce new analyses and products to better map the level of protection provided by flood control structures and non-structural flood mitigation features. Current requirements to use the best available elevation data for mapping and watershed-based analysis and mapping, and to include a broad range of existing data from various sources during the analysis of flood hazard should be more strictly enforced. The community engagement, outreach, and education elements of the flood risk project process should include new notifications for communities of the models to be used in the analysis and an explanation of why they are appropriate, a mandatory step to share initial results of the analysis for review by the community, and an established procedure for evaluating community map update requests based on the implementation of recommendations from the Technical Mapping Advisory Council.

More information is available at: www.fema.gov/guidelines-and-standards-flood-risk-analysis-and-mapping

Stormwater Asset Management for a Successful Stormwater Program

By Rahul Kesarkar, PE, PMP, LEED AP BD+C, Dewberry

Nowadays, TMDL (Total Maximum Daily Load) is a buzzword in the water resources industry, especially in the Chesapeake Bay watershed. As agencies in Maryland work toward qualifying for their National Pollutant Discharge Elimination System (NPDES) permit and meeting Phase II of Maryland's Watershed Implementation Plan (WIP) interim goals by 2017 and final goals by 2025, water resources engineers in the region have almost all worked directly or indirectly on a project related to TMDL.

As many of you have seen, many new stormwater management (SWM) facilities are being constructed or retrofitted along our roadways. To meet the TMDL goal by 2025 is a daunting task, but maintaining and keeping these SWM facilities functional is more daunting. Therefore, stormwater asset management is going to be crucial in the coming years.

What is asset management? It is a process of maintaining and managing assets once they are built, and for agencies that own SWM facilities, will be a way of doing business. Asset management involves sound planning, and use of appropriate technology and people. A life cycle approach is important for a good asset management program and involves planning, design, construction, and operations/maintenance. A comprehensive asset management program helps land owners locate, inspect, evaluate, and remediate their stormwater assets to sustain their functionality, improve water quality and stability, protect sensitive water resources, and provide safe and aesthetic stormwater systems.

Stormwater asset management is needed to improve aging infrastructure, meet permit (NPDES/TMDL) compliance, manage expectations, maintain record keeping and reporting, and manage funding. Especially with the tremendous increase in stormwater assets in recent years, an asset management program assists agencies in prioritizing maintenance and repairs, and estimating maintenance budgets more accurately. Effective asset management optimizes the useful life of an asset, assists in focusing on critical assets, improves decision making, optimizes data management, and results in a more efficient work flow.

Letter from the Chair

By Necolle Maccherone, Michael Baker International

Welcome!



Necolle Maccherone

We all have the same 24 hours in each day. Consider spending time with us. MAFSM is often seeking volunteers for the activities we conduct for our members.

There are numerous ways to contribute, including:

- Do you have a topic of interest or expertise you would like to share? Consider leading a **Lunch-and-Learn**, an hour-long

conference call during lunch hour where you can share your knowledge on a specific topic with your peers. MAFSM has hosted several on topics ranging from mitigation to planning to grants. Contact me if you are interested!

- Have you attended a floodplain- or stormwater-related event on which you'd like to report? **Write a newsletter article or post to our LinkedIn group** <https://www.linkedin.com/groups/2418448>.
- Are you interested in seeing how our organization works? **Attend a board meeting**—in person or via conference call.
- We'd also like volunteers **to serve on our six committees:** <http://www.mafsm.org/committees.php>

Why volunteer? Many hands make light work. MAFSM always welcomes new faces, fresh perspectives, and different takes on MAFSM activities. Our organization benefits from both periodic and sustained influxes of volunteers. Do you like to plan events? We always welcome help planning our annual conference and identifying great locations for our field tours. Do you want to share your project or research? Submit an abstract for our conference.



Sea Shells by Brent Jett

But what's in it for you? Plenty! My time with the organization has expanded my connections and networking (meeting so many of you!), given me an opportunity to practice public speaking (at our annual conference and at the national conference), exposed me to grant opportunities for this and other groups (like the Chesapeake Bay Trust), introduced me to programs in my community that I could use in my home (like Rain Garden subsidies through Howard County), and introduced me to organizations that I may not otherwise have known about (like Smith Island United). Our Mapping and Technology Chair, Kevin Wagner from the Maryland Department of the Environment (MDE), has also shared the benefits of his involvement in MAFSM. "MAFSM has been a great tool to assist me with my job with the State NFIP Coordinating Office at MDE. I'm able to interact with a variety of folks in a different setting, and take advantage of the group's social media page to get the word out about important flood-related information"

Our volunteer opportunities are endless! If you are interested or know someone who is, then please contact me (think college-aged child home for the summer looking for experience, think colleague interested in meeting peers in our industry, think seasoned professional looking for a new experience).

Treasurer's Report

The current balance in the Treasury is \$16,923.39.

Spring Preparedness Reminder

Welcome spring—warmer weather, longer days, flowers, and baseball! While springtime has its benefits, it also has its fair share of risks that include heavy rains, severe weather, ground thaw, and snowmelt. These

events can increase our flood risk. It's important to know your risks and to take action to mitigate them. Please take the time to visit <https://www.ready.gov/> and <https://www.floodsmart.gov/floodsmart/>, and be sure to prepare.

Recent Lunch and Learns:

- July 16, 2015: *City of Baltimore's Comprehensive Planning Creates Exceptional Disaster Preparedness Plan* by Kristin

Baja, CFM, City of Baltimore Office of Sustainability

- December 17, 2015: *Protecting Historic Buildings from Flooding* by Jen Sparenburg, CFM, Maryland Historical Trust
- May 11, 2016: *The Office of the Flood Insurance Advocate* by Errol Garren, FEMA Program Analyst and member of the Office of the Flood Insurance Advocates (OFIA) staff

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MAFSM is grateful for their support.

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