Today's Speaker

• Tony Subbio, CFM
  – Emergency management and community resilience planner
  – Specializes in hazard mitigation and floodplain management services
Today’s Session

• The National Flood Insurance Program (NFIP)
• Regulations
• Public Information Programs
• Flood Damage Reduction/Mitigation
• Flood Preparedness
• The Community Rating System (CRS) Program
• Questions
The National Flood Insurance Program
A Refresher
The National Flood Insurance Program (NFIP)

- Federal program that provides flood insurance to participating communities.
- Based on an agreement between local communities and the Federal Government that:
  - **A community will adopt and enforce a floodplain management ordinance.**
  - **The Federal Government will make flood insurance available within the community as a financial protection against flood losses.**
Reasons for the NFIP

✓ Reduce emphasis on structural flood control measures; increase emphasis on nonstructural FPM measures

✓ Reduce Federal disaster costs: shift burden from general taxpayers to floodplain occupants

✓ Provide insurance coverage not generally available on the private market.
NFIP Participation Requirements

✓ Participating communities are required to adopt and enforce a floodplain management ordinance that meets or exceeds requirements specified under 44 CFR 60.3.

✓ Continued eligibility is based on maintaining compliance, which is based on enforcement of the provisions of the floodplain management ordinance.

✓ Compliance is monitored by FEMA via an audit process called a Community Assistance Visit (CAV).

An ordinance is the key!
The Community Role:

- Issuing or denying floodplain development/building permits.
- Inspecting all development to assure compliance with the local regulations.
- Maintaining records of floodplain development.
- Assisting in the preparation and revision of flood maps.
- Assisting residents in obtaining information on flood hazards, map data, flood insurance and proper construction measures.

Clark Fork River, outside of Plains, Montana. Originally house was 30-40 feet from river bank and 1" above BFE.
Compliance

“Compliance” means holding up your end of the agreement, most notable: enforcing your ordinance.

FEMA has recourse for non-compliance through 3 approaches:
1) Probation
2) Suspension
3) Reclassification under the Community Rating System (CRS).
Regulations
Regulations - Stronger

- Freeboard
- Prohibition of Fill
- Cumulative Substantial Damage/Improvement
- Compensatory Storage
• Elevation Certificates (EC)
  – Do you require them? *Are you sure?*
  – Are they complete?
  – Are they right?
  – Checklist and job aid

• Substantial Damage/Improvement Determination
  – How do you do it?
  – Checklist and job aid
Regulations - Other

- Open Space

![Google Map Image]

[Image showing a map with a scale balance symbol indicating a balance between Tax Base and Loss Prevention]
Regulations - Other

- Stormwater Management
  - Size of development
  - Design storms
  - Low-impact development
  - Inspection and maintenance of stormwater facilities
  - Watershed Master Plan
  - Erosion and sedimentation controls
  - Water quality Best Management Practices (BMP)
• Stormwater Management
  – MCM #1 – Public Education and Outreach on Stormwater Impacts
  – MCM #2 – Public Participation/Involvement
  – MCM #4 – Construction Site Runoff Control
    • Erosion and Sedimentation Control
  – MCM #5 – Post-Construction Runoff Control
    • Erosion and Sedimentation Control
  – MCM #6 – Pollution Prevention/Good Housekeeping

Public Information Programs
Public Information Programs

• Does your Hazard Mitigation Plan have a table like this?

<table>
<thead>
<tr>
<th>Total Population</th>
<th>Population in Hazard Area</th>
<th>Percent Population in Boundary</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,400</td>
<td>41</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>3,776</td>
<td>15</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>3,194</td>
<td>303</td>
<td>9.5%</td>
</tr>
<tr>
<td>3,861</td>
<td>321</td>
<td>8.3%</td>
</tr>
<tr>
<td>2,560</td>
<td>25</td>
<td>1.0%</td>
</tr>
<tr>
<td>7,024</td>
<td>130</td>
<td>1.9%</td>
</tr>
<tr>
<td>10,310</td>
<td>108</td>
<td>1.0%</td>
</tr>
<tr>
<td>7,755</td>
<td>168</td>
<td>2.2%</td>
</tr>
<tr>
<td>3,791</td>
<td>12</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>6,507</td>
<td>118</td>
<td>1.8%</td>
</tr>
<tr>
<td>23,522</td>
<td>634</td>
<td>2.7%</td>
</tr>
<tr>
<td>16,424</td>
<td>185</td>
<td>1.1%</td>
</tr>
</tbody>
</table>
Public Information Programs

• Does your municipality have:
  – A website?
  – A newsletter?
  – Brochures in the municipal office?
  – A community library?
  – Active community groups that might distribute information?
  – Other ways to provide information to residents and businesses?
Public Information Programs

• Does your municipality have:
  – A floodplain administrator who can talk to people about:
    • Their risk from flooding?
    • What they can and cannot do on their property in the floodplain?
    • What types of approvals are required for development in the floodplain?
    • What they can do to protect their property?
    • The benefits and cost of flood insurance?
Public Information Programs

• Possible Topics
  – The flood hazard
  – Flood insurance
  – Protecting people from flooding
    • Turn Around, Don’t Drown
  – Protecting property from flooding
  – Building responsibly
    • Permitting requirements
  – Protecting natural floodplain functions
    • Water source(s)
Public Information Programs

- How often?
  - Monthly?
  - Quarterly?
  - Seasonally?
  - Annually?
  - When a flood is coming?
  - After a flood?
Let’s take a break
LET’S PRACTICE!

- Two short messages (3-4 sentences each)
- About at least two topics
- That you would deliver at two different intervals
Flood Damage Reduction/Mitigation
Flood Damage Reduction/Mitigation

- Identify Problem Areas
- Identify Capabilities and Resources
- Identify Projects to Reduce Vulnerability
  - Acquisition
  - Elevation
  - Floodproofing
  - Infrastructure upgrades
  - Backflow preventers
  - Storage facilities
Flood Damage Reduction/Mitigation

Hazard Mitigation Assistance Guidance

Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program, and Flood Mitigation Assistance Program

February 27, 2015

FEMA
Flood Damage Reduction/Mitigation

• FEMA Pre-Disaster Mitigation Grant
  – 75% federal share

• FEMA Flood Mitigation Assistance
  – 75% federal share; higher for repetitive loss or severe repetitive loss property mitigation

• PA DCED Flood Mitigation Program
  – 85% state share
## Flood Damage Reduction/Mitigation

- **What is in your Hazard Mitigation Plan (HMP)?**

<table>
<thead>
<tr>
<th>Initiative*</th>
<th>Mitigation Initiative</th>
<th>Action to Risk Reduction Strategies</th>
<th>Hazard(s) Targeted</th>
<th>Goal(s) Met</th>
<th>Lead Agency</th>
<th>Support Agencies</th>
<th>Estimated Benefits</th>
<th>Estimated Cost</th>
<th>Sources of Funding</th>
<th>Timeline</th>
<th>Priority</th>
<th>Mitigation Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>CasT-1</td>
<td>Hammertown Road Bridge - Address flood problem at the bridge at 141 Hammertown Road</td>
<td>Existing</td>
<td>Flood, Flash Flood, and Ice Jams</td>
<td>2</td>
<td>DPW</td>
<td>Medium</td>
<td>High</td>
<td>FEMA HMP; PDM, FMA; PA, DCED FAB, Operating Budget</td>
<td>Short</td>
<td>Low</td>
<td>SIP</td>
<td></td>
</tr>
<tr>
<td>CasT-2</td>
<td>Turkey Hill Road Culvert - Upgrade the culvert at 2051 Turkey Hill Road with one with a higher capacity.</td>
<td>Existing</td>
<td>Flood, Flash Flood, and Ice Jams</td>
<td>2</td>
<td>DPW</td>
<td>Medium</td>
<td>Medium</td>
<td>FEMA HMP; PDM, FMA; PA, DCED FAB, Operating Budget</td>
<td>Short</td>
<td>Low</td>
<td>SIP</td>
<td></td>
</tr>
<tr>
<td>CoSf-1</td>
<td>Improve stormwater drainage at 10th Street and Edgco Avenue.</td>
<td>Existing</td>
<td>Flood, Flash Flood, and Ice Jams</td>
<td>2</td>
<td>DPW</td>
<td>Medium</td>
<td>Medium</td>
<td>FEMA HMP; PDM, FMA; PA, DCED TMP, Capital Improvement Budget</td>
<td>Short</td>
<td>Low</td>
<td>SIP</td>
<td></td>
</tr>
<tr>
<td>CoSf-2</td>
<td>Protect the Columbia Municipal Authority WWTF to the 0.2% annual chance flood level.</td>
<td>Existing</td>
<td>Flood, Flash Flood, and Ice Jams</td>
<td>2</td>
<td>DPW</td>
<td>High</td>
<td>High</td>
<td>FEMA HMP; PDM, FMA; PA, DCED FAB, Severe Grant, States' Fees</td>
<td>Short</td>
<td>High</td>
<td>SIP</td>
<td></td>
</tr>
<tr>
<td>CoSf-3</td>
<td>Provide information at the overlook regarding the potential for wildfires on the hill below, and how visitors can prevent them.</td>
<td>N/A</td>
<td>Wildfire</td>
<td>4</td>
<td>Municipal EMC</td>
<td>Medium</td>
<td>Low</td>
<td>Operating Budget</td>
<td>Short</td>
<td>Low</td>
<td>EAP</td>
<td></td>
</tr>
</tbody>
</table>
Flood Damage Reduction/Mitigation

• *Speaking of HMPs:*
  – Armstrong County’s update is in-process.
  – Westmoreland County’s update should be starting soon.
  – Washington County should consider applying for a grant this year.
Flood Preparedness
Flood Preparedness

- Emergency Operations Plan (EOP)
- Response Operations
- Critical Facilities
Flood Preparedness

- Inundation Maps
- Warning Systems
Flood Preparedness

If you notice any errors in the below information, please contact our Webmaster

32.5 Water reaches the flood of record...October 16, 1954.

30.65 Water reaches the level of the St. Patricks Day Flood and crest on March 18, 1936.

29.7 Water reaches the level reached during Hurricane Agnes June 23 1972.

23 Floodwaters reach the railroad tracks on the left bank.

20.7 Water reaches the level reached during Hurricane Ivan September 18, 2004.

20.66 Flood reaches the level reached on March 5, 2015.

Flood Preparedness

- StormReady
The Community Rating System (CRS) Program
Part of the National Flood Insurance Program (NFIP)  
  – Administered by FEMA  
Provides for reduced flood insurance premiums where there is better floodplain management.
Promotes floodplain management practices above and beyond the minimum NFIP requirements.
Administered by the Insurance Services Office (ISO)  
  – ISO/CRS Specialist
The CRS Program

- 19 creditable activities in four categories
- Can get credit from 94 elements
- Flood insurance discounts ranging from 5-45%
- Class 4 and above particularly strenuous requirements

<table>
<thead>
<tr>
<th>CRS Class</th>
<th>Credit Points (cT)</th>
<th>Premium Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>In SFHA</td>
</tr>
<tr>
<td>1</td>
<td>4,500+</td>
<td>45%</td>
</tr>
<tr>
<td>2</td>
<td>4,000-4,499</td>
<td>40%</td>
</tr>
<tr>
<td>3</td>
<td>3,500-3,999</td>
<td>35%</td>
</tr>
<tr>
<td>4</td>
<td>3,000-3,499</td>
<td>30%</td>
</tr>
<tr>
<td>5</td>
<td>2,500-2,999</td>
<td>25%</td>
</tr>
<tr>
<td>6</td>
<td>2,000-2,499</td>
<td>20%</td>
</tr>
<tr>
<td>7</td>
<td>1,500-1,999</td>
<td>15%</td>
</tr>
<tr>
<td>8</td>
<td>1,000-1,499</td>
<td>10%</td>
</tr>
<tr>
<td>9</td>
<td>500-999</td>
<td>5%</td>
</tr>
<tr>
<td>10</td>
<td>0-499</td>
<td>0</td>
</tr>
</tbody>
</table>

Series 300 Public Information
- Elevation Certificates
- Map Information Service
- Outreach Projects
- Hazard Disclosure
- Flood Protection Information
- Flood Protection Assistance
- Flood Insurance Promotion

Series 400 Mapping and Regulations
- Floodplain Mapping
- Open Space Preservation
- Higher Regulatory Standards
- Flood Data Maintenance
- Stormwater Management

Series 500 Flood Damage Reduction
- Floodplain Mgt. Planning
- Acquisition and Relocation
- Flood Protection
- Drainage System Maintenance

Series 600 Flood Preparedness
- Flood Warning Program
- Levee Safety
- Dam Safety
Final Questions?
Thank you!

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