



THE INSIDER

March 2021

An exclusive publication for ASFPM members

Registration Now Open for 2021 ASFPM Virtual Conference, May 10-14

With the 45th Annual National Conference just a little more than two months away, now is the time to secure your spot for the nation's premier conference dedicated to all aspects of flooding and floodplain management.

Like last year, the 2021 conference will be held entirely online. And given that last year's virtual conference broke all attendance records with nearly 2,000 attendees representing every state in the nation, we're expecting an even bigger and better turnout for 2021.

What won't change? Exceptional content delivered by leading experts in the field.

Here's what you can expect

ASFPM's virtual conference is a five-day event featuring three plenary presentations, six workshops, and 58 concurrent sessions for a total of more than 160 presentations. All sessions will be actively moderated with live Q&A to ensure an engaging and interactive experience.

Topics include:

- Coastal Issues
- Dams & Levees
- Mapping
- Mitigation
- Modeling
- Natural & Beneficial Functions
- NFIP
- Post-Disaster
- Risk Communication
- Social Justice
- Stormwater & Urban Flooding

Day 1 and Day 5 of the conference (May 10 and May 14) will feature three optional half-day workshops apiece (additional fee required). The heart of the conference will run May 11, 12, and 13 from 9:00 a.m. to 5:00 p.m. Central each day for three full days of learning.

[View the full program](#)



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The Insider

The members-only newsletter of the Association of State Floodplain Managers (ASFPM). Published 6X/year (Jan., March, May, July, Sept., Nov.)

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Editorial

ASFPM welcomes articles and news announcements from our members and partners. We reserve the right to edit articles for space, grammar, punctuation, spelling, and clarity. We encourage you to include artwork with your article in the form of photos, charts, and illustrations. If the artwork is not yours originally, you must include expressed, written consent granting ASFPM permission to use the art in our publications.

Please send all submissions to:
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ASFPM

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Program note: Due to the virtual format, committee meetings and other ancillary events typically conducted at ASFPM in-person conferences will not be offered during this conference. We're encouraging committee chairs to schedule their meetings for later in the year.

Continuing Education Credits (CECs)

The 2021 ASFPM Virtual Conference is approved for **12 Continuing Education Credits** for Certified Floodplain Managers and 16 Certification Maintenance credits for American Institute of Certified Planners (AICPs).

Pricing and member discounts

Members can take advantage of our early bird rate of \$350 if they register by April 30. The cost for nonmembers is \$400. Supplemental training workshops are available at an a la carte price of \$25.

Registered attendees will gain live and on-demand access to all plenary and conference sessions, admittance to the interactive "xpo360" virtual exhibit hall, and unlimited on-demand viewing of all conference sessions until Jan. 31, 2022.

Sponsor and exhibitor opportunities

This year's conference will feature a fully interactive virtual exhibit hall! For more information on sponsorship opportunities visit the [sponsors and exhibitors page](#) on the conference website.

We hope you can join us at the 2021 ASFPM Virtual Conference. [Register now!](#)

ASFPM's Ingrid Wadsworth Calls it a Career

By Chad Berginnis, CFM, Executive Director

Ingrid D. Wadsworth, CFM, long-time deputy director of the Association of State Floodplain Managers, is retiring at the end of March 2021. Ingrid's retirement will bring to a close a career that includes more than 34 years in water resources at federal and regional government agencies as well as the non-profit sector.

In her 11 years as part of the management team at ASFPM, Ingrid helped grow the association from a small nonprofit to one with 20,000 national and state chapter members and revenues of over \$4 million per year. Under her leadership, the association transitioned accounting systems, improved financial processes and helped institute attractive human resources programs, which allowed the association to thrive.

One of Ingrid's greatest strengths was her ability to set a positive tone while effectively overseeing volunteer leaders, state chapters, and the Board of Directors, serving nationwide members, and collaborating with a diverse group of leaders from many different scientific and technical fields across the country. She is especially proud of being ASFPM's first female executive, and mentored other women leaders as they ascended into leadership roles at the association and in their respective positions. In addition to her competence and skill, she has been a friend to all with her thoughtfulness, loyalty, and quiet encouragement.

Ingrid has requested virtual well wishes over any formal retirement party or event. We invite everyone to share their memories of working with Ingrid, and to wish her a wonderful retirement. Although the leadership transition process has begun, she can be reached at her work email through the annual conference at Ingrid@floods.org.



FEMA Grant Processes Too Complex, GAO Says

By Mary Bart

The Government Accountability Office released a report last month with findings that probably won't come as a surprise to anyone who's applied for a hazard mitigation grant from FEMA. State and local officials from 10 or the 12 jurisdictions interviewed said the grant processes are "complex and lengthy."

Specifically, authors of the GAO report noted, these officials commented on "challenges with the required benefit-cost analysis, the complexity of the application processes, the timeliness of grant awards, and the technical capacity required to successfully apply."

GAO analyzed FEMA's grant data for fiscal years 2010 through 2018 to create the report, and made the following six recommendations to FEMA:

1. Establish a plan with time frames to develop pre-calculated benefits for additional project types, where appropriate.
2. Establish a plan with time frames to assess PA, HMGP, FMA, and BRIC hazard mitigation grant processes to identify and implement steps to reduce the complexity of and time required for grant applications, including steps to facilitate the use of funding from more than one FEMA mitigation grant program on a project.
3. Create a centralized inventory of hazard mitigation resources on the FEMA website.
4. Develop a plan for conducting future loss avoidance studies to ensure they can include more hazard types.
5. Ensure that as new methods and metrics to assess the effectiveness of hazard mitigation are developed, FEMA officials consider opportunities to adopt common methods and metrics across all of its hazard mitigation programs.
6. Publicly share pre-calculated benefits studies and state developed records of effectiveness, such as by posting them to its website.

FEMA did not dispute the GAO findings, according to the report, and recognizes that by developing and implementing plans to address the challenges identified, the agency "could reduce barriers to applying for grants, expand the pool of applicants, and help ensure that hazard mitigation is being implemented where it is needed most."

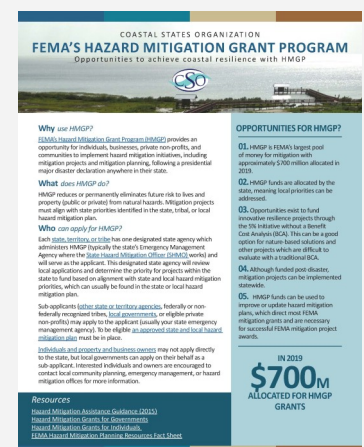
In fact, the GAO provided a draft of the report to the Department of Homeland Security (DHS) for comment. In the written comments, which are included in appendix VI, the department described steps they plan to take to address the recommended actions.

[Download Disaster Resilience - FEMA Should Take Additional Steps to Streamline Hazard Mitigation Grants and Assess Program Effects](#)

CSO Fact Sheets on FEMA Hazard Mitigation Grants

The Coastal States Organization (CSO) has developed five new fact sheets that provide easy to understand information on how to access FEMA hazard mitigation grant programs, specifically for coastal management initiatives.

Check out the new factsheets and a crosswalk of the programs [here](#).



Community-based Flood Insurance: Can It Help Close the Insurance Gap?

By Bruce Bender, CFM

For a long time, federal flood insurance through the NFIP has been the main player in the flood insurance marketplace. But after the passage of NFIP reform legislation in 2012 and 2014, the private market exploded from about a dozen programs to more than 50 different programs today. What also has evolved is interest in other reinsurance and catastrophe bonds to support the NFIP and other less traditional or new ways to provide financial protection, like parametric insurance and community-based flood insurance (CBFI).

Partly driven by Congress asking FEMA to explore alternatives, the concept of community-based flood insurance began appearing in several research papers soon after the 2014 reform legislation; e.g., [A Community-Based Flood Insurance Option \(2015\)](#) by the National Academy of Sciences (NAS) on behalf of FEMA and [A Proposed Design for Community Flood Insurance \(2015\)](#) by Carolyn Kousky and Leonard Shabman. Based on the NAS report, FEMA concluded that no more research was needed and not to implement CBFI. In 2016, the General Accounting Office (GAO) [reviewed their work](#) and report to Congress and “determined that FEMA’s conclusion was reasonable.” And the talk about CBFI quieted down...until now.

To keep it simple, **parametric insurance** offers pre-specified payouts based upon a trigger event; e.g., if wind reaches a certain speed or a certain amount of rain falls, then the policyholders (who all paid the same specific set premium) will receive a set amount.

[Wharton Risk Management and Decision Processes Center](#) (with Carolyn Kousky as one of the lead authors) partnered up with the world’s largest insurance broker [Marsh & McLennan](#) to re-explore CBFI and expand it to Community-based Catastrophe Insurance (CBCI), and to be fair, they also wrote about it in a [newsletter](#) last summer). This expansion of the concept would allow inclusion of other catastrophes besides floods; e.g., wildfire. They also suggest expanding the concept of “community” to be “any entity that has the authority to secure or facilitate insurance coverage on behalf of multiple properties”; e.g., water management or levee district, stormwater agency. They note that having a financial relationship with community members would make it easier to undertake. They propose four different delivery models that range from low to high involvement by the community (starting with low):

- Connect community members with an insurer,
- A group policy is created where the community collects the premium for the insurer,
- The community provides (through an insurer) parametric insurance for its members and charges for it, or
- The community creates a captive (its own risk-bearing entity) and is the full administrator of the program.

In their report, they highlight the challenges of each (including meeting lender requirements...or not) and how it might be implemented. They conclude stating (as many of us know) the disaster protection gap needs to be closed and it “will require innovation.” Is this innovative concept a potential for some communities out there? Read their recent [report](#)...and you decide!

**Do you have an article you’d like to share
with ASFPM members?**

Email Mary Bart at editor@floods.org





William A. Anderson

ACCOMPLISHED SCHOLAR, RESEARCHER,
AND POLICYMAKER IN THE FIELD OF
HAZARDS AND DISASTER MITIGATION

In honor of Black History Month, last month ASFPM recognized the vision and work of William Averette Anderson (1937 – 2013), an accomplished scholar, researcher, and policymaker in the field of hazards and disaster mitigation.

In a career that spanned more than 50 years, Bill Anderson dedicated his life's work analyzing and taking actions to mitigate the causes and consequences of hazards and disaster risk. In particular, he sought to understand and address the extent to which marginalized groups suffer the worst impact and are slow to recover when disasters strike.

Through a career that included esteemed positions at the National Science Foundation, World Bank, National Academies, and Arizona State University, Anderson served as a mentor and role model to countless new researchers and practitioners in the field. He also worked tirelessly to ensure that funding was dedicated to studying vulnerable populations and ensuring that racial minorities are represented in all hazards and disaster professions – from frontline hazard management to critical hazards research.

And while it seems the principles of environmental justice are just starting to gather momentum, Anderson worked to address the issue throughout his long career. In a talk at the 1996 Aspen Global Change Workshop, Anderson had this to say about the challenges facing minority communities and the importance of having representation in the disaster mitigation and emergency management fields:

"The poor and people of color, especially minority women, are underserved when it comes to society's ability
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to make resources available for mitigating, preparing for and recovering from hurricanes, earthquakes, and other natural disasters. Members of these groups are generally at greater risk to disasters and have fewer resources with which to respond to and recover from them..." he said.

"A number of actions could help empower the underserved and link them to the natural disaster reduction subculture. A first step is to bring the underserved into the research professions relevant to natural disaster mitigation—including engineering, the physical sciences, and the social sciences. Minorities currently represent a relatively untapped resource in these fields."

Later, in a wide-ranging 2011 interview for the [EERI Oral History Series](#), Anderson spoke about the failures revealed by our inability to respond to Hurricane Katrina as well as the importance of minority representation in the profession.

"As a result of Katrina, social scientists are now re-examining previous conclusions about such issues as disaster social vulnerability and resilience, risk communication, preparedness, evacuation, response, and recovery ..." he said. "Because of their vulnerability, Hurricane Katrina affected many minorities but there are few minority researchers and practitioners in the field. A minority perspective could bring new light to issues that would otherwise go unnoticed."

In that same interview, he evoked the work of Gilbert White, considered the father of floodplain management. "White always said that if you want to reduce the risk, you have to put the information about the hazard into the hands of those who can reduce societal vulnerability."

Larry Larson, ASFPM's director emeritus and senior policy adviser, had the pleasure of working with Anderson for decades in his role with NAS and the Natural Hazards Center in Boulder.

"Bill was a person who listened as much or more than he talked; a rare and valuable skill," said Larson.

Greater diversity in the hazards and disasters field is widely acknowledged as necessary for better understanding of and more inclusive planning for marginalized populations. Since his passing, Anderson's vision for the field have been carried on by his wife, Norma Doneghy Anderson, a cadre of committed hazard and disaster peers and mentees of Bill Anderson, as well as the next generation of hazard and disaster students.

The [William Averette Anderson Fund](#) was created to expand advanced studies in the field of disaster and hazard research and mitigation within minority communities with the initial focus on increasing the number of African-American scientists, practitioners, and policymakers. The fund recently teamed up with [RePicture](#), a public benefit corporation with a mission to increase interest and diversity in STEM (science, technology, engineering, and math). You can learn about some of the research conducted by BAF fellows on [RePicture's platform](#). This summer they will also be partnering on the free RePicture STEM Resume-Builder Program with a track targeted to introducing college and exceptional high school students to careers in disaster management and research.

ASFPM Seeks Board Nominations

The nomination period for the 2021 Board of Directors Election is now open. All eligible voters should have received a call for nominations email on Feb. 23, 2021. If you didn't receive that email, please check your spam folders or reach out to ASFPM Membership Engagement Coordinator Cate Secora at memberhelp@floods.org to receive the link to the ballot.

Lists of the eligible nominees for each position on the ballot this year can be found on the member portal and the deadline to submit nominations is **March 19, 2021**. For more information about the elections process, or if you have any questions, please visit our [Board Elections page](#) or send an email to Cate at memberhelp@floods.org.

Flood Insurance Committee Corner

Risk Rating 2.0: What You Need to Know About NFIP's Largest Change in 40 Years

(The following article is from this month's guest columnist and Insurance Committee Co-Chair-Emeritus, Paul [I-haven't-really-retired] Osman.)

On October 1, 2021, new flood insurance rates are scheduled to go into effect for all NFIP policies. It will be the biggest change to the NFIP since the program's inception.

Since its start in 1968, the NFIP has been the primary source of flood insurance coverage for residential properties in the United States. When conceived, the purpose of the NFIP was both to offer affordable flood insurance and reduce flood risk through the adoption and enforcement of floodplain regulations. A longer-term objective of the NFIP is to reduce federal expenditure on disaster assistance after floods.

Today, there are more than five million policies providing \$1.3 trillion in coverage. The program collects about \$4.6 billion in annual revenue from premiums and fees. Unfortunately, climate change and increased flooding has damaged the program. Since Hurricane Katrina (2005) the program has gone deeply into debt. That debt is over \$20 billion today. Interest alone on the debt is estimated at more than \$1 million per day.

NFIP rating change

The NFIP's current rating structure follows general insurance practices that were in effect more than 40 years ago when the NFIP was established and has not changed much since then. Three basic characteristics are used to classify properties:

1. Flood zone on a Flood Insurance Rate Map (FIRM),
2. Occupancy type, and
3. Elevation of the structure compared to the base flood elevation.

With Risk Rating 2.0, flood zones, mapping, and elevations will no longer be used in calculating a property's flood insurance premium. Instead, the premiums are to be calculated based on the specific features of each individual property including:

1. Structural and geographical characteristics of the individual structure,
2. Height (not elevation) of the lowest floor of the structure, and
3. Replacement cost value of the structure.

Risk assessment

FEMA's current risk model considers only two types of flooding: the 1%-annual-chance fluvial (river) flood and the 1%-annual-chance coastal flood (storm surge and wave action). Information about the flood risk is determined through NFIP flood studies (watershed, hydrology, and floodplain topography) and the performance of certain flood protection measures (i.e., levees). This data is incorporated into a flood risk assessment, which yields an estimate of the average annual loss, which is then used to calculate premiums. Across the nation, properties with the same NFIP flood risk are charged the same insurance rate.

Risk Rating 2.0 is designed to incorporate a broader range of flood frequencies and sources, including pluvial flooding (drainage and urban flooding due to heavy rainfall) and other coastal risks such as erosion. Risk Rating 2.0 will also factor additional geographical variables, such as the distance to water, the type and size

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of nearest bodies of water, the elevation of the property relative to flooding source, and specifics on the building. As proposed, NFIP premiums calculated under Risk Rating 2.0 will reflect an individual property's flood risk (rather than national averages).

According to FEMA, Risk Rating 2.0 will also use commercial catastrophe models to estimate future loss potential. The use of catastrophe models to estimate potential losses caused by natural hazard events has become a standard risk management practice in the insurance industry.

FEMA believes that Risk Rating 2.0 will provide a more transparent and accurate flood insurance pricing, will lead to better risk communication, and an increase in flood insurance take-up rate.

FEMA has suggested that Risk Rating 2.0 will provide credits for three mitigation actions:

1. Installing flood openings,
2. Elevating onto posts, piles, and piers; and
3. Elevating machinery and equipment above the lowest floor.

FEMA has not yet given any information on how these credits will be applied to individual property premiums.

Flood zones and LOMCs

Under Risk Rating 2.0, the boundary of the mapped floodplain will still be used to determine where mandatory purchase of flood insurance will be required. However, flood zones will no longer be used in calculating a property's flood insurance premiums; instead, the premium will be calculated based on the specific features of an individual property. As proposed, flood zones will still be needed for floodplain management purposes. All new construction and substantial improvements to buildings in a mapped floodplain must still be elevated to the locally adopted flood protection elevation.

The FIRM map appeal process (LOMAs and LOMRs) will still exist, but once Risk Rating 2.0 begins, map appeals are not to have any effect on the premium that a policyholder pays, just the federal flood insurance requirement for lenders.

Impacts

According to FEMA, Risk Rating 2.0 will:

- Reflect an individual property's risk,
- Reflect more types of flood risk in rates,
- Use the latest actuarial practices to set risk-based rates,
- Provide rates that are easier to understand for agents and policyholders, and
- Reduce complexity for agents to generate a flood insurance quote.

FEMA believes that Risk Rating 2.0 will provide a more transparent and accurate flood insurance pricing, will lead to better risk communication, and an increase in flood insurance take-up rate. Risk Rating 2.0 is not designed to increase or decrease revenue for the NFIP. If the new rates lead to a shortfall, the rating plan will be revised. FEMA cannot currently give any information about the number or percentage of properties which will see their premiums change under Risk Rating 2.0.

Under Risk Rating 2.0 all types of properties may see changing rates. However, certain types of properties may be more likely to be affected by the rate increases. These may include grandfathered properties, properties currently on the border of flood zones, properties currently outside the mapped floodplain, and properties with above-average or below-average replacement cost values. For example, the use of distance to water, rather than flood zone, may mean that premiums for properties at the landward boundary of a Special Flood Hazard Area could go down, while premiums for a property at the water boundary could go up.

Although FEMA has not yet given any details of how grandfathered properties will be affected by Risk Rating 2.0, other than to say that "all properties will be on a glide path to actuarial rates," the implication of the fact that flood zones will no longer be used to set premiums appears to indicate that zone grandfathering, at least, will no longer be relevant.

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Risk Rating 2.0 will continue the overall policy of phasing out NFIP subsidies. Because the limitations on annual premium increases are set in statute, Risk Rating 2.0 will not be able to increase rates faster than the existing limit for primary residences of 5%-18% increase per year.

Legislative concerns

Past changes to NFIP premiums have resulted in legislative actions after constituents complained about premium increases, arguing that it created a financial burden on policyholders, risked depressing home values, and could lead to a reduction in the number of NFIP policies. Similar concerns will likely be expressed with Risk Rating 2.0

As Congress considers a long-term reauthorization of the NFIP, a central question may be who should bear the costs of floodplain occupancy in the future and how to address the concerns of constituents facing increases in flood insurance premiums. Many are suggesting FEMA may delay the process until more information is known.

Much of the content for this article is from a recently released Congressional Research report on Risk Rating 2.0. The full report can be read [here](#).

You can also read more about Risk Rating 2.0 on [FEMA's NFIP Transformation webpage](#).

Paul Osman

P. Oz Consulting, LLC

We thank Paul for compiling this information and sharing this article with us. Note that FEMA still plans to release rating and other details about Risk Rating 2.0 on April 1 and implement it on October 1. Also, please note that some Write Your Own companies issue renewals 60-90 days in advance, so renewal notices could be coming out as early as July this year, if FEMA sticks to its current schedule.

Your humble Insurance Committee Co-Chairs will continue to monitor this.

Bruce Bender and Steve Samuelson

Updates to Conservation Easements Strengthens Protection for Farmlands, Grasslands, and Wetlands

The U.S. Department of Agriculture (USDA) released the final rule for its Agricultural Conservation Easement Program (ACEP), which enables agricultural producers and private landowners to protect farmlands, grasslands, and wetlands with conservation easements. The rule updates ACEP as directed by the 2018 Farm Bill and incorporates public comments made on an interim rule.



The wetland reserve easements (WRE) component helps landowners restore and protect wetlands in agricultural landscapes that provide benefits, including increased wildlife habitat, improved water quality, reduced impacts from flooding, groundwater recharge, and more outdoor recreation and educational opportunities.

The Natural Resources Conservation Services (NRCS) provides technical and financial assistance directly to private and tribal landowners to restore, protect and enhance wetlands through the purchase of these easements.

[Learn more about ACEP benefits and eligibility requirements.](#)

HUD Looks to Shore up Fragile Mortgage Portfolio

By Mary Bart

The premium-financed and taxpayer-guaranteed Federal Housing Administration (FHA) Mutual Mortgage Insurance fund within the Department of Housing and Urban Development (HUD) insures more than \$1.26 trillion of mortgage debt on 8.12 million single-family homes.

It's also one of HUD's largest potential liabilities, according to a new HUD report titled [Flood Insurance Coverage of Federal Housing Administration Single-Family Homes](#).

To better understand the flood risk exposure of FHA single-family homes and compliance with flood insurance requirements, HUD reviewed property-level flood insurance policies and damage claims for the past decade in North Carolina and Florida. This data enabled researchers to link FHA-insured mortgages with flood insurance policies and damage claims for the first time and provided insight into the level of compliance with the flood insurance mandate relative to flood risk exposure in these two states. The data also enabled researchers to begin examining potential causal relationships between flood damage and mortgage delinquency.



Flood waters continue to rise in Conway, S.C., impacting surrounding communities. (Photo taken Sept. 25, 2018 by SC National Guard, [Flickr](#).)

"The first finding is that this portfolio is very exposed to flood risk, yet many homeowners that are at risk are not covered by adequate flood insurance—even when it is required," Seth D. Appleton, HUD's assistant secretary for policy development and research wrote in the foreword of the report. "In both states, over one-half of the FHA-insured mortgages in these states are located within or very close to a high-risk flood zone, yet less than one-fifth of such homes have insurance, and only about one-half of homes required to have insurance are in compliance."

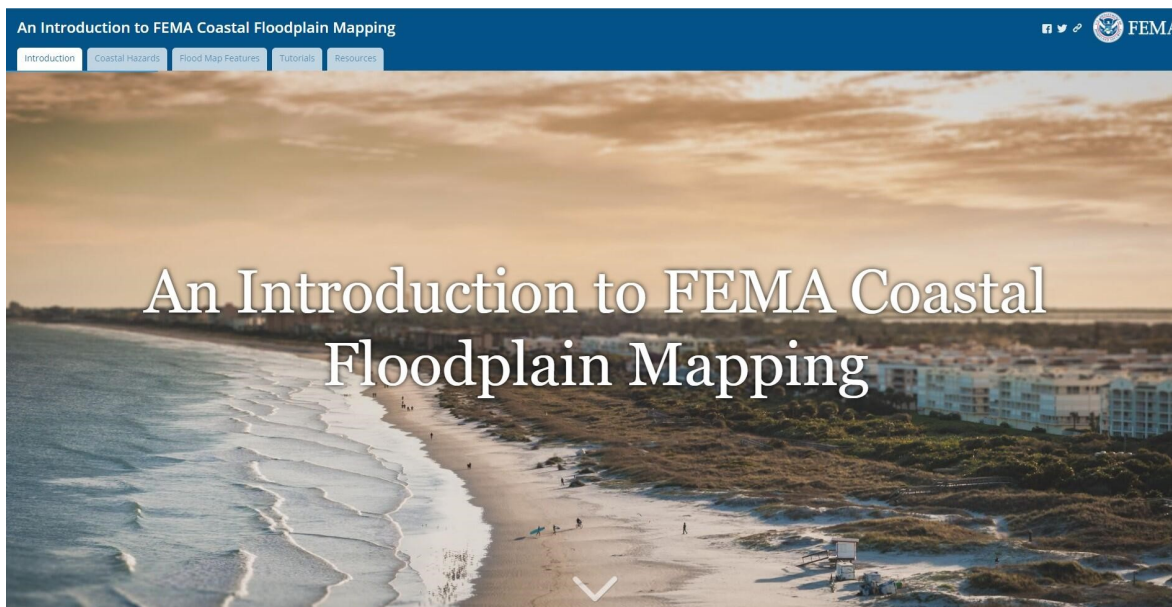
The federal requirement for flood insurance applies only to people with federally backed mortgages on property that the government says has a 1% chance of being flooded each year. The HUD report found that from 2011 through 2019, roughly half of the FHA-insured properties in Florida and North Carolina complied with the insurance requirement. Compliance rates were slightly higher in Florida than in North Carolina. But owners of property just outside a so-called special flood hazard area face no flood-insurance requirement even though the properties face a higher-than-average flood risk.

Nearly 400,000 homes in Florida and North Carolina have FHA-insured mortgages and are located within 600 meters of a flood hazard area, the HUD report found. But fewer than 5% of those homes had flood insurance in 2019.

Next steps

As HUD balances its responsibilities to support homeowners and protect the American taxpayer, it indicated in the report that this is just the beginning of the analysis that's needed on the flood risk exposure of FHA-insured mortgages and compliance with the insurance mandate. [Download the report.](#)

FEMA Releases New Resources to Inspire Communities to Reduce Risks



FEMA launched a new interactive story map to help residents and leaders in coastal communities understand their unique risks and to use data from coastal studies to become more resilient.

[“Thinking Beyond Flood Maps”](#) presents ideas to inspire coastal communities to use FEMA flood mapping data for more than just floodplain management ordinances or explaining flood insurance purchase requirements. Case studies from four coastal communities show how they have used the data to enhance resilience from floods.

The four case studies featured in the story map are:

- Pinellas County, Florida launched an outreach and education program for residents about flood hazards. Pinellas County also started a training program to help real estate agents answer flood-related questions from potential home buyers.
- Communities along coastal Maryland began the Coast Smart Construction Program and other initiatives to reduce the impacts of rising sea levels and flooding in coastal areas.
- Aberdeen, Washington implemented the Risk Visualization Viewer, an interactive map developed by the state and FEMA to help users identify potential tsunami flooding.
- New York City is using FEMA data to develop Future Flood Risk Maps to identify areas vulnerable to floods to support the city’s resilient design and planning efforts.

All of FEMA’s story maps on flood risk and mitigation can be found at [here](#). In addition to the story map, FEMA recently launched these new resources:

- [Planning for Future Conditions](#). This brief guide for local officials and community planners explains why it is important to consider future risks in in hazard mitigation plans and other risk reduction strategies. It offers tips for addressing changing risks and provides links to resources that can help communities learn more and take action.
- [Building Community Resilience with Nature-Based Solutions: A Guide for Local Communities](#). This resource helps local communities, states, territories and tribes make the business case for nature-based solutions. It also offers guidance for planning and implementation, including public and private funding for projects. The guide was developed in partnership with resilience experts from the National Oceanic and Atmospheric Administration (NOAA).

FEMA Releases Updated NFIP Technical Bulletin 3 & 6 with Focus on Dry Floodproofing

FEMA Technical Bulletins (TBs) provide guidance about how to comply with the National Flood Insurance Program's (NFIP) minimum floodplain management requirements for building performance. The TBs are primarily for use by state and local officials responsible for interpreting and enforcing building codes and NFIP regulations. They are also helpful to design professionals, builders and homeowners.

The updated TBs will include information from the latest International Codes® (I-Codes®) and American Society of Civil Engineers (ASCE) Standards. They will also have information about best practices and input from stakeholders about a variety of issues. The current version of TB 3 and 6 was published in April 1993. The TBs added the updates to improve usability, credibility and streamline content.

NFIP Technical Bulletin 3 provides guidance on the NFIP requirements for the design and certification of dry floodproofing of non-residential and non-residential portions of mixed-use buildings.

Updates include:

- Discussion of the factors and planning considerations that influence the decision-making process when determining the feasibility of dry floodproofing a building.
- Step-by-step instruction regarding dry floodproofing design requirements.
- An example about seepage calculation that illustrates how to determine if the structure can be considered substantially impermeable.
- Instructions for the National Flood Insurance Program Floodproofing Certificate
- NFIP Technical Bulletin 6, Requirements for Dry Floodproofed Below-Grade Parking Areas Under Non-Residential and Mixed-Use Buildings in Special Flood Hazard Areas in Accordance with the National Flood Insurance Program

NFIP Technical Bulletin 6 provides guidance on the NFIP requirements for the design and certification of dry floodproofed below-grade parking areas.

Updates include:

- Identification of issues specific to dry floodproofing below-grade parking areas.
- References to TB 3 for extensive guidance on design requirements.
- Updated discussion on design considerations such as protecting points of entry, managing internal flow of seepage and equalization of flood loads vertically in multi-level below grade parking areas.

[View all Technical Bulletins.](#)

Additional Resources from FEMA

CRS Credit for Stormwater Management is a full guide, including examples, to help communities tailor their stormwater management and watershed management programs in ways that reduce flood losses, protect natural processes, and earn CRS credit. This 2021 edition provides background on the creditable management techniques, discusses the legal aspects of such management, and describes various ways to document the creditable activities. [Download.](#)



Making Corrections to the Repetitive Loss List is a one-page CRS handout that describes the new procedure communities submit to FEMA corrections to the repetitive loss list, using the Repetitive Loss Update Worksheet, also known as the AW-501. [Download.](#)

Wet Floodproofed Ag & Accessory Structures and ... Elevation Certificates?

By Rebecca Quinn, CFM

FEMA published Floodplain Management Bulletin P-2140, [*Floodplain Management Requirements for Agricultural Structures and Accessory Structures*](#) to follow up the policy issued late February. [By the way, skip the policy and focus on the bulletin.] That's prompted quite a few people to ask me about whether communities should require Elevation Certificates when they approve wet floodproofed ag and accessory structures. To be specific, those asking work for communities that participate in the NFIP Community Rating System. Why the question? From what I hear, if CRS communities comply with the specific requirements and limits of the policy and bulletin, and if they collect ECs for wet floodproofed ag and accessory structures, more than likely they'll get dinged by CRS for not enforcing freeboard. Why? Because the ECs will show floors below the BFE.

Here's my question: why would you collect an EC for a non-elevated, wet floodproofed structure? The reason we require ECs for elevated buildings is to verify compliance in flood zones with BFEs. You can't just eyeball an elevated building and tell if it is elevated to the correct height above datum. Sure, the EC collects other information that's valuable, like enclosure size and flood openings, but its primary benefit is to have a licensed professional shoot the floor elevation. With that in hand, local officials can determine compliance. The EC has a separate section for unnumbered A zones, which can be filled out by anyone because what is checked is height above grade, which means a surveyor is not required.

If your community follows the guidance (ideally after adopting requirements) and approves a variance for a wet floodproofed agricultural structure, or if you issue a permit for a wet floodproofed accessory structure, you don't need the floor surveyed to confirm compliance. It's approved to be below BFE and if it's on or close to grade, so of course the floor is below BFE. You might want the contractor or owner to fill in the information for flood openings so you can field verify, but that doesn't require a licensed surveyor. Someone asked me about elevated equipment. Well, I'd probably be satisfied to have the contractor or owner report the height of the equipment above grade.

I understand the purpose of CRS is to credit activities that exceed the NFIP minimums. However, I consider the detailed limits specified in the policy and bulletin do actually exceed the minimums, which appear in the 1993 edition of Technical Bulletin 7, *Wet Floodproofing Requirements*.

I encourage all communities to adopt and administer specific requirements for wet floodproof accessory structures to make the limitations clear to everyone. Plus, how else can you fairly and uniformly enforce the requirement? Many fewer communities might consider adopting the variance criteria for wet floodproofed agricultural structures, but my advice is the same for those that have significant agricultural lands in floodplains. But what I'm hearing is some CRS communities, afraid of getting dinged, might decide to skip adoption. That would be an unfortunate outcome. While I hope CRS will reconsider and not penalize communities that do get ECs on wet floodproofed structures, at least we have the option of not collecting surveyed elevation data at all.

Detached garages, attached garages, and enclosures used for parking

This topic was in part prompted by discussion of the CRS Class 8 Prerequisite for communities to require residential structures to be elevated to at least BFE plus one foot of freeboard. The question is whether flood openings are required when the floor of an enclosure or attached garage is at or above the BFE, but below the BFE plus freeboard. I was surprised by how much discussion this generated, given the scenario only occurs in areas where the BFE isn't very high above the ground.

I often point out the importance of terms and definitions. Here's my take on these terms – from a compliance

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perspective, NOT insurance. As I often remind people, we regulate based on what's in our regulations and building codes not on what is, or is not, insured.

- **Detached garages.** A detached garage is an accessory building used for parking vehicles (and maybe some storage). "Detached" means completely separate from the primary building on the parcel of land. For floodplain management purposes, detached garages are accessory structures and may be wet floodproofed if one-story and not larger than 600 sq. ft. and meet the requirements for wet floodproofing explained in the FEMA P-2140 Bulletin noted above.
- **Attached garages.** An attached garage shares a wall with the primary building and extends horizontally from that building. Attached garages do not have living space above the area used for parking.
- **Enclosures used for parking.** This is very much a floodplain thing. Elevated buildings may have enclosures underneath provided the enclosures are constructed properly and are used solely for parking of vehicles, building access, and storage. Most people might call them garages, but for floodplain management purposes they are enclosures. I've been asked about "snout houses." What are those? Snout houses have garages mostly under a portion of the living space, with a portion protruding into the front yard. For floodplain management purposes, I consider those enclosures used for parking.

What does all that have to do with flood openings when the floor of an enclosure – or attached garage – is at or above the BFE, but below the BFE plus freeboard? I suggest you check out the [illustrated guidance](#) prepared by the Florida State Floodplain Management Office. The guidance explains that for compliance purposes, the slab or floor of an attached garage or enclosure becomes the lowest floor if the garage/enclosure does not comply with requirements for enclosures, including flood openings. Without flood openings, the building's lowest floor does not comply with the BFE plus freeboard elevation requirement. The Florida Building Code requires minimum one-foot freeboard (as to most state and local building codes, unless modified to remove the freeboard). I won't try to explain how NFIP insurance rating rules do or don't consider flood openings in attached garages.

Floodplain Manager's Notebook online

Three years ago this month ASFPM added past issues of the *Floodplain Manager's Notebook* to its online searchable library. The 2020 issues are now available. Get in touch if you don't find what you're looking for. Fair warning – ask an intriguing question and I may ask you to co-author a column!

The first Notebook column was published in January 2008. My how time flies. This is a good time to remind readers that my columns reflect my take on topics of interest. I cite FEMA publications when I can, in part to encourage you to do the same when you're looking for answers. Build your own library of go-to pubs — my last recommended reading list in the [July 2019 Insider](#) is a good start. And remember, local officials can in touch with NFIP state coordinators who, when necessary, can check with floodplain management specialists in the FEMA Regional Offices.

Submit your own items or suggestions for future topics to column editor Rebecca Quinn, CFM, at rcquinn@earthlink.net. Comments welcomed! Explore back issues of the [Floodplain Manager's Notebook](#).

The Association of State Floodplain Managers will convene the world's largest and most comprehensive floodplain management conference – our 45th annual gathering, May 10-14, 2021 in a virtual setting.

[Register now](#) for the early bird member rate of \$350.

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Avoiding Valuation Bias and Inequity

By Ray Carroll, MAI, SRA, CFM

Lately I'm seeing more articles written about the growing sensitivity to inequity built into our civic systems and our social fabric. There's nothing new about this discussion, and a growing awareness of subtle, systemic bias is a good sign.

In October 2020, the Appraisal Institute, the American Society of Appraisers, the American Society of Farm Managers and Rural Appraisers, and the Massachusetts Board of Real Estate Appraisers joined forces to support development of training to address unconscious bias in valuation. That training is now available to appraisers nationwide.

The [February 2021 News & Views](#) published by ASFPM reported that "FEMA's national advisory council acknowledged that government disaster aid does not target those in greatest need of help and in fact exacerbates inequity by enriching affluent areas and shortchanging low-income and minority communities."

What can a floodplain administrator do to reduce inequity and valuation bias as related to disaster preparedness, disaster relief, and everyday floodplain management? And what does this have to do with estimating "market value" used to make substantial improvement and substantial damage determinations (sometimes call the "NFIP market value")?

- Recognize that some of the people most at risk from flooding are tenants living in non-conforming, entry-level housing. When that kind of housing is being repaired or renovated, local officials must insist on building permits and code compliance, even if it means that sub-standard housing must be demolished and rebuilt. Improving the quality and safety of non-conforming homes will make it easier and cheaper for families to recover after flood events. It may also save lives during major disasters.
- Demonstrate leadership by encouraging elected officials to create programs to demolish or relocate homes out of dangerous floodways, even if it means a commitment to public acquisition. There are plenty of good public uses appropriate to floodways, but housing is not one of them.
- Look at the pattern of improvement and repair permit activity in your community. If you have property owners in entry-level neighborhoods that aren't taking advantage of Actual Cash Value method to determine the NFIP market value, some valuation bias is probably at play. In most cases, using ACV results in a building value that is higher than the value determined by the adjusted assessment method (see the major drawbacks of adjusted assessment method discussed in the [September 2020 Insider](#), Floodplain Manager's Notebook/Market Value Supplement).
- Examine your handout materials, presentations, and your community website to see if you're communicating in layman's terms to all audiences. When you describe your community's responsibility to enforce SI/SD requirements, be sure to offer easy-to-understand guidance and recommend the using ACV to develop market values. Floodplain administrators are so familiar with the jargon of what they do, they sometimes forget it can sound like gibberish. (Appraisers can be guilty of the same thing!) Poor communication undermines trust.

Definitions

Valuation: In Merriam-Webster online, the first definition for [valuation](#) is "the act or process of valuing; specifically: appraisal of property."

Bias: The Uniform Standards of Professional Appraisal Practice (USPAP) defines bias as "a preference or inclination that precludes an appraiser's impartiality, independence, or objectivity in an assignment."

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What about the possibility of valuation bias creeping into the appraisal reports submitted for SI/SD purposes? I'm talking about all forms of bias, including overstating and understating values. The examples of bias used in appraiser training usually outline situations where an appraiser colludes with a borrower to defraud the lender by overstating value, or where the appraiser colludes with a lender to discriminate against a neighborhood where the lender doesn't want to make loans.

Conventional market value appraisals always depend on conclusions drawn from analysis of neighborhood economic and demographic characteristics. Those conclusions influence the selection of comparable sales, the development of adjustments, the calculation of depreciation, and the appraisal results. Appraisal methods that require economic/demographic analysis are open to biased conclusions, whether deliberate or unconscious.

Here's the problem. It looks like more than 90 percent of the independent appraisals received by floodplain administrators are traditional market value estimates based on sale comparables that are selected and adjusted after analysis of neighborhood economics and demographics. That kind of appraisal is open to bias and can also lead into the problems associated with use and occupancy that I wrote about in the [November 2020 Insider](#), Floodplain Manager's Notebook/Market Value Supplement.

To reduce the possibility of valuation bias in the appraisal reports, why not craft your floodplain management ordinance to remove the traditional market value appraisals altogether, in favor of Actual Cash Value? This can be achieved by defining Market Value to mean Actual Cash Value (ACV) determined by a qualified independent appraiser or to the results of the Adjusted Assessment Method. FEMA's SI/SD Desk Reference (P-758) describes ACV as the cost to replace a building on the same parcel with a new building of like-kind and quality, minus depreciation due to age, use, and neglect.

The argument has already been made that ACV is superior to other appraisal methods. Patricia Staebler, SRA, wrote about this in the Fall 2017 *The Appraisal Journal* article, "The 50% Rule FEMA Appraisal," and co-authored the [May 2019 Insider](#) Floodplain Manager's Notebook column on this topic.

This much is true of ACV:

- ACV is conceptually simple and easy to understand.
- ACV appraisal reports are the easiest to read and review.
- ACV works for all buildings, while other methods don't.
- ACV completely avoids forbidden value associated with use and occupancy.
- ACV usually results in a better outcome for building owners.
- And, importantly, using specialized valuation tools already available, ACV appraisal reports offer little opportunity for valuation bias.

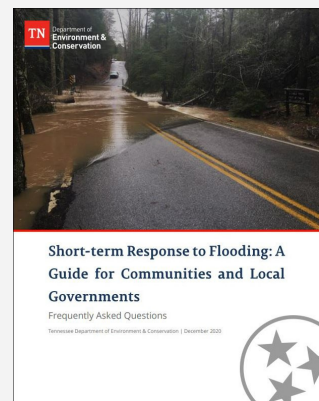
In the next Market Value Supplement, I'll share more about some of the tools available to appraisers who make ACV valuations.

Short-term Response to Flooding: A Guide for Communities and Local Government

The Tennessee Department of Environment and Conservation (TDEC) created a guide for officials and community members to provide information in the hours, days, and weeks following a flood event.

Although developed for Tennessee officials, it offers a lot of helpful advice that could be adapted by other states looking for a quick reference for answers to questions that may arise immediately following a flood event.

[It's available for download from the ASFPM library.](#)



Washington Legislative Report

By Meredith R. Inderfurth, ASFPM Washington Liaison



The 117th Congress is Getting Started

During the new Congress' first few weeks, much organizational work has been going on. For the most part, committees in both the House and Senate have settled on leadership roles and memberships at the full committee and subcommittee levels, and most committees have held organizing meetings to establish their rules and procedures, and they've begun to shape their agendas.

The Congress' initial legislative focus has been largely on the next stimulus package – both its contents and the strategy for moving it forward. ASFPM has been supporting and will continue to support efforts to ensure inclusion of support for state and local governments as they cope with demands of the Covid-19 pandemic and, for many, related loss of revenue. Senate committees also have focused on confirmation hearings for Biden administration nominees and Senate floor activity has largely been consumed with nominee confirmations at this point.

Any legislation that was introduced in the last Congress but not passed has to be introduced again to be considered in the 117th Congress. Such bills will, of course, have new numbers. Many of those are beginning to be re-introduced, along with new legislative proposals. Due to the considerations described above, there have been very few hearings so far on new or re-introduced legislative proposals, but the pace is picking up.

In most years, the administration's proposed budget for the next fiscal year is released in early February. As is usually the case, however, when a new administration takes office, the proposed budget will be delayed. This year is particularly challenging because the previous administration required that all agency submissions assume that the former president would remain in office. That whole process of agency submissions, "pass-backs," and final decisions now has to take place in a very tight time frame. Apparently, we can expect to see a "Skinny Budget" in March, but it is likely that the full, detailed federal budget request will not be available until late April or even early May.

Appropriations

Initially the central issue for appropriators is the next stimulus and financial assistance package which is being handled at both the committee level (as well as by authorizing committees) and at the leadership and White House levels. With FEMA in a key role for Covid-19 vaccination support, the Disaster Relief Fund is being drawn down rapidly and is projected to need replenishment sometime in April, prior to the next hurricane and wildfire seasons.

Appropriations subcommittees in both the House and Senate haven't made decisions about whether to begin holding hearings with federal department and agency officials prior to receiving detailed budget proposals. Appropriations subcommittees will also either hold a day or two of hearings with "outside witnesses," or at least accept written Outside Witness Testimony. Given the scheduling uncertainties for the spring, no dates have yet been announced for submission of such testimony. ASFPM usually submits Outside Witness Testimony regarding the budget proposals for a number of departments and agencies.

There will also be some changes in Appropriations committee and subcommittee leaderships for this Congress. Senate chair positions will be held by Democrats and ranking minority members will be Republicans this Congressional session, since Democrats hold the majority. Sen. Patrick Leahy (D-VT) is chairman and Sen. Richard Shelby (R-AL) is the ranking minority member of the full Senate Appropriations Committee. For the Homeland Security Subcommittee, which funds FEMA, the chairman is Sen. Chris Murphy (D-CT) and the ranking minority member is Sen. Shelley Moore Capito (R-WVA). Sen. Dianne Feinstein (D-CA) chairs the Energy and Water Appropriations Subcommittee, which funds the Army Corps of Engineers, and Sen. John Kennedy (R-LA) serves as ranking minority member.

The House chair of the full Appropriations committee is now Rep. Rosa DeLauro (D-CT) and the ranking minority member is still Rep. Kay Granger (R-TX). Subcommittee chairs for the Energy and Water and Homeland Security remain the same as during the previous Congress. Rep. Marcy Kaptur (D-OH) chairs Energy and Water and Rep. Lucille Roybal-Allard (D-CA) chairs Homeland Security.

NFIP Reauthorization and Reform

Prospects may be brighter for legislative action on reform of the National Flood Insurance Program (NFIP) during this Congressional session. At present, the program is authorized through September 30, 2021, via its 17th short-term reauthorization.

Chairwoman Maxine Waters (D-CA) of the House Financial Services Committee is expected to use, as a starting point, the bill reported out of committee during the last Congress (H.R. 3167). Rep. Patrick McHenry (R-NC) is continuing as ranking minority member. The Financial Services Committee has been holding hearings on a range of economic, monetary, and Covid-19 related topics. Although moving NFIP legislation is important to the chairwoman, any movement is not likely just yet.

Sen. Sherrod Brown (D-OH) is the new chairman of the Senate Banking Committee and Sen. Patrick Toomey (R-PA) is the ranking minority member. Chairman Brown has already signaled his interest in developing and moving flood insurance legislation. Both he and Sen. Toomey have more interest in flood issues than the former chairman, Sen. Michael Crapo (R-ID).

It is also likely that Senators Robert Menendez (D-NJ), Jack Reed (D-RI), Bill Cassidy (R-LA), and John Kennedy (R-LA) will continue to play important roles in development of NFIP reform and reauthorization legislation. Banking Committee staff have been preoccupied with work on their portions of both the budget reconciliation package and the next Covid-19 stimulus/assistance package.

FLOODS Act and PRECIP Act

The FLOODS Act and the PRECIP Act are set to be introduced in the House on February 26th by Chairwoman Mickie Sherrill (D-NJ) of the Environment Subcommittee on the House Committee on Science, Space and Technology. ASFPM has endorsed both bills. Both support updating the nation's data on precipitation. The FLOODS Act will also be introduced very soon in the Senate Commerce, Science and Transportation Committee by Ranking Minority Member Roger Wicker (R-MS) and Sen. Gary Peters (D-MI).

The FLOODS Act (Flood Level Observation, Operations and Decisions Support Act) came very close to final passage at the end of the last Congress (see "Insider" January 2021). Bill numbers in the 116th Congress were S. 4462 and H.R. 8882. They will, of course, have new numbers when reintroduced in the 117th Congress.

These bills would authorize federal funding support of \$3.5 million/year through 2030 to update precipitation data maintained as Atlas 14 by NOAA and the National Weather Service. Because states, localities and other interested parties have been responsible for providing funding for updates in the past, there is wide variation in the data nationwide. Most data is 10-12 years old or more, and five northwest states' Atlas precipitation data is nearly 50 years old. With extreme rainfall events increasing and probable major investment in infrastructure at all levels of government, it is important to utilize the effectiveness, efficiency, and economies of scale of a federally-funded and nationwide effort to update the nation's precipitation information. ASFPM is hopeful that early action can be taken to pass the FLOODS Act so that appropriation of funds in the FY 2022 budget could facilitate immediate implementation by NOAA.

The bills would also establish a national integrated flood information system at NOAA to improve flood early warning and improve interagency coordination and collaboration on collection and use of data related to water. They would also formally authorize a "Water Sub-Cabinet" which was informally established during the previous administration.

The PRECIP Act (Providing Research and Estimates of Changes in Precipitation Act) also includes authorization of federal funds to support updating Atlas 14 rainfall data. It also provides for a National Academy of Sciences study on methodologies for computing Probable Maximum Precipitation (PMP). As drafted, the NAS would have flexibility to also look at methodologies for collecting Atlas 14 data. The bill authorizes funds to support the study and subsequent work to update PMP data.

In addition to strong ASFPM support, these bills are supported by the American Society of Civil Engineers, the Association of State Dam Safety Officials, the American Public Works Association, the National Flood Association and a number of other organizations.

Climate Preparedness legislation

The FEMA Climate Change Preparedness Act (H.R. 744) was introduced by Rep. Yvette Clarke (D-NY). The measure has been referred to the House Transportation and Infrastructure Committee's subcommittee on emergency management.

The bill would require FEMA to revise its strategic plan to incorporate consideration of climate change. It would also require the FEMA National Advisory Council (NAC) to establish a subcommittee on climate change to "advise FEMA on how to best incorporate climate change, including risk assessments and strategies for adaptation and mitigation, into and throughout FEMA's policies, plans, programs and operations." No action has been scheduled on the bill as of yet.

The Federal Agency Climate PREP Act is likely to be introduced by Rep. Carolyn Maloney (D-NY). The bill was introduced in the last Congress as H.R. 8429. A draft version has been developed by Rep. Maloney for introduction in this current Congress. (Federal Agency Climate Planning, Resilience and Enhanced Preparedness Act of 2021)

The draft bill could require all federal departments and agencies to create climate change adaptation plans. It would also establish a Council on Federal Agency Climate PREP. This is described as an interagency council to "guide, coordinate and track implementation of federal actions on climate change preparedness and resilience." This council would not only work across the federal government, but would work "in partnership with state and local governments, academic and research institutions and the private and nonprofit sectors." The bill would also establish a State, Local and Tribal Leaders Task Force on Climate PREP.

Infrastructure

Development of a major transportation-focused infrastructure bill is also likely this spring. Leadership would probably come from the House Committee on Transportation and Infrastructure. It has been reported that, during a meeting about the Covid assistance package, President Biden turned to Chairman Peter DeFazio (D-OR) and said, "You're next!"

Meanwhile, the Senate Environment and Public Works Committee ("EPW") will focus on drinking water and wastewater legislation for the next month or more. A March 17th hearing is planned on state revolving loan funds supporting drinking water and wastewater infrastructure.

Also this spring, the EPW committee is monitoring implementation of the recently passed Water Resources Development Act (WRDA 2020). They hope to examine use of natural and nature-based alternatives by the Army Corps of Engineers, but the review may possibly occur informally and via roundtables, rather than via hearings. They will begin to assemble plans for the next WRDA sometime during the summer, according to present plans. Chairman Tom Carper (D-DE) has said he is committed to the schedule of passing a WRDA bill every two years.

Requirements for Flood Risk Management

President Biden has reinstated Executive Order 13690 on the Federal Flood Risk Management Standard (FFRMS), which was welcome news, however it is important to also have legislation in place to make similar requirements, since an EO can be overturned by another President.

Rep. David Price (D-NC) and Rep. Lee Zeldin (R-NY) have introduced the Flood Resiliency and Taxpayer Savings Act (H.R. 481), which would require development of resiliency standards for critical and non-critical projects. The bill has been referred to the House Financial Services Committee and the House Transportation and Infrastructure Committee.

Text of legislation can be found by going to www.Congress.gov and typing in the bill number or title. This early in the Congressional session, some bill text have not yet been posted.

Operations Report

As you probably read on page 3, this is my last operations report to you! It is with a grateful heart for a challenging and fulfilling 11 years here at ASFPM that I put down my coffee cup and retire.

The world has changed. It's hard to know all the long-term societal effects of a pandemic and the next generation forced to receive their education in front of a computer screen. Nor can we quantify the full effects of finding new hobbies, connecting with others in new ways, learning to get business done virtually, or dealing with our personal losses. We have all become more comfortable transferring funds via apps on our phones, jumping on Zoom calls, and ordering groceries and take out on the regular. The world has changed, and new challenges require new ways of thinking. And while I step aside and let the next generation of floodplain managers rise to the call, I leave an ASFPM that is a strong and successful association, poised to thrive in this new world!

After helping to lead the association through more than a decade of healthy growth, and rapidly right-sizing the infrastructure to support it, ASFPM is ready to continue growing with you and for you. There are so many accomplishments and in-progress items that I have been a part of over the years, and I want to highlight just a few of the new things that are available to you:

- A more robust and responsive [website](#);
- The ability to renew your membership online (CECs must be up-to-date);
- Hundreds of [online training programs and webinars](#) available on-demand;
- The digital migration of the CFM exam, which you can take online starting this spring;
- A virtual conference that will be even bigger and better than what we delivered in 2020; and
- A highly dedicated and knowledgeable ASFPM staff. While this final bullet is not "new" like the others, it's critical to the success of the association and is something I will surely miss.

As I sign off for the very last time, please remember, always, the important work that you do. With every visit, approval, review, and plan, you help people fulfill their dreams and protect their families. You build strong communities, resilient to an unknown future. **Never underestimate the power of the nation's floodplain managers to do good in this world.**

With gratitude,

Ingrid D Wadsworth, CFM
Deputy Director Operations

A Global Look at Extreme Weather Risks and Building Codes

Building code developers/researchers from Australia, Canada, New Zealand and the United States have launched the [Global Resiliency Dialogue](#), a joint initiative to inform the development of building codes that draw on both building science and climate science to improve the resilience of buildings and communities to intensifying risks from weather-related natural hazards.

This report details the findings of a survey designed to help illuminate – in detail – how climate-based risks are considered within national building codes and standards. It includes an exploration of the types of codes that rely on climate-related data to support their requirements, as well as the source of that climate data, how it is communicated, and how often it is updated.

[Download it here.](#)



The Use of Climate Data and Assessment of Extreme Weather Event Risks in Building Codes Around the World: Survey Findings from the Global Resiliency Dialogue
January 2021



Remembering Dennis Mileti

Dennis Mileti, former director of the Natural Hazards Center, died Jan. 31, 2021 from complications of COVID-19. He was 75.

Mileti was a luminary in the field of hazards and disaster research. During his tenure as NHC director, he led the second assessment of natural hazards research, which culminated in the publication of [Disasters by Design](#). The work leveraged the knowledge of more than 130 of the nation's disaster experts and established a framework for sustainable hazard mitigation in the United States.



Mileti is also widely recognized as one of the world's leading risk communication scholars and an expert on how people behave during disasters. He was an advocate of creating messages and warnings that encouraged people to prepare for and respond appropriately to disaster risks. He knew that moving this research into action could save lives.

"Dennis was a mentor, friend, colleague, and inspiration to all who met him, heard him speak, or were fortunate enough to know him," said current Director Lori Peek. "He could light up an entire room with his powerful words and insights."

Mileti earned his PhD in sociology at the University of Colorado Boulder, where he studied under Natural Hazards Center founder Gilbert White. He graduated in 1975 after contributing to the first Assessment of Research on Natural Hazards. He returned to CU in 1994 to become the third director of the Natural Hazards Center and professor in the Department of Sociology. During his tenure, which ended in 2003, he worked to advance research on the societal aspects of hazards and disasters and to support the next generation of researchers and practitioners.

Mileti was a keynote speaker at the 2010 Gilbert F. White ASFPM Foundation Forum where his research on how to public buy-in for mitigation action are still as valid today as they were 10 years ago. The recording of that talk, Behavior Factors and How to Effect Change in Flood Mitigation, is [available on YouTube](#).

A [tribute page](#) has been set up on the Natural Hazards Center site where we encourage you to share your thoughts, memories, and photos.

Mary Fran Myers Scholarship Now Accepting Applications

The Mary Fran Myers Scholarship recognizes outstanding individuals who share Myers' commitment to disaster research and practice and have the potential to make a lasting contribution to reducing disaster vulnerability. At least one scholarship recipient each year will receive financial support allowing them to attend the Annual Natural Hazards Research and Applications Workshop. The Workshop will be held virtually in 2021.

To apply, please visit the Natural Hazards Center [website](#). This year, they are accepting applications from those who reside outside of N. America and the Caribbean. Applications are due March 15, 2021.

NEWS BRIEFS

Resources, reports, and the latest curated news

[Why increasing numbers of U.S. residents live in high-risk wildfire and flood zones](#)

Laura Lightbody, project director of the Pew Charitable Trusts' flood-prepared communities initiative, said that unsustainable development will continue without governmental regulations for construction on floodplains. Some cities are leading the way in implementing such regulations.

[You need all 6 pieces of the puzzle to build urban resilience, but too often it's politics that leaves a gap](#)

Contrary to popular belief, building cities that are resilient to the impacts of climate change is not just about infrastructure. Urban resilience also has ecological, social, economic, institutional and, most importantly, political dimensions.

[A case study of flood protection for a water treatment plant](#)

A new berm around the Greenville, NC water treatment plant is projected to save \$31 per \$1 spent. More tangibly, it protected the plant from Hurricane Matthew in 2016, just a few years after the berm was built.

[International research team calls for 'glocal' approach to help mitigate flooding damage](#)

A 'glocal'—global to local—hydrometeorological solution for floods is considered to be critical for better preparedness, mitigation, and management of different types of significant precipitation-caused flooding, which happen extensively almost every year and in many countries, such as China, India, and the U.S.

[Fact sheet: How can revolving loan funds make our coasts more resilient?](#)

To better understand the role RLFs can play in resilience, and the work that goes into establishing them, EESI created a fact sheet that examines two RLFs that focus on shoreline resilience.

[Biden administration takes first step towards flood resilience](#)

Reinstating the Federal Flood Risk Management Standard is a good start but just the first step toward implementing equitable, integrated flood management and prioritizing nature-based solutions in states and communities across the country.

[How state governments can help communities invest in climate resilience](#)

This report presents recommendations for how state governments can develop climate-resilience financial systems that help local communities invest in protecting residents, businesses, public infrastructure, private property and natural resources from climate-driven stresses and shocks.

State News

FLORIDA

[Panama City Beach Homeowners To Get 25% Flood Insurance Rate Discount](#)

More than 12,000 local households soon will receive about a 25% discount on flood insurance after the city received an improved score on the National Flood Insurance Program Community Rating System. The community improved from a Class 8 to a Class 5, which will result in more than \$450,000 in annual savings for property owners.

[Tampa Bay Regional Planning Council takes technical lead in statewide flood mitigation planning](#)

Six regional planning councils were awarded \$1.49M to create a statewide approach to flood planning and mitigation. Funds are allocated through the U.S. Department of Housing and Urban Development's (HUD) Community Development Block Grant Mitigation program. The Tampa Bay Regional Planning Council will serve as the technical lead on the three-year project.

(Continued on page 24)

NEWS BRIEFS

Resources, reports, and the latest curated news

(Continued from page 23)

IOWA

['I know I'm in a floodplain. That's my problem': \\$4.9 million flood mitigation project in Ames could result in eminent domain use](#)

Jim Howe's business has been flooded eight times in 33 years but he has reservations about the \$4.9 million flood mitigation project that could take part of his land.

[Anatomy of a flood](#)

Over the past three decades, every Iowa county has been impacted by at least four presidential disaster declarations related to flooding. State leaders have seen enough, and they're now asking experts to help them chart a course that can help Iowa become more resilient to flooding in the future.

LOUISIANA

[It cost Louisiana \\$7.5M to rebuild a Grand Isle Beach after Hurricane Zeta](#)

The island is on the frontlines of climate change and coastal land loss, facing one of the highest rates of relative sea level rise in the world. Tidal flooding is increasing. Most of the homes are raised up high on stilts

NEW YORK

[These innovators are transforming NYC's waterfront green spaces](#)

The next chapter of local public space is being written along the Big Apple's 500-plus miles of shoreline, as innovative landscape architects, architects, and designers propose new models for urban coasts in the face of climate change.

TEXAS

[Stopping storm surge: Coastal barrier aims to protect Greater Houston area](#)

After five years of work, a study of how to protect the Texas Gulf Coast from storms is nearing final approval, and it could result in a slew of some of the longest and most expensive projects in the state's history.

Understanding and Managing Flood Risk: A Guide for Elected Officials

The new year ushered in a new slate of elected officials who need to get up-to-speed on the range of choices that are available to them as they evaluate the flood risk management approaches that will best protect the people and property they've been elected to serve.

Developed by the Flood Science Center, **Understanding and Managing Flood Risk: A Guide for Elected Officials** is a comprehensive guide that walks elected officials through the key information they need to know to fulfill their floodplain management responsibilities before, during, and after a flood event.

[Access the report.](#)



MEMBER NEWS

The latest news about ASFPM members

Teri Provost, director of SEDA-Council of Governments Flood Resiliency program, was selected to serve as vice-chair of the Pennsylvania Association of State Floodplain Managers. Provost's board appointment is from January to December this year. Having worked for SEDA-COG for more than 14 years collectively, Provost said she aims to bring the agency's regional approach and her experience to the board.

SEDA-COG's Flood Resiliency program was established in 2019 in response to the increasingly severe impacts of flooding. The program's goal is to help break the flood damage cycle and stop its drain on people and communities. SEDA-COG offers services related to flood resiliency and mitigation assistance both within and outside of its 11-county region.

Please help us celebrate our members! Send word of your accomplishments to us at editor@floods.org.

Welcome New Members!

Julie E. Greenfield, P.E., CFM, HDR, Inc., UT	Peter B. Keefe, L.S., Keefe Land Surveying, CT
Sarah L. Rafajko, City of La Crosse, WI	Amelia Schoeneman, AICP, Story Cnty., IA
Scott N. Godbey, City of Nixa, MO	William A. Andrews, EIT, MS DOT
Rachel Struhs, UT	Cody C. Meshes, City of Columbus, GA
Angelia Crowther, Utah Div. of Emergency Mgmt.	Valerie Duhl, P.E., City of Port Orange, FL
Gregory M. Scheirer, P.E., Dynamic Engineering Consultants	Benjamin S. Reith, P.E., DLZ Corporation, OH
Matthew A. Tryon, National Flood Experts, FL	David L. Ottow, AECOM, PA
Summer R. Rohwedder, City of New Braunfels, TX	Susan Rita Morris, AECOM, FL
Bryan L. Mayer, Ramsey Cnty., MN	Melissa D.E., Hew City of Miami, FL
Melissa Reynolds, P.E., MPA, CFM, City of New Braunfels, TX	Justin L. Petersen, CFM, City of Watertown, SD
Michael J. Barber, Virginia Dept. Conserv. & Recreation	Phillip M. Prout, BCO, Barry Isett & Associates, PA
Julie A. Blackburn, ISG, MN	Kimberleigh Dinkins, FL
Matthew A. Genchur, White Township, PA	Victoria P. Sim, RA, LEED AP, FMP, City of Pompano Beach
Prasanna Dahal, P.E., Arcadis, OH	Gilberto S. Hilario, CFM, Town of Marion, MA
Randolph L. Bowers, Civil & Environmental Technologies, LLC	Stephanie Nevadunsky, P.E., Collective Water Resources, FL
Douglas C. Wicks Tioga Cnty., PA	Michael K. Hough Leon Cnty., FL
Mark D. Vasquez, CBO, City of S. Pasadena, FL	Carol L. Mumford Leon Cnty., FL
John L. Abner, City of Mount Dora, FL	Audra H. Hayden Leon Cnty., FL
Jeff Rowell, Nemaha Cnty., NE	Jacob D. Bowen City of Harrisburg, PA
Zuchen Deng, P.E., WSP USA, AZ	Andrew J. Shillingsford, E.I.T., Dewberry, FL
Emily J. Shaw, ISG, Inc., MN	Carolyn L. Heaps, VA
Jazmin Gonzalez Lopez, City of Marathon, FL	Glenn D. Hollowell, City of Highland Village, TX
Michaela K. Long, EIT, Riley Engineering, LLC, AZ	Katherine B. Williams, Cummins Cederberg, Marine & Coastal Engineering, FL
Wes Saunders-Pearce, City of St. Paul, MN	
Jay T. Mazalewski, City of Driggs, ID	

ASFPM Editorial Guidelines

ASFPM accepts and welcomes articles from our members and partners. "The Insider" and "News & Views" have a style format, and if necessary, we reserve the right to edit submitted articles for space, grammar, punctuation, spelling, potential libel and clarity. If we make substantive changes, we will email the article back to you for your approval before using. We encourage you to include artwork with your article in the form of photos, illustrations, charts, and graphs. Please include a description of the art, along with the full name of who created the art. If the art is not yours originally, you must include expressed, written consent granting ASFPM permission to use the art in our publications.

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