

An aerial photograph showing a flooded area. A road with a yellow double line is partially submerged and damaged. A white house with a grey roof is surrounded by floodwater and debris. The surrounding area is green with some trees showing autumn colors.

Determining Substantial Damage and Improvement Workshop

New Hampshire Floodplain
Management
Office of Energy and Planning

For the New Hampshire community officials

Prepared by
Staff at JFO
For Declaration
DR-1812-NH
DR-1815-ME

Local Government Center
25 Triangle Park Drive
Concord, New Hampshire
March 18, 2009

Review of the important definitions

- Forget what you think you know
- We function on a different plain

Floodplain

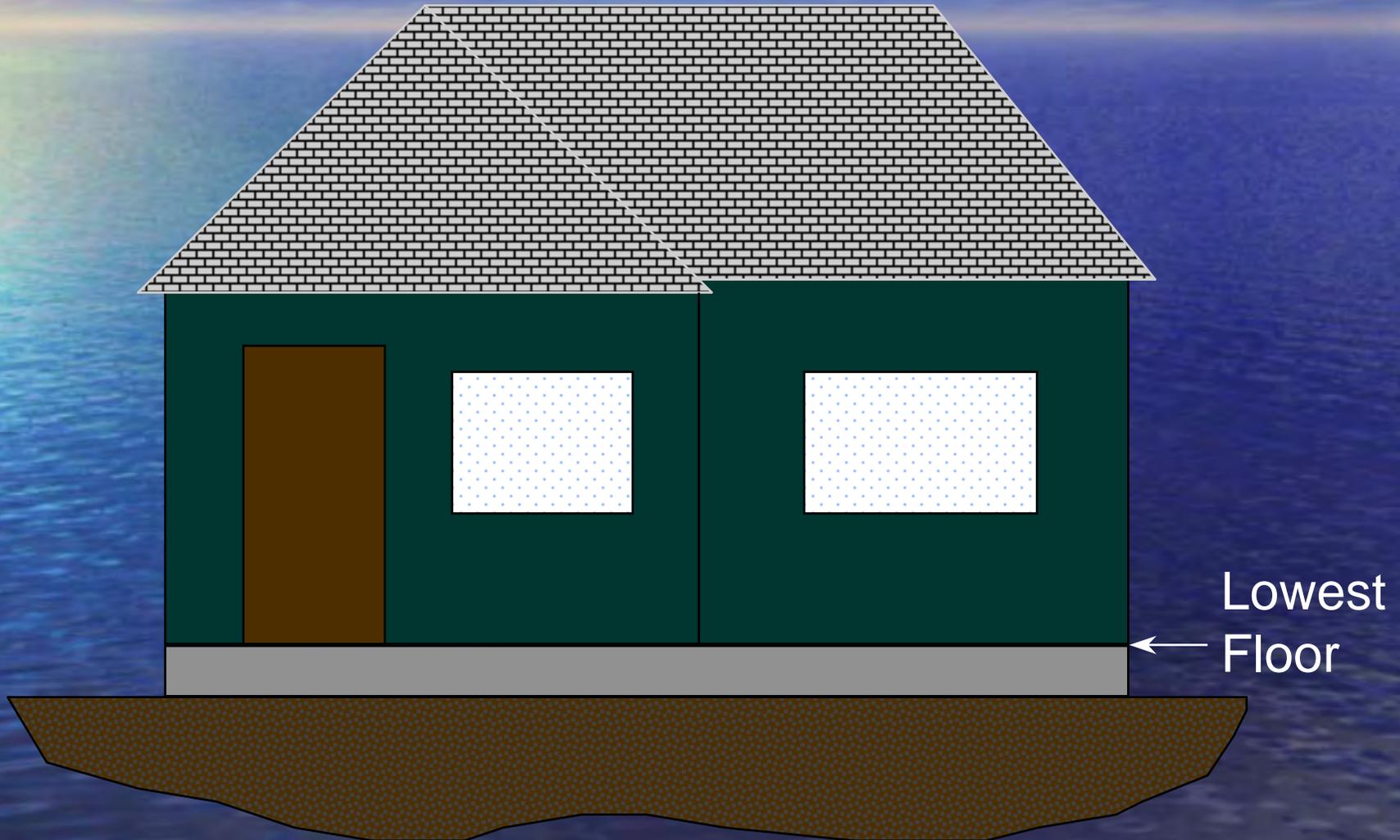
Definitions you must know

- Lowest Floor

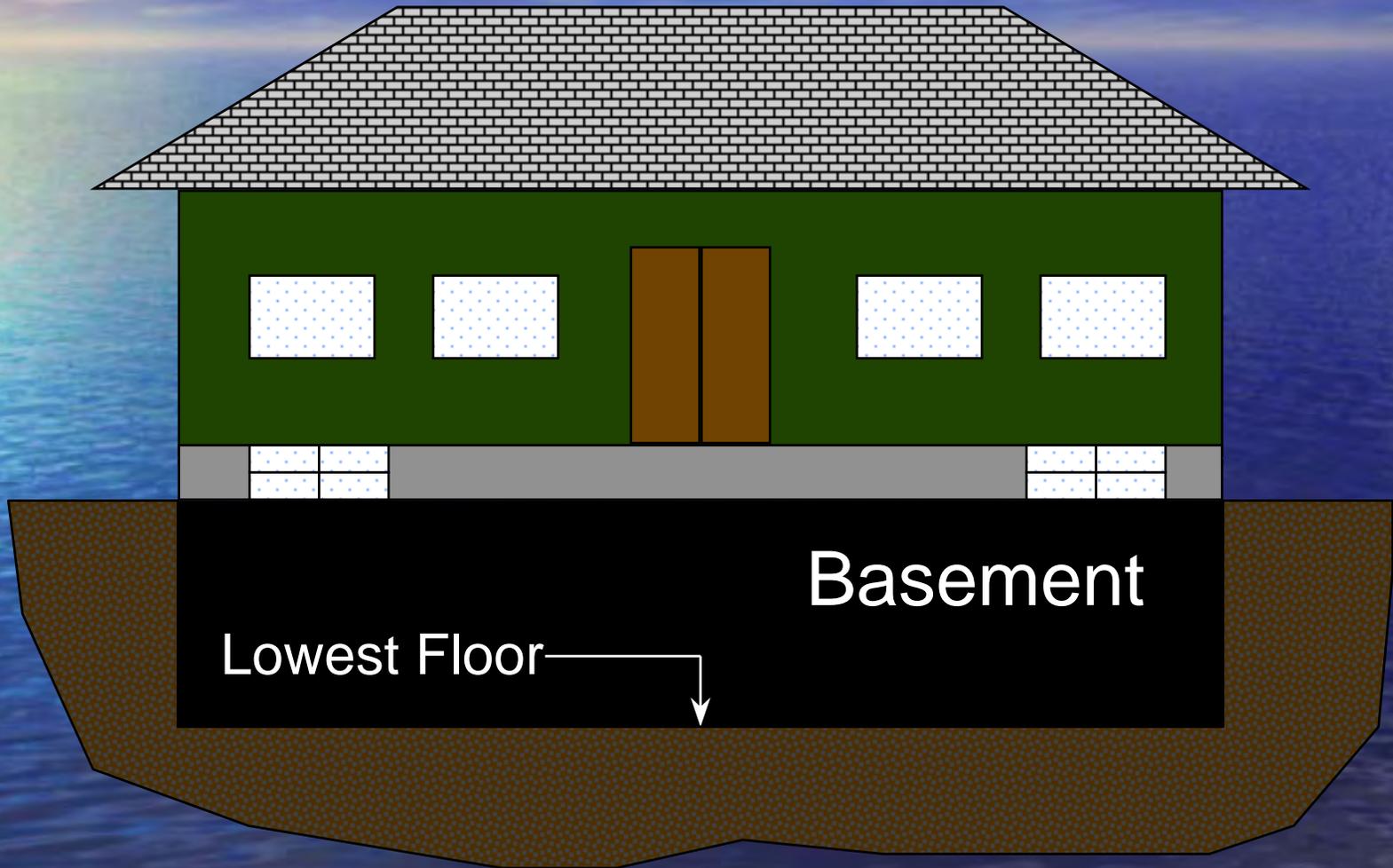
Definition of Lowest Floor

“...means the lowest floor of the lowest enclosed area, including basement. An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building’s lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.”

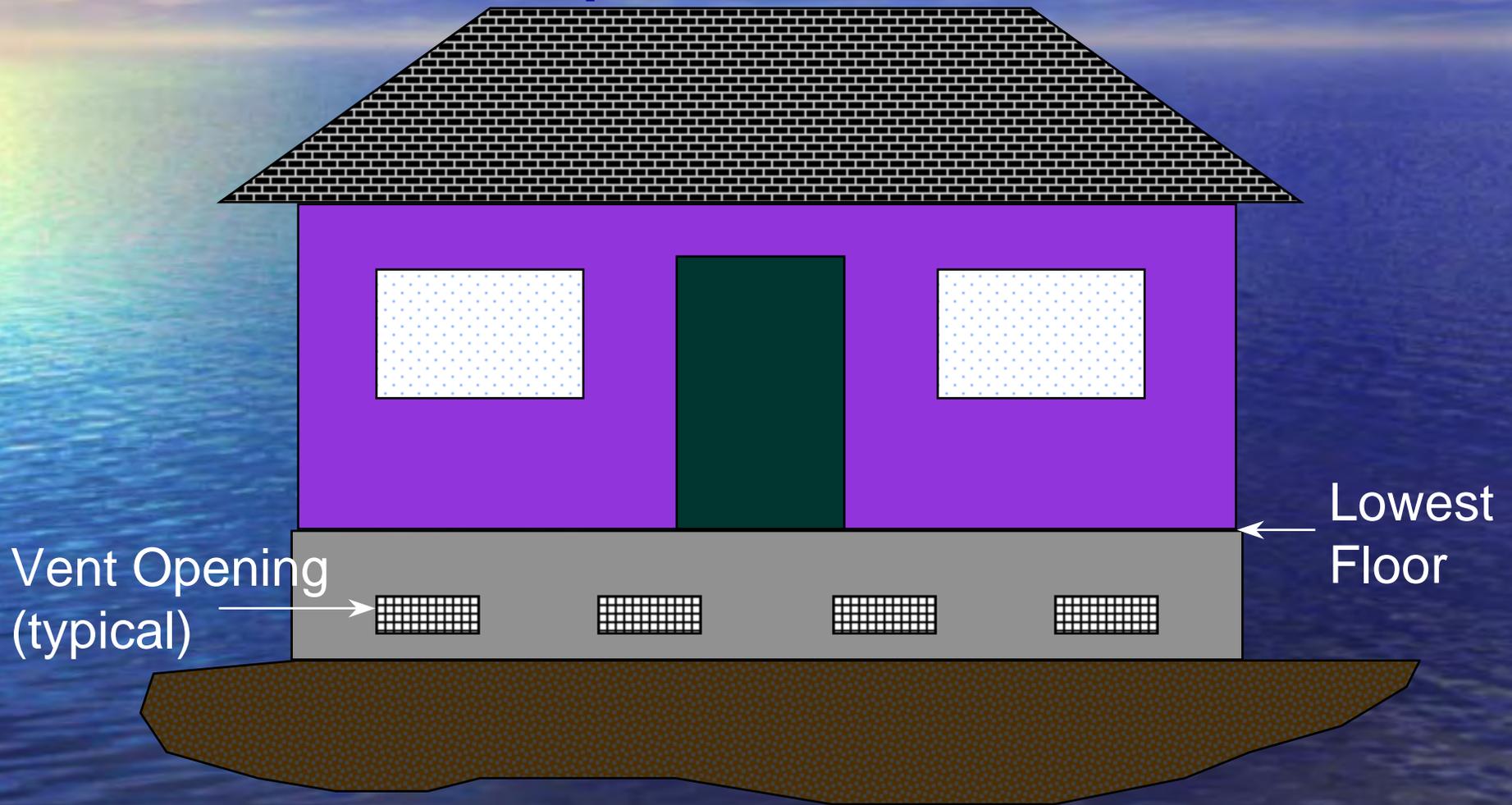
Lowest Floor Elevations Slab Foundation



Lowest Floor Elevations Basement Foundation



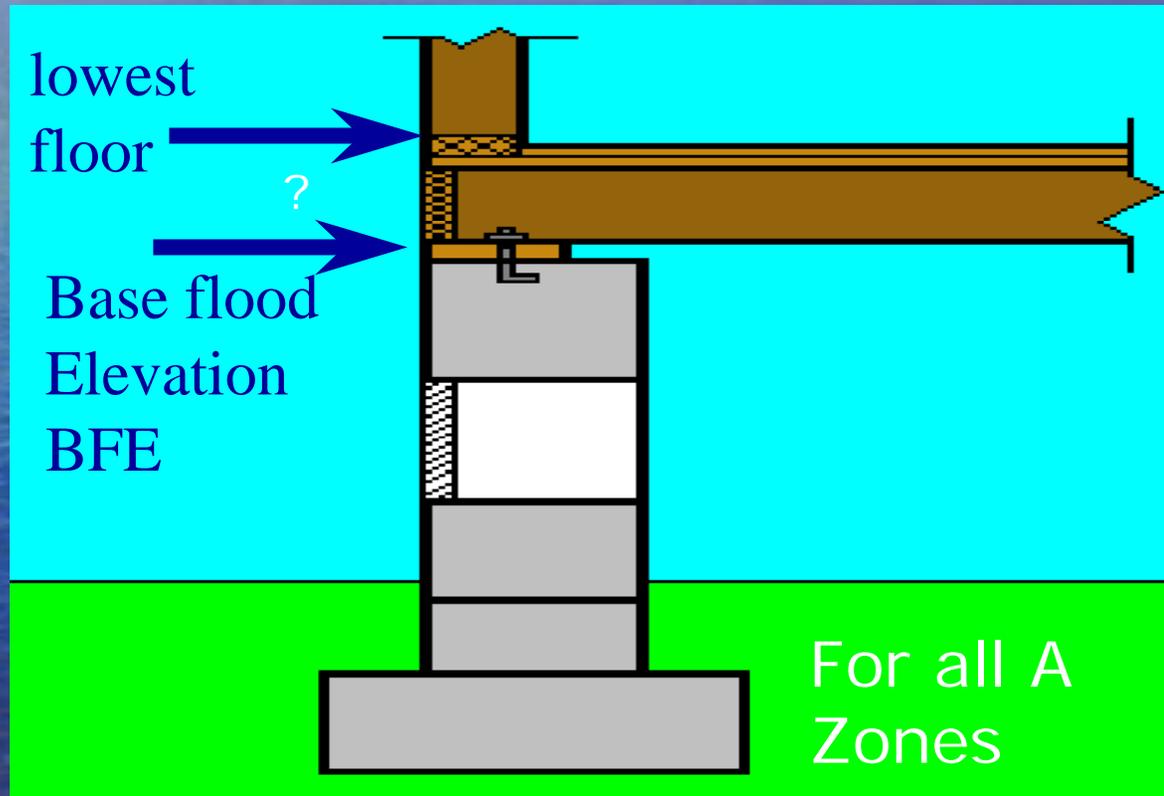
Lowest Floor Elevations Crawl-Space Foundation



FEMA Lowest Floor Guide

- See handout “Insurance Agent’s Lowest Floor Guide”
 - <http://www.fema.gov/pdf/nfip/manual200510/07lfg.pdf>
 - This is a part of the Flood Insurance Manual
 - Over 50 diagrams illustrating what is the lowest floor

Development Standards





FEMA

NATIONAL FLOOD INSURANCE PROGRAM

ELEVATION CERTIFICATE

AND

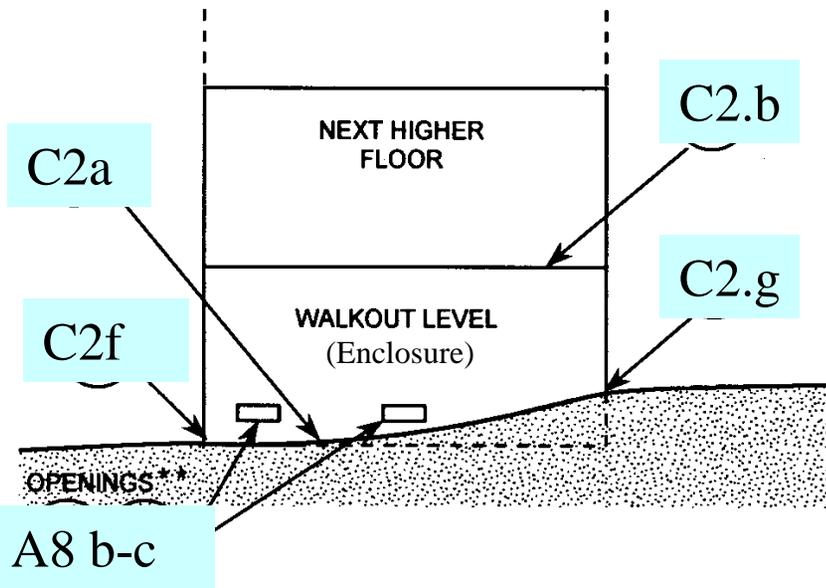
INSTRUCTIONS

Expiration extended until 3/31/09
Minor Changes are being made
See Handout

DIAGRAM 7

All buildings elevated on full-story foundation walls with a partially or fully enclosed area below the elevated floor. This includes walkout levels, where at least one side is at or above grade. The principal use of this building is located in the elevated floors of the building.

Distinguishing Feature – For all zones, the area below the elevated floor is enclosed, either partially or fully. In A Zones, the partially or fully enclosed area below the elevated floor is with or without openings** present in the walls of the enclosure. Indicate information about openings in Section C, Building Elevation Information (Survey Required).



Definitions you must know

- Lowest Floor
- Substantial Damage

Substantial Damage

Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.



Photo by Lou Sidell

Substantially Damaged?



From the New Hampshire State
Floodplain Management
Coordinator, Jennifer Gilbert



Photo by Brigitte Ndikum-Nyada

Importance of reading the FIRM

- Insurance rating Insurance agents
- Permitting Federal, State & Local
- Grants & Federal E.O. 11988
- Lenders Banks, S&Ls, SHA, SBA
 - Determinations are made by horizontal control only

Definitions you must know

- Lowest Floor
- Substantial Damage
- Substantial Improvement

Substantial Improvement

Means any reconstruction, rehabilitation, addition, or any other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement.

This term includes structures which have incurred substantial damage, regardless of actual repair work performed

Substantial Improvement (cont.)

The term does not, however, include either:

- (a.) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or

Substantial improvement does not include...

(b) Any alteration of an “historic structure” provided that the alteration will not preclude the structure’s continued designation as an “historic structure”, and a variance is obtained from the board of appeals.



Definitions you must know

- Lowest Floor
- Substantial Damage
- Repetitive Loss

Repetitive Loss

- A structure that has suffered flood damage on 2 occasions that equal or exceed \$1,000 each within any rolling 10 year period.
- 48,000 properties currently insured meet that definition (2004)
- Over 122,000 properties nationwide (2006)
- Over 10,000 RL's have exceeded 2 or 3 losses that cumulatively exceed the building value.
- They cost the NFIP approx. \$200,000,000 annually (2004)

Repetitive Loss Properties

- Of the 4,400,000* properties currently insured, only 1% are RL properties (2004)
- Expected to account for 25 to 30% of the Claims losses (2004)

*5,595,500 + Flood Insurance Policies in effect (2008)

Severe Repetitive Loss

Severe Repetitive Loss (SRL) is defined as:

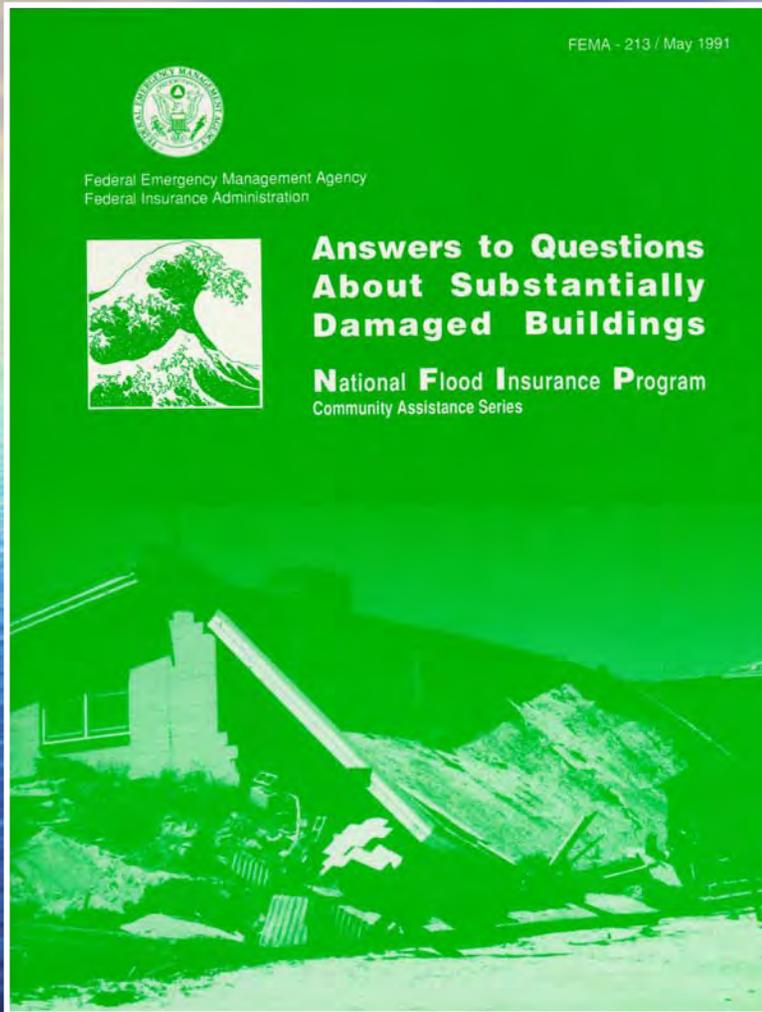
- (a) That has at least four NFIP claim payments (including building and contents) over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or
- (b) For which at least two separate claims payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building.

Severe Repetitive Loss

- For both a and b above, at least two of the referenced claims must have occurred within any ten-year period, and must be greater than 10 days apart.
- \$3,500,000,000 paid out in claims for Severe Repetitive Loss Properties
- 6,000 properties nationwide meet the definition of SRL

FEMA Technical Reference

“Answers to Questions About Substantially Damaged Buildings”



FEMA-213, May 1991

Definitions you must know

- Lowest Floor
- Substantial Damage
- Substantial Improvement
- Market Value

Definitions

- If the feds do not define it in the law or the regulations, use a standard dictionary

Market Value

The International Association of Appraising Officers

<http://www.iaao.org/>

The most probable price (in terms of money) which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus.

Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

Market Value

The buyer and seller are typically motivated;

Both parties are well informed or well advised, and acting in what they consider their best interests;

A reasonable time is allowed for exposure in the open market;

Payment is made in terms of cash in United States dollars or in terms of financial arrangements comparable thereto;

The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

CAUTION

BE CONSISTANT in:

- Your process of review
- Your acceptance of information as to type and criteria

Definitions you must know

- Lowest Floor
- Substantial Damage
- Substantial Improvement
- Market Value
- Increased Cost of Compliance

Increase Cost of Compliance

- **Increased Cost of Compliance.** Coverage for expenses that a property owner must incur, above and beyond the cost to repair the physical damage the structure actually sustained from a flooding event, to comply with mitigation requirements of State or local floodplain management ordinances or laws. Acceptable mitigation measures are elevation, floodproofing, relocation, demolition, or any combination thereof

ICC

- Up to \$30,000 for flood mitigation
- Substantially Damaged, or
- Repetitive Loss
 - Twice in 10 years
 - Average loss equaled or exceeded 25% of the market value
 - Must have had flood insurance claims for each of the two flood losses
 - Community's FPM regulations have Repetitive Loss language

If your home or business is damaged by a flood, you may be required to meet certain building requirements in your community to reduce future flood damage before you repair or rebuild. To help you cover the costs of meeting those requirements, the National Flood Insurance Program (NFIP) includes **Increased Cost of Compliance (ICC) coverage for all new and renewed Standard Flood Insurance Policies.**



National Flood Insurance Program

Increased Cost of Compliance Coverage

How You Can Benefit



For more information about the NFIP and flood insurance, call 1-800-427-4661, or contact your insurance company or agent.

For an agent referral, call 1-888-435-6637
TDD 1-800-427-5593

Also, visit FEMA's Web site at <http://www.fema.gov/business/nfip>
<http://www.floodsmart.gov>
for valuable guidance to help you reduce losses from floods, fires, and other disasters.

F-300 (06/07)



Definitions you must know

- Lowest Floor
- Substantial Damage
- Substantial Improvement
- Market Value
- Increased Cost of Compliance
- Pre-FIRM

Pre-FIRM

Pre-FIRM Building. A building for which **construction or substantial improvement** occurred on or before December 31, 1974, or before the effective date of an initial Flood Insurance Rate Map (FIRM).

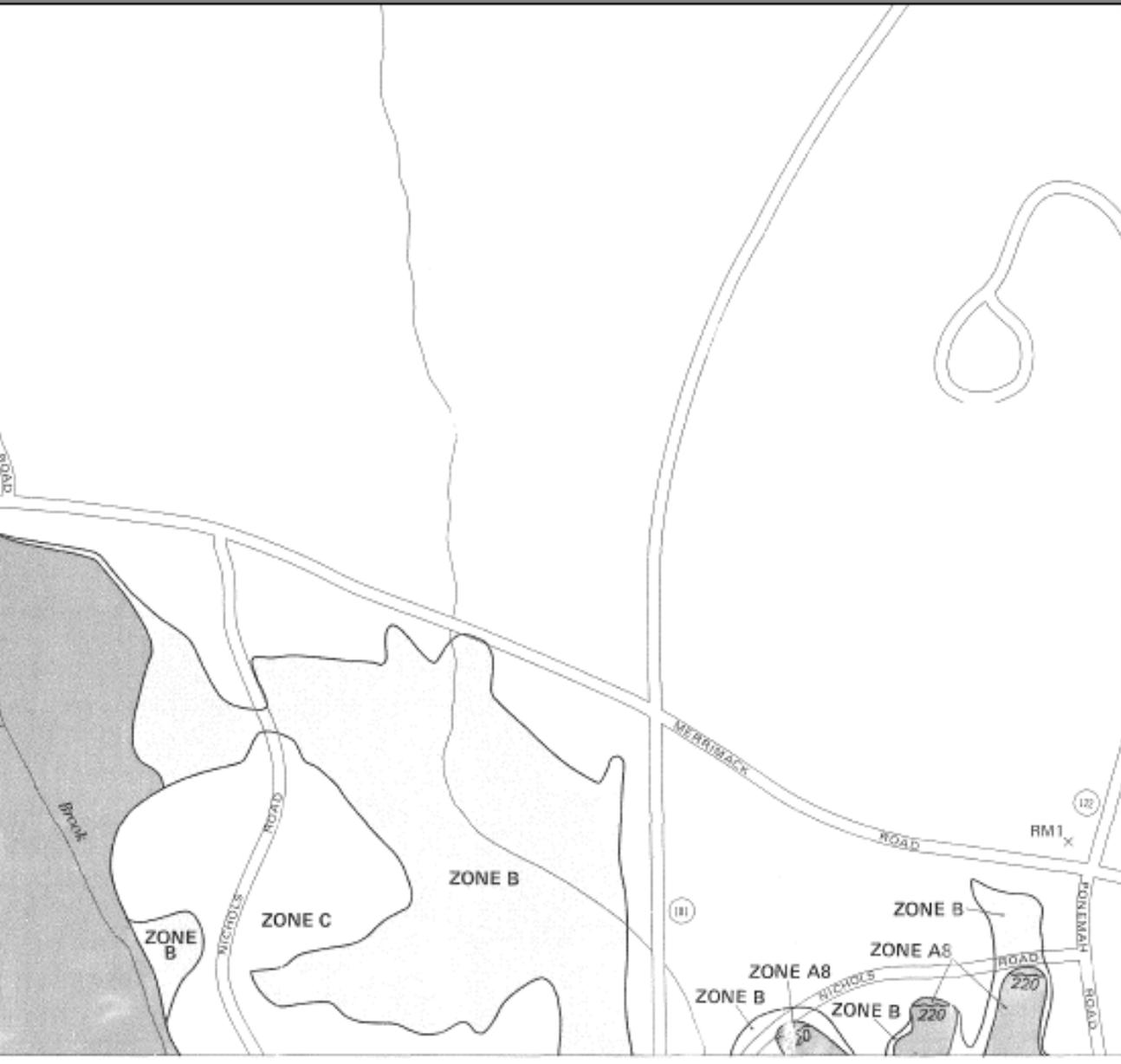
Pre-FIRM

- Pre-FIRM buildings are those built before the effective date of the first FIRM for a community. This means they were built before detailed flood hazard data and flood elevations were provided to the community and usually before the community enacted comprehensive regulations on floodplain regulation. Pre-FIRM buildings can be insured using "subsidized" rates. These rates are designed to help people afford flood insurance even though their buildings were not built with flood protection in mind.

Federal Emergency Management Agency Community Status Book Report NEW HAMPSHIRE

Communities Participating in the National Flood Program

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal
330152#	ACWORTH, TOWN OF	SULLIVAN COUNTY	09/13/74	04/01/01	05/23/06(L)	04/01/01	No
330174	ALBANY, TOWN OF	CARROLL COUNTY	01/17/75	03/01/95	03/01/95(L)	03/01/95	No
330041#	ALEXANDRIA, TOWN OF	GRAFTON COUNTY	06/28/74	06/08/98	02/20/08	07/16/07	No
330103#	ALLENSTOWN, TOWN OF	MERRIMACK COUNTY	04/05/74	04/02/79	04/02/79	04/02/79	No
330020#	ALSTEAD, TOWN OF	CHESHIRE COUNTY	07/26/74	04/02/86	05/23/06(M)	04/02/86	No
330001#	ALTON, TOWN OF	BELKNAP COUNTY	07/19/74	05/17/88	05/17/88	05/17/88	No
330081#	AMHERST, TOWN OF	HILLSBOROUGH COUNTY	03/22/74	07/02/79	07/02/79	07/02/79	No
330104	ANDOVER, TOWN OF	MERRIMACK COUNTY	06/28/74	04/02/86	04/02/86(M)	04/02/86	No
330082#	ANTRIM, TOWN OF	HILLSBOROUGH COUNTY	04/12/74	04/01/81	04/01/81	04/01/81	No
330042#	ASHLAND, TOWN OF	GRAFTON COUNTY	06/28/74	04/02/86	02/20/08(M)	04/02/86	No
330175#	ATKINSON, TOWN OF	ROCKINGHAM COUNTY	01/03/75	04/02/93	05/17/05	03/03/09	No
330176#	AUBURN, TOWN OF	ROCKINGHAM COUNTY	02/28/75	04/02/86	05/17/05	04/02/86	No
330177	BARNSTEAD, TOWN OF	BELKNAP COUNTY	01/03/75	04/02/86	04/02/86	04/02/86	No
330178#	BARRINGTON, TOWN OF	STRAFFORD COUNTY	02/21/75	09/01/89	05/17/05	09/01/89	No
330010#	BARTLETT, TOWN OF	CARROLL COUNTY	06/28/74	05/01/79	03/01/84	05/01/79	No
330043#	BATH, TOWN OF	GRAFTON COUNTY	03/01/74	04/15/92	02/20/08	04/15/92	No
330083#	BEDFORD, TOWN OF	HILLSBOROUGH COUNTY	03/29/74	04/16/79	05/02/94	04/16/79	No
330002	BELMONT, TOWN OF	BELKNAP COUNTY	06/28/74	09/01/89	09/01/89(L)	09/01/89	No
330084#	BENNINGTON, TOWN OF	HILLSBOROUGH COUNTY	03/08/74	04/18/83	04/18/83	04/18/83	No
330029#	BERLIN, CITY OF	COOS COUNTY	07/19/74	06/15/82	06/15/82	06/15/82	No
330045#	BETHLEHEM, TOWN OF	GRAFTON COUNTY	06/28/74	04/15/86	02/20/08(M)	04/15/86	No
330105#	BOSCAWEN, TOWN OF	MERRIMACK COUNTY	03/15/74	07/16/79	07/16/79	07/16/79	No
330107	BOW, TOWN OF	MERRIMACK COUNTY	05/03/74	04/16/79	11/20/00	04/16/79	No
330106#	BRADFORD, TOWN OF	MERRIMACK COUNTY	06/28/74	04/15/92	04/15/92	04/15/92	No
330125#	BRENTWOOD, TOWN OF	ROCKINGHAM COUNTY	06/28/74	04/15/81	05/17/05	04/15/81	No
330046#	BRIDGEWATER, TOWN OF	GRAFTON COUNTY	08/16/74	06/17/91	02/20/08	06/17/91	No



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
AMHERST,
NEW HAMPSHIRE
HILLSBOROUGH COUNTY

PANEL 7 OF 12
(SEE MAP INDEX FOR PANELS NOT PRINTED)



COMMUNITY-PANEL NUMBER
330081 0007 B

EFFECTIVE DATE:
JULY 2, 1979



U.S. DEPARTMENT OF HOUSING
AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



EXPLANATION	
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A00	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. [Medium shading]
C	Areas of minimal flooding. [No shading]
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity [wave action]; base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity [wave action]; base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION
MARCH 22, 1974

CONVERSION TO REGULAR PROGRAM
JULY 2, 1979

Post-FIRM

A building for which construction or substantial improvement occurred after December 31, 1974, or **on or after the effective date of an initial Flood Insurance Rate Map (FIRM)**, whichever is later.

Questions

- NFIP Overview?
- Definitions and Acronyms?
- Anything else so far?

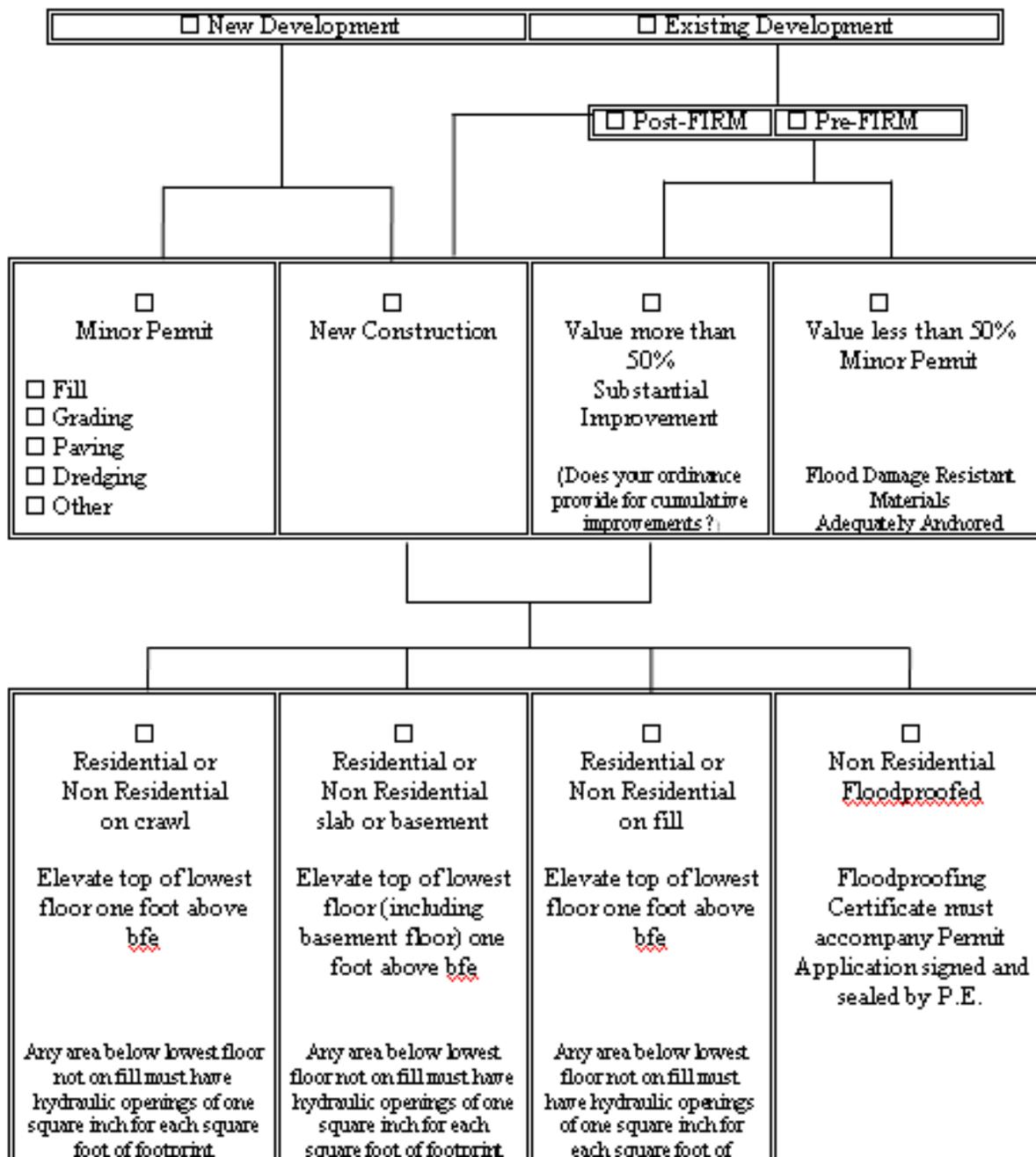
Determination of Substantial Improvement



Permitting Process

- Does your permit application reflect the provisions of your ordinance?
- Do you ask the right questions that will ensure the regulations will be met?
- The Decision Tree

A, AI-30, AE and AH Zones [Not in Floodway]



Authority To Regulate Floodplains

- You are enforcing the local jurisdiction's regulations—not FEMA's.
- Local regulations for reducing flood loss receive authority granted to municipalities by the States.
- Inherent in the right to enact regulations is the duty and authority to administer and enforce them.



Who makes the determination?

- Who is the decider?
- At what level is the decision made?
 - The community derives its authority from the State
 - The community has an agreement with the Feds
 - Community determines who shall administer the codes
- Does your state have a mandatory building code?

Other Code Concerns

- States and local jurisdictions that have adopted one or more of the codes in the International Code Series® (I-Codes) are cautioned that these codes have provisions for buildings in flood hazard areas, including provisions related to substantial improvement and substantial damage.
- The pertinent codes for New Hampshire are:
 - *2006 International Building Code® (IBC)*
 - *2006 International Residential Code® (IRC)*
- The codes reference the nationally recognized standard produced by the American Society of Civil Engineers, *Flood Resistant Design and Construction (ASCE 24)*

Some Comments About State Model Ordinances

- State provided Model Floodplain Management Ordinances are intended as a starting point for communities
- Based on the maps, the Models are tailored to fit each community's needs, with limited optional language
- Communities may consider more restrictive standards than the minimum standards

Code differences

- IRC and NFIP both require decisions regarding Substantial Improvement however:
- NFIP places the burden on the Local Official for the determination
- IRC places the burden on the Board of Appeals.
- Consult you community's counsel for guidance in you situation

Where to go to get help

- Each State has a designated State Coordinating Agency for the NFIP, with an individual identified as the NFIP State Coordinator Jennifer Gilbert. State Coordinators provide a link between the Federal government and local levels of government that have responsibilities related to floodplain management.
- Additional assistance may be sought from Regional Office of FEMA in Boston.
- State Hazard Mitigation Officer

Who makes the determination?

Community's responsibility

See FPM regulations in 44CFR 59.22(b)(1)

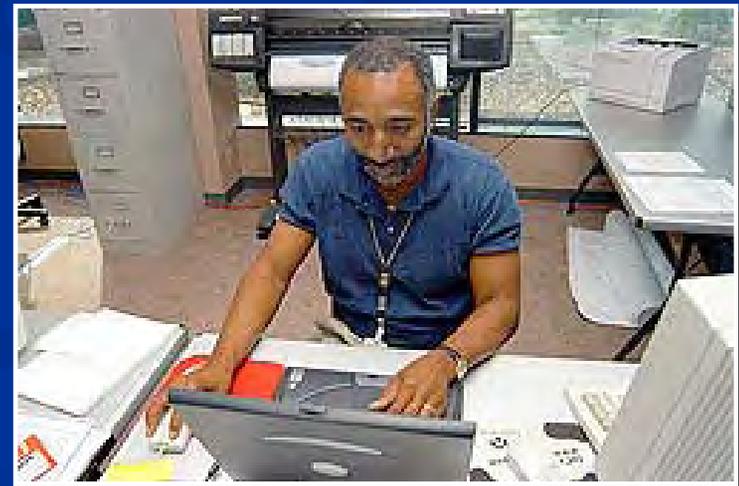
- (1) Appoint or designate the agency or official with the responsibility, authority and means to implement the commitments made in paragraph (a) of this section
- (2) Designate the official responsible to submit a report to the Administrator concerning the community participation in the Program, including but not limited to development and implementation of floodplain management regulations

Who makes the determination?

- Adoption of minimum NFIP requirements [see 44CFR Parts 59.2, 60.1
- Permits required for “development”
 - 60.3(b)1.
- Development standards adopted
 - Require new construction and Substantial Improvement meet elevation requirements 60.3(b)4 and 60.3(c)2.

Community Responsibility

- Community:
 - Only entity that can make a substantial improvement/substantial damage determination.
 - Must assure:
 - Accuracy of improvement cost and actual repair/damage value.
 - Consistent market value estimates.



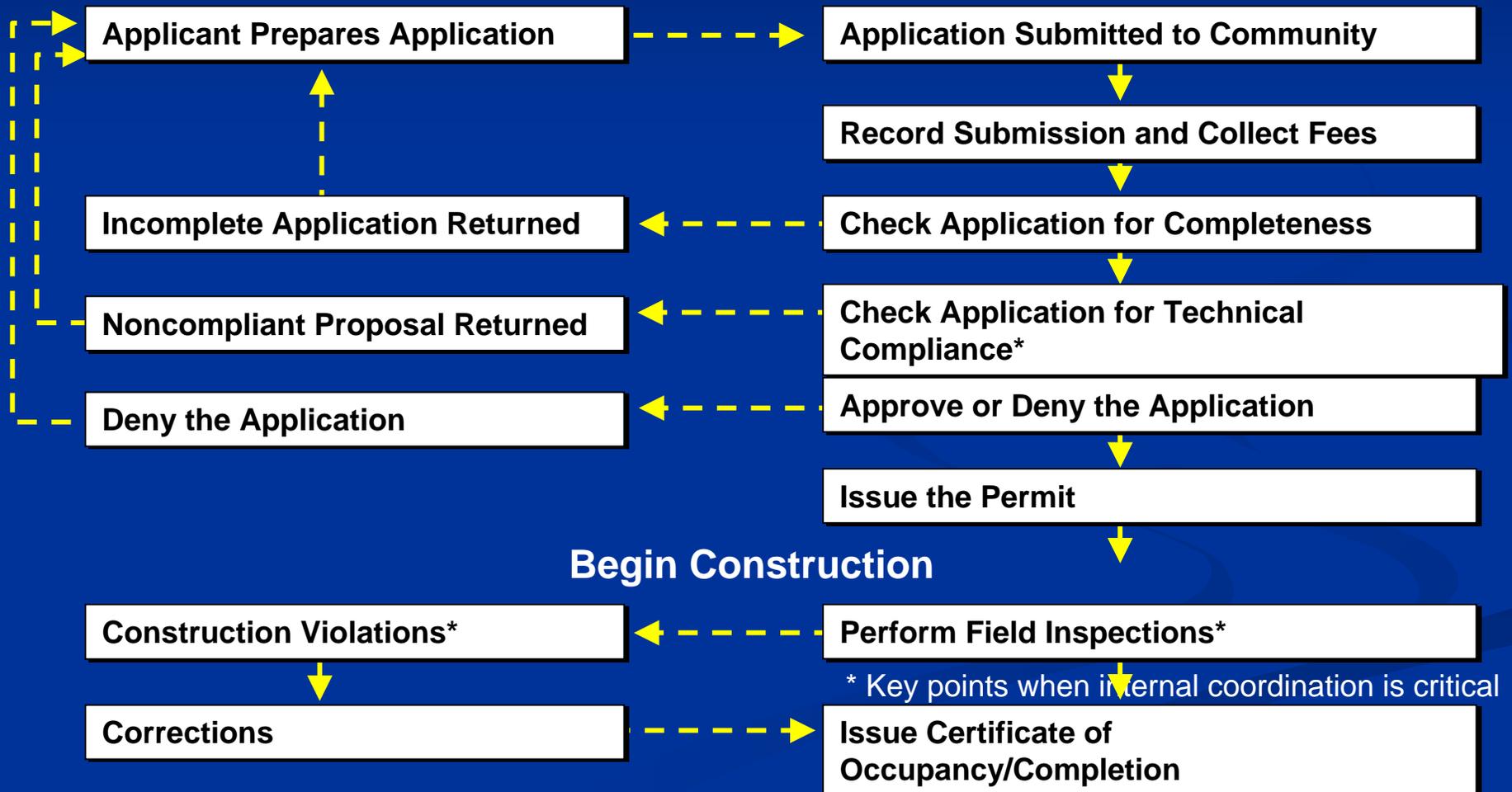
Included in Substantial Improvement

- Reconstruction
- Rehabilitation
- Addition
- Other Improvements



Substantial improvement of any structure in the floodplain, whether damaged or not, is considered new construction under the community's floodplain ordinance.

Application Processing and Construction



Applicants Responsibility

- Do you offer a pre-application meeting with potential applicants?
- Advise those for which you think it may be a Substantial Improvement or if it is a Substantial Damaged building that they must provide you with the appropriate information for you to make an appropriate decision.

Making the determination

- When to make the determination
 - As soon as possible – but not until you have the needed information to do so.
- Does your permit applications ask the right questions?
 - Do you ask the estimated cost of the improvements?
 - Do you ask for the market value of the structure?
 - Do you ask for a breakdown on labor and materials?

Asking the questions

FLOOD HAZARD DEVELOPMENT APPLICATION

Community Name, Your State

(All applicants must complete entire application)

[60.3(e)]

Application is hereby made for a Flood Hazard Development Permit as required under Article II of the Floodplain Management Ordinance of *Community Name*, Maine, for development as defined in said ordinance. This permit application does not preclude the need for other municipal permit applications. [Article II, also, NFIP Reg. Part 60.3(a)(1)]

Owner: _____

Phone No.: _____

Applicant: _____

Phone No.: _____

Contractor: _____

Phone No.: _____

Address: _____

Address: _____

Address: _____

LEGAL DESCRIPTION

Is this part of a subdivision? Yes No If yes, give the name of the subdivision and lot number:

Subdivision: _____ Lot #: _____

Tax Map: _____ Lot #: _____

Asking the questions

Tax Map: _____ Lot #: _____

Address: _____
Street/Road Name

Zip Code: _____
Town/Zip Code

General explanation of proposed development: _____

Estimated Value of Proposed Development: \$ _____ *[Necessary to administer Substantial Improvement requirements or Accessory]*

Proposed Lowest Floor elevation [for new or substantially improved structure]: Article III.H.3.

OTHER PERMITS

Are other permits required from State or Federal jurisdictions? Yes No
If yes, are these other permits attached? Yes No Not Applicable

Federal and State Permits may include but are not limited to: ME/DEP/Natural Resource Protection Act, Site Location of Development Act, Metallic Mineral Exploration, Advanced Exploration and Mining; USACE/Section 9 &10 of the Rivers and Harbors Act/ Section 404 of the Clean Water Act; Federal Energy Regulation Commission.

SEWER AND WATER

Sewage Disposal: Public Private *[Article III.F., Article VI.C.&D., and NFIP Reg. Part 60.3(a)(6)]*
 Existing Proposed Not Applicable Type _____

Water Supply: Public Private *[Article III.F., Article VI.B., and NFIP Reg. Part 60.3(a)(5)]*

Asking the questions

(This section to be completed by Municipal Official)

LOCATION

Flooding Source (name of river, pond, ocean, etc.): Recommended but not required by FPMO

- V1-30 Zone VE Zone AE Zone A1-30 Zone A Zone AO Zone AH Zone [Needed to administer Ordinance]
 FRINGE FLOODWAY (2 width of floodplain in A Zone) [Needed to administer Article VI]

Base Flood Elevation (bfe) at the site _____ NGVD [Required for New Construction or Substantial Improvement]

Lowest floor elevation of proposed or existing structure _____ NGVD [Required for New Construction or Substantial Improvement]

If proposed development is in an AE or A1-30 Zone and cross section data is available in the Flood Insurance Study, please note the nearest cross section reference letter and elevation of base flood at nearest cross section above and below the site. [Recommended but not required by FPMO]

Cross Section Letter	Base Flood Elevation
Above Site _____	Above Site _____
Below Site _____	Below Site _____

Basis of unnumbered A Zone bfe determination: _____ [NFIP Reg Part 60.3(b)(4)]

- From a Federal Agency: USGS USDA/NRCS USACE Other _____
 From a State Agency: MDOT Other _____
 Established by Professional Land Surveyor
 Established by Professional Engineer HEC/RAS HEC II HY 7 TR20 TR55 Quick-2
 Other _____
 Highest Known Water Level
 Other (Explain) _____

VALUE

If the development involves work on an existing structure, enter the **Market Value** of existing structure before improvements:

\$ _____ Needed to administer Substantial Improvement requirements.

Why is the determination needed?

- 60.3(b)(4), (c)(2), (d)(1), and (e)(1) require substantial improvements be elevated if residential.
- 60.3(b)(4), (c)(2), (d)(1) require substantial improvements be floodproofed if not elevated for non-residential structures.

How to make a determination

- Mark will provide the mechanics and details of a determination with the RSDE portion after lunch.
- For now the most important part is the following formula:

Determining Substantial Improvement

$$\frac{\text{Cost of Improvement}}{\text{Market Value of the building}} \geq 50\%$$

$$\frac{\text{Building improvement is } \$52,000}{\text{Current Market Value of structure is } \$100,000} = 52\% \text{ or } \geq 50\%$$

Since the value of the improvement exceeds the value of the structure it is a Substantial Improvement

Determining Substantial Damage

$$\frac{\text{Value of Damages}}{\text{Market Value of the building}} \geq 50\%$$

$$\frac{\text{Value of the Damages is } \$52,000}{\text{Current Market Value of structure is } \$100,000} = 52\% \text{ or } \geq 50\%$$

Since the value of the improvement exceeds the value of the structure it is a Substantial Improvement

How to make the determination

- Where can you find the information you need?
- Does your ordinance allow you to bill the applicant for additional information?
- Are you allowed to hold the permit until you get the information you need to make the decision?

Items to be included in damage determinations:

- All structural elements including:
- Foundation footings and pilings
- Monolithic or other types of concrete slabs
- Bearing walls, tie beams and trusses
- Wood or reinforced concrete decking or roofing
- Floors and ceilings
- Attached decks and porches
- Interior partition walls
- Exterior wall finishes (e.g. brick, stucco, or siding) including painting and decorative moldings
- Windows and doors
- Reshingling or retiling a roof
- Hardware

Items to be included in damage determinations:

All interior finish elements, including:

- Tiling, linoleum, stone, hardwood or carpet over subflooring.
- Bathroom tiling and fixtures
- Wall finishes (e.g. drywall, painting, stucco, plaster, paneling, marble, or other decorative finishes)
- Kitchen, utility and bathroom cabinets
- Built-in bookcases, cabinets, and furniture
- Hardware

Items to be included in damage determinations:

All utility and service equipment. including:

- Heating, ventilating, and air conditioning equipment
- Repair or reconstruction of plumbing and electrical services
- Light fixtures and ceiling fans
- Security systems
- Built-in kitchen appliances
- Central vacuum systems
- Water filtration, conditioning, or recirculation systems

Items to be included in damage determinations:

Also:

- Labor, profit, and other costs associated with repairing building components.

(If it is hard wired or hard plumbed, it is counted.)

What not to include

- Appraisals based upon income potential
- Land
- Landscaping
- Driveway
- Septic and tile field
- Contents unless built in
- Fees for architectural and engineering plans, specifications, survey and building permits
- Demolition costs associated with clean-up, debris removal, and preparation of the site

What not to include

- Structural fill for elevating the building
- Plug-in type appliances such as washers, dryers, stoves, refrigerators, window air conditioners, or
- Dehumidifiers.
- Detached structures such as garages, gazebos, and sheds
- Fences, sidewalks, and yard lights
- Swimming pools

Word of caution!

Substantial damage is determined regardless of the actual cost to the owner. You must figure the true cost of bringing the building back to pre-damage condition using qualified labor and materials obtained at market prices.

Some wild examples

- The window replacement and roof shingles exceed the value of the Camp
- My brother-in-law had the windows from another project they tore down
- My church is furnishing the labor

The scary question!

- What do you do when the project is $\frac{3}{4}$ done and the cost exceeds 50%?

\$\$\$, “[{(#&@A?!@+<+_-*^%\$~)}]”



Have a nice day

Discuss some wild examples

- Labor
- Materials
- What about procedures?
 - Progress estimates
 - Pros and cons
- What happens if?
 - If they don't have flood insurance?
 - If they underestimated the cost?

Resources to Help

The following are an effort to give you the lead on proven resources to help you when dealing with:

- Substantial Improvements
- Substantial Damage
- Repetitive Losses
- Increased Cost of Compliance
- Residential Substantial Damage Estimator

General Reference

- Answers to Questions about Substantial Damage
- Unit 8 of a Study Guide and Desk Ref
- Lowest Floor Guide
- RSDE Software and Training Video
- FEMA is developing a SISD Desk Ref

Screening Tools

- Claims adjuster monetary damage est.
- Cost estimates by owner & documentation

Acceptable Sources of Cost Information

- Itemized actual costs - materials and labor
- Estimated of materials and labor that are prepared by licensed contractors or professional construction cost estimators
- Building valuation tables by building code organizations & cost estimating manuals/tools for professional building-cost estimating services. (i.e. Marshal Swift, RS Means)
- “Qualified estimates” by local officials using local/regional construction costs

Market Value

Most accurate and reliable

- Appraisals by professional appraisers
 - Use standard practices
 - Qualified to appraise the type of property
 - Licensed in state the property is located.

Market Value

Should be required:

- Estimating methods yield a percent close 50%
- If applicant disagrees with community's determination developed using estimating methods.
- Explicitly written in community's floodplain regs or required by other local/state codes

Market Value

Adjusted assessed value – best used as a screening tool

- Usually an adjustment factor is necessary because the assessed values cannot be used as direct equivalent for market value. Local officials should consult with the authority that prepares the assessment.

Market Value

Some limitations:

- Appraisal cycle – how often are they done?
 - When was the last appraisal?
- Land values – need to be separate from structure(s)
- Assessment level – established ratio between the assessor's full cash value and the true fair market value.

Market Value

Actual cash value/replacement –
screening tool

- Actual cash value – cost to replace building on the same parcel with new building of like-kind quality less age-depreciation, use, neglect, and damage.
 - Most situation ACV is a reasonable approximation of market value.

Market Value

- Replacement cost value does not account for depreciation and thus likely overestimates market value
 - Construction cost information are available to support estimating the replacement of cost of a building (e.g. Marshall & Swift, RS Means)

Market Value

Qualified Estimates

Developed by a qualified local official who has sufficient experience and professional judgment on which to base estimates. Estimates should be based on best available information.

Flood Insurance Implication on Determinations

Pre-Firm vs. Post FIRM

Pre-FIRM vs. Post-FIRM

- Quick Review of definitions
 - Pre-FIRM includes structure prior to the FIRM
 - Post-FIRM includes structure after the FIRM
 - Includes
 - substantial improvement
 - Substantial Damage
- Rating is different
 - Pre-FIRM is subsidized by those with Post-FIRM policies
 - Post FIRM is actuarial

Pre-FIRM vs. Post-FIRM

- Substantial Improvements or Substantial Damage to a Pre-FIRM structure will reclass the structure to Post-FIRM
- It will be rerated with actuarial rates
- If non-compliant lowest floor – WOW! The rates can go as high as \$25/\$100.

Repetitive Loss Structures

- Special rating
 - Actuarial review by separate rating
 - When offered Mitigation programs do it or face higher rates

What is ICC?

(Coverage D)

It is additional insurance to assist the building owner with meeting the additional costs of bringing a non elevated building into compliance by either elevating the building or making it floodproof if it is a non residential building.

Who can get it?

- It is only available via a flood insurance policy (Coverage A)
 - Coverage A is “building” coverage
- Which is only available in NFIP participating communities
- Coverage is **MANDATORY**
 - Except for:
 - Emergency Program
 - Condominiums
 - Group Policies
 - Appurtenant structures

ICC coverage cont.

- When does it pay?
 - ONLY After a **flood** loss
- What qualifies for a payout
 - If the local floodplain administrator determines the structure to be substantially damaged by a flood.
Must be damaged in single event at or above 50% of the before damage market value.

ICC coverage cont.

- ICC Born out of the 1994 NFIP Reform Act
- How Much?
 - Up to \$30,000
- What does it cover?
 - The cost of mitigation measures that will reduce flood risk

ICC coverage cont.

- What mitigation measures?
 - Elevation
 - Floodproofing (only for non-residential structures)
 - Relocation
 - Demolition
- Or any combination of the above

ICC coverage cont.

- When does it pay?
 - ONLY After a **flood** loss
- What qualifies for a payout
 - If the local floodplain administrator determines the structure to be substantially damaged by a flood.
 - Must be damaged in single event at or above 50% of the before damage market value.

ICC coverage cont.

Or, If the community has Rep Loss provisions, additional possibilities exist

- Damaged by flood twice in the past ten years and insured with flood insurance
- On average the damages were $\geq 25\%$ of the market value at the time of each flood,

Increased Cost of Compliance

- Policy Holder's Role:
 - Report Loss
 - Provide adjuster's report to community
 - Provide contract's signed contract with \$ est.
 - Provide Proof of Loss and permit to insurance company for 1st portion of claim
 - Complete mitigation measure
 - Provide Certificate of compliance to insurance company

Increased Cost of Compliance

- Adjuster's/Claims Reps role
 - Est. flood damage and inform policy holder of possible eligibility for ICC
 - Set up file
 - Damage and market value of structure
 - verify that damage claim info supports community information
 - Provide Proof of Loss form to insured
 - Provide claim payments to insured

Increased Cost of Compliance

- Code Officer/Building Insp./FPM administrator's role
 - Determine if substantially damaged or repetitive loss and provide written determination to policy holder
 - Discuss mitigation options and FPM requirement to applicant
 - Issue appropriate permits
 - Inspections
 - Certificate of Compliance

ICC Claim Roles

ICC Claim Roles

The key roles assumed when applying for ICC coverage are summarized below.

Key Roles Assumed Within the ICC Claims Process*		
Policyholder	Adjuster/ Claims Representative	Building Department/ Floodplain Administrator
1. Report flood loss to insurer.	2. Estimate flood damage and tell policyholder he/she may be eligible for ICC benefits.	3. Determine building "substantially damaged" or a "repetitive loss." Provide written determination to policyholder. Discuss mitigation options that will comply with floodplain regulations. Issue necessary building permits for mitigation measures.
4. Provide the building department's or local floodplain administrator's written determination of substantial damage or repetitive loss to the adjuster.	5. Set up an ICC claims file: <ul style="list-style-type: none"> ▪ Obtain damage and market value information on structure. For a repetitive loss structure, get previous claim information. ▪ Verify that the flood-related damage for the current building claim supports community information. 	
6. Obtain a signed contract that details costs to perform the mitigation activity and give it to the claims representative.	7. Provide Proof of Loss form to the policyholder.	
8. Provide Proof of Loss and copy of community permit(s) to the insurance company in order to receive the first portion of the ICC claim money.	9. Provide an initial ICC claim payment to the policyholder.	
10. Complete the mitigation measure.		11. Inspect completed mitigation work and issue a Certificate of Occupancy or Compliance or other written evidence that the work is compliant with floodplain management ordinance.
12. Provide a copy of Certificate of Occupancy or Compliance to the insurer.	13. Make final ICC claim payment upon receipt of Certificate of Occupancy or Compliance.	

ICC

- What happens if?
 - If they don't have flood insurance?

Local official's flood Insurance Implications

- Be consistent and compliant in your actions because your actions can impact the insurance rates owners pay
- If your practice and administration of the regulations are compliant and consistent there is minimal liability exposure on the community

RSDE VIDEO

- Intro by Jennifer
- Awesome stuff!

Response to Video

- Has anyone used RSDE?
- What about consistency?
- What about letters following a flood?