The 1993 Flood Revisited: 25 Years and Still Mitigating

A Tale of Two Cities begins: “It was the best of times, it was the worst of times…” At this time twenty-five year ago, Mother Earth was setting in motion one of the worst natural disasters to hit North America. Since 1993, other disasters such as Hurricanes Katrina, Sandy, and Harvey have all surpassed the 1993 flood in overall scope, but the 1993 flood remains the worst disaster in Illinois history. It was also a transformative event that redirected floodplain management and resulted in reductions to future flood risk in Illinois and the nation.

In total scope, the 1993 losses remain staggering:

- $25 billion in damages
- 60,000 homes destroyed
- 1,200 levee failures
- 53 people died
- 30,000 jobs lost
- 75 towns under water
- 50,000 people got disaster assistance
- 40,000 people got emergency housing

Thousands of individual stories remain from the 1993 flood: The Village of Valmeyer was flooded after a levee failure, and the town made a difficult decision to move the entire village 400 feet up on the bluff. The City of Grafton, long prone to flooding, had never before experienced the 1993 level, but in 1993 the town’s Building Inspector red-tagged his own home as well as his sister’s home, and both parcels are now open space. The entire Town of Hull mobilized to sandbag the elementary school until midnight when the school’s flood insurance policies became effective. The Village of Niota was covered in oily tar after flood waters ruptured a nearby oil storage tank. Similar stories exist for nearly every town along the Illinois and Mississippi Rivers. Not a single river town in Illinois looked the same after the 1993 flood.

Confluence of the Mississippi and Missouri Rivers on August 14, 1991 (top) and August 19, 1993 (bottom).
Despite the widespread suffering and destruction, some valuable themes emerged from the 1993 flood. These themes remain the pillars of our strong floodplain management programs today:

1. **Good mapping and risk awareness are important.**
Since 1993, countywide digital maps now exist for most of the state and updates are an ongoing process. These maps can be viewed by everyone at the National Flood Hazard Layer website. Real time gages are common in Illinois and real time inundation mapping is being introduced. Areas of residual risk (behind levees) are being identified and mapped.

2. **Removing buildings and people from the floodplain works.**
Since 1993, over 5,000 buyouts and relocation projects have been completed. In addition, over 2,000 elevation projects have been completed. Areas once prone to annual flooding now pass floods unscathed, and most importantly, the homeowners were able to move out of harm’s way and avoid the heartbreaking and economic impact of having their home flooded. The US Army Corps of Engineer’s lease cabins once lined the river and were considered the most costly flood loss structures in the entire state. These cabins have all been torn down or elevated, saving the state millions of dollars in annual loss avoidance.

3. **Strong regulations are important.**
Since 1993, every community in Illinois has adopted regulatory standards which go above-and-beyond FEMA minimum standards. Higher freeboard has protected new development from floods which are increasing in frequency and magnitude. Cumulative substantial damage regulations have resulted in repetitive loss structures being elevated or bought out. Illinois now ranks #1 in the nation for the fewest number of claims on structures built after flood maps were adopted, as well as the highest overall percentage reduction on repetitive loss properties.

4. **Good local floodplain managers are even more important!**
Since 1993, it has become manifestly obvious that strong local officials are the most valuable assets and most important component of our success. Illinois now has 525 Certified Floodplain Managers (CFMs). Illinois also has 62 CRS communities and nearly half of the CRS communities among the six states of FEMA Region V. Local Officials are the front line in strong floodplain management and it is no more obvious than along the Illinois and Mississippi Rivers where today, major floods pass unnoticed.

The 2018 IAFSM annual conference plenary session will include local officials and leaders who helped fight the 1993 flood and worked to change the course of floodplain management in Illinois, for the better. We look forward to seeing you at the conference.

*“Old” Valmeyer during the 1993 flood, the 1995 relocation, and the “new’ Valmeyer today.*

*Before and After views in Grafton, IL*
Legal Brief: Water, Water Everywhere

Scott F. Uhler and James A. Rhodes, Klein, Thorpe & Jenkins, Ltd.


https://www.iml.org/page.cfm?category=4369

Municipal responsibility or liability for alleged negligent conduct (or failure to act) regarding damage attributable to the design and/or maintenance of the stormwater infrastructure in the municipality presents a potentially significant, if not catastrophic, expense. Under such circumstances, claims of damage due to municipal negligence or due to municipal actions constituting a “taking” of property (due to flooding) have been asserted against municipalities. The available protections from immunity and duties of a municipality can vary significantly based on whether the municipality has notice of system problems, whether the stormwater facility or basin is public or subject to public control, or whether the municipality is engaging in meaningful oversight and maintenance of its systems. A series of recent judicial decisions serve to highlight some common issues for municipalities and clarify possible municipal responsibility or liability for damage caused by stormwater or flooding. Understanding the circumstances that can lead to liability can better prepare a municipality to avoid it. For the full article, please visit the Illinois Municipal League Review magazine at: https://www.iml.org/page.cfm?key=18924&parent=4369

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2017 Community Rating System (CRS) Program Update
Join CRS and Get Lower Flood Insurance Premiums!

Background
The Community Rating System (CRS) program is designed to reduce flood insurance premiums, community-wide, based on a community’s commitment to go beyond the National Flood Insurance Program (NFIP) minimum national standards and use higher floodplain management standards. There are four categories of higher standards: 1) Public information, 2) Mapping and regulations, 3) Flood damage reduction, and 4) Warning and response.

Greater reductions in flood insurance premiums can be achieved over time, depending on the level of commitment to the program. Download more CRS information at: https://www.fema.gov/media-library/assets/documents/15846.

Illinois CRS highlights:
1) Midwest Region V is ranked second in the nation by CRS participation (see graph below);
2) Illinois has over 40% of the CRS communities within the six states of FEMA Region V;
3) The total flood premium savings resulting from CRS participation is $2,495,400 in Illinois, with an average annual savings of $170 per CRS policy;
4) Presently Illinois has 62 CRS communities, up from 40 communities in 2010 and zero in 1990;
5) Illinois has the most Class 5 (25% flood premium reduction) CRS communities (except FL & NJ);
6) 2017-2018 communities that are considering or have applied to CRS: DuPage County, Libertyville, Elmhurst, and Swansea.

Steps to Join CRS
CRS is growing rapidly because communities see tangible benefits. What you are doing now will probably qualify your community to be a Class 8 (10% flood premium reduction) or better. Don’t delay, please contact your CRS Illinois representative Lou Ann Patellaro at Lou.Patellaro@verisk.com or call her at (954) 651-5021 to find out more about CRS.
IDNR Permitting & Floodplain Map Change Seminar

On September 1, 2017, the Stormwater Management Committee hosted a half day seminar where Gary Jereb from IDNR presented an overview of the Illinois Department of Natural Resources, Office of Water Resources regulatory programs, specifically the floodway management, the public water management and the dam safety programs. Gary also discussed the proposed changes to the floodway rules entitled Construction in Floodways of Rivers, Lakes and Streams (Illinois Adm. Code Part 3700).

Brian Chaille, P.E. CFM with Illinois State Water Survey’s MT-2 processing team provided guidance for successfully revising FEMA maps in Illinois. Brian also explained the review process and provided insights to help facilitate the map change process for requestors or potential requestors.

Copies of both presentations have been added to the IAFSM website under Conferences and Workshops. These presentations provide an excellent resource for those submitting permits to IDNR or letters of map change to ISWS.  http://www.illinoisfloods.org/conferences.html
From the Chair: Celebrating Our Successes and IAFSM’s Increased Clout

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

This is a celebratory time of year as we remember the year’s past accomplishments and plan ahead for a bright future. As such, I’m happy to report that IAFSM’s clout has just increased. With the approaching new year, new positions and appointments have drawn several of our board members into loftier roles. Loren Wobig, our current Past Chair, has been appointed to serve as Director of the Office of Water Resources at the Illinois Department of Natural Resources. Steve Altman, our Treasurer, will serve as the Acting Division Manager of the Division of Resource Management at the Illinois Department of Natural Resources. Finally, while not a new position, Yours Truly now has a fresh new MS degree from the University of Illinois, with no small amount of suffering. There are many other IAFSM members who are doing our organization proud as they advance their careers and the profession, both behind the scenes and out in front. That’s why I am so honored to be a part of IAFSM and contribute my small part to the great collective that we represent, while taking advantage of the relationships each of you have to offer.

When someone in your family does something great, it’s exciting, and the pride felt compels us to tell others about the accomplishment. There’s also pride in being associated with those who do good things, large and small. You should have great pride in the people that compose IAFSM are always doing interesting, creative, important, and good things. Being involved on the Board or in a committee will prove to you that this is true. Our people run deep and wide in many specialties and skills, with room for many more to be part of things. Some of our people have remarkable ambitions. Matt Brolley, PE, CFM, is the 2017 ASCE Citizen Engineer of the Year. In addition to his engineering career at V3 Companies, Matt is also the two-term mayor of Montgomery, IL, and running for Congress in Illinois’ 14th District. What an amazing opportunity to have a floodplain manager represent our interests in public office! For the rest of us, what an amazing opportunity we have to represent our floodplain and stormwater interests through participation in our communities and IAFSM. We all have a role to play.

The next gathering of exciting and important people that you won’t want to miss is coming March 14 & 15, 2018 in Tinley Park, IL. That would be the IAFSM annual conference, as I’m sure you guessed. Watch your email and this publication for all the details. Our conference chair, Erik Gil, and the Board are preparing another not-to-be-missed conference. This year at the conference we will be debuting a short video highlighting the 1993 Great Flood. You may recognize some of the on-screen talent. Until then, go forth and do good things, your reputation precedes you.
2018 Project Awards

The IAFSM Project Awards recognize excellent projects across the state where a team has been assembled to accomplish a specific task. These awards are different from the IAFSM Chapter awards that honor the efforts of one person over a career or an agency over an extended period of time and many projects. If you have a project you would like to be considered for an award, please submit your completed entry form by January 26, 2018. Entry Forms can be found here: http://illinoisfloods.org/documents/2018_IAFSM_Conference/2018_IAFSM_Project_Awards.docx

New in 2018 – We are assembling a panel of judges to evaluate the projects. If you are interested in volunteering as a judge, please email Shauna Urlacher at surlacher@v3co.com.

Congrats to our New CFMs!

Congratulations to everyone who passed the exam and became a Certified Floodplain Manager in the State of Illinois in 2017!

Steve Bange, City of Quincy, IL
Robert Bielaski, City of Elmhurst, IL
Ronald Davis, Illinois Department of Natural Resources
Michael Hanke, CDM Smith
Robert Julich, Infrastructure Engineering, Inc.
Steven Keenan, Springfield Sangamon County, IL
Sylwia Kokoszka, HR Green, Inc.
Christopher Kuester, Thouvenot, Wade & Moerchen, Inc.
Scott Lueken, Baxter & Woodman, Inc.
Dale Marting, Trotter & Assoc., Inc.
Vincent Micek, Thomas Engineering Group
Eddie Paulino, Metropolitan Water Reclamation District of Greater Chicago
Kristian Peterson, Illinois Department of Natural Resources
Andrea Pizzo, Christopher B. Burke Engineering
Andrew Reicks, CDM Smith
Daniel Schmansk, RS&H
Todd Strole
Jesse Tinch, Illinois Department of Natural Resources
Troy Turner, City of Collinsville, IL
Corey Van Dyk, Baxter & Woodman, Inc.
Anne Wilford, Kane County, IL
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:
• 2018 Annual Conference, March 14, 15, 2018, Tinley Park, IL

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:
  • Feb 5-7 E284 – Advanced III Floodplain Management
  • March 12-16 – E0169 – Annual Hazard Mitigation Stakeholder Workshop
  • March 26-29 E0176 – Hazus-MH for Floodplain Managers

Webinars:
ASFPM –  http://www.floods.org/n-calendar/webinars.asp
  • 1/25/18 – Climate-smart Restoration

Conferences:
  • 6/17-6/22/18 – ASFPM Annual Conference – Phoenix, AZ

Other training and CEC opportunities can be found on ASFPM’s calendar:  http://www.floods.org/n-calendar/calendar.asp?
Important Stuff We Tell You in Every Newsletter…

Save the Date! 2018 IAFSM Conference
The 2018 Annual Conference will be March 14 & 15, 2018, at the Tinley Park Convention Center.

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 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. We are planning for a second table in Bartlett and one in Champaign. Contact Sarah at IAFSM@illinoisfloods.org to make arrangements.

Next Board Meetings
The next IAFSM Board Meeting will be held on Wednesday, January 10 at 10:00 am in the Sam Tinley Room at the Tinley Park Convention Center, 18451 Convention Center Drive, Tinley Park, IL. 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@illinoisfloods.org

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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