

Fall 2018 Newsletter

# **Statewide County Stormwater Authority Granted**

In August, Governor Rauner signed a bill sponsored by Senator Sue Rezin, which provided statewide county stormwater enabling authority. Previously, only a select number of counties had the authority to enact stormwater regulations. The new bill extends that authority to all counties in Illinois with a population center greater than 50,000 people.

The 2015 Report for the Urban Flooding Awareness Act, published by the Illinois Department of Natural Resources -Office of Water Resources, included a recommendation to expand this stormwater enabling authority statewide. IAFSM recognizes and applauds Mike Sutfin, City of Ottawa; Hal Sprague, Center for Neighborhood Technologies; and Senator Sue Rezin, for working to get this important legislation passed.

Counties which were previously granted stormwater authority were: Boone, Cook, DeKalb, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, Lasalle, Madison, McHenry, Monroe, Peoria, St. Clair, and Will Counties. The new bill expands the list to include McLean, Macon, Champaign, Sangamon, and Winnebego Counties.

# **Interactive Story Map Commemorates the '93 Flood**

FEMA Region V's Mitigation staff and External Affairs staff developed an interactive story map to commemorate the 25th Anniversary of the 1993 Great Midwestern Flood event.

The interactive map "commemorates the great flooding event that caught the country by surprise, celebrates the spirit of community resilience and togetherness during times of disaster and demonstrates how mitigation projects really do save money and offer piece of mind to residents and local officials." The map story highlights the flooding, recovery, and mitigation efforts in three communities: Austin, Minnesota; Darlington, Wisconsin; and Grafton, Illinois.

In addition to commemorating the 25th anniversary, the story map promotes mitigation and will be used by FEMA during community outreach and external stakeholder interactions.



The story map can be viewed online at this link:

http://fema.maps.arcgis.com/apps/MapJournal/index.html?appid=d7d7992e8e0249189b7e32479316ec53

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### Salt and Water Don't Mix

~Ron Davis, IDNR-OWR

In July, the Illinois Attorney General filed a lawsuit against the Peoria Barge Terminal and Morton Salt for improper storage of salt that allowed runoff into the Illinois River. The potential fines are up to \$10,000 a day plus additional costs up to \$50,000. I could not find any public responses by the companies to the charges.

The chloride from the salt (sodium chloride) can have a significant impact on aquatic life and a principle anti-caking agent, ferric ferrocyanide, breaks down into free cyanide which is extremely dangerous for aquatic life.

The model state floodplain ordinance section 11-9 "Public Health and Other Standards" addresses dangerous substances in the floodplain. The first subsection states that one "cannot store chemicals, explosives, buoyant materials, flammable liquids, pollutants, or other hazardous or toxic materials below the flood protection elevation unless such materials are stored in a storage tank or flood proofed building constructed in accordance to the requirements of section 11-7."

There are some "chemicals and materials that are considered by the Corps of Engineers to be extremely hazardous or vulnerable to flood conditions that they are prohibited from being stored in the Special Flood Hazard Area including the 500 year floodplain." These chemicals are:

Acetone Ammonia Benzene Calcium Carbide Carbon Disulfide Prussic Acid Celluloid Chlorine Hydrochloric Acid Magnesium Nitric Acid Potassium Sodium Oxides of Nitrogen Phosphorus Sulfur

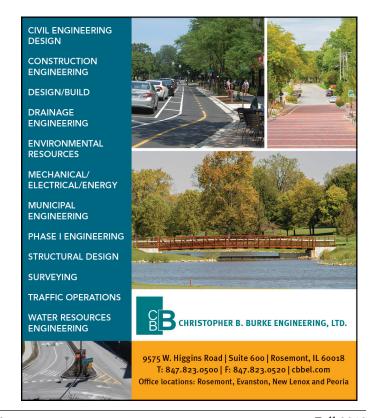
As floodplain managers, the bottom line is that it is necessary to keep these chemicals from being stored in the floodplain. You are protecting your waterways and you could be protecting your city or the businesses in your city from substantial fines.



### **OUR SERVICES**

Water Resources • Site Development
Environmental • Recreation • Infrastructure
Transportation • Construction • Structural
Surveying and Mapping
Geographic Information Systems





# Raising Local Flood Awareness

FEMA's High Water Mark Initiative is a community-based awareness program that increases local communities' awareness of flood risk and encourages action to mitigate that risk.

Two examples that build local awareness are shown below. The first is located overseas in Dinant, Belgium. The church pictured was built in the 1200s on the banks of the Meuse River. While obviously not part of our NFIP, the photos are fun and show a community that understood the importance of flood awareness at an early date: check out the floods of 1529 and 1573 noted on the pillar! Much closer to home, the Village of Gurnee has placed signage to raise awareness of the flood risk and encourage preparedness. For more info, <a href="https://www.fema.gov/high-water-mark-initiative">https://www.fema.gov/high-water-mark-initiative</a>

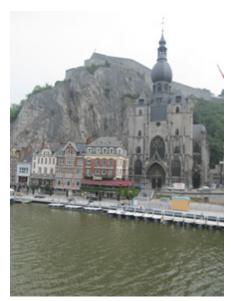






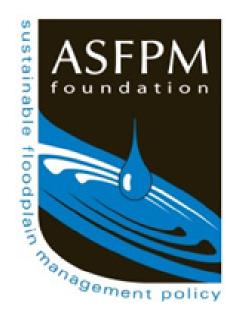
Photo credits: Paul Osman, IDNR (Dinant church photos) and Sharon Osterby, Lake County (Gurnee sign)

# ASFPM Floodplain Management Best Practices & Case Studies Compendium

Best practices and case studies are effective tools to highlight State and local initiatives to reduce flood risks at the local and regional level. The ASFPM Floodplain Management Best Practices and Case Studies Compendium catalogues best practices and case studies in a searchable format for online viewing; this will increase accessibility and usefulness to the reader. This project, funded by the ASFPM Foundation, was completed a few months ago and is now ready for primetime use!

ASFPM's Flood Science Center collected twenty five best practices and case studies that comprise the compendium. This project created a typology that established the means to organize and index case studies associated with best practices. Sources included the ASFPM's No Adverse Impact (NAI) How-to-Guide; "The Nature Conservancy's Naturally Resilient Communities Project;" and the FEMA Cooperating Technical Partners (CTP) mentoring project.

• NAI How-to-Guides: To further ASFPM's No Adverse Impact<sup>TM</sup> initiative, ASFPM developed a series of No Adverse Impact How-to-Guides. These How-to-Guides were developed for each of the Building Blocks in the publication entitled "No Adverse Impact: A Toolkit for Common Sense Floodplain Management."



- Naturally Resilient Communities: The Nature Conservancy (TNC) contracted with ASFPM to assist in developing a guide and case studies for the mainstreaming of natural infrastructure, such as comprehensive planning, education of developers, relocation of property, the raising of infrastructure, and floodplain regulations, to address coastal and riverine flooding.
- CTP Support: FEMA contracted with ASFPM to help support the Cooperating Technical Partners (CTP). The CTP Program is a partnership between FEMA and participating NFIP communities, regional agencies, state agencies, tribes, and universities that have the intent and capability to become a more active participant in FEMA's mapping program. The project involved documenting best practices and providing training, such as automatic engineering tasks.

These best practices and case studies can be important and very useful at the State and local levels in designing programs or projects to reduce their flood risks. The Best Practices and Case Studies Compendium can be found at the ASFPM Flood Science Center by clicking below.

https://www.floodsciencecenter.org/products/best-practices-case-studies-compendium/





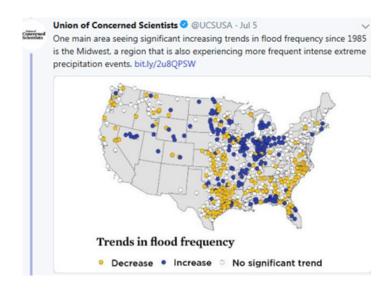




# **Inland Flooding & Climate Change**

The Union of Concerned Scientists recently published an Inland Flooding webpage. The site provides a fact sheet and infographic that presents a synopsis of the latest scientific findings on how rainfall and flooding patterns in the United States have changed and the causes of these changes. They also include a summary of possible changes to come, and recommendations for making communities more flood resilient. While coastal flooding and sea level rise are important parts of the complete picture of flood risk, this report focuses on inland flooding only.

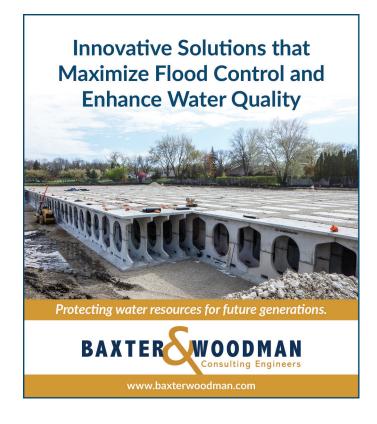
The Inland Flooding webpage can be viewed at: <a href="https://www.ucsusa.org/floods">www.ucsusa.org/floods</a>



# Award Season is upon us! 2019 Chapter Awards Are Open

If you know of a project or person worthy of recognition by IAFSM, consider submitting a nomination for a Chapter Award. The award nomination forms can be found on our website at <a href="https://www.illinoisfloods.org/membership/awards">https://www.illinoisfloods.org/membership/awards</a>

Chapter awards are typically presented to individual people, groups, or agencies that represent the Chapter's best in the Floodplain and Stormwater Management profession. These awards honor the efforts of one person over a career, or honor an agency over an extended period of time and/or through many projects.





### The Waffle House Index and Natural Disasters

~From the Chair. Glenn Heistand, P.E., CFM, ISWS

Following a series of hurricanes in 2004 that battered the east coast, former FEMA Administrator Craig Fugate amusedly created the Waffle House Index. Waffle House restaurants, numbering more than 2,100 locations, are open 24/7, so the threshold for them to close during a natural disaster is extremely high, making them good measurements of a storm's severity. The index has three levels, based on the extent of operations and service at the restaurant following a storm:

**GREEN:** full menu - restaurant has power and damage is limited or no damage at all.

YELLOW: limited menu - no power or only power from a generator, or food supplies may be low.

**RED:** the restaurant is closed - indicating severe damage or severe flooding

Since the establishment of the Waffle House Index, several light-hearted news reports and articles about the Index continue to surface each year around hurricane season. People like an inspirational story about self-reliance and defiance against Mother Nature, or watching the government get outmaneuvered by an agile underdog (Waffle House) during chaos. I enjoy the absurd contrast between low-tech vs. high-tech metrics, or street-smarts vs. book-smarts in an alley fight. No doubt that we need all the tech available to respond to disasters, but when the chips are down there's no substitute for a switch-blade and fancy footwork to get through a fight in one piece. There's something refreshing and inspirational about measuring catastrophes by the number of waffles served for breakfast.

Besides being recognized as a bellwether for the status of a community after disasters, Waffle House sets a high bar for preparedness and recovery. "Jump Teams" are deployed for emergency response to their restaurants, setting up generators, establishing fuel depots, and stockpiling food. Using HURRTRAK software and individual restaurant coordinates, they can anticipate the expected damage and coordinate efforts effectively. Waffle House helps their employees' families with evacuation, home emergency kits, clothing drives, and housing when needed. After the storms, they help employees with their insurance claims and filling out FEMA grants if they qualify. That's a great example of full-spectrum planning and support that we could all do well to learn from.

In a FEMA blog, the director of external affairs posted: As Craig Fugate often says, the Waffle House test doesn't just tell us how quickly a business might rebound – it also tells us how the larger community is faring. The sooner restaurants, grocery and corner stores, or banks can re-open, the sooner local economies will start generating revenue again – signaling a stronger recovery for that community. The success of the private sector in preparing for and weathering disasters is essential to a community's ability to recover in the long run.

We shouldn't forget that recovery at the homeowner-level will usually take years to complete, if ever. The defiance of Mother Nature may inspire a hardy initial flood response, but short memories will lead to repeated personal tragedies when the next flood arrives. How can we, as floodplain professionals, lead and convince public officials and flood victims to make good decisions, to avoid the sunk cost fallacy of throwing good money after bad? Escalation of commitment, or "in for a penny, in for a pound", thinking will not solve repetitive loss problems. As the Illinois State Floodplain Manager, Paul Osman, is fond of saying, "get in while the carp is still flopping on the couch" to educate and direct the appropriate steps towards mitigation.



# Hey and Associates, Inc. Stormwater & Floodplain Management Civil Engineering Design Wetland Delineation & Mitigation Ecological Restoration & Management Water Quality & Lake Management Landscape Architecture Regulatory Permitting heyassoc.com 847.740.0888

# Speakers, Vendors, Exhibitors, Sponsors and Tours Wanted for 2019 Conference

The IAFSM Annual Conference will be Wednesday and Thursday, March 13-14, 2019 at the Embassy Suites - Peoria Riverfront Conference Center in Peoria, IL, and may include a pre-conference workshop on March 12. A CFM exam will be offered the night before the conference on March 12, 2019.

### **Call for Speakers**

IAFSM invites speakers from municipal, public and private sectors to present information on floodplain and stormwater management topics. Submit abstracts <u>online: https://goo.gl/forms/FAz8NcejJ6eSRdpe2</u> The deadline is October 31, 2018. Presenters will be notified of their acceptance or denial by December 20, 2018.

IAFSM intends for the 2019 Annual Conference to provide focused/in-depth education and training in the principle committee disciplines of IAFSM, including Floodplain Management, Stormwater Management, Mitigation, Wetlands, CRS, and Legislation, and encourages abstract submissions in the areas of water quality / BMPs for MS4s, and urban flooding issues.

### **Exhibitor and Vendor Registration**

Companies and organizations are invited to exhibit their products, services, and activities at the IAFSM conference. For more information: <a href="https://www.illinoisfloods.org/content/documents/2019">https://www.illinoisfloods.org/content/documents/2019</a> exhibitor flyer.pdf

### **Sponsors Invited**

We invite you to be a sponsor of the annual conference, or to donate a door prize. All sponsors will be identified in the conference program, at plenary sessions and during the awards luncheon. For more information on sponsorship levels and benefits, please visit: <a href="https://www.illinoisfloods.org/content/documents/2019">https://www.illinoisfloods.org/content/documents/2019</a> iafsm sponsorship flyer.pdf

### **Tours / Field Trips Wanted**

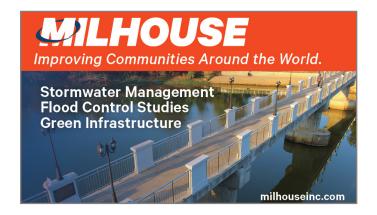
Does your community have a floodplain, stormwater, mitigation, or wetland project in the vicinity of the conference hotel that you would like to show to other floodplain managers? IAFSM is considering offering Technical Field Tours again, if enough tour sites are submitted to make up a tour. Please submit nominations for potential tour sites at <a href="https://goo.gl/forms/FAz8NcejJ6eSRdpe2">https://goo.gl/forms/FAz8NcejJ6eSRdpe2</a>.

### Lodging

Lodging is available at the special conference rate of \$139, through Feb 18. Visit <a href="www.embassysuiteseastpeoria.com">www.embassysuiteseastpeoria.com</a>. Enter the arrival and departure dates in the upper right corner, click "more options", and enter OOD in the group code box. Then, click the blue button to check rooms and rates. Room types with the \$139 rate should appear for selection.

### **For More Information**

For more information, please go to the Annual Conference page on our website at <a href="https://www.illinoisfloods.org/conferences-workshops/iafsm-annual-conference">https://www.illinoisfloods.org/conferences-workshops/iafsm-annual-conference</a> or contact Erik Gil, Conference Chair, at egil@cbbel.com, or Sarah Harbaugh, Executive Secretary, at iafsm@illinoisfloods.org.





# **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:**

• None at this time

### **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:
- November 26-29 E0273 Managing Floodplain Development through the NFIP

### Flood Provisions of the International Residential Code - ONLINE COURSE.

FEMA Building Science in partnership with ICC has launched the new online course "Flood Provisions of the International Residential Code" in celebration of Building Safety Month. For a limited time, this course is available FREE of charge. More information is available at the following.

http://media.iccsafe.org/catalog/Flood-Provisions-IRC-Pt1/presentation\_html5.html?lms=1 (Part 1) http://media.iccsafe.org/catalog/Flood-Provisions-IRC-Pt2/presentation\_html5.html?lms=1 (Part 2).

For more information, email FEMA-Buildingsciencehelp@fema.dhs.gov

### Webinars:

- ASFPM <a href="http://www.floods.org/n-calendar/webinars.asp">http://www.floods.org/n-calendar/webinars.asp</a>
- 10/26-11/9 Using the New HEC-RAS Mapper Applications Online class

### **Conferences:**

- October 4, 2019 Upper Mississippi River Conference, October 24-25, Moline IL
- November 7-8, 2018 Wisconsin Association for Floodplain, Stormwater, and Coastal Management Conference

Other training and CEC opportunities can be found on ASFPM's calendar: <a href="http://www.floods.org/n-calendar/calendar.asp?">http://www.floods.org/n-calendar/calendar.asp?</a>

Note: Winter 2018 CFM Exam to be held Wednesday, Dec 12, 2018 9am to 12noon. CBBEL offices 9575 W, Higgins Road, Suite 600, Rosemont, IL 60018





# Important Stuff We Tell You in Every Newsletter...

### **Save the Date! 2019 IAFSM Conference**

The 2019 Annual Conference will be March 13 & 14, 2019, at the Embassy Suites East Peoria Riverfront Hotel & Conference Center. <a href="https://www.illinoisfloods.org/conferences-workshops/iafsm-annual-conference">https://www.illinoisfloods.org/conferences-workshops/iafsm-annual-conference</a>

### **Wanted: Newsletter Ideas and Articles**

IAFSM members, this is YOUR newsletter! Email Jennifer Maercklein, editor, at <a href="mailto:jmaercklein@v3co.com">jmaercklein@v3co.com</a> 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. <a href="http://www.illinoisfloods.org/committees.html">http://www.illinoisfloods.org/committees.html</a>

### **Borrow our Water Table**

IAFSM has four 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 currently keeps one in Springfield and one in Bartlett, with the remaining two tables at other locations (tbd) throughout the state. Contact Sarah at IAFSM@illinoisfloods.org to make arrangements.

### **Next Board Meetings**

The next IAFSM Board Meeting will be held on Wednesday, Nov 14 at 10:00 am at V3 Companies, 7325 Janes Ave, Woodridge. All members are welcome and encouraged to attend Board meetings. See you there!

### **Jobmart**

Visit our Jobmart at <a href="http://www.illinoisfloods.org/jobmart.html">http://www.illinoisfloods.org/jobmart.html</a> Jobmart is a free service to members of IAFSM. To post an open position, please sign into our website and complete the job posting form. If you have any questions please contact <a href="https://www.illinoisfloods.org">IAFSM@illinoisfloods.org</a>.

### **2018 CFM Exam Schedule**

To view 2018 exam dates and register, visit www.illinoisfloods.org/certification.html.







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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