



THE IAFSM CURRENT

Illinois Association for
Floodplain and Stormwater Management

Summer 2016 Newsletter

Get High Marks for Flood Risk Awareness

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What is a High Water Mark? A high water mark is a physical marker that shows the maximum elevation reached by floodwaters during a flooding event. After the flood water has receded, natural marks (made from silt and debris or just as a result of the water itself on structures) illustrate how high the water reached. High water marks provide valuable data about flood elevations and areas that are likely to flood.

Why is it important to “know your line?” High water marks are great tools for flood risk awareness. While floods are the most common and costly natural disaster in the United States, home and business owners often take few or no steps to protect against these potentially devastating events. Over the life of a typical 30-year mortgage, homes and businesses in high-risk areas have a 26-percent or greater chance of flooding—that’s more than twice the chance of a fire! Unfortunately, many still refuse to believe their home or community is at risk of flooding. High water marks are incontrovertible proof that flooding can and will happen in a given area.

Be a High Water Mark Community! To address this challenge, FEMA developed the High Water Mark (HWM) Initiative— a community-led, federally-supported awareness program. The HWM Initiative helps increase the general public’s understanding of flood risk by showcasing local flooding history and motivating residents in a particular locale to take action to reduce the risk. Upon entering the program, the community hosts a launch event to announce the initiative and posts high water mark signs in prominent places to show how high flood waters have risen in the past. Communities also create a comprehensive plan on ways to take mitigation actions as a community and strategies to engage residents about flood risk over time. To get the ball rolling in your community:



Observing a high water mark on a home.

- Learn more—Click to download and share the HWM Initiative flyer. Visit www.fema.gov/high-water-mark-initiative to read about successful HWM communities.
- Sign up—Interested community leaders should contact Vincent Brown at Vincent.Brown@fema.dhs.gov to get started on preparing and signing your Memorandum of Understanding.
- Make a plan—Work with us to identify your community’s risk and what actions you are willing to take to reduce it. The HWM Initiative is just the beginning!

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Post Flood Recovery: State Floodway Regulations and Policies

~ IDNR, Office of Water Resources, Division of Resource Management

After a flood there is typically an urgency to implement flood recovery measures as quickly as possible. Such well-intended actions to quickly restore properties and communities to pre-flood conditions can result in an inadvertent disregard for prevailing IDNR/OWR floodway regulations and policies. Under the Rivers, Lakes and Streams Act (615 ILCS 5), the IDNR/OWR regulates construction within public bodies of water and within floodways of streams in urban areas with drainage areas of one (1) square mile or more and streams in rural areas with drainage areas of ten (10) square miles or more. Post flood recovery activities need to consider these IDNR/OWR floodway regulations and policies:

Replacing or Repairing Damaged Buildings - IDNR/OWR permits are not required for interior repair work on an existing structure in the floodway provided that the structure is not damaged to 50% or more of the structure's market value (substantially damaged) before it was damaged. Permits are required to replace buildings or make modifications to existing buildings which would increase their outside dimensions.

Substantially Damaged Buildings - Special conditions apply to substantially damaged buildings - those in which the total cost of repairs is 50 percent or more of the structure's pre-flood market value. If a building is found to be substantially damaged, repairs cannot begin until compliance with the local floodplain ordinance is demonstrated. In most cases, that may require repairs that include elevating or flood-proofing the structure to reduce the potential for future flood damage. Most communities in Illinois now track cumulative damages caused by multiple flood events.

Raising Existing Buildings - The raising of an existing building is authorized by IDNR/OWR Statewide Permit No. 6 (no application required), provided no changes are made to the outside dimensions of the building and provided the proposed raising would not involve the placement of fill to accomplish the raising. However, Statewide Permit No. 6 is not applicable in designated floodways in Northeastern Illinois.

Levee Repair - Repairs to reestablish the levee to its authorized alignment and top elevation do not require IDNR/OWR authorization. For any levee work involving a change in the alignment or top elevation, an application for permit should be submitted to IDNR/OWR for review.

Bridge and Culvert Repair/Replacement - IDNR/OWR authorization is not required for the repair of structures that are basically still intact - provided the repair would not reduce the waterway opening or increase the roadway profile. IDNR/OWR authorization is required for bridge and culvert replacement. Replacing bridge and culvert crossings that have been the cause of demonstrable flood damage will require the replacement crossing to reduce the induced flood damages to the fullest practicable extent.



Navigation Structures - Replacement of appurtenant navigation structures such as mooring cells at existing barge loading facilities does not require IDNR/OWR authorization.

Repair/Replacement of Other Infrastructure - IDNR/OWR authorization is not required for the repair of structures that are basically still intact. If a structure in a public body of water or jurisdictional floodway is to be totally replaced or reconstructed, a permit will be required. If not authorized under an IDNR/OWR statewide or regional permit, a completed permit application should be submitted for IDNR/OWR review. It is anticipated that the replacement structure can be easily authorized upon receipt of a completed permit application demonstrating that the structure is being replaced with a structure that is no more obstructive to river navigation or flood flows and at the proper elevation in accordance with local ordinance requirements.

Removal of Flood-Deposited Debris and Sediment - The removal of debris does not require IDNR/OWR authorization, but the material should be disposed outside of the floodway or where it will not obstruct flood flows or be liable to washing into a stream. Flood-deposited sediment may be removed from stream floodways and all previously improved stream channels and drainage ditches without a permit provided material is deposited where it will not obstruct flood flows. Statewide Permit No. 11 authorizes certain maintenance dredging of sediment from up to 1,000 foot lengths of natural stream channels and from marinas, barge terminals, water intakes and other facilities in public bodies of water. However, Statewide Permit No. 11 is not applicable in designated floodways in Northeastern Illinois. Individual permits are required for other channel modification and floodway regrading projects.

Restoration of Scoured Floodways and Eroded Stream Channels - Floodways that have been scoured as a result of a recent flood may be restored to pre-flood conditions without IDNR/OWR authorization. However, care should be taken to ensure that the restoration does not result in raising areas above original ground elevations. Certain channel stabilization activities are authorized by IDNR/OWR Statewide Permit No. 9 and Regional Permit No. 3. Individual permits are required for other channel modification and floodway regrading projects.

Local Permits - In addition to state floodway permit requirements, local floodplain management ordinances require that permits be obtained for any construction or development activity in a floodplain area, including the repair or reconstruction of structures damaged by flooding.

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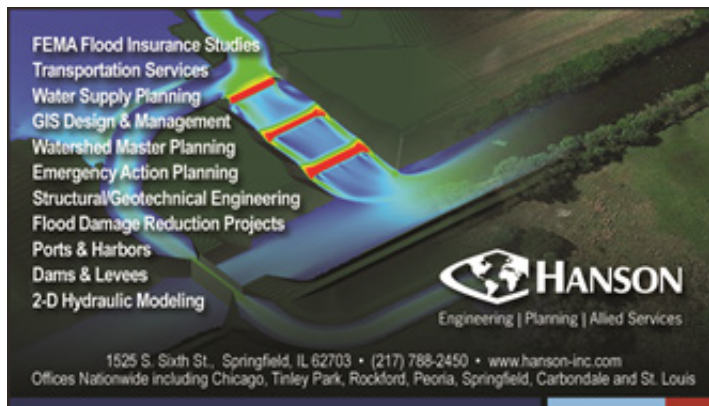
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From the Vice Chair

~ Glenn Heistand, P.E., CFM, ISWS

I have the pleasure of guest authoring “From the Chair” this edition. As Vice Chair, this is a good chance for me to express my appreciation for the IAFSM officers and board members whom I am privileged to serve with. Since 2011 when I joined the board as Secretary, I’ve been amazed at the high level of professionalism, knowledge, and commitment that this organization has in its leaders. It’s rare to find a group that enjoys getting together for board meetings and conferences, but this one does, because of the personal relationships that develop. There’s no drama, no politics, just fulfillment in doing good work together and enjoying each other’s company. As I’ve moved through Secretary, Treasurer, and now Vice Chair, I gain more appreciation for those that have gone before me. I now sit at the half-way point of my IAFSM career, with one more year as Vice Chair, and ostensibly four more years to finish out as past-chair. I won’t lie, it takes a lot of work to perform these roles, and I’m glad that my boss Sally McConkey sees the value of being involved. After all, she has trod this very path herself. Being on the board has given me the opportunity to develop new friendships and professional contacts, to live out my professional skills beyond the office, and to develop new skills. For anyone thinking about getting involved as an officer or committee chair, I will tell you that it is worth the effort.

As Conference Chair, this is a good chance to thank everyone who helped make the 2016 conference a success. Thank you! A conference our size has many moving parts that require a team effort to handle. Our executive secretary, Sarah Harbaugh, does an amazing job keeping things on track and organizing the bulk of behind-the-scenes tasks. Without her, the conference would be far less successful, and the conference chair would have far less hair. Although the last IAFSM annual conference was only a few months ago, we are already moving forward with planning the 2017 conference at the Crowne Plaza in Springfield on March 8-9, 2017. The 2017 conference is in a different location than we’ve been used to for the downstate conference, but it will be even more exciting and action-packed! The Kidzeum of Health and Science in downtown Springfield is currently constructing the IAFSM-sponsored water table that you helped fund through membership dues and conference attendance. The water table will be an interactive exhibit to educate children and families about the water cycle, water quality, conservation, erosion, dams, levees, flooding, and water safety. We hope for a chance to see the new water table and host a special social gathering at the Kidzeum facility during the conference. We are also working to line up some prominent plenary speakers that I’m sure you will find interesting, informative, and perhaps entertaining. As always, please contact me if you have and ideas or suggestions for plenary speakers, and don’t forget to mark your calendars to attend next year!



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GIS for Hydrologic and Hydraulic Modeling Seminar

IAFSM is hosting a 3-day GIS for Hydrologic and Hydraulic Modeling seminar, taught by West Consultants on September 19-21, 2016 in Woodridge, IL. This seminar will provide cover ArcHydro, HEC-GeoRAS, and HEC-GeoHMS. Attendees have the option to attend 1, 2, or all 3 days of this seminar. This hands-on training will include:

Day 1: GIS Basics and ArcHydro:

GIS basics, such as surfaces (TINs, terrains, grids) and hydrologic inputs (e.g. curve numbers). Workshops and lectures will teach attendees how to delineate streams and watersheds and use Spatial Analyst to perform hydrologic calculations. Terrain processing in ArcHydro (e.g. burning in streams, filling sinks, creating flow direction grids, et cetera) will also be covered.

Day 2: HEC-GeoRAS:

Lectures and workshops will focus on using HEC-GeoRAS to efficiently create HEC-RAS geometry files from terrain data, survey data, land cover, et cetera. The material will also discuss post-processing of HEC-RAS results in ArcGIS (i.e. FEMA floodplain mapping).

Day 3: HEC-GeoHMS:

Lectures and workshops will teach attendees how to create hydrologic sub-basins with user-selected outlet points, compute sub-basin characteristics, and calculate other hydrologic parameters (e.g. time of concentration).

You can register for this seminar online at: <https://www.123signup.com/register?id=ntfvs>. Please register early, as space is limited. Contact Shauna Urlacher, Stormwater Management Committee Chair, at surlacher@v3co.com, with any questions.



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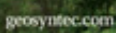
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CEC Education & Training Opportunities

Looking for training opportunities? The following opportunities are coming up in the next few months. If you are looking for credits, be sure to review the material and confirm they meet the appropriate requirements.

IAFSM Sponsored Training Opportunities:

- GIS for Hydrologic and Hydraulic Modeling – see the description elsewhere in this newsletter

ASFPM State Chapter Conferences

- 8/22/16-8/26/16 – Kentucky Association of Mitigation Mangers Conference, Gilbertsville, KY
- 8/24/16 – Ohio Floodplain Management Association Conference, Columbus, OH
- 9/7/16-9/9/16 – Indiana Association for Floodplain and Stormwater Management, Florence, IN

ASFPM Sponsored Training

- 9/13/16-9/15/16 – Climate Change Adaptation Planning, Nebraska City, NE
- 9/29/16 – 9/30/16 – 2D Floodplain Delineation using 2D HEC-RAS Model, Denver, CO

ASFPM Webinars

- <http://www.floods.org/n-calendar/>
- 7/14/16 – Letters of Map Change
- 7/14/16 – Elevation Certificates
- 8/25/16 – NFIP Basics

Additional Training Opportunities:

- EMI provides a wide range of training opportunities and upcoming training. EMI courses are free for local and state government employees. Learn more at the EMI website. <http://training.fema.gov/EMI/>.
- Upcoming courses include:
 - o Sept 12-15: E0273 Managing Floodplain Development through the National Flood Insurance Program
 - o July 11-14: E0282 Advanced Floodplain Management Concepts II
 - o Aug 29-Sept 1: E0284 Advanced Floodplain Management Concepts III
 - o July 18-21, Sept 19-22: NFIP/Community Rating System



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Important Stuff We Tell You in Every Newsletter...

Save the Date! 2017 IAFSM Conference

The 2017 Annual Conference will be March 8 & 9, 2017, at the Crowne Plaza Springfield. See you there!

Wanted: Newsletter Ideas and Articles

IAFSM members, this is YOUR newsletter! Email Jennifer Maercklein, editor, at jmaercklein@v3co.com if there are topics that you'd like us to cover. You don't need to write the article - we just want your ideas! If you're gifted with a pen and would like to provide content, we welcome your written contributions as well.

Get Involved with IAFSM!

IAFSM Committee Chairs welcome your help and involvement. See the list of chairs on the last page of this newsletter, or visit the committee webpage to learn more about volunteer opportunities. <http://www.illinoisfloods.org/committees.html>

Borrow our Water Table

IAFSM has two Watershed Tabletop Models available for all members to check out (free of charge) and bring to Public Works Open Houses, Scout meetings, 4-H meetings, school classrooms, etc. This offers a great opportunity to educate about the dangers and impact of unplanned development and human activity in the floodplain. IAFSM keeps one in Springfield and the other in northeast Illinois. Contact Sarah at IAFSM@illinoisfloods.org to make arrangements.

Next Board Meetings

The next IAFSM Board Meeting will be held on July 13 at 10:00 a.m. at Ottawa City Hall, 301 W. Madison St. All members are welcome and encouraged to attend Board meetings. See you there!

Jobmart

Visit our Jobmart at <http://www.illinoisfloods.org/jobmart.html> Jobmart is a free service to members of IAFSM. If you would like to post a position, send complete information to IAFSM@sbcglobal.net.

2016 CFM Exam Schedule

To view 2016 exam dates and register, visit www.illinoisfloods.org/certification.html.



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The IAFSM Newsletter is published quarterly for members of the Illinois Association for Floodplain and Stormwater Management. Information and opinions contained herein do not necessarily reflect the views of all members. Items for publication and other editorial matters should be directed to the editor at jmaercklein@v3co.com.

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