



THE IAFSM CURRENT

Illinois Association for
Floodplain and Stormwater Management

Summer 2018 Newsletter

Natural Hazard Mitigation Saves \$6 to \$7 for Every \$1 Spent

~Ron Davis, IDNR-OWR, IAFSM Mitigation Chair

The National Institute of Building Sciences, with funding support from FEMA and a number of non-profits, released a study that found that the savings from Federally-funded mitigation projects was \$6 for every \$1 spent. These mitigation projects included all types of hazards; for flood projects, the ratio was even higher at \$7 for every \$1 spent.

As I write this we have just experienced another flood in Rockford. While we all saw numerous pictures of cars in the water, we did not see pictures of homes underwater. The reason is an acquisition project that purchased more than 100 homes in the last ten years. This mitigation success has been repeated across the state in recent years. As we retreat from the floodplains, the floods come up and recede, but without as many structures in their path, and without damage.

There are several items this study does not take into account. The main item that is not monetized is the prevention of human suffering. By removing people from flood exposure, the stress in their life is reduced and they don't have to go through the devastation of having their home damaged. They also don't lose priceless items, like photos and drawings made by their children that can't be replaced.

The study also does not take into account the damage prevented by floodplain regulators doing their job. Ensuring that homes are not built in harm's way is a very difficult job, but without this enforcement work, mitigation is almost worthless. What good does it do to remove homes from one part of the floodplain if new homes are built in the floodplain elsewhere? By enforcing the NFIP rules and mitigating the existing structures, Illinois may be the number one state in reducing flood risk.

To read the study, visit the study's website at: <http://www.nibs.org/page/mitigationsaves>



June flooding in Rockford - photo by Ovidio Aldana as shown on www.kwqc.com

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Flood Games: How manipulation of flood insurance leads to repeat disasters

~Mark Collette, Reporter, Houston Chronicle

This is an excerpt from the Houston Chronicle. For the complete article, including a reference to Illinois as a state known for adhering well to the NFIP's 50 percent rule, visit:

<https://www.houstonchronicle.com/business/article/Flood-Games-How-victims-local-officials-and-an-13031069.php>



What's the problem? Across the country, officials are failing to enforce a central pillar of the taxpayer-subsidized NFIP: Making sure severely damaged properties are elevated or removed from floodplains.

Why does it matter? Thousands of such homes get rebuilt and then flood again, often for more than they are worth, costing taxpayers more than \$1 billion in repeat disasters. People and property are put back in harm's way.

What's being done? Not much. The deeply indebted program is set to lapse July 31 without congressional reauthorization, and lawmakers have put forward a host of potential reforms to tie to reauthorization, but none directly address the costly problem of poorly enforced elevation requirements.

Why does this happen? Under federal rules, local officials are supposed to assess flood damages and require demolition or elevation if the damage is estimated at 50 percent or more of the home's value – called "substantial damage." But telling traumatized flood victims that they will have to undertake expensive home elevation projects is politically and emotionally difficult, so officials lowball the damage estimates, putting people and homes back in vulnerable places, the Chronicle found.

Among the Chronicle's findings:

- The Chronicle examined claims records for more than 36,000 "severe repetitive loss" properties – the most frequently flooded properties in the flood insurance program nationwide. About 16 percent had evidence of being substantially damaged – beyond the 50 percent threshold – at least once before flooding again. This data suggests their damage assessments were too low or not enforced.

Flood Games (Cont.)



- Properties that avoided the 50 percent requirement in just that fraction of the program have cost at least \$1.1 billion in insurance claims – twice what the insured buildings are worth.
- Louisiana and Texas have more flooded properties with evidence of this problem than any other state; Houston has more than any other city. Seven of the nation's 10 most frequently substantially damaged properties are in Houston. Those seven have had 107 damage claims totaling \$9 million, even though the combined value of those buildings is just \$426,000.
- A database of damage assessments from Galveston after Hurricane Ike, paired with recollections by officials there, shows how officials lowballed thousands of assessments, placing homes back at risk near the waters that inundated them under a 19-foot storm surge.
- Nothing has fixed the problem, even though FEMA has known about it for decades. The percentage of repetitively flooded properties with histories of substantial damage hasn't changed even as thousands more properties have racked up repeat losses.
- Only one of the reform proposals addresses oversight of substantial damage – it requires training of local officials but provides no new enforcement measures.
- The analysis captures only a slice of the problem because it relies on just a fraction of flooded properties that have had flood insurance. Most flooded homes do not carry insurance. Also, the problem is under-reported because FEMA doesn't keep key records on damage assessments, and neither do most local jurisdictions. In many communities that participate in the NFIP, only paper records of damage assessments exist, even for recent floods. Houston, with more evidence of repeat substantial damage than any other city, hasn't been audited by the NFIP in years and could not provide a full accounting of its damage assessments.

Flooding Around the World

Interested in learning more about flood conditions and flood mitigation projects around the world? Visit www.floodlist.com.

As described on their website: FloodList provides news and information about the latest flood events from around the world, with funding from Copernicus, a European Union program for monitoring the Earth's environment using satellite and in-situ observations. FloodList reports on all the major flood events from around the world to raise awareness of the risks of flooding and the devastation caused by the increasing number and severity of flood events. FloodList includes articles on flood-related issues such as warning systems, mitigation and control, flood recovery, flood damage repair and restoration, as well as flood insurance.

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Pre-Disaster Mitigation and Flood Mitigation Assistance

~Ron Davis, IDNR-OWR, IAFSM Mitigation Chair

FEMA has released some tentative dates for this year's PreDisaster Mitigation (PDM) and Flood Mitigation Assistance (FMA) programs. The program's run simultaneously every year and the proposed dates are:

- August 2018 – Notice of Funding Opportunity posted
- August and September 2018 – outreach, NOFO & eGrants webinars
- October 1, 2018 – Application start date
- October thru December – additional eGrants webinars
- January 31, 2018 – Application period closes

FEMA is anticipating the availability about \$250 million (nationwide) for the PDM program and \$125 million for the FMA program. This is double the amount that was available for the PDM program in recent years.

The criteria for selection are not posted yet, but if you look at FEMA's website you can find the criteria for last year's cycle. It might surprise you that a major emphasis is place on your jurisdiction's building codes.

Pre-award costs may be included in the budget, but they are only eligible for work after the application start date and only when the project is awarded.

The priority for the FMA program is the acquisition of Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties. All properties in the FMA program must have flood insurance prior the opening of the application period and maintain it until the property is purchased. Repetitive Loss properties are funded at 90% of the total costs and the SRL properties are funded at 100% of the total costs. Other insured properties may be included at a 75% federal share, but the more you add the lower you go in the rankings.

The PDM program is meant for all hazards, including wind and earthquakes. Structural flood projects are one of the top priorities. It is funded at a 75% federal share.

All applications must be entered in the egrants system, which requires registration. Sam Al-Basha is the new State Hazard Mitigation Officer at IEMA and can assist you in registering and may be contacted with any questions you have. Contact Sam at Sam.m.Al-Basha@illinois.gov



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From the Chair: 2-D Floodplain Modeling and Other Thoughts

~Glenn Heistand, ISWS

The 2018 ASFPM annual conference in Phoenix, AZ is in full swing as I write this from the cool 68-degree comfort of my hotel room. Outside is a blistering 110-degree day, which is warm by anyone's standards. This famous "dry" heat I keep hearing about seems to be trying to impress the out-of-town visitors who have come for the conference from all over the country, distracting us from the wet conditions that generally drive our ambitions as floodplain managers. I'll be glad to see corn country in Illinois where I can walk to my car without needing a 16 oz bottle of water to carry me through. The desert southwest is a place of beautiful harshness, where extremes of climate and delicacies of nature converge. It is amazing that our country has such a range of environments and yet we cannot escape the realities of stormwater and floodplain issues on the constructs of our communities and developments wherever we go.

If this year's conference is any indication, 2018 may be remembered as the year that 2-D floodplain modeling went mainstream. Most of the technical sessions I've attended have had a least one presentation dwelling on the results or the construction of 2-D hydraulic models. The release of HEC-RAS version 5.0.4 this spring may have something to do with it, with the upgraded RASmapper tool, improved 2-D modeling features, and faster computational routines. Certainly, the abundance of high resolution LiDAR is also a driving force in this modeling paradigm shift. The technology we now have access to is exciting. The new abilities these resources provide for engineers to quickly and accurately analyze areas at a watershed scale will change the way we think about H&H studies. No matter how fancy the tools are that we use, the results are only as good as the data that goes into them and we must be careful to understand how these tools work before blindly creating models. This advance of technology continues to put pressure on the FEMA definition of a 1-D steady-state floodway and its viability as a useful concept in floodplain management.

The Illinois Association for Floodplain and Stormwater Management continues to be a leader in the country, tying for third place with Florida for the largest group of members, based on the latest available (2017) numbers. The top five chapters are Texas (2,490 members), Colorado (968 members), Illinois and Florida (858 members), and Arizona (684 members). Despite our high number of IAFSM members, we have a pitifully low number of Illinois people who are also dues-paying ASFPM members: a mere 70 people, which puts us way down the list compared to other chapters. I would challenge our IAFSM members to consider also becoming ASFPM members. Maybe you didn't even know that was an option, or assumed you were already an ASFPM member if you are an IAFSM member...not true. ASFPM is a respected voice in floodplain management practice and policy in the United States because it represents flood hazard specialists of local, state and federal government, research community, insurance industry and the fields of engineering, hydrologic forecasting, emergency response, water resources and others. ASFPM is the glue that connects the state chapters to each other and brings national continuity to the voice of our profession. They deserve as much support as possible.

As the summer vacation season swings into gear, I hope that you have exciting plans to spend time with your loved ones and experience a break from the ordinary. While you are sipping your lemonade and daydreaming of hydraulic models, take some time to visit the brand new IAFSM website and Facebook page, and think about a topic for your conference presentation at our 2019 annual conference on March 13 - 14 in East Peoria. If you get through all that, also mark your calendar for the 2019 ASFPM conference on May 19 - 24 in Cleveland, Ohio. I'll expect to see a lot of Illinois people at such a close destination.

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:

- July 17 – 3 day Civil 3D, Flood Analysis and Stormwater Tools Training

Additional Training Opportunities:

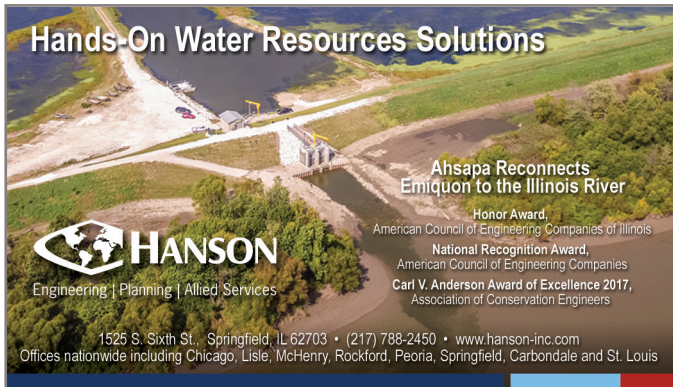
- EMI provides a wide range of training opportunities and upcoming training
- EMI courses are free for local and state government employees. Learn more at the EMI website: <http://training.fema.gov/EMI/> Upcoming courses include:
- Aug 27-30 – E0272 Managing Floodplain Development through the NFIP
- July 30-Aug 2 – E0282 – Advanced Floodplain Management Concepts

Webinars:

- ASFPM – <http://www.floods.org/n-calendar/webinars.asp>
- 8/22/18 – OpenNSPECT webinar – software tool for examining the impact of land use decisions on nonpoint-source pollution

Conferences:

- Save the Date for our 2019 Conference: March 13 & 14, 2019, at the Embassy Suites East Peoria Riverfront Hotel & Conference Center.



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Check Out Our New Website!

IAFSM has launched Phase 1 of their new website! If you haven't already visited www.illinoisfloods.org, please do so!

You'll be able to keep up on Association news, stay on top of and register for upcoming conferences and workshops, browse available employment opportunities in our Jobmart, and take part in the Knowledge Exchange, where you can post a question, share a document, or connect with other CFM's in the state.

While the site is still being developed (and you can help us by making suggestions), we think it has streamlined many of our day to day operations and hope you will find it easier to keep up with current events and happenings in all things Stormwater.

Phase 2 will include an upgrade to our Publications and Resources Section, with important links to industry relevant resources.

If you have comments, or are interested in helping out, please contact Diane Bouckaert, Chair of the Education Outreach Committee at dbouckaert@manhard.com.



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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.

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 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, July 11 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 <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.

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