# Association of State Floodplain Managers



Dedicated to reducing flood losses & protecting floodplain resources

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### Kayaking an MS4 Stormwater Outfall in Nebraska

Written by Rocky J. Keehn, P.E., CFM, D.WRE, Owner/Senior Water Resources Engineer, Common Sense Water Resources Engineering in Omaha, and NeFSMA Board Member and Co-chair Professional Development Committee

Have you ever wanted to see an MS4 stormwater outfall or a floodway up close and personal? Nebraska Floodplain and Stormwater Managers Association members went on a kayak tour the day before the 10<sup>th</sup> annual NeFSMA conference in Kearney, Nebraska and got that opportunity!

Twenty-two brave souls traveled the Nebraska Public Power District Tailrace and Turkey Creek (North Channel of the Platte River) as part of the 3.8-mile kayak trip. Kearney Stormwater Manager **Dan Lillis** showed kayakers the route they'd be taking to view the three major and five minor outfalls. The flood experts were excited about getting out "in the field" rather than looking at the projects on a FIRM.

Lillis explained that the route drains almost all the southern half of the city that flows to the Platte River. During the trip, NeFSMA members were able to see the impacts (sediment, trash, erosion, etc.) from urban stormwater systems on a natural drainage



NeFSMA members head out on a kayak tour of Kearney, Nebraska's urban stormwater drainage system. Photo by Rocky J. Keehn.



Time to carry the kayak from the trailer to start of the Kearney Water Trail. Photo by Rocky J. Keehn.



The floodway of Turkey Creek (North Channel of the Platte River) begins. Photo by Rocky J. Keehn.

system. Besides MS4 outlets, we also saw the results of clean-up efforts undertaken by the Kearney Whitewater Association and the location of the future Whitewater Kayak course.

All but three kayakers made it through the trip without going into the water. However, two who took an accidental dip were past NeFSMA Chairs **Nate Hartman** and me. Hartman claims his was a result of someone else "helping" him into the water and mine was a result of a tree limb that should have been removed (at least that's what I told everyone).

I think everyone on the tour was surprised that such a great water resource gem is in the middle of Nebraska. The annual conference is held in Kearney every two years and everyone agreed this event must be on the agenda every year! So, follow our website and we hope to see a few ASFPM members not from Nebraska on the trip in two years. As we like to say in Nebraska, to be a good stormwater/flood expert you need to "be the water" and the tour was deemed a success in achieving that goal.



The starting section of the Kearney Water Trail is the NPPD tailrace from a small hydropower facility upstream and used to be lined with trees and old car bodies for erosion control. Great clean-up effort by Kearney Whitewater Association. Photo by Rocky J. Keehn.

Have a story you'd like to share with ASFPM newsletter readers?
Email ASFPM PIO
Michele Mihalovich at michele@floods.org.



Videos from **#ASFPM2018** are now available on our YouTube channel. Watch our plenary panelists, check out our national awards luncheon or relive that inspirational speech from ASFPM Foundation's first Future Leaders Scholarship winner **Jesus Mulgado**!

### Not an ASFPM member yet? Join today!

http://www.floods.org/index.asp?menuID=820





And have you seen it at your community's gas pumps? Inquiring minds want to know. Shoot an email to ASFPM PIO Michele Mihalovich at

michele@floods.org

### From the Chair

Maria Cox Lamm, CFM & South Carolina State Floodplain Manager

### **Helping One Another**



One of the biggest benefits of ASFPM is the opportunity to meet and share ideas and experiences with other members. I've developed lasting relationships with many people through ASFPM. I met **Traci Sears**, ASFPM Region 8 director and Montana NFIP/CAP coordinator, a few years ago at an ASFPM annual national conference. The relationship we built and information we shared over many conversations and emails set up the perfect opportunity to work together in the great state of Montana.



ASFPM Chair Maria Cox Lamm was in Missoula, Montana June 2018. She is pictured with ASFPM Region 8 Director Traci Sears (right). Montana used the Emergency Management Assistance Compact to bring on Lamm to conduct training on substantial damage assessments. Photobombing dog's name is unknown. Photo by Maria Cox Lamm.



ASFPM Chair Maria Cox Lamm (with back to camera, was in Missoula, Montana to conduct training on substantial damage assessments. Here she speaks to Jamie Erbacher (right) with Missoula County Community & Planning Services; Kathy Maudrone (left), Sanders County Planner & FPM Administrator; and a gentleman with the Missoula Building Department. Photo by Maria Cox Lamm.



ASFPM Chair Maria Cox Lamm (left) was in Missoula, Montana this June. Montana used the Emergency Management Assistance Compact to bring on Lamm to conduct training on substantial damage assessments. Photo by Maria Cox Lamm.

Our relationship led to a formal request for assistance from the state of Montana to the state of South Carolina. This formal request came through the Emergency Management Assistance Compact system, what some of us know as EMAC. After many conversations between Traci and me concerning her state's need for floodplain management recovery assistance, it was decided Montana's floodplain program and local communities would greatly benefit from my experience and knowledge. I was able to assist the state with its ongoing flooding and recovery efforts this past June.

There are not many times in our jobs that we're recognized for our experience and knowledge. So it was an honor to be asked to come and assist Montana with training local floodplain managers regarding Substantial Damage assessments and post disaster duties. This also provided an opportunity for South Carolina to pay it forward for the invaluable assistance Mississippi provided to us during our 2015 flood event.

Montana was actively experiencing excessive runoff flooding after a heavy snowfall this past winter. Traci and I coordinated on the details of the local training and exactly what was needed to fill out this unique EMAC request. The emergency management side had to be briefed on the need and benefit for this type of request, as well as determine state funding availability since Presidential Declarations are never guaranteed. Both states reviewed the request and costs and moved to approve the floodplain management EMAC.

best interest to provide some training prior to the in-depth and on-site training during my visit. Before I left, I conducted a June 1 webinar for Montana communities to expose them to some of the general

programmatic requirements and information. This helped foster more specific recovery and SD questions during local training events.

The way EMAC works is that the request starts with your first day of travel to the state and ends when you are safely back home. In my case, I traveled to Montana June 9 and returned to South Carolina June 14. Traci and I spent June 10 preparing for the on-site trainings and field work. June 11-13, we conducted four trainings in four different locations. The trainings were attended by staff from 11 different communities that covers about 1/3 of Montana, or approximately 441,000 square miles.

The days were long, but productive. Local officials were eager to learn and had great questions. Just like when we conduct SD training in my state, most local officials get the hang of performing the assessments after doing a few in the field. By the end of the four training events, everyone was feeling confident they could perform assessments of a flooded structure. The training also provided critical knowledge, experience and information to the state floodplain program tasked with training locals for future floods.

Before I left Montana, the weather forecast included heavy rain for the upcoming weekend. The snow pack had been melting at a reasonable rate at that point and had only caused flooding in a few areas. While attending the ASFPM annual national conference the very next week, Traci informed me some of the communities we trained were being directly impacted by floodwaters. I asked her how it was going, and she said all the communities reported that they felt prepared and were not asking for specific assistance at that time. Assisting Montana was a rewarding experience for me. And to know the communities felt comfortable performing the assessments in a serious situation so soon after training makes me as proud of them as Traci is.

Currently, ASFPM is working through legislation to get this type of assistance to be reimbursable under public assistance. Don't let the reimbursement issue stop you from asking another state for assistance. Montana and South Carolina were able to work out the details and get the assistance needed. This recovery adventure has also helped create another pool of knowledgeable and experienced floodplain managers who may be willing and able to assist with other flood recovery events within and outside Montana. As it may become more difficult to tap into federal resources due to an increase in disaster events, these additional resources will be vitally important to the floodplain community as a whole.



Flooding is the most common and costly natural disaster in the U.S. Floodplain management can help communities reduce losses, protect valuable economic and natural resources, and more importantly, save lives. FEMA recently released a video called, "Higher Standards: The Value of Floodplain Management." Learn how communities can reduce the physical and financial

impacts of future flooding through <u>floodplain management</u>. Video by **Juanita Thompson** – Aug. 15, 2018.

### Notable Reports

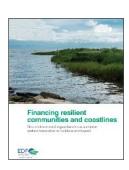
### IBHS Releases Hurricane Harvey Wind Damage Investigation Report



The <u>Insurance Institute for Business and Home Safety report</u> found, among many things, that higher building standards will help lessen future damage (p. 29). Texas has adopted the 2006 edition of the International Residential Code® as the minimum standard for residential construction. Local jurisdictions may choose to adopt and enforce more recent editions of the IRC, but there is no process for enforcing the code at the state level, and there is no mandate by the state for local jurisdictions to enforce the code. Code enforcement is solely within the purview of individual local jurisdictions. For this reason, Texas ranks 15th out of 18 coastal hurricane-prone states in IBHS' Rating the States: 2018 report.

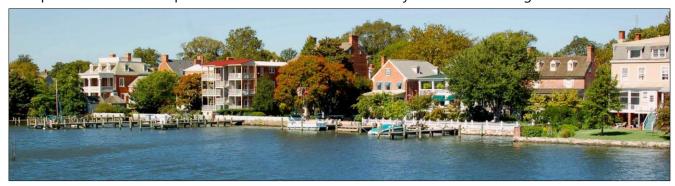
### Financing Resilient Communities and Coastlines

A new report, <u>Financing Resilient Communities and Coastlines</u>, by <u>EDF</u> and <u>Quantified Ventures</u> finds that environmental impact bonds could help the state of Louisiana — and other coastal areas dealing with land loss and sea level rise — restore its rapidly disappearing coast faster and for less money, while involving local asset owners in voluntarily helping pay for projects that realize superior reduction in land loss. The report is a must read for coastal communities trying to figure out how to efficiently and effectively finance efforts to enhance their resiliency.

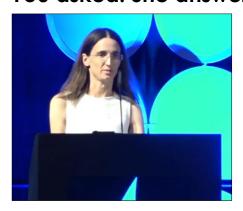


#### Flood Risk Beliefs and Coastal Home Prices

The <u>report findings have two important policy implications</u>. First, high quality flood risk maps and projections of future sea level rise are key ingredients for the health of housing markets. A lack of reliable information makes it difficult for residents to accurately assess their flood risk. Second, these results raise the question of how residents' risk beliefs may converge in the future. One mechanisms that could potentially do this is mandatory, risk-priced flood insurance. Under such a case, individuals would fully internalize their property-specific flood risk through annual insurance premiums, regardless of their individual beliefs. That is, the price of the insurance—which reflects the true risk—would be capitalized in housing values. While public insurance through the National Flood Insurance Program is currently mandatory for those in high flood risk areas, <u>uptake remains low</u> and, in many cases, insurance premiums are <u>below the actuarially fair risk-based rates</u>. Thus, while <u>National Flood Insurance Program reforms</u> could help solve program solvency issues and increase resilience, it will also have important distributional consequences as well as implications for the health and stability of coastal housing markets.



### You asked. She answered.



**Dr. Carolyn Kousky**, director of policy research and engagement for the Risk Management and Decision Processes Center at Wharton, served as a panelist during ASFPM's annual national conference in Phoenix this June. The panel discussion focused on "NFIP Issues and Implementation Strategies." The audience was asked to put questions down on Post-it notes on the tables that the panelists would answer after they were done speaking. However, there were many questions and not a lot of time. ASFPM gathered those unanswered questions, and Kousky happily agreed to answer them.

# Q: How would the NFIP and private insurers benefit from having all loss data from FEMA/NFIP? Why haven't private and FEMA shared data?

**A:** Private insurers argue that having access to property-level historic claims data would help them better price flood insurance and underwrite new flood products. Having not been in the market the last 50 years, most do not have their own loss histories to draw on for rate setting. FEMA argues they are bound by the Privacy Act to not release address-level data. Communities benefit from information on claims histories, as well, to inform flood-risk management policies. Perhaps the NFIP and private firms could share data with a third party that could combine and release claims totals at a small geographic scale.

# Q: Did you find private flood insurance firms performing their own floodplain mapping and engineering risk analysis?

**A:** Many firms rely on third-party vendors and models, but some do some things in house. It would be easier to defer anyone interested to the section on this in the <u>report we just released</u>.

# Q: Can you, in general, comment on whether your research showed private insurance costs were more or less than NFIP rates for equivalent coverage?

**A:** Unfortunately, firms were quite reluctant to share actual premium numbers with us. What I can say is that since the NFIP is required to offer a policy to anyone who wants one, private firms can only operate where they can price compete with the NFIP. So where they are operating, they are generally offering lower costs. The firms varied quite a bit, however, on where they thought those pockets were – some focused on high risk, others low risk, some thought they could do better on pre-FIRM, others stayed away from pre-FIRM, etc. Many firms were offering broader coverages, but we also heard that many (not all, but many) consumers just wanted the lowest price and were not willing to pay more for a higher-valued (more expansive coverages) product.



The National Weather Service has proposed changes to the long list of advisories, watches and warnings for all modes of flooding to better communicate the threat of flooding to the public. Do you think reducing flood alerts to just four rather than seven will cut down on confusion? Read the story here.

### **ASFPM (& Partner) News**



ASFPM and Coastal States Organization welcomes Alexis

Cunningham, a 2018 Digital Coast Fellow. Over her two-year fellowship, she will lead CSO's and ASFPM's partnership to promote and improve participation in the Community Rating System as a tool to achieve coastal flood resilience. This includes bridging the gap for communities that do not have sufficient capacity to join or advance in the CRS. She hopes to contribute to the field of water management and policy in sorting out the competing priorities of ecosystems, economic development, energy, food and human consumption. Cunningham earned an M.S. in water science and policy from the University of Delaware, where she assessed the effectiveness and role adaptive management plays in the Chesapeake Bay Total Maximum Daily Load.

Four county-based teams have been selected to participate in a new technical assistance and training program focused on strengthening coastal counties' resilience, sponsored by National Association of Counties in partnership with ASFPM, Coastal States Organization and National Oceanic and Atmospheric Administration. The selected teams are



from Santa Rosa County, Florida; Calcasieu Parish, Louisiana; Harrison County, Mississippi; and Cameron and Willacy Counties, Texas.

In October 2018, the team members will travel to Baldwin County, Alabama to participate in a coastal resilience training and peer exchange workshop. During the workshop, attendees will receive intensive, hands-on training designed to boost their capacity to better prepare for, plan for, absorb the impacts of, recover from or adapt to extreme weather events and climate-related hazards. Teams will develop tailored action plans that will guide their efforts to protect and strengthen their natural habitats and economies. Each team will also receive individual assistance following the in-person training forum to guide their implementation of the coastal resilience strategies and projects they chose to incorporate into their action plans.

This three-year project, funded through NOAA's Coastal Resilience Grant program, provides key support to NACo's long-term goal of strengthening county resiliency by building leadership capacity to identify and manage risk and become more flexible and responsive in disaster situations. <u>Learn more here</u>.

Nearly 160 groups, including ASFPM, signed a letter to House and Senate committee members, encouraging continued progress on the upcoming



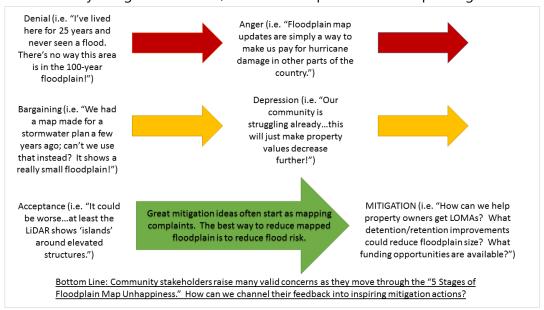
Farm Bill, set to expire Sept. 30, 2018: <a href="http://www.floods.org/n-news-hottopics/article.asp?id=553">http://www.floods.org/n-news-hottopics/article.asp?id=553</a>

# Preventing Inundation by Shifting the Conversation from Indignation...to Resignation...to Mitigation

Written by Martin Koch, CFM, a floodplain mapping specialist with the Kansas Department of Agriculture's Division of Water Resources

Many floodplain managers are familiar with using hydrologic and hydraulic models to predict how a river or stream will respond to a 1%-annual chance storm. However, one of the most difficult natural phenomena to predict can be the reaction of community members to updated floodplain maps. To discover how community members will "weather" difficult conversions regarding floodplain mapping – with a sunny disposition or with clouds of anger brewing on the horizon – one must turn instead to a psychological model.

Next year marks the 50<sup>th</sup> anniversary of **Elisabeth Kubler-Ross'** five-stage model for predicting how human psychology copes with loss. While her model is popularly known as the "Five Stages of Grief," it can actually apply to a range of challenging circumstances. Community members whose homes and businesses are newly mapped in the Special Flood Hazard Area, and community leaders who see large areas of their cities newly designated as such, are often not pleased with map changes.



However, KDA-DWR has developed strategies to help channel sensitivity regarding map changes into a productive passion for implementing mitigation actions and taking steps to improve disaster preparedness. We use a data collection sheet that lists all criteria needed for logging mitigation actions in FEMA's Mitigation Action Tracker tool on one piece of paper (see next page). This allows for real-time action tracking, even when staff members are in a meeting away from their computer. It also helps community leaders visualize and quantify the steps toward accomplishing a successful mitigation action.

We also use a series of draft map review processes to ensure local input is taken into account. Online draft map review websites allow stakeholders to pinpoint locations and offer feedback as easily as they can search for driving directions on a GPS unit. The review web maps are used during the "kickoff" and "map review" project phases. After the kickoff meeting, stakeholders can access detailed online scoping maps and submit comments on project and modeling scope. Once draft mapping is ready, stakeholders can use the web maps to review new mapping, and the public can use the online tool to see if map changes will affect their property. Users can create and submit comments using polygons to focus on

#### Mitigation Action (circle one):

#### Identified | Scoped | In Progress | Completed

Responsible Department (check one):

Code Enforcement	Planning & Zoning
Community Development	Public Works
Emergency Mgmt	State Agency
Fire Dept	Other

#### Estimated Cost (circle one):

<\$150,000 | \$150,000 - \$400,000 | \$400,000 - \$750,000 | \$750,000 - \$1,000,000 | >\$1,000,000

#### Primary Funding Source (check one):

Community:	U.S. Army Corps of Engineers:
Bonds	General Investigation, Feasibility Study
Staff Time	Section 205
General Funds	Floodplain Management Services
Tax Levy	Planning Assistance to States
Other	P.L. 84-99 (Levee Pgrm.)
FEMA:	Other Federal Agency:
FMA	BIA
PDM	BLM
HMGP	DOT
PA	EPA
RFC	HUD
SRL	NOAA
Other	NRCS
	Other
County	Property Owner
Development Impact Fees	Special Water Management District
Permit Fees	State
Other	

#### Estimated Timeframe (circle):

#### <1 year | 1-2 years | 2-3 years | 3-5 years | >5 years

### Documented in (check one):

Capital Improvement Plan	Local Natural Hazard Mitigation Plan
Comprehensive Land Use Plan	RiskMAP Process Plan
FMA Plan	State Risk Management Team (Silver Jackets)
HMA Database	Other

#### Problem Solved (add brief narrative on reverse side):

specific locations of interest, and then add comments in seconds using a text box. Community and public draft review periods occur prior to preliminary status, so pertinent comments can be easily incorporated into draft mapping.

Like severe storms, reactions to floodplain map changes are often easier to model and predict than to entirely prevent. However, just as communicating with family members and creating an emergency supply kit can boost individual preparedness, communicating with stakeholders and building a "kit" of map review tools helps KDA-DWR empower communities to become more resilient to challenging circumstances.

### **Certification Board of Regents News**

Written by ASFPM's Deputy Director Ingrid Wadsworth, CFM

ASFPM's annual national conference in Phoenix marked a succession to a new Certification Board of Regents president. After serving four years, CBOR President **Mark Riebau** stepped down, and **Louie Greenwell** was named to the position.



Riebau accomplished much during his time as president, including the creation of a new CBOR Charter/Policy Manual, new Continuing Education Credits Policy that will make it easier to obtain credits from online courses, and a <u>CFM Study Guide</u> (released May 2018). Luckily we won't be losing him! Riebau intends to stay on CBOR as an atlarge regent until a replacement is decided. Then he can fully enjoy his retirement!



Greenwell, director of comprehensive planning for Middlesex County, New Jersey, joined CBOR as the Professional Development Committee regent several years ago. He brought not only his expertise in what skills and professional development CFMs need, but also collaborated in the development of ASFPMs first CFM Ethics course (he provided a train-the-trainer session on it at the Phoenix conference).

**IN OTHER NEWS**, the CBOR Exam Workgroup—a separate group that works exclusively on the analysis and maintenance of the exam, met in Madison, Wisconsin

this July. Besides the annual review and analysis, a key issue was trying to find out why exam scores have been declining nationally. They determined multiple factors contributed to declining scores. The biggest reasons being:

- Folks are just not prepared enough for the exam;
- There is a misconception that taking 273 and then the exam immediately after is enough preparation for the exam; and
- ❖ Potential issues with some exam questions.

As a result, ASFPM, with CBOR's assistance, will heavily promote the new CFM Study Guide (we encourage you to do the same if you know someone is planning on taking the exam). The exam workgroup either replaced, amended or retired 17 questions on the current exam. A new exam rollout date of Sept. 1, 2018 has been scheduled to begin using the adjusted exam. We're hopeful that scores will improve through the new questions and the study guide promotion.



### Ready to take the CFM exam?



To help you better prepare for the CFM exam, the ASFPM Certification Board of Regents just released a <u>study guide</u> that explains recommended prerequisites, what to expect on exam day, links to all technical references backing up each exam question, and supplemental study materials including videos and online tutorials.

### Getting Planning Mileage Out of the Flood Risk Products



<u>FEMA's Flood Risk Products</u> are sets of data designed to help communities make better planning and investment decisions. FEMA encourages communities to use the FRPs to support local mitigation planning. For example, using FRPs to identify the location and impacts of flood hazards in order to better prioritize areas in need of mitigation strategies.

However, community planners may not be aware of what data is available or how it can be used to help meet the mitigation planning requirements found in the <u>Robert T. Stafford Disaster Relief and Emergency Assistance Act</u>. The new "Using Flood Risk Products in Hazard Mitigation Plans" publication aims to help planners improve how they talk about flood risk in their mitigation plan. The document explains what FRPs are, where they can be found and includes several case studies. Most importantly, the publication walks the user through how each FRP can be applied to help meet mitigation planning requirements.

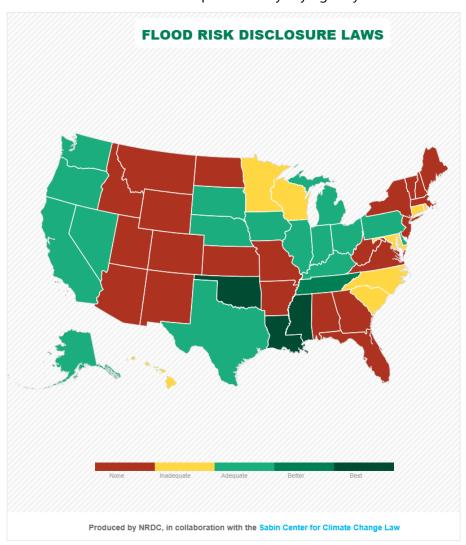
### **Policy Matters!**

Larry Larson, P.E., CFM Director Emeritus – Senior Policy Advisor, ASFPM



How often is a buyer aware of the flood risk on the property they want to buy? Most of us in this profession know it is not very often. **Joel Scata**, attorney at the <u>National Resources Defense Council</u>, has now <u>undertaken a study that rates the disclosure laws in each state</u>. The study shows that nearly half the states have no disclosure rules the seller must meet. And many states with disclosure laws are loaded with loopholes that greatly reduce the effectiveness of the disclosure requirements. In New York, the seller can avoid disclosure by simply "opting out" and paying the buyer \$500 at closing. When selling especially high-risk property, that \$500 probably has a high Return on Investment.

The study includes a map, and you can click on any state to get a rating of their disclosure laws and regulations (and find out what is and isn't included). Unfortunately, even in states that ask for disclosure, the seller is often given an "out" because the language says "to your knowledge" has it flooded...etc. That allows a seller to evade the requirement by saying they were not aware of the risk, which would often be



hard to show whether they did or did not know. Some states include this question: "Is the property in a FEMA flood zone?" with these three options for answers: Yes\_No\_Unsure\_. Even "highly rated "states have some of these loopholes.

ASFPM's District 3 Chapter Director **Tara Coggins** from Lamar County, Mississippi has found success with their disclosure rules because she works closely with Realtors and lenders. She meets with them regularly and provides information. Coggins also makes sure property risk information and history is on the county website for public viewing. The Mississippi disclosure rules have some loopholes as well, but by building relationships with the real estate industry, flood-risk disclosure is being accepted and

used effectively. Coggins said, "All in all, it has made life much easier in the floodplain management world for me!"

Requiring disclosure of risk conditions can happen at the local, state or federal level. There are some disclosures required at the federal level for some hazardous risks, but for flood risk, most of these are at the state or local level, with state level being most common. There has been some language proposed in the NFIP reauthorization bills to require flood risk and history disclosure for buyers and renters. ASFPM continues to support those provisions.

What could ASFPM chapters and states do to improve flood-risk disclosure on real estate transactions? Chapters and state offices can work together to develop a strategy to get their Legislature or regulators to address the issue. The ASFPM Foundation works with chapters to hold state symposia to look at and find ways to improve flood-risk management in that state. This could be a significant change to help manage a state's flood risk (If your chapter would be interested in hosting this, the foundation is taking applications until Aug. 31).

The bottom line is that home buyers should have all information necessary to make an informed decision about purchasing a home—including whether a property is flood prone. We applaud NRDC for daylighting this important issue. Now it's up to the rest of us to make sure all states have a flood-risk disclosure law (minus those pesky loopholes).



Floodplain and emergency managers, design professionals, financial services experts, futurists, housing experts, insurers, journalists, meteorologists, product manufacturers, risk communicators, scientists, social psychologists and many others will come together to make this conference an innovation incubator for the disaster safety and resilience movement. ASFPM is a "presenting partner" for this year's conference, which will bring together the foremost voices in disaster safety and resilience movement Nov. 7-9 in Clearwater Beach, Florida. It will address lessons from the 2017 catastrophic disasters that caused more than 300 deaths and \$300 billion in losses from California to the Caribbean, while highlighting new solutions to the growing disaster challenge. Click here to read more information about this conference.

### Your Voice is Needed to Help Develop a Community Flood Risk Guidebook

Written by Tim Trautman, P.E., CFM, Charlotte-Mecklenburg's Storm Water Services Program Manager & ASFPM's Mitigation Pod Facilitator









What if proactive communities had the knowledge, skills and ability to manage their flood risk like a portfolio of assets (tracking risk like retirement investments)? Flood risk in each of our communities changes every year with growth and mitigation actions.

Charlotte-Mecklenburg Storm Water Services in North Carolina is working on a project for Department of Homeland Security to develop a Flood Risk Guidebook that communities could use to manage their "flood risk portfolio" in the floodplain. It will be based on a Risk Assessment and Risk Reduction planning tool we developed five years ago. But your input, along with lessons we've learned, will help us refine the approach so it's applicable to a wide variety of communities (different flood types, datasets, mitigation approaches, etc.).

PLEASE HELP US HELP COMMUNITIES ACROSS THE COUNTRY. I'm asking you to provide input from a community perspective by taking an 18 question survey. Although it will focus on flood, the guidebook concepts could have applicability to other hazards too. Please share the survey with any other communities you know of that deal with flood hazards. The deadline to take the survey is Aug. 31!

> Visit <a href="https://www.ManageFloodRisk.org">www.ManageFloodRisk.org</a> for more background on the project and to take the flood risk survey.

Together we can serve our communities in bigger and brighter ways! Thanks!



### Are you a floodplain professional in government positions at the municipal, county or state levels? NRDC wants to hear from you!

ASFPM is inviting you to participate in the following survey as a practitioner in the floodplain management field. This survey will take no more than 15 minutes to complete, and will help improve floodplain management and compliance at the state and local levels.

This survey, which closes Sept. 7, is being conducted by the Natural Resources Defense Council, a national nonprofit organization, and **BrokoppBinder Research & Consulting**, a private research consulting firm.

Please click the link to begin the survey: https://www.surveymonkey.com/r/FloodplainComplianceSurvey.



Flood Fest 2019: The Mitigation Resilience Tour ASFPM's 43<sup>rd</sup> Annual National Conference Cleveland, Ohio May 19-23, 2019

Hey, if you can believe it, the "call for presenters" for our annual national conference in Cleveland will go out mid-September. Be sure and check out our <u>Facebook</u> and <u>Twitter</u> pages for when the call for presenters opens.



# **Job Corner**

Take a look at FREE job postings on **ASFPM's Job Board**. And if you're an employer, posting a job is also absolutely FREE! Below are just a few of the career opportunities currently on our board. Check them out on <u>ASFPM's Job Board</u>.

- ❖ Atkins in Denver, Colorado and San Diego, California is hiring a water resources engineer.
- ❖ An NFIP community assistance program specialist is need at the Arizona Department of Water Resources.
- \* Kansas Department of Agriculture is hiring a floodplain mapping specialist.



### ASFPM Webinar Series Event (CFMs earn 1 CEC)

The next event in ASFPM's webinar series will be "Adopting Higher Regulatory

Standards," presented by French Wetmore, CFM, president of French & Associates, a floodplain management consulting firm. He's also served as a local FPM, state flood insurance coordinator and chair of ASFPM. The event is scheduled for Sept. 11 at 2:30 p.m. Eastern (1:30 p.m. Central) and one Continuing Education Credit will be given to participating CFMs. Please save the date for this event and look for registration to open soon! For questions about this webinar, please contact Kevin Currie, ASFPM training coordinator, at kevin@floods.org.

### Fundamentals of Building Science Course at EMI (CFMs earn 12 CECs)

FEMA is sponsoring a **four-day E0312 Fundamentals of Building Science Course** at the Emergency Management Institute National Emergency Training Center in Emmitsburg, Maryland, Sept. 24-27. This course is designed to present information on the risks posed by natural hazards, and the basic scientific and engineering concepts for hazard-resistant buildings and facilities. The course reviews information pertaining to impacts of wind, flood, earthquake and wildland/urban interface fire on the constructed environment. It also explains key performance and construction issues related to floods, wind, wildfires and earthquakes.

**To Apply:** Complete a <u>FEMA Form 119-25-1</u>, General Admissions Application, with student signature and signature of supervisor or sponsoring agency official. Mail, scan or fax the application to:

NETC Admissions Office (Room I-216) National Emergency Training Center <u>16825 South Seton Avenue</u> <u>Emmitsburg, MD 21727</u>-8998

Phone: (301) 447-1035 Fax: (301) 447-1658

Email: <a href="mailto:netcadmissions@fema.dhs.gov">netcadmissions@fema.dhs.gov</a>. For additional information about this course, visit: <a href="https://www.firstrespondertraining.gov/frt/npccatalog?courseId=2093#anc-search-results">https://www.firstrespondertraining.gov/frt/npccatalog?courseId=2093#anc-search-results</a>.

### Safer, Stronger, Smarter: A Guide to Improving School Natural Hazard Safety (CFMs earn 1 CEC)



This webinar will provide an overview of the recently released guidebook, <u>FEMA P-1000</u>, <u>Safer, Stronger, Smarter: A Guide to Improving School Natural Hazard Safety</u>. FEMA P-1000 aims to equip school safety advocates and stakeholders with information, tools and resources they need to promote safer schools in their communities and it aims to empower and support decision-makers by providing actionable advice.

**Lori Peek**, director of the Natural Hazards Center and Professor in the Department of Sociology at the University of Colorado Boulder, is the presenter. She served on the Project Management Committee that developed FEMA P-1000, and has conducted long-term investigations in the aftermath of several major disasters.

The webinar will be held from noon-1:30 Pacific Sept. 6. To learn more and register for this free webinar, click here.

# What's Happening around the Nation?

A collection of the most viewed stories on our Facebook page

**Texas**—Starting in October, all new developments built in League City, Texas must be built at least 24 inches above the 100-year flood elevation and 3 inches above the nearest 500-year flood elevation. Read "League City approves flood mitigation efforts, new development standards."



**South Carolina**—The legislation that S.C. Sen. Scott and Rep. Sanford have introduced will find out why homeowners become trapped in an endless pattern of rebuilding and have trouble obtaining assistance to move somewhere safer. Read "Editorial: We need to help people move to higher ground."



**United States**—An investigation by ProPublica and Reveal into our nation's flawed approach to controlling rivers found that life-and-death decisions are dictated less by sound

science than by economics, politics and luck. Read "Flood thy neighbor: Who stays dry and who decides?"

Most states require sellers to disclose existing flood damage or known flooding in the area, but not the property's detailed flood insurance history that would reveal exactly how risky and expensive it could be to live there. Under the Privacy Act of 1974, FEMA can't reveal a property's flood insurance claim history to anyone other than the homeowner, and the owner has to request it in writing. Read "Little-known federal law keeps buyers from finding out if a home routinely floods."



Awesome video on levees. Watch "To see how levees increase flooding, we built our own."





Twenty one states have no statutory or regulatory requirement that a seller disclose to a buyer a home's flood risk. That's wrong. For most people, purchasing a home is the biggest financial investment of their life. They deserve to know what they are buying. Read "Home buyers face stacked deck to learn of past floods."





### From the Director's Desk

Chad Berginnis, CFM Executive Director, ASFPM

### When a Flood Happens, but Damage Doesn't.



It was a rain event for the ages (at least in our neck of the woods). On Aug. 20, the day before I was to leave for Washington, D.C., I experienced the most intense rain event of my life. The rain, which began around noon and didn't stop until late that night, may have been a record-setting rainfall event. NEXRAD radar estimated that between 7-13 inches of rain fell in western Dane County – most of it in about a 6-hour period. Prior to this event, the 24-hour rainfall record for Wisconsin stood at 11.72 inches set in 1946. Around our executive office in Madison, nearly 10 inches of rain fell. And at my home (about 15 miles west of ASFPM HQ) we had about 7.5 inches. Luckily, my trusty old home in Mount Horeb is near the highest point in town. Still, I had wind driven rain coming in three windows and dripping off a ceiling beam. What a mess!

Of course as a floodplain manager, I was totally geeking out about this event. We have a good network of precipitation gauges through CoCoRaHS, or Community Collaborative Rain, Hail and Snow Network. CoCoRaHS is a unique, nonprofit, community-based network of volunteers of all ages and backgrounds working together to measure and map precipitation. The program's <a href="website">website</a> provides high-quality data for natural resources, education and research applications.

As the event unfolded (and continues to unfold as it has been less than 48 hours at the time I am writing this article), I began to notice something else. Yes, we had lots of the traditional damage pictures coming



Madison, Wisconsin flooding on Odana Road Aug. 20, 2018. Photo by an ASFPM staff member. From ASFPM's Flickr page: https://www.flickr.com/photos/136139065@N08/

in, and the media reporting on the event. But I began to see a certain repetition in the damage photos. Lots of flooded cars, lots of people forgetting to "Turn Around. Don't Drown." Sadly, a 70-year-old man drove into a flooded roadway, got out of the car and was swept away by the current. I wasn't seeing a ton of building damage either. Of course that could change. There were three smaller communities west of Madison – Cross Plains, Black Earth and Mazomanie, where half of the community was under water, and multiple bridges washed out. I have seen numerous events over time all over the country where 8-12 inch rainfall would cause extreme damage and devastation. But I wasn't seeing it here in my own backyard.

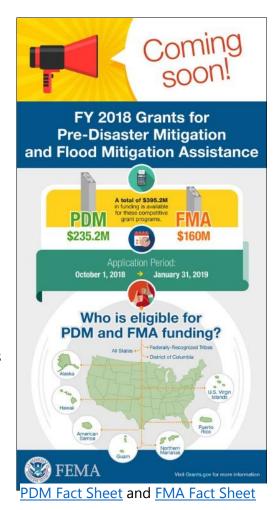
I do know that for the past five decades, Wisconsin has been working hard to achieve effective floodplain management. Since 1967, their higher building standards have served the state well. Most importantly among them:

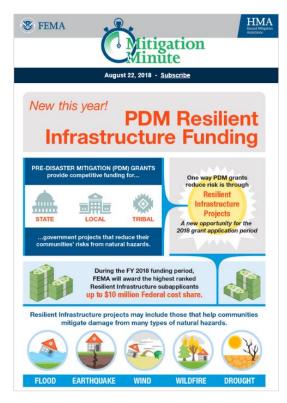
- A statewide 2-foot freeboard, essentially a zero-rise floodway when flood maps are created (wider floodways mean you don't crowd the streams and rivers and allow open space for floodwater flow);
- ❖ A requirement that if you do increase flood risk on another property (whether it is through floodway encroachment or building a dam that causes downstream impacts), the person causing the impact must buy flood easements; and
- A strong state hazard mitigation program that focuses a lot of efforts on acquisition of structures, particularly in floodways.

The result of all this effort is relatively infrequent and smallish federal disaster declarations. It also means that when we get a record-setting rainfall event, the impacts aren't nearly as bad as they could have been. Of course, when you get that much rainfall, there will be impacts, especially outside of designated flood-hazard areas (and due to urban stormwater facilities being overwhelmed). Hopefully, state and local leaders will use this event as an opportunity to assess how programs can be improved.

But as I sit here, there is a fear creeping in too. Can we be...too successful? What if policy makers see this event as either something that is just too big to plan for, or even worse, they see the lack of damage as a reason to roll back standards? That is why post-disaster assessment is so important. I am hopeful there will be interest in seeing how state and local efforts have contributed to losses avoided so they can be documented and shown to policy makers. Sadly today, some floodplain managers might be closer than ever to achieving floodplain management nirvana – that is an event happens and no damage occurs. BUT they are also constantly defending the reasons why they have effective standards and rebuffing efforts to water them down.

It seems human beings have a remarkable ability to willfully disconnect reality from policy making! This happens on the federal level too. Just a couple of months ago, I had the





opportunity to speak to one of our senators, **Ron Johnson**, who said that too often efforts by states like Wisconsin go unnoticed, and states that do little to nothing to manage their own flood risk seem to get rewarded.

Soon, FEMA damage assessment teams will be visiting Dane County to see if there is enough damage to qualify for a federal disaster declaration. It will be interesting to see if we meet the threshold for getting one—and if not, how that will be perceived. Regardless of the outcome, my gut is telling me it could have been a LOT worse. Lives were saved and damage was avoided because the state and communities were serious about managing flood risk.

Your partner in loss reduction,



Pre-Disaster Mitigation Grant Program

### What's the ASFPM Foundation been up to?

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### **Next Larry Larson Speakers Series Focuses on Big Data**

We've all been hearing more and more about "big data" everywhere we turn. So why should we care about it? How will it impact us? These are questions that will be answered at this year's <a href="ASSFPM">ASSFPM</a> Foundation Larry A. Larson Speaker Series, event held in collaboration with the Floodplain Management Association conference Sept. 5 in Reno, Nevada.

The topic is "Big Data = Big Future + Big Challenges," and the keynote speaker is Daniel Cotter, director of the First Responders Group in the Science and Technology Directorate, U.S. Department of Homeland Security. He has extensive experience in flood-hazard mapping and flood-disaster mitigation, response and recovery in the public and private sectors. Cotter oversees the Flood Apex Research

Program of the Directorate, and will be joined by a panel of experts, including **Edward Clark**, NOAA National Water Center; **Samantha Medlock**, Willis Towers Watson; and **David Ford**, David Ford Consulting.

Big data methodologies are being used increasingly to provide



flood-risk information at scales ranging from the community level to the entire nation. It represents the use of large volumes of structured and unstructured data, analyzed and manipulated to capture trends and observations that might be considered meaningful. Simply put, big data can range from leveraging massive geospatially-referenced data sets into physical models, to using data analytic tools searching for trends in equally massive data sets.

Recently, big data solutions have been applied to flood risk identification, providing data analytics and results in new ways, and with notable consequences. Potential applications include determination of flood risk, informing of insurance ratings, flood forecasting, investment modeling, post-event damage assessments, and post-event planning analytics. Each of these applications can have profound consequences for the public and end users. A recent application of big data for flood-risk assessment has signaled potential downgrade of future municipal bonds for high-risk areas, while in another recent instance, there were serious concerns about the results and what they suggested.

Join us for <u>ASFPM Foundation</u>'s 4<sup>th</sup> Annual Larry A. Larson Speakers Series to discuss the benefits, risks and challenges associated with the use of big data in flood-risk identification and flood-risk management.

# LARRY A. LARSON SPEAKERS SERIES

Big Data = Big Future + Big Challenges

In collaboration with Floodplain Management Association's National Conference

Sept. 5, 2018 at 10:15 a.m

Atlantis Resort Reno
Nevada

only the Speakers Series event, you must register for the conference under the one-day registration option using the code

ASFPMComp. This will be at no cost to you.

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