Policies, Programs and Resources: What’s New in the World of Floodplain Management

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ASFPM Chair
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Mitigate the losses, costs, and human suffering caused by flooding.

Protect the natural and beneficial functions of floodplains.

and…
What does ASFPM do?

- **National and State Policy Issues**
- National CFM® Certification
- **Develop Tools, Publications, & Resources for State and Local Floodplain Managers**
- **No Adverse Impact (NAI)**
- Conferences & Events
- Training (ASFPM Webinar Series)
- **Research**
- **National Flood Barrier Testing and Certification Program**
### Federal Budget (FY20)

<table>
<thead>
<tr>
<th>Program</th>
<th>Administration</th>
<th>House</th>
<th>Senate</th>
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<tbody>
<tr>
<td>FEMA - Flood Mapping</td>
<td>$100 m</td>
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<tr>
<td>FEMA – Pre Disaster Mitigation (PDM)</td>
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<td>FEMA – Flood Mitigation Assistance (FMA)</td>
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- Record mapping funding from House!
- PDM changes to formula program in FY20
- We will see lots of action in September. A Continuing Resolution likely.
NFIP Reauthorization

- NFIP expires 09/30/19.
- House bill HR 3167 and HR 3111 passed out of committee
  - Comprehensive bill, ASFPM supports
- Senate bill S 2187 introduced in July, similar to SAFE Act that was introduced last Congress
  - Comprehensive bill, ASFPM supports elements of the bill
- Similarities:
  - Positive changes to ICC (increase to 60K and allow payments in addition to claim amount)
  - State revolving loan fund for mitigation
  - Assistance to lower income property owners
  - Caps annual increases on flood insurance premiums
  - Begins to address urban flooding issue
NFIP Reauthorization

• Differences
  – House bill doesn’t address debt; Senate bill would use interest payments for mitigation
  – House bill authorizes $500 million for flood mapping; Senate bill remains at $400 million
  – House bill has authorization for CAP-SSSE program and doubles its funding from current levels; Senate bill doesn’t have this
  – House bill has provisions for dealing with agricultural buildings from both a floodplain management and insurance standpoint

• ASFPM developed/updated Principles and Priorities documents for reform.
Disaster Reform and Recovery Act (DRRA)

- Signed into law in October 5, 2018 it has several sections positively impacting floodplain management and hazard mitigation:
  - Sec 1206 allows for reimbursement through Public Assistance of mutual aid assistance for substantial damage and building inspections post-disaster (this is language ASFPM wanted in law)
  - Increases allowable grantee and subgrantee management costs under HMGP and PA; this will help build capability
  - Authorizes the availability of HMGP for fire management (FMAG) disaster declarations and identifies several specific types of eligible mitigation activities that impact flood risk management
  - Authorizes hazard mitigation assistance as part of Economic Development Administration economic adjustment grants
  - Deems that a disaster loan is not a duplication of benefits
Disaster Reform and Recovery Act (DRRA)

- Big changes for the Pre-Disaster Mitigation Program which will be called BRIC:
  - Authorizes new technical/financial assistance category for establishing, implementing, and enforcing latest building codes
  - Gives FEMA authority to withdraw PDM assistance and provide it to other states through a competitive program if awarded funds are not obligated in 3 years from initial obligation.
  - Adds two new criteria for PDM award selection/assistance which are to what extent has the applicant adopted and enforced the latest building codes and to what extent will the project increase the level of the community’s resiliency
  - Changes the funding for PDM to a formula based on 6% of estimated disaster costs.
Other FY20 Legislation

• Digital Coast Act (S. 1069, H.R. 2189)
  – Introduced in both House and Senate. Passed Senate unanimously last Congress, we are hopeful!

• Water Resource Development Act
  – ASFPM participated in kickoff hearing in July
  – Congress wants to maintain schedule of WRDA every two years

• Reforming Disaster Recovery Act (H.R. 3702)
  – Codifies the CDBG-DR program
  – Establishes an Office of Disaster Recovery and Resilient Communities in HUD
  – Focuses on technical assistance and capacity building for local governments
  – Sen Schatz is co-sponsor of Senate version.
Other FY20 Legislation

- The Shelter Act (H.R. 3462, S. 1958)
  - authorize a tax credit for 25% of qualifying mitigation expenses up to an annual limit of $5,000 per taxpayer

ASFPM working singularly and with coalitions to influence these important pieces of legislation!
Non-Traditional Resources for Flood Risk Reduction

THERE'S THE FLOODPLAIN. NOW WHERE DO WE GO FROM HERE?
National Flood Barrier Testing and Certification Program

• Challenge: High demand for reliable flood mitigation solutions

• Opportunity: Manufacturers have the means to obtain third-party certification with the National Flood Barrier Testing & Certification Program

• Benefit: Product differentiation by proving it meets consensus standard and the national program’s rigorous protocol

Temporary (Perimeter) Barrier, Certified Silver Level
National Flood Barrier Testing and Certification Program

- Currently tests/certifies:
  - Perimeter barriers
  - Opening barriers
  - Backwater valves
  - Mitigation (flood abatement) pumps
  - Sealants
NFBTCP

• National Flood Barrier Testing and Certification Program
  • Certification requires water based testing, component/material testing and manufacturing facility audits
  • Tests to ANSI/FM Approvals 2510 Standard
Partnership

- ASFPM (Program administrator, maintains website)

- FM Approvals (Certifies the product, confers the FM Diamond, conducts materials/component testing, performs manufacturing facility audits)

- US Army Corps of Engineers (Conducts water testing at ERDC lab in Vicksburg Mississippi)
• ANSI is an accredited standards development organization, using a consensus process

• The 2510 standard is intended to be used to evaluate the components and performance of flood abatement equipment

• Based on FM Approvals 2510 standard

• Is the REQUIRED standard for the Program
ANSI 2510

- Hydrostatic Strength
- System Leakage
- Component Durability – Cycling
- Vibration Resistance
- Impact and Wear Resistance
- Salt Spray Corrosion – Residue Build-Up
- Tensile Strength
- Ultimate Elongation
- Tensile Set
- Compression Set
- Accelerated Aging
- Ultraviolet Light Exposure
- Air Oven Aging
- Biological Degradation Resistance
- Environmental Corrosion Resistance
- Extreme Temperature Operation
- Reliability Study
- Abrasion Resistance
- Hail Resistance
- Tear and Puncture Resistance
- Performance (Water Tests)
• Certified products earn the FM Diamond, a globally recognized quality mark from FM Approvals

• The FM Diamond is like the Underwriters Laboratory certification for consumer electronics

• FM Diamond ensures product quality and consistency
Most communities’ subdivision standards are inadequate to ensure that:

- All flood hazard areas on a tract of land are identified;
- Infrastructure is protected and resilient;
- Flooding potential on the site and adjacent areas has not increased; and
- Natural floodplain functions are protected.
• Subdivision Design and Flood Hazard Areas
  – Collaboration between APA and ASFPM
  – Companion to 1997 report with the same name
  – Recommends over 60 standards that can be used to maximize flood loss reduction
  – PAS report available for free on FEMA’s website
General Principles

1. Maintain natural and beneficial functions of the floodplain
2. Adopt a No Adverse Impact Approach to Floodplain Management
3. Avoid New Development in the Floodplain Whenever Feasible
4. Focus on Data-Driven Decision Making to Assess Risk and Inform Decisions
5. Consider Future Conditions of the Floodplain Including Development Impacts and Climate Change
Natural and Manmade Geographic Features

• *Require mapping of the 100-year floodplain and floodway for any area that could hold or convey water where a floodplain has not already been mapped*

• Require and maximize width of riparian buffers (research shows ranges from 10 to 500 feet)

• Require dam and levee failure inundation zones on preliminary plans and plats

• Prohibit change of dam classification unless developer helps finance cost of upgrades
Layout and Design

- *Ensure that floodplain areas are non-buildable, either as laid out as areas that are non-buildable on lots, or set aside as reserve areas entirely (not contained within lots)*

- A No Adverse Impact standard for evaluating and mitigating most/all physical and ecosystem impacts of development and/or impacts on critical habitat

- The surface of new streets within subdivisions shall be built to at least the 100-year flood elevation

- Include use standards such as prohibition of hazardous uses/critical facilities
Infrastructure

- Size culverts and bridges to convey 100-year storm
- Prohibit owner associations from maintaining stormwater and flood protection infrastructure
- Locate utility easements outside of the floodplain where possible

Platting

- Show flood elevation data (100-year, building pad elevations) on plats
- Require permanent markers of flood boundary
Watershed Management

- Require green infrastructure and low impact development techniques in both stormwater management and roadway design sections of subdivision regulations.
- Require post-development peak storm flows and runoff for the 100-year or less frequent storm be no higher than was the case prior to development.
- Require retention and detention facilities based on the 24-hour, 100-year storm.
- Prepare a habitat assessment to demonstrate that any subdivision development activities will not adversely impact the habitat and species it supports and describe any appropriate mitigation measures taken.
FHA 203K Loan

- FHA's primary program for the rehabilitation and repair of single family properties:
  - Flood mitigation activities are eligible based on guidance clarification made in fall of 2015
  - Combines financing for purchase or refinance and repairs into one loan
  - Can be used in cases where property owner finds flood insurance too expensive or generally to mitigate flood risk
  - Must be done by a FHA approved lender – they already exist throughout the country
  - Competitive mortgage rates

ASFPM has just signed a MOU with HUD to develop guidance and informational materials to promote this program nationwide. Stay tuned for more information!
No Adverse Impact (NAI)

• Even if we perfectly implement the current standards, damages will increase because we are putting development in the path of disaster.

• No Adverse Impact (NAI) is an approach that ensures that the action of any community or property owner, public or private, does not adversely impact the property and rights of others.
Benefits of the NAI Approach

- Will reduce future flood damages
- Will reduce future suffering
- Will protect the communities natural resources and amenities
- Will improve the quality of life
- Will provide for more sustainable growth within the community
- Will reduce the community’s liability
NAI How-To Guides

• Features:
  – 5 NAI level tools in each guide
  – Case studies and “How-To” information
  – Based on 7 building blocks in NAI Toolkit:
    • Mitigation
    • Infrastructure
    • Planning
    • Education / Outreach
    • Regulations
    • Emergency Services
    • Mapping
What keeps you up at night?

- Are you worried about liability for enforcing or not enforcing flood risk reduction standards?
- Do you think you have enough legal standing to take an enforcement action?
- Are you afraid of being sued for a takings?
- What about a moratorium until you can figure out how to recover more resiliently?
- Are your standards or flood maps good enough?
- Will/do citizens complain to local officials about flooding in areas that were properly permitted?
Liability

• Successful suits against communities result from actions such as inadequate construction or inadequate maintenance of dams, levees, roads, and bridges which increase flood damages on other lands.

• “Act of God” defense is less and less defensible. Even rare floods are predictable. As are residual risks from levees and dams.

• If a community permits development that results in an adverse impact, your community may be liable, even if you meet code standards.
Takings

• No cases found where a landowner prevailed in a regulatory takings suit against a community’s denial of use, where the proposed use would have had any substantial offsite impacts or threatened public safety.

• Courts have broadly supported restrictive regulations for high risk flood areas based upon public safety, nuisance prevention, public trust and other concerns.
In the Works!

- Capital Improvement Planning for future flood conditions (partnership with APA)
- Update of Elected Officials Guide to Addressing Community Flood Problems
- Post-flood compliance and building local (community) capacity
- Historic flood documentation
- Research into effectiveness of floodways
The present status of floodplain management does not encourage complacency ... On balance, progress has been far short of what is desirable or possible, or what was envisaged at times when the current policies and activities were initiated - GFW

www.floods.org