National Flood Insurance Program, Mitigation and the Community Rating System

2015 Preparedness Conference
August 25, 2015
BACKGROUND
National Flood Insurance Program (NFIP)

- Provides flood insurance to homeowners, renters, and business owners
- Community must participate in the program
- Written by insurance agencies through their carrier or direct with the NFIP (rates and coverage are the same for all agents)
- Created by Congress in 1968
- Administered by the Federal Emergency Management Agency (FEMA)
The NFIP: How It Works
Rhode Island NFIP Facts

- All 39 communities and 1 Tribal Nation participate in the National Flood Insurance Program (NFIP).

- Approximately 16,000 structures in designated floodplains
  - 9,600 have flood insurance → 60%

- Currently 15,691 policies statewide (both in and out of the floodplain)
  (As of August 18, 2015)
  - Bristol County: 2,328
  - Kent County: 2,038
  - Newport County: 2,846
  - Providence County: 2,800
  - Washington County: 5,679

- Average RI Premium is $1,372/annually
FLOODPLAIN MAPPING
Rhode Island Facts

- 400+ miles of coastline
- 21 of 39 municipalities are coastal
- DFIRM data available statewide
Types of Flooding

- Riverine
- Flash
- Coastal
- Shallow

Photo: Bob McMillan, FEMA
Definitions

- **Base Flood**: Flood that has a 1% chance of being equaled or exceeded in any given year.

- **Flood Insurance Rate Map (FIRM)**: An official map where FEMA has delineated the special flood hazard areas.

- **Freeboard**: An additional level of protection added above the Base Flood Elevation.

- **Special Flood Hazard Area (SFHA)**: Areas subject to the Base Flood or greater in any given year. These areas include Zones A and V.
Definitions

- **Pre-FIRM** buildings are built prior to the community’s initial FIRM or flood maps, so they may have greater flood risk.

- **Post-FIRM** buildings were built after initial FIRM. They have reduced risk of flooding and damage if they are compliant with the state and local floodplain regulations.

http://www.fema.gov/cis/RI.html
# Definitions of FEMA Flood Zones

<table>
<thead>
<tr>
<th>Risk Type</th>
<th>Zone</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low to Moderate</td>
<td>X (unshaded)</td>
<td>Area of minimal flood hazard</td>
</tr>
<tr>
<td>Low to Moderate</td>
<td>X (shaded)</td>
<td>0.2% Annual Chance Flood</td>
</tr>
<tr>
<td>High Risk</td>
<td>A</td>
<td>1% Annual Chance Flood Inland floodplains that do not have a base flood elevation (BFE)</td>
</tr>
<tr>
<td>High Risk</td>
<td>AE</td>
<td>1% Annual Chance Flood Special flood hazard area that has a determined elevation &amp; wave height &lt; 3 ft</td>
</tr>
<tr>
<td>High Risk - Coastal</td>
<td>VE</td>
<td>1% Annual Chance Flood Velocity zone that has a determined elevation &amp; wave height &gt; 3 ft</td>
</tr>
</tbody>
</table>
Flood Zone Wave Heights

**V ZONE**
- Wave Height ≥ 3 ft
- Flood Level Including Wave Effects
- 100-Year Stillwater Elevation
- Sea Level
- Shoreline

**COASTAL A ZONE**
- Wave Height 3.0-1.5 ft
- Overland Wind Fetch

**A ZONE**
- Wave Height <1.5 ft
- Limit of Flooding and Waves
Digital Flood Insurance Rate Maps (DFIRMs)
Coastal Mapping Elements

1. **Unshaded Zone X** is the area of minimal flood risk outside the 500-year floodplain (formerly called Zone C).

2. **Shaded Zone X** is subject to flooding by the 500-year flood (0.2% annual chance), formerly called Zone B.

3. **Zone A** and **Zone AE** are subject to flooding by the base or 100-year flood (1% annual chance), and waves less than 3 feet (formerly called Zones A1-A30).

4. **Zone V** and **Zone VE** are where waves are expected to be 3 feet or more.

5. **Base Flood Elevation (BFE)** is the estimated water surface elevation (in feet above datum).

6. **Shoreline**
Riverine Mapping Elements

1. **Unshaded Zone X** is the area of minimal flood risk outside the 500-year floodplain (formerly called Zone C).

2. **Zone AE** is the 100-year (1% annual chance) floodplain with BFEs (formerly called Zone A1- A30).

3. The **Floodway** is the cross-hatched area.

4. **Shaded Zone X** is subject to flooding by the 500-year flood (0.2% annual chance), formerly called Zone B.

5. **Base Flood Elevation (BFE)** is the water surface elevation of the base flood at specific locations.

6. **Cross Section** location, where ground surveys determine the shape of the land and how constrictions such as bridges and culverts affect the flow of floodwater.
Available Mapping Tools

**Floodsmart**

**FEMA Map Service Center**

- New to the FEMA Map Service Center?
  - Renew/Update/Maintain
  - Real Estate Flood Determination Agents
  - Insurance Agents
  - Engineers/Surveyors
  - Federal/State Customers

Coming soon:
Change your flood zone designation through FEMA’s new online tool for streamlined Letter of Map Change processing. Click here to learn more.

Try our new Live Chat service!
Our staff is available for online chat Monday through Friday, 8:00 am to 5:00 pm Eastern Standard Time (Eastern Daylight Time). Click below to start chatting now.

**FEMA Orthomagery Transfer to IRIS**
Beginning August 29, 2011, orthomagery for effective studies will be stored at the United States Geological Survey (USGS). Orthomagery will no longer be available via the WMS, the MAP or the Engineering Library. To access the imagery at its new location, use the following URL: http://maps.fema.gov/orthomagery.

More Information:
- Product Availability
- How do I find the flood map for my area?
- What is a FIRMsuite?
- How do I find a LOMC?
- Definitions of FEMA flood zone designations
- Product information
- Price list
- How to order
- Need assistance?

**FIRMsuite - Desktop 3.2.2 Upgrade**
Update. The Map Service Center now has version 3.2.2 of the FIRMsuite Desktop viewer available for download. This new version includes additional features that allow users to search for map panels by address or coordinates, search for and download Letter of Map Changes (LOMCs) for a panel, and print full-scale flood insurance rate maps.

Click here to learn how to create a FIRMsuite.
Rhode Island Alternative
RI Mapping Tool

• Designed to provide users with an easily accessible online *reference tool* by which to make informed decisions about the flood risk for a specific area or property.

• The floodplains shown on this Tool are delineated on the FEMA historic, preliminary, or Flood Insurance Rate Maps.
Floodplain Mapping

RECENT COASTAL
Bristol County – 7/7/14
Kent County – 9/18/13
Newport County – 9/4/2013
Providence County – 9/18/13
Washington County – 10/16/13

UPCOMING RIVERINE
Kent County – 10/2/15
Providence County – 10/2/15
REGULATIONS
Floodplain Management

44 CFR 60.3 Requirements

• A permit is required for all development in the SFHA shown on the FIRM.
• “Development” is any man-made change to real estate including:
  • structures
  • dredging
  • grading
  • excavating
  • storage
  • mining
  • filling
  • paving
  • drilling
Duties of the Floodplain Administrator

• Understand the regulations
• Ensure permits are obtained
• Coordinate with other offices, departments, and programs
• Conduct inspections
• Correct violations and enforcement actions
• Update the ordinance and record keeping
Ordinance Administration

Ordinance must be:

• Legally enforceable
• Applied uniformly throughout community
• Take precedence over less restrictive requirements
Record Keeping

There is no statute of limitations!

Permit File (NFIP Requirement)
Elevation Certificates official record for new and substantially improved buildings
- Documents compliance with regulations and supports insurance rating
- CRS communities must use FEMA Elevation Certificate (Form 81-31)
Substantial Improvement and Substantial Damage

Photo: Mark Wolfe/FEMA
Substantial Improvement and Substantial Damage

**Improvement:** Any reconstruction, remodel, rehabilitation, addition, or improvement the cost of which = or > 50% of the building’s *pre-improvement* market value.

**Damage:** damage of any origin, where the cost to restore the building to its pre-damage condition = or > 50% of the building’s market value *before* the damage occurred.
# Documenting SD/ SI

<table>
<thead>
<tr>
<th>COSTS INCLUDED</th>
<th>COSTS EXCLUDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Structural items and major building components</td>
<td>• Design cost</td>
</tr>
<tr>
<td>• Interior finish elements</td>
<td>• Clean-up</td>
</tr>
<tr>
<td>• Utility and service equipment</td>
<td>• Contents</td>
</tr>
<tr>
<td>• Market value of all labor and materials</td>
<td>• Outside improvements</td>
</tr>
<tr>
<td></td>
<td>• Septic systems</td>
</tr>
</tbody>
</table>
Special Situations

• **Exempt costs** should not be included in determining improvement / repair costs

• **Historic structures** are exempt from SI requirements **IF:**
  – Bona-fide “historic”
  – Integrates all possible flood damage reduction measures
  – Project maintains status of structure

• **Code violations**
FLOOD INSURANCE
Flood Insurance Basics

• Standard homeowners insurance doesn't cover flooding.

• Flood Insurance is required if you live in a Special Flood Hazard Area (SFHA) or high-risk area AND have a federally backed mortgage or other commitment (reverse mortgage, line of credit/equity, etc.)

• A lender can require flood insurance, even if a structure is NOT in the SFHA.

• Flood insurance can be purchased through a local insurance agent.
Coverage Limits

Flood insurance coverage can help protect property and belongings. The NFIP determines coverage and premiums.

<table>
<thead>
<tr>
<th>Structure Type</th>
<th>Building Coverage</th>
<th>Contents Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>$250,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Commercial</td>
<td>$500,000</td>
<td>$500,000</td>
</tr>
</tbody>
</table>
Homeowner Flood Insurance Affordability Act of 2014

• HFIAA was signed into law on March 21, 2014
• Repeals and modifies certain BW-12 provisions:
  • Reinstated grandfathering
  • Refunded excessive policy premiums
  • Instituted policy surcharge $25 primary residence/$250 all others per year
  • Capped yearly premium increases
  • Provided relief for primary residence owners
  • Remove sales rate trigger
• Create Affordability Study for Congress
• Designation of Flood Insurance Advocate to assist NFIP policyholders
Program Changes Effective April 1, 2015

- Revised Premium Rates
  - Limits annual premium increases to no more than 18% of premium
  - Limits average rate class increase to 15%
  - Increase of 25% on premiums for non-primary, SRL, commercial policy holders
- Increases the Reserve Fund
- New rating tables for Substantial Damage/Substantial Improvement structures
- Newly mapped properties eligible for Preferred Risk Policy
MITIGATION
Mitigation Basics

• Mitigation efforts strive to reduce loss of life and property by lessening the impact of a disaster.

• Supports actions that occur before a disaster to reduce consequences later.

• Encourages actions that are long-term cost-effective, and environmentally sound.
HMA Programs

Pre-Disaster Mitigation (PDM)

Flood Mitigation Assistance (FMA)

Hazard Mitigation Grant Program (HMGP)
Eligible Sub-Applicants

• State or Local Government
  – Municipalities MUST apply on behalf of property or business owner. Individual property owners are not to contact State regarding application/award.

• Tribal Government

• Private Non-Profits (PNPs)

<table>
<thead>
<tr>
<th>TYPE</th>
<th>PDM</th>
<th>FMA</th>
<th>HMGP</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Agencies</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Local Government</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Tribal Government</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Private Non-Profits (PNPs)</td>
<td></td>
<td></td>
<td>X</td>
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## Eligible Activities

<table>
<thead>
<tr>
<th>Eligible Activities</th>
<th>HMGP</th>
<th>PDM</th>
<th>FMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mitigation Projects</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Property Acquisition and Structure Demolition</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Property Acquisition and Structure Relocation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Structure Elevation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mitigation Reconstruction</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Dry Floodproofing of Historic Residential Structures</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dry Floodproofing of Non-residential Structures</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Minor Localized Flood Reduction Projects</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Structural Retrofitting of Existing Buildings</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Non-structural Retrofitting of Existing Buildings and Facilities</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Safe Room Construction</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Wind Retrofit for One- and Two-Family Residences</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Infrastructure Retrofit</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Soil Stabilization</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Wildfire Mitigation</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Post-Disaster Code Enforcement</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generators</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>5 Percent Initiative Projects</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advance Assistance</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>2. Hazard Mitigation Planning</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3. Management Costs</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
# Mitigation Awards

<table>
<thead>
<tr>
<th>PDM Award Year</th>
<th>Number of Sub-Grantees</th>
<th>Open Awards</th>
<th>Activity Type(s)</th>
<th>Total Federal Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>16</td>
<td>2</td>
<td>Hazard Mitigation Plans</td>
<td>$226,102.71</td>
</tr>
<tr>
<td>2011</td>
<td>1</td>
<td>0</td>
<td>Hazard Mitigation Plan</td>
<td>$28,056.72</td>
</tr>
<tr>
<td>2012</td>
<td>3</td>
<td>2</td>
<td>Hazard Mitigation Plans &amp; Residential Acquisition</td>
<td>$243,302.25</td>
</tr>
<tr>
<td>2013</td>
<td>2</td>
<td>2</td>
<td>Utility Elevation Infrastructure Relocation</td>
<td>$1,394,366.88</td>
</tr>
<tr>
<td>2014</td>
<td>3</td>
<td>3</td>
<td>Generators Hazard Mitigation Plan</td>
<td>$207,375.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FMA Award Year</th>
<th>Number of Sub-Grantees</th>
<th>Activity Type</th>
<th>Federal Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1</td>
<td>Residential Elevation</td>
<td>$190,251.00</td>
</tr>
<tr>
<td>2014</td>
<td>1</td>
<td>Residential Acquisition</td>
<td>$305,250.00</td>
</tr>
</tbody>
</table>
## Additional Mitigation Awards

<table>
<thead>
<tr>
<th>Declared Disaster</th>
<th>Event</th>
<th>Number of Sub-Grantees</th>
<th>Activity Types</th>
<th>Total Federal Share (to date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMGP DR-1894</td>
<td>March 2010 Floods</td>
<td>13</td>
<td>• Acquisitions • Backflow valves • Drainage • Outreach initiative • Structure Relocation</td>
<td>$3,096,964.00</td>
</tr>
<tr>
<td>HMGP DR- 4027</td>
<td>TS Irene</td>
<td>13</td>
<td>• Backflow valves • Elevations • Hazard Mitigation Plans</td>
<td>$1,119,240.00</td>
</tr>
<tr>
<td>HMGP DR- 4089</td>
<td>Sandy</td>
<td>7</td>
<td>• Acquisitions • Elevations • Generators • Hazard Mitigation Plans</td>
<td>$1,356,368.00</td>
</tr>
<tr>
<td>HMGP DR- 4107</td>
<td>Severe Winter Storm</td>
<td>5</td>
<td>• Acquisitions • Generators • Hazard Mitigation Plans</td>
<td>$299,643.00</td>
</tr>
</tbody>
</table>
COMMUNITY RATING SYSTEM
What is CRS?

• The Community Rating System (CRS) is a program administered by FEMA to provide lower insurance premiums under the National Flood Insurance Program (NFIP).
• Premium reductions are rated by 10 classes.
• Reductions based on point values assigned from community implemented activities.
• The activities credited provide a direct benefit to the community.
## CRS Premium Reductions

<table>
<thead>
<tr>
<th>CREDIT POINTS</th>
<th>CLASS</th>
<th>PREMIUM REDUCTION SFHA*</th>
<th>PREMIUM REDUCTION NON-SFHA**</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,500+</td>
<td>1</td>
<td>45%</td>
<td>10%</td>
</tr>
<tr>
<td>4,000 - 4,499</td>
<td>2</td>
<td>40%</td>
<td>10%</td>
</tr>
<tr>
<td>3,500 - 3,999</td>
<td>3</td>
<td>35%</td>
<td>10%</td>
</tr>
<tr>
<td>3,000 - 3,499</td>
<td>4</td>
<td>30%</td>
<td>10%</td>
</tr>
<tr>
<td>2,500 - 2,999</td>
<td>5</td>
<td>25%</td>
<td>10%</td>
</tr>
<tr>
<td>2,000 - 2,499</td>
<td>6</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>1,500 - 1,999</td>
<td>7</td>
<td>15%</td>
<td>5%</td>
</tr>
<tr>
<td>1,000 - 1,499</td>
<td>8</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>500 – 999</td>
<td>9</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>0 – 499</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Special Flood Hazard Area

**Preferred Risk Policies are available only in B, C, and X Zones for properties that are shown to have a minimal risk of flood damage. The Preferred Risk Policy does not receive premium rate credits under the CRS because it already has a lower premium than other policies. The CRS credit for AR and A99 Zones are based on non-Special Flood Hazard Areas (non-SFHA) (B, C, and X Zones). Credits are: classes 1-6, 10% and classes 7-9, 5%. Premium reductions are subject to change.
## CRS Participation in Rhode Island

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Class</th>
<th>Entrance Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>8</td>
<td>May 1, 2013</td>
</tr>
<tr>
<td>Charlestown</td>
<td>7</td>
<td>May 1, 2015</td>
</tr>
<tr>
<td>East Providence</td>
<td>9</td>
<td>May 1, 2014</td>
</tr>
<tr>
<td>Middletown</td>
<td>8</td>
<td>October 1, 1991</td>
</tr>
<tr>
<td>Narragansett</td>
<td>8</td>
<td>October 1, 1992</td>
</tr>
<tr>
<td>North Kingstown</td>
<td>9</td>
<td>October 1, 1993</td>
</tr>
<tr>
<td>Pawtucket</td>
<td>8</td>
<td>October 1, 2014</td>
</tr>
<tr>
<td>Westerly</td>
<td>8</td>
<td>May 1, 2013</td>
</tr>
</tbody>
</table>
Flood Insurance Savings

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Class</th>
<th>Savings Per Policy</th>
<th>Savings Per Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>8</td>
<td>$134</td>
<td>$75,182</td>
</tr>
<tr>
<td>Middletown</td>
<td>8</td>
<td>$118</td>
<td>$19,276</td>
</tr>
<tr>
<td>Narragansett</td>
<td>8</td>
<td>$95</td>
<td>$154,745</td>
</tr>
<tr>
<td>North Kingstown</td>
<td>9</td>
<td>$62</td>
<td>$57,808</td>
</tr>
<tr>
<td>Westerly</td>
<td>8</td>
<td>$191</td>
<td>$223,866</td>
</tr>
</tbody>
</table>

Figures based on Savings Report from 2014

- Average Savings Per Policy: $120
- Total Municipal Savings: $530,877
Summary

• Building or rebuilding higher can lower flood risk and could save money.
• FEMA HMA grants are an opportunity to implement mitigation measures and reduce risk.
• When rebuilding or building new:
  – Property owners need to be aware that flood risk changes over time
  – Rebuilding decisions now can affect long-term flood insurance premiums
  – Elevating properties and ensuring the right type of construction helps decrease risk and reduce future flood insurance premiums
• Take advantage of State and Federal NFIP or HMA specific technical assistance opportunities (i.e. bulletins, helpline, trainings, etc.).
Questions?

Twitter: @RhodeIslandEMA
Facebook: facebook.com/rhodeislandema
Web: riema.ri.gov