



NEWSLETTER

Fall 2021

massFM 2021 Annual Conference Review!

This year's conference topic was **Climate Risk Update: Evaluating Rising Risks for Resilient Communities**, held October 21, 2021. About 60 members registered and our presenters hit it out of the ballpark!

Intergovernmental Panel on Climate Change (IPCC) Report: Dr. Matt Barlow (UMass Lowell) reviewed results of the IPCC Assessment Report Cycle 6. The report forecasts increased magnitude and frequency of rainfall extremes, leading to floods and drought, coupled with sea-level rise. These events will affect new locations that have not experienced extreme events in the past.

Northeast Climate Adaptation Science Center: Dr. Rick Palmer (NE CASC, UMass Amherst) suggested an improved approach to flood frequency computations to incorporate Global Circulation Model forecasts for near-term and long-term future conditions.

Northeast River Forecasting Center: David Vallee (NOAA) presented some exciting advances in the experimental, hourly National Water Model to expand into Flood Inundation Mapping.

MA Coastal Flood Risk Model: Kirk Bosma (Woods Hole Group) developed maps of Coastal Flood Exceedance Probability with potential future climate scenarios to support MassDOT vulnerability analysis.



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Massachusetts Association for Floodplain Management (massFM)

We educate, promote, & inform on practices related to floodplain management.

We welcome and encourage readers to send us notices of training and other events, articles or other contributions to share with others in our community.

Please visit our website at www.massFM.org for additional articles and resources, and to sign up to receive future editions via email.

Contact: massfloodplain@gmail.com

Risk Rating 2.0

Risk Rating 2.0 First Take: Messaging Will be Key

Written by Joe Rossi, ANFI, CFM

In August, FEMA released rates for the highly anticipated NFIP rating redesign Risk Rating 2.0 (RR2.0), also called “Equity in Action”. Equity in Action’s more nuanced approach will no longer be based on flood zones or base flood elevation and instead employ a “graduated” rating system, evaluating factors such as distance to water, types of flood exposure, replacement cost, and other advanced elements. As insurance companies launch their online rating programs for agent use, the highly anticipated roll-out pulls the curtain back on Equity In Action’s real world implications. For insureds, the new pricing methodology will result in premium decreases for many, and premium increases for some. Considering the wide range of impacts of RR 2.0, FEMA and other policy-makers must deliver a clear, timely and carefully crafted messaging campaign to insureds, floodplain managers, agents and politicians, so that Risk Rating 2.0’s promise of reliability and fairness can be realized for everyone.

In a recent sample of about forty residential locations in New England, the average premium under RR 2.0 decreased 28% against the “legacy” rate premiums, or about \$887. However, the 40% of premium gainers saw an average increase of 47% over their legacy rates, or about \$1,851. The RR 2.0 messaging campaign needs to broadly educate policyholders and stakeholders alike, not just those whose premiums will increase. While few would complain about a lower policy cost, neighbors will inevitably compare notes. A property owner might ask a community official why a premium is going down (or up) for a certain building or type of building.

Notably, Equity In Action provides a significant cost benefit to those looking to purchase NFIP flood insurance by eliminating the need to obtain an elevation certificate to get a quote. Instead, FEMA will use its tools and available data to estimate a property’s elevation which, along with other property characteristics, will be used to calculate risk. Though no longer required, an elevation certificate can still be a valuable tool to lower a premium if it shows a property’s elevation to be higher than FEMA’s estimate. In fact, the estimated elevations determined by FEMA in the New England study were on average nearly 2 feet different from the certified elevations on the elevation certificates. Though the impact of elevation on the premium amount varies widely, the message surrounding elevation certificates should be simple: You no longer need an elevation certificate, but it may be the first step to lowering a premium.

Floodplain managers have been concerned about how to communicate and tie mitigation to flood insurance under Equity In Action. Careful consideration must be given in communicating ways to reduce premiums based on mitigation activities. For structures seeing increases in premium, elevation certificates alone could help mitigate pricing. Elevating utilities is now a risk and premium reduction activity, new under Equity In Action. Adding flood vents to enclosures does offer a premium discount albeit not as significant as before. But floodplain managers now have more fuel to advocate for home elevation, which is where a significant amount of premium discounts apply. Additionally, there is an opportunity for floodplain managers and others to discuss private flood insurance options, which may offer premium relief.

Risk Rating 2.0, Equity In Action has the unintended consequence of increasing the vernacular for all stakeholders around private flood insurance. The message industry provides to insureds and the awareness around flood insurance options will likely drive more people to purchase flood insurance, primarily driven by Equity In Action. This is a giant leap forward in understanding flood risk and bringing the NFIP into the 21st century. With any new program, challenges exist. But the messages we tell surrounding the changes to the NFIP will craft the story of insuring the future. The more thought that goes into telling the story of Risk Rating 2.0 changes will not only impact the perception of Equity In Action, but will also dictate how we further bridge the flood insurance coverage gap. *Joe is the President of Joe Flood Insurance Brokerage.*

Biden Justice 40 Initiative

Written by Joy Duperault, CFM

Greetings. You may already be aware of President Biden's [Executive Order 14008](#) titled "Tackling the Climate Crisis at Home & Abroad," which includes sections on re-focusing the federal government's approach to climate change; repurposing federal investment in sustainable infrastructure; establishment of a Civilian Climate Corps; new engagement regarding land, air and water resource protection; and promoting environmental justice (Sections 220 thru 223.)

The mission of Section 220 is stated as this: "The [Environmental Justice] Interagency Council shall develop a strategy to address current and historic environmental injustice by consulting with the White House Environmental Justice Advisory Council and with local environmental justice leaders. The Interagency Council shall also develop clear performance metrics to ensure accountability, and publish an annual public performance scorecard on its implementation." The work of the council will also include updating President Clinton's EO 12898, an order which focused on the environmental and human health effects of federal actions on minority and low-income populations, but which many believe has never been fulfilled.

The Environmental Justice Advisory Council that will advise the Interagency Council, will consist of members who have "knowledge about or experience in environmental justice, climate change, disaster preparedness, racial inequity..."

The Justice 40 Initiative (section 223 of the order) includes recommendations "on how certain federal investments might be made toward a goal that 40 percent of the overall benefits flow to disadvantaged communities." The "40 percent" is a goal and the number only includes "certain federal investments." The term "disadvantaged communities" has yet to be defined.

The earliest impact of this EO appears to be on federal grant programs, an easy target for diverting federal dollars toward environmental justice populations. Since the EO was enacted after the first BRIC grant program roll-out in 2020, perhaps that's why we didn't see strong award results in EJ communities overall. (Perhaps.) We look for a better outcome for these communities in the awards for the 2021 program; for information about MA mitigation grant applications visit: <https://www.mass.gov/service-details/fy-2021-hazard-mitigation-technical-assistance-and-webinarsbriefings>.

Federal agencies in our realm that have begun working toward the Justice 40 goal include FEMA, EPA, and most likely HUD. Many states are also engaged in focusing on EJ populations and are attempting to gain a deeper understanding of where vulnerable populations intersect with environmental injustice and where there are opportunities to make changes on behalf of these populations.

For a shift to occur in federal investment in "disadvantaged communities," there will need to be an agreed-upon clear definition of this term. The order calls for the development of a Climate and Environmental Justice Screening Tool that will identify disadvantaged communities and hopefully inform equitable federal investment decisions, especially in the grant-making realm.

If there are communities in MA that are investigating this issue with regard to floodplains and flood loss reduction for vulnerable populations (whatever your definition of this is), I'd be very interested to know about these efforts and to support them (within the bounds of my work capacity), so please let me know at joy.duperault@mass.gov. Thanks!

Joy is the Massachusetts State Floodplain Manager

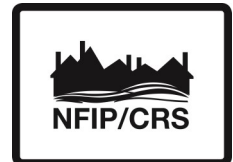
Community Rating System Corner

A Handy Place to Stay Current on CRS Matters

Written by Shannon Hulst, CFM, Floodplain Specialist and CRS Coordinator, Barnstable County and Woods Hole Sea Grant

Activity 360

Does your building department get inquiries about how to make a structure safer from flooding? Does your Building Commissioner offer site visits, recommendations on where to pursue mitigation grants, or regularly attend FEMA's trainings on property protection and financial assistance? If you answered yes to any of these questions, then this activity is for your community!



Activity 360 offers credit for providing property protection assistance. Most communities that I work with opt for just giving advice rather than delving into site visits or grants, but your community can do any combination of these. You'll need to keep a log of the inquiries you receive and advertise the service annually, typically through an annual mailing like a tax bill. For credit for attending trainings, you'll also need a record of any Emergency Management Institute classes you've taken related to property protection and financial assistance. And there's a bonus: those EMI classes get you credit in activity 430 as well!

Some communities shy away from sharing information about grants. There's a list of possible financial assistance sources available in the CRS Manual (see below). Other departments in your community, such as planning, may have folks who work with these types of assistance and are more familiar with them. What a great opportunity for some teamwork!

Even if you want to keep it simple and stick to answering questions when they come in, you'll get credit for that. This activity isn't right for all communities, but I recommend it if your building department already fields the occasional inquiry about protecting a structure from flooding and if it's not too difficult to add a few lines to a tax bill mailing.

The Community Rating System (CRS) is a voluntary program within the National Flood Insurance Program that offers discounts on flood insurance in exchange for actions taken within a community that improve flood resilience. More information can be found at www.fema.gov/floodplain-management/community-rating-system and crsresources.org.

Financial Assistance for Property Protection Measures

Pre-flood Assistance

- Projects fully or partially funded by a local agency. For example, some metropolitan sewer agencies fund part or all of a project to stop sewer backup and some communities have their own rebate, financial assistance, or construction programs;
- FEMA mitigation grants;
- State or local programs, such as grants, loans, and rebates;
- Housing improvement assistance programs;
- The U.S. Department of Agriculture's rural development grants and loans for mitigation;
- The potential to reduce flood insurance premiums for certain mitigation projects (e.g., elevating the building above the base flood elevation); and
- Exempting the improvements from property tax increases.

Post-flood Assistance

- Flood insurance;
- Flood insurance's Increased Cost of Compliance benefit for substantially damaged structures;
- FEMA's Hazard Mitigation Grant Program; and
- The U.S. Small Business Administration's post-flood mitigation loans.

See www.CRSresources.org/300 for more information on these financial assistance programs.

Shannon is the CRS & Floodplain Coordinator for Barnstable County through the Cape Cod Cooperative Extension & Woods Hole Sea Grant.

massFM Spotlight on Regional Members Metro/North Region

Written by Linda Hutchins, PG, CFM, Environmental Protection Specialist, FEMA Region I and massFM Metro/North Regional Representative

An interview with Shad Ahmed, October, 2021

Shad Ahmed is the City of Lowell's Deputy Emergency Management Director, a position he began in June 2020. I interviewed him en route to the RI Emergency Management Advisory Council, where he serves as a SME appointed by the Governor.

If you heard today there was a flood warning for Lowell, what would your top concern be?

We are attacked on a number of fronts from urban poor drainage flooding to riverine flooding. Lowell has a lot of aging infrastructure in a mid-sized city with a lot of vulnerable residential properties and population at the intersection of two rivers and a number of canals. I constantly monitor the River Forecast Center, so we are aware before the flood warnings are issued and start sharing information in city-wide briefings and public messaging. Between rivers and urban flooding in areas with poor drainage, even moderate rain events cause problems.

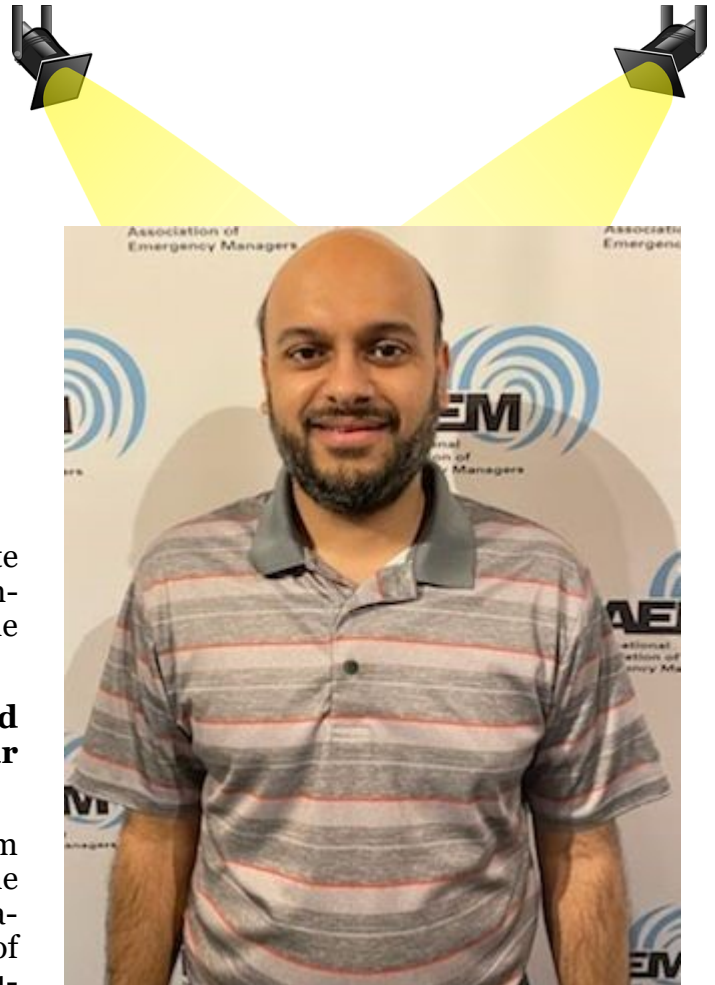
What's the City's greatest challenge with respect to flood mitigation?

We have very few resources but want to change our posture from reactive to pro-active. We're not in that position yet. Residents expect us to put our limited resources to good use. We are seeking out mitigation dollars for resilience projects but also want to invest limited tax dollars wisely.

In your tenure with Lowell, what's been your greatest achievement so far?

Throughout the Covid response, we engaged different cultural groups, beyond language services and interpretation, to understand how our messages were being received, down to mode of communication, formatting and pictures. Everything is impacted by equity considerations and factoring this in yields better overall results. This applies to all aspects of emergency response, even how you respond to a house fire and offer services.

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Regional Spotlight

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Do you hear from your constituents about flood insurance rates? Are they aware of the changes with FEMA's Risk Rating 2.0?

There was misinformation at first; people expected increases in their premiums. We had an open conversation with the city council and residents to explain how Risk Rating 2.0 is data-driven. Initially, we presented the national numbers, but we were able to get information specific to Lowell. We found out the vast majority of premiums were decreasing.

Do you have any words of wisdom from the Emergency Manager's perspective for our MassFM membership?

Floodplain management is a unique field but it is applicable to so many disciplines. MassFM should do more outreach to emergency managers. I've encouraged colleagues to get training in floodplain management; it adds to their value as an interdisciplinary team member. You don't necessarily need a CFM, but emergency managers should be better integrated and engaged in conversation with their community floodplain managers.

Tell us about yourself. What hobbies or leisure-time activities do you enjoy?

What's "leisure time"?! The last year or two have been a blur. Before Covid-19, my wife and I had started travelling domestically and started traveling abroad. We'd like to continue that. Also, much to my wife's dismay, I enjoy working around the house on projects like smart-home devices and tinkering with electronics.

Annual Conference Review

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EOEEA Climate Resilience Design Standards Tool: Mia Mansfield (EOEEA) provided an overview of the tool used to identify project sites that might be at high risk for climate exposure and provides recommended design standards. The tool is available online.

Risk Rating 2.0: Our own Joe Rossi offered Q&A about the National Flood Insurance Program's new graduated risk rating and policies.

New Vertical Datum Update: NOAA's Dan Martin revealed the update to the National Stationary Reference System that will rely on GPS technology replacing physical benchmarks used in the past. The new reference will be known as the North American-Pacific Geopotential Datum NAPGD2022 and is expected to be implemented in 2025 or 2026. The NGS Coordination Conversion and Transformation Tool (NCAT) will provide conversions to the new datum.

MassFM Annual Meeting: Election results were announced, and the annual business meeting was held. Keep an eye on our website for future events!

We would like to extend a Thank You to our Sponsors!



Seeking Volunteers!

massFM encourages participation by its members in the various committees that keep us moving forward. *Click [here](#) if you are interested in sitting on a massFM committee in 2022.*

Promoting Watershed-Scale Collaboration

Mass ECAN is excited to announce a new resource: [*Advancing Climate Adaptation through Watershed-Scale Collaboration*](#). Collaborating across a watershed is an effective and impactful way to tackle climate change. This resource provides context for and highlights the benefits of these types of collaborations.

A big thanks to outgoing Board member **Gabrielle Belfit** who was instrumental in getting our chapter recognition with ASFPM! We look forward to her continued involvement and welcome **Rebecca Haney** as the new Southeast Regional representative!

massFM Board of Directors

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Western: David Azinheira

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Metro/North: Linda Hutchins

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Our mission at massFM is to create a forum for the exchange of local knowledge about floodplain management, to share that knowledge with the public, to inform municipal and statewide policies and procedures, and to improve the Commonwealth's ability to mitigate flood hazards now and in the future. massFM strives to be inclusive across multiple disciplines, regardless of means. We welcome you to join us.