

Higher Ground

Floodplain Management Ordinance Best Practices

Monday, October 4, 2010

10:30-11:45am



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Introductions



Tell Us:

- Your Name
- Community
- Interest in Ordinances
- Something about Your Shoes



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National Flood Insurance Program

- Established by National Flood Insurance Act of 1968
- Community participation is voluntary.
- To participate, community must enforce floodplain management regulations in exchange for enabling property owners to purchase flood insurance
- GOAL: To Reduce Future Flood Losses



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National Flood Insurance Program

- Know Your Risk
- Reduce Your Risk
- Insure Your Risk



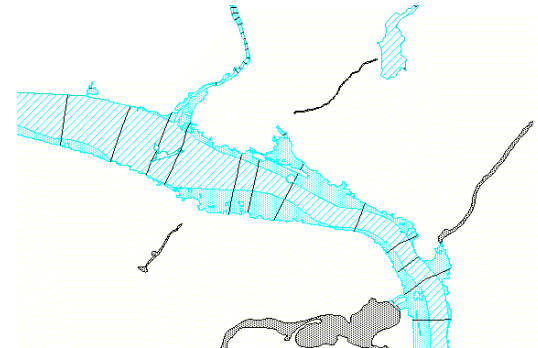
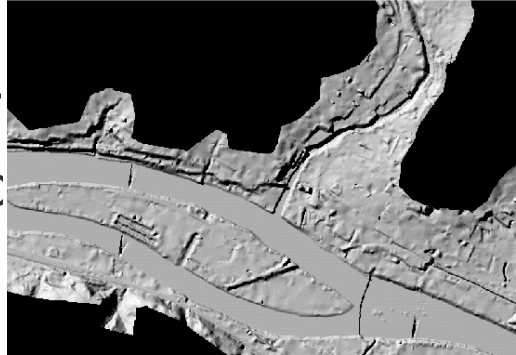
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Map Modernization



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lap



DFIRM Status	# of Counties	%	# of Communities	%
Effective	26	39%	1,060	41%
Preliminary	31	46%	1,185	46%
In Progress	10	15%	317	12%



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Ordinance Update Process



Floodplain Management Ordinance
**STANDARD OPERATING
PROCEDURES AND GUIDANCE**

PREPARED BY: FEMA REGION III
MARCH 2010



- Currently in Various Stages of Update

Floodplain Ordinance Status	# of Counties	%	# of Communities	%
Updated	20	30%	633	25%
In Progress	33	49%	1313	51%
Remaining	14	21%	616	24%



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Activity



Imagine you are the new mayor of a community which has limitless resources and the citizens of the community support your decisions without question. You are put in charge of updating your community's floodplain management ordinance.

- In this ideal world, what types of requirements would you include in your ordinance to insure the safety of your citizens and of their property? And why?
- Document your requirements on the nearby flip charts.



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Federal Minimum Requirements

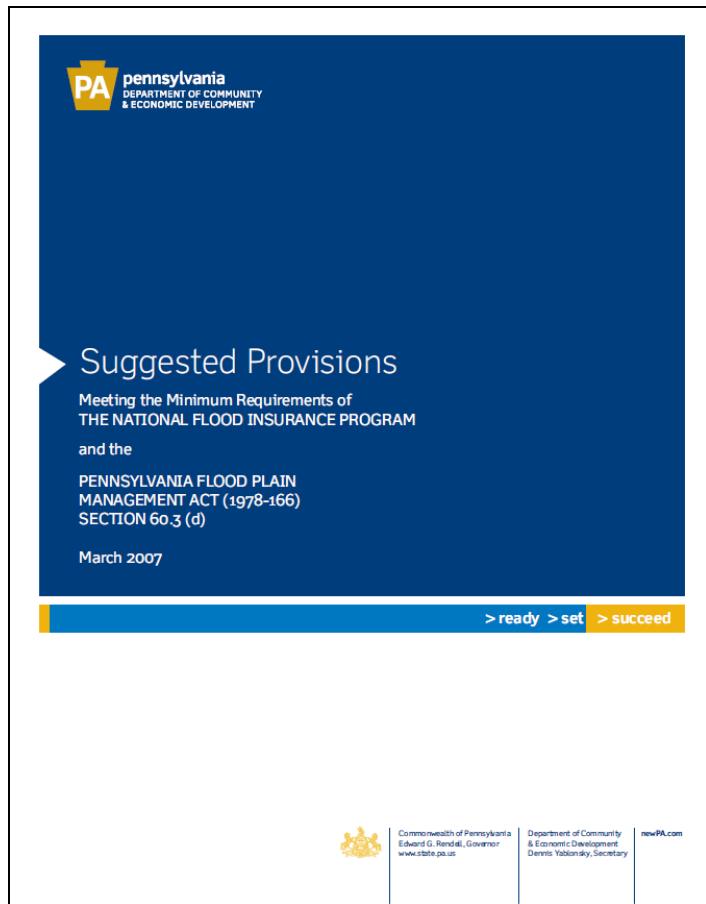
- Require permits
- Elevate residential & elevate/dry flood proof non-residential structures
- Use flood resistant materials
- Elevate and anchor utilities
- Limit development in floodways.
- Minimize/eliminate flood damage to public utilities/facilities
- Anchor all structures



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PA Suggested Provisions



- Not a model
- Higher standards include:
 - 1 ½ feet of freeboard
 - Restrictions on hazardous material storage
 - Regulated high risk land uses
 - 50 foot Setbacks/ Buffers
 - Repetitive Loss



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More Higher Standards

- Freeboard
- Cumulative Substantial Improvement/Damage
- Community Identified Flood Hazard Areas
- Approximate A Zones
- Subdivision Restrictions
- Stream Alteration BMPs
- Non Conversion Agreements
- Prohibitions
 - SFHA and/or FW development
 - Manufactured homes
 - Fill
- Historic Structures
- Certificate of Compliance



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Freeboard

- NFIP premiums based on May 2008 rates
- One-floor residential structure with no basement built Post-FIRM
- \$500 deductible
- \$250,000 coverage for the building and \$100,000 for contents.

Zone A	Annual NFIP Insurance Savings	Savings Over 30 Year Mortgage
1 ft. freeboard	\$554 (43%)	\$16,620
2 ft. freeboard	\$757 (59%)	\$22,710
3 ft. freeboard	\$832 (65%)	\$24,960



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Cumulative Improvement/Damage

- WV: Substantial damage includes cumulative flood-related damages sustained by a structure on two separate occasions during a 10 year period for which the cost of repairs at the time of each flood event equals or exceeds 25 percent of the market value of the structure before the damage occurred.



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Community Identified Flood Areas

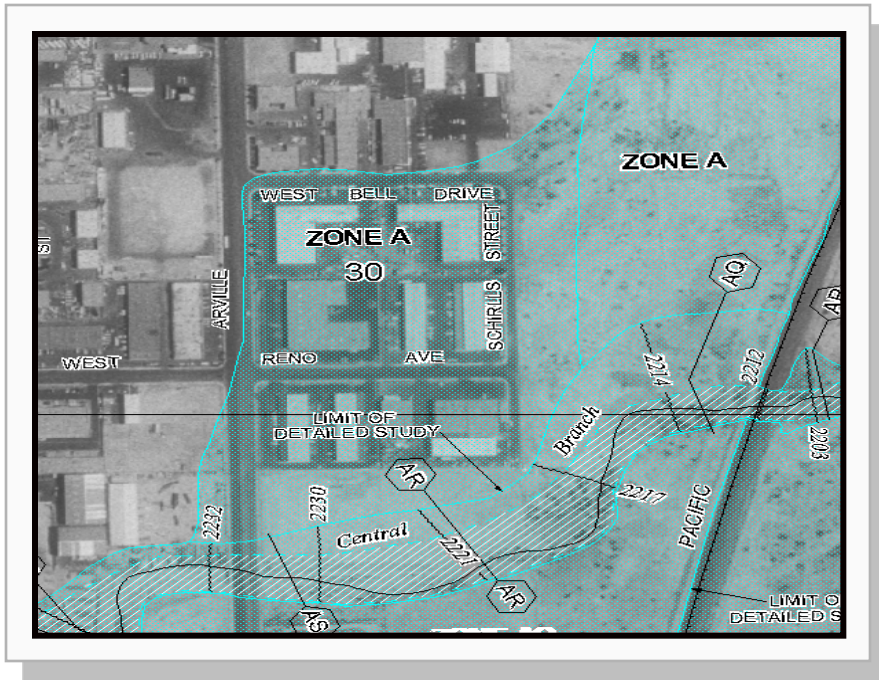
- The ____(Community)____ may identify and regulate new local flood hazard or ponding areas. These areas may be delineated on a “Local Flood Hazard Map” using best available topographic data and locally derived information such as flood of record, historic high water marks or approximate study methodologies.



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Zone A Floodplains



- Close to 25,000 stream miles with mapped flood hazard areas in Pennsylvania
- About 17,500 miles are Approximately studied
- Zone A floodplains do not have Base Flood Elevations determined
- Community is required to determine whether structures will be “reasonably safe from flooding”

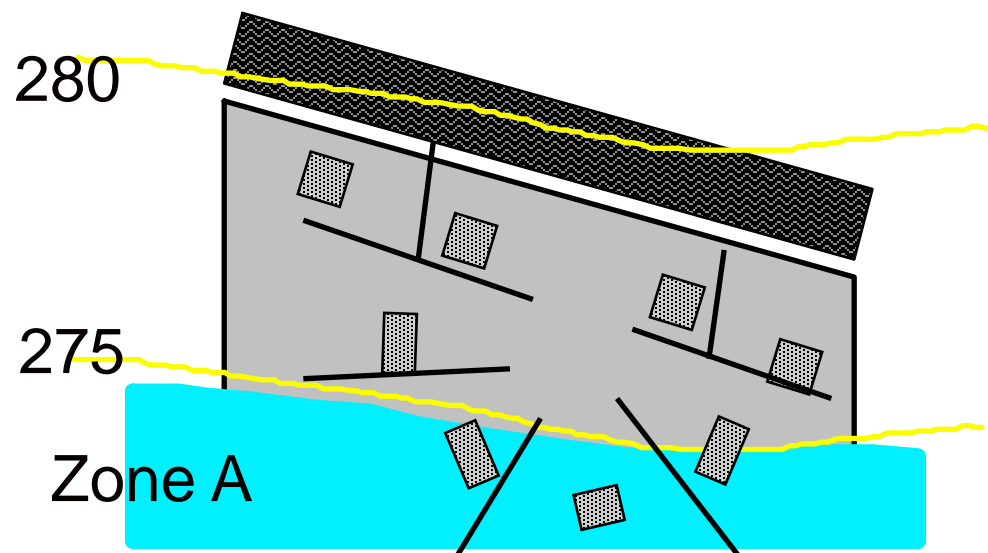


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Subdivision Restrictions

- Lower threshold for BFE determination from 50 lots and 5 acres
- Require each lot to have a portion of land outside the SFHA



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Stream Alteration BMPs



- Wing walls
- Trash grates
- Requiring openings to be of sufficient size to pass debris and/or anticipated future increases in flood heights.



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Non Conversion Agreements

A Non Conversion Agreement shall be signed by the applicant whenever the community determines that the area below the first floor could be converted to a non-conforming use (generally applies to enclosed areas below base flood elevation that are 5 ft. high or more).



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pennsylvania
DEPARTMENT OF COMMUNITY
& ECONOMIC DEVELOPMENT

Prohibitions

- No development in Special Flood Hazard Area (SFHA) and /or Floodway (FW)
- No manufactured homes in SHFA or in FW
- No Fill in SFHA or in FW
- No Critical Facilities



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Historic Structures

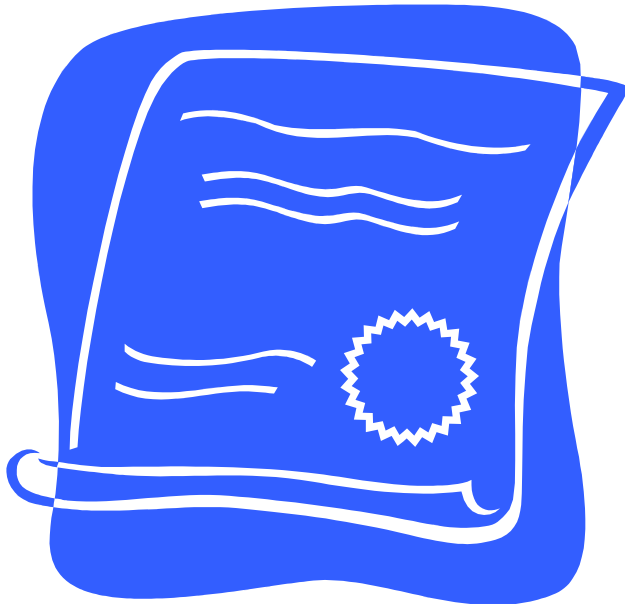
- Communities have the option of using either provision (exclusion from substantial damage/improvement definition OR variance) for addressing the unique needs of “historic structures.”
- Relying on the variance option gives a community more control over what floodplain safety methods are incorporated into the design.



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Verification of Compliance



- Certificate of Occupancy compared to Certificate of Compliance
- As Built Elevation Certificates
- Permanent Utility Connection



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Tips & Tricks

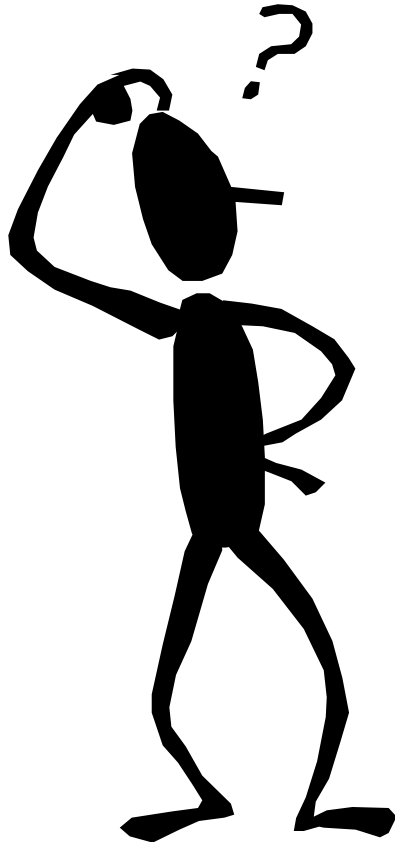


- Intergovernmental agreements
- Westmoreland County Flood Hazard Determination Tool
- Language that requires applicants to submit LOMC
- Coordination of building code and fpm ordinance
- Market value
- Marcellus shale and your ordinance
- Coordination with health, police and assessors offices (unpermitted development)
- Others?



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