



Promoting Floodplain Management: What Your Community Can Do

Jennifer Gilbert, CFM, ANFI
NH Floodplain Management Coordinator
National Flood Insurance State Coordinator



Quote of the Day

“There are some parcels that Mother Nature owns. She may only visit once every few years, but she owns the parcel and when she comes to visit, she visits.”



Source: AP

Andrew Cuomo

Governor of New York

2013 State of the State Address

Agenda

- Overview of NFIP
- Upcoming Changes
- What Communities Can Do to Reduce the Impacts



What is NFIP?

- Voluntary and mutual agreement between the Federal Emergency Management Agency (FEMA) and a community
- Participating Communities agree to adopt and administer appropriate regulations
- FEMA will make available flood insurance for all residents

NFIP in New Hampshire

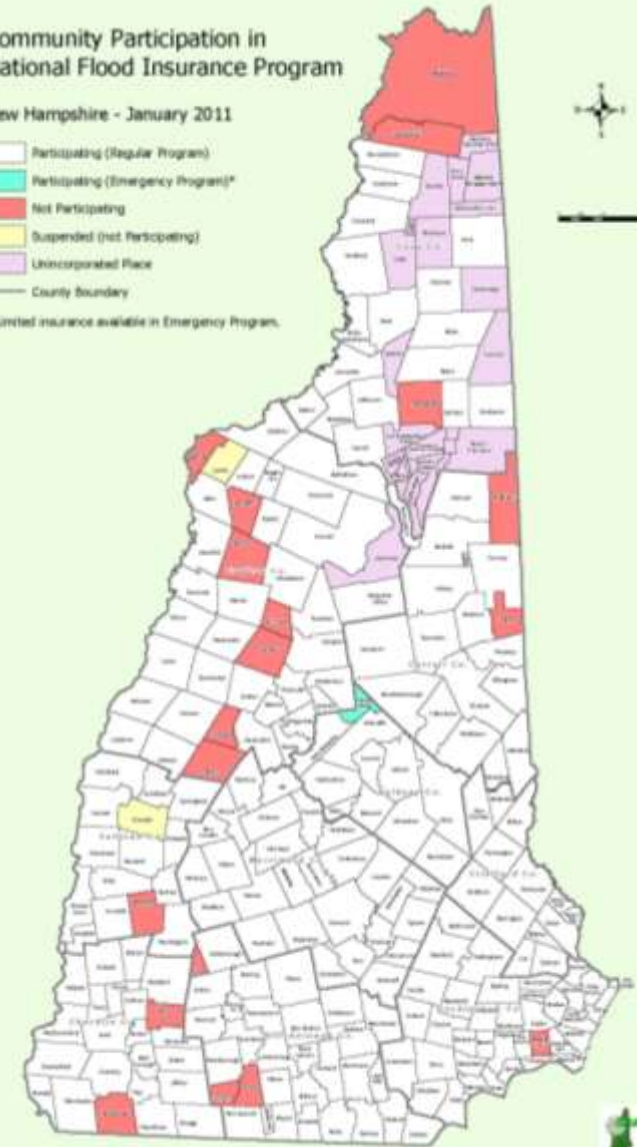
- 214 communities (91%) participate
- 21 communities (9%) do not participate
- 2 communities are suspended

Community Participation in National Flood Insurance Program

New Hampshire - January 2011



* Limited insurance available in Emergency Program.



NFIP Minimum Regulations Better than Nothing....but...

- Buildings can still suffer damage
- Do not address changes to floodplain areas that are not updated on FEMA's maps
- Do not address future conditions



Better than Nothing....but...



ASFPM strongly believes the minimum NFIP floodplain regulations:

- do not provide adequate long-term flood risk reduction for communities; and
- the benefits of flood risk reduction achieved by higher regulatory standards far outweighs the burden of administering them.

Other Factors to Consider

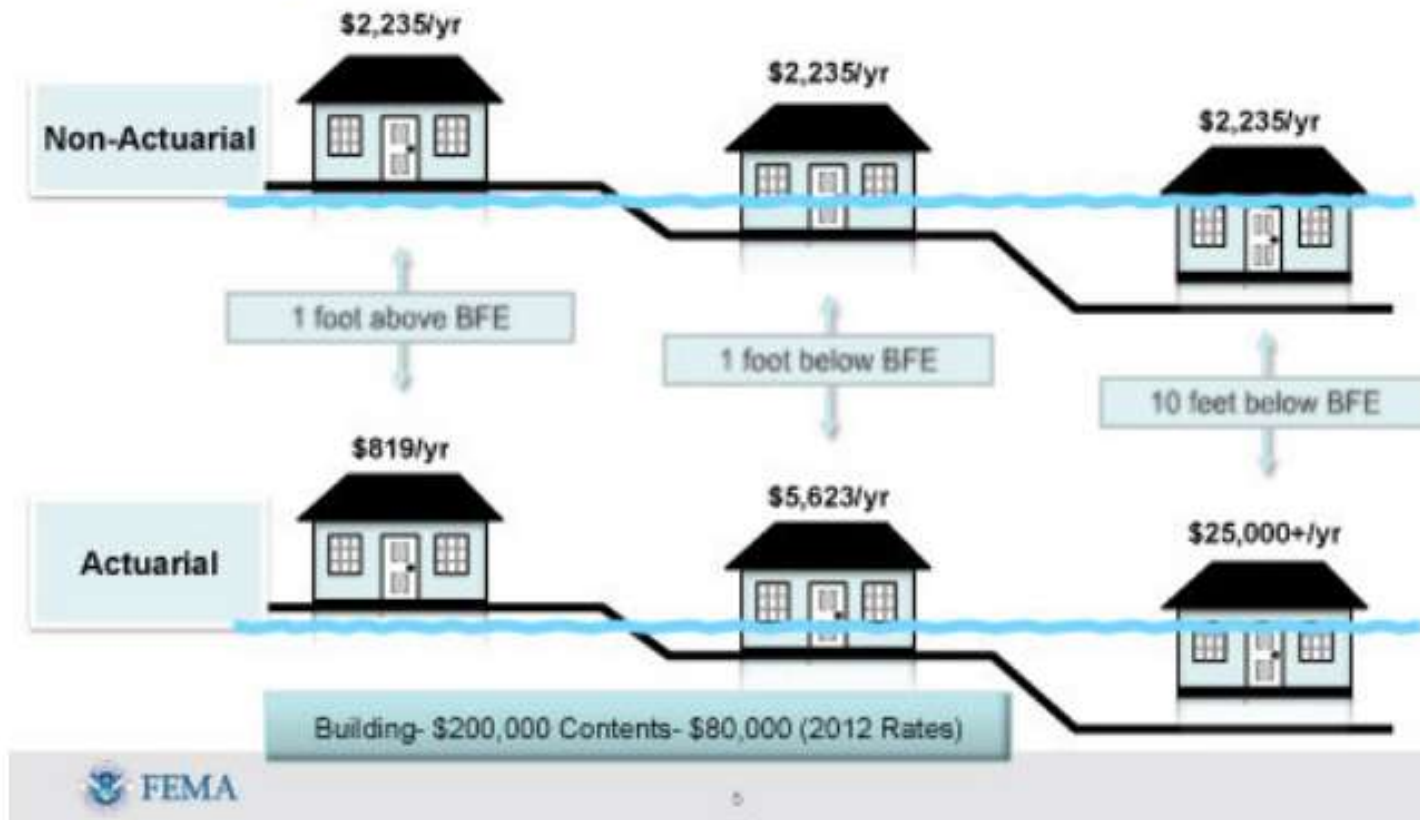
- Biggert-Waters National Flood Insurance Reform Act of 2012
- NH Coastal Mapping Project
- Sea Level Rise

Flood Insurance Reform Act of 2012

- Passed by Congress on July 6, 2012
- Intent is to eliminate subsidies for:
 - Structures built prior to the first flood insurance map in a community (pre-FIRM)
 - Policies based on the map in effect when structure was built (grandfathering)

NFIP Rating Examples: The Impact of Loss of Subsidies

Rate comparisons



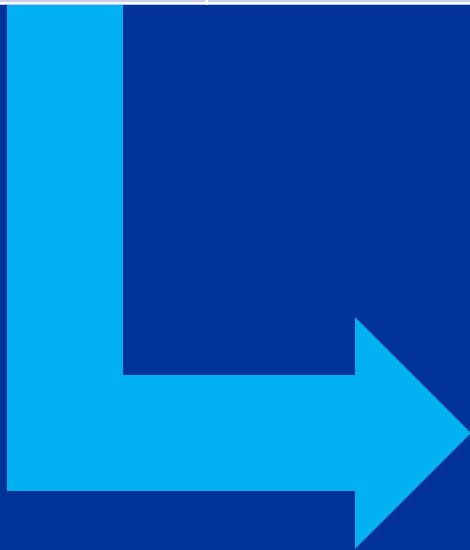
An example of how National Flood Insurance Program rates may increase when the Biggert-Waters Flood Insurance Reform and Modernization Act of 2012 is implemented.

Current & Upcoming Insurance Rate Changes

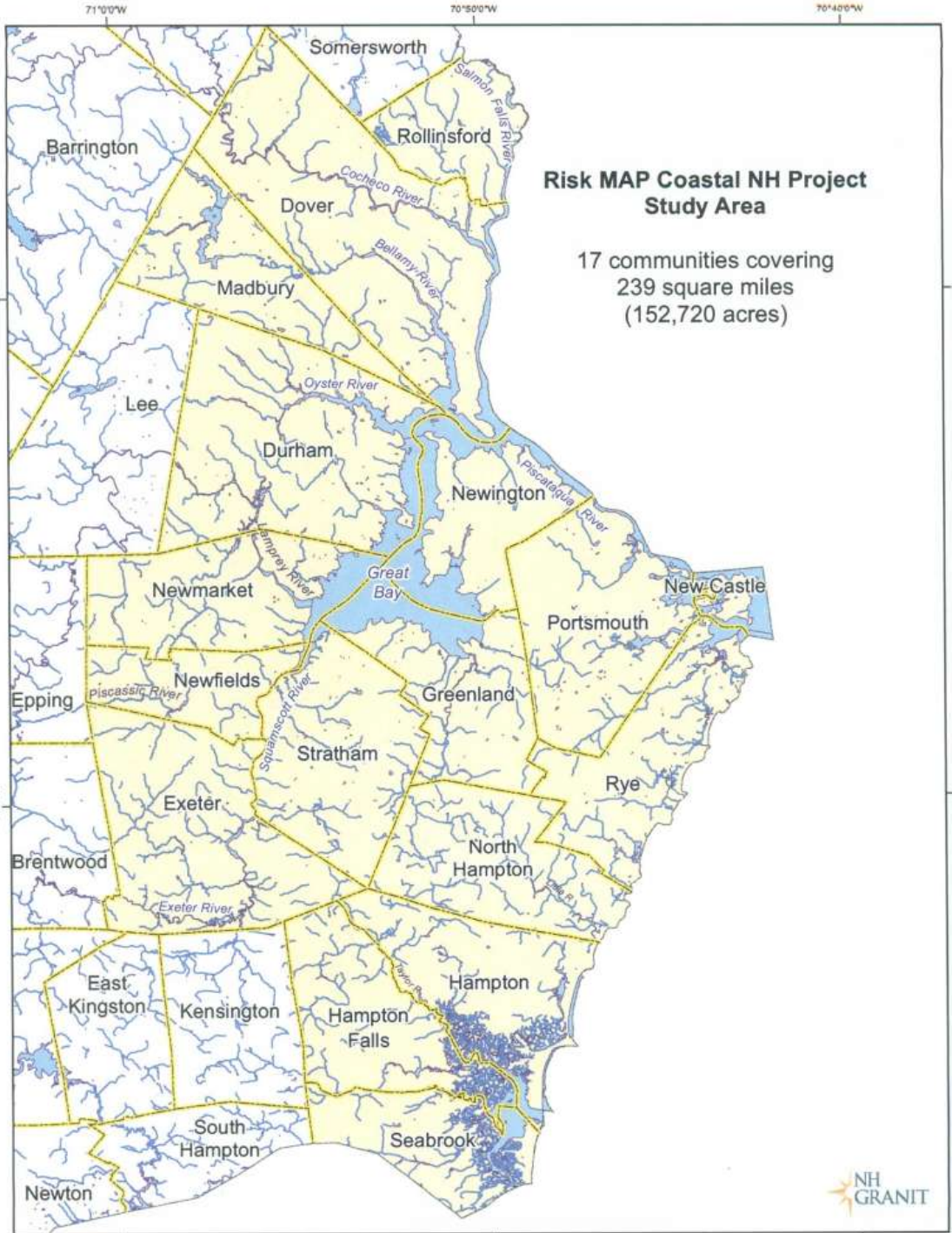
Effective Date	Type of Pre-FIRM Structure	Changes
Jan 1, 2013	Non-Primary Residence	Up to 25% increase per year till full risk premium is reached
Oct 1, 2013	Business Properties Severe Repetitive Loss Properties	Up to 25% increase per year till full risk premium is reached
	All new policies effective on or after July 6, 2012. Including those due to property being sold, a policy lapse, severe repetitive flood losses, and new policy purchased for any reason.	First renewal or purchase after Oct 1, 2013 will be based on full risk premium

Current & Upcoming Insurance Rate Changes

Effective Date	Type of Structure	Changes
Oct 1, 2014	When a new map changes the flood zone or flood elevation for any property	5-year phase till full risk rating is reached based on new map



NH Coastal Mapping Project



Risk MAP Coastal NH Project Study Area

17 communities covering
239 square miles
(152,720 acres)

Future Costs of Sea Level Rise

Lloyd's of London estimates that a one foot rise in sea level along the Gulf and Atlantic coastlines would increase flood losses by 80% by 2030.

ASFPM News & Views, Feb 2013

Higher Standards



A Guide for Higher Standards in Floodplain Management

Prepared by:

ASFPM Floodplain Regulations Committee

June 2011

Table of Contents

I. FREEBOARD	3-4
II. ACCESS (INGRESS-EGRESS)	4
III. COMPENSATORY STORAGE	5-6
IV. CRITICAL DEVELOPMENT PROTECTION	6-7
V. CUMULATIVE SUBSTANTIAL DAMAGE/IMPROVEMENT	7
VI. FILL STANDARDS	8
VII. FLOODWAY RISE	8-9
VIII. FOUNDATION DESIGN	9
IX. FUTURE CONDITIONS HYDROLOGIC MAPPING	9-10
X. MATERIALS STORAGE	10-11
XI. SETBACKS	11
XII. STORMWATER MANAGEMENT	11-12
XIII. SUBDIVISION STANDARDS	12-13
XIV. USE RESTRICTIONS	13
XV. REGULATING AREAS NOT MAPPED ON FIRM	14
XVI. ELEVATION OF ALL ADDITIONS	14-15
XVII. COASTAL SITING	15
XVIII. DUNE PROTECTION	15-16
XIX. COASTAL CONSTRUCTION	17
XX. COASTAL A ZONE	17-18
XXI. SINK HOLE STANDARDS	18-20
XXII. PLAYA LAKE STANDARDS	20-21
XXIII. ALLUVIAL FAN STANDARDS	21
XXIV. RIGHT OF ENTRY TO ENFORCE FLOOD PLAIN ORDINANCE	22-23
XXV. ENFORCEMENT – FINES AND PENALTIES	23-24

Freeboard

- New construction or substantial improvement of any residential structure shall have lowest floor, including basement elevated (1', 2', 3', etc.) above the base flood elevation.
- Where a base flood elevation is not known (Zone A), the lowest floor shall be elevated at least 2' above the highest adjacent grade.

Reduce Your Risk, Reduce Your Premium

Under the Flood Insurance Reform Act of 2012, You Could Save More than **\$90,000** over 10 Years if You Build 3 Feet above Base Flood Elevation*

**PREMIUM AT 4 FEET BELOW
BASE FLOOD ELEVATION**

\$9,500/year
\$95,000/10 years



BFE

**PREMIUM AT
BASE FLOOD ELEVATION**

\$1,410/year
\$14,100/10 years



BFE

**PREMIUM AT 3 FEET ABOVE
BASE FLOOD ELEVATION**

\$427/year
\$4,270/10 years



BFE

*\$250,000 building coverage only (does not include contents), AE (high to moderate risk) zone, single-family, one-story structure without a basement at: 4 feet below Base Flood Elevation (BFE); at BFE; and at 3 feet above BFE. (Rating per FEMA flood insurance manual, October 1, 2012). The illustration above is based on a standard National Flood Insurance Program (NFIP) deductible.

Freeboard Examples

Community	Freeboard Elevation Above BFE
Allenstown	2 ft
Canaan	2 ft
Concord	2 ft (Merrimack River) 1 ft remainder of City
Keene	1 ft
Raymond	1.5 ft (New Construction) 1.5 ft (Recommended for Substantial Improvements)
Salem	1 ft
Winchester	1 ft

Preservation of Floodplain Areas

- A community can restrict all development from the floodway or the entire floodplain area or restrict only certain types of development such as critical facilities and residential structures.
- Language needs to be carefully worded to avoid taking challenge or other issues.

Preservation of Floodplain Areas

Community			Prohibited in Floodplain
Bath Conway Walpole			All development
Allenstown Concord Cornish Derry Easton Epsom Francestown	Franconia Grantham Hampton Hancock Hanover Keene Lisbon	Litchfield Madbury Piermont Salem Swanzey Walpole	Certain uses and/or new or substantially improved buildings, fill, etc.

Setbacks

- Proposed developments adjacent to riverine floodplains shall be setback (50', 100', 200', etc.) from floodway boundary or centerline of stream (with no floodway).
- Proposed development adjacent to coastal floodplains (Zone VE) shall be set back (100', 200', 300', etc.) from the mean low tide boundary.

Setback Examples

- **Grantham** has lot, frontage, setback and height requirements in their floodplain conservation overlay district.
- **Piermont** requires that all parts of any structure, residential, non-residential, commercial, industrial, or agricultural, including mobile homes, must be set back at least 75 feet from the 100-year floodplain boundary.

Cumulative Substantial Damage

Flood related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.



Cumulative Substantial Improvement

When the combined total of all improvements or repairs made after the adoption of this regulation equals or exceeds 50 percent of a structure's market value, that structure is considered to be substantially improved.

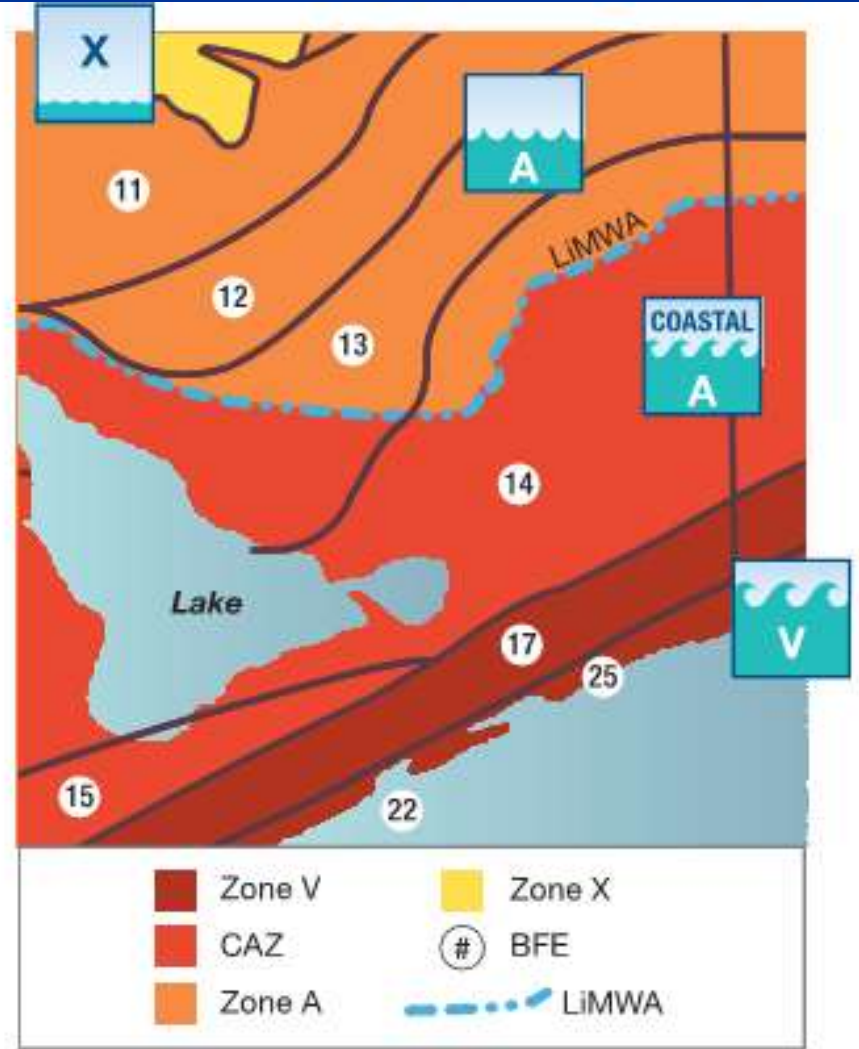
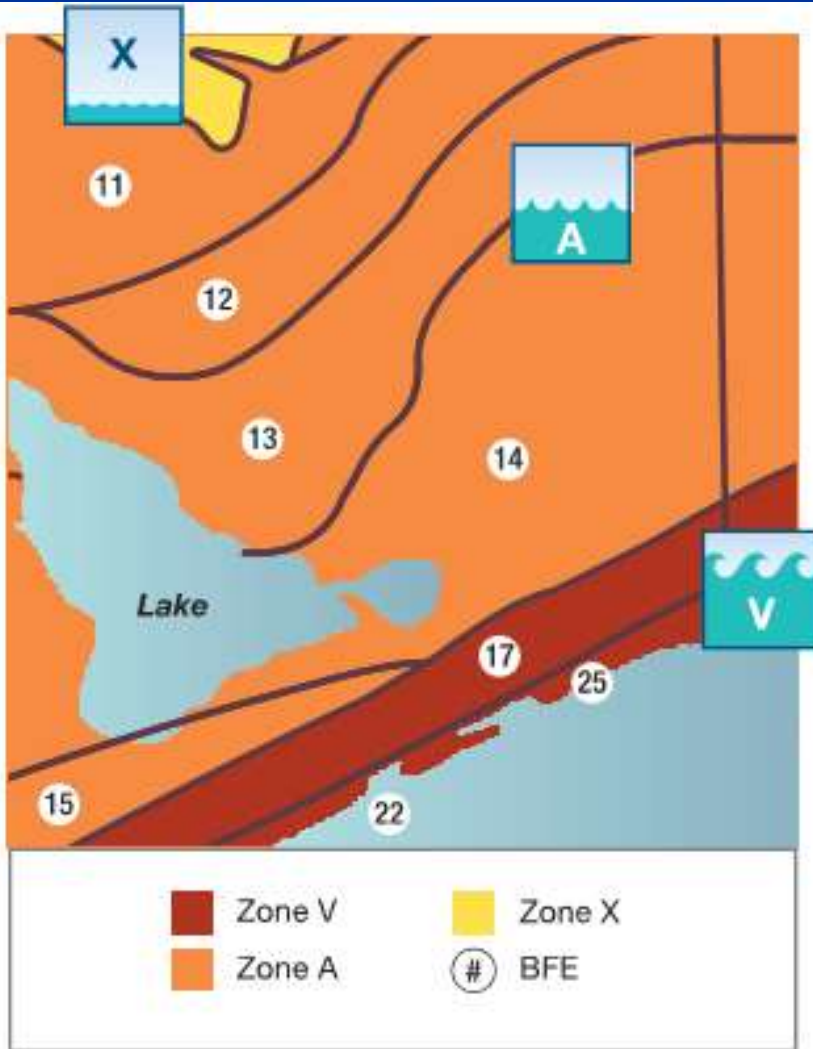


Critical Facilities

- Prohibit critical facilities and developments in all special flood hazard areas (and in all 500-year floodplains).
- Those adjacent to special flood hazard areas shall be 2 ft above the 500-yr flood elevation. Access roads to and from facility should be elevated at this level.



Coastal A Zones





Community Rating System



Community Rating System

- A FEMA voluntary incentive program for NFIP communities
- Reward communities that are doing more than meeting the NFIP requirements by reducing the flood insurance premiums of their residents by a certain percentage.

Credit Points	CRS Class	Discount
4,500 +	1	45%
4,000-4,499	2	40%
3,500-3,999	3	35%
3,000-3,499	4	30%
2,500-2,999	5	25%
2,000-2,499	6	20%
1,500-1,999	7	15%
1,000-1,499	8	10%
500-999	9	5%
0-499	10	0%

NH CRS Communities

• Keene	Class 8	10%
• Marlborough	Class 9	5%
• Peterborough	Class 8	10%
• Winchester	Class 9	5%

Average NH CRS Points = 835 (Class 9)

CRS Activities

4 Categories

- Public Information Activities
- Mapping & Regulatory Activities
- Flood Damage Reduction Activities
- Flood Preparedness Activities

20 Total Activities

CRS Activities

- Public Information Activities
 - Elevation Certificates (56)
 - Map Information Service (140)
 - Outreach Projects (2)
 - Hazard Disclosure (0)
 - Flood Protection Information (22)
 - Flood Protection Assistance (0)

(#) – NH Avg CRS Points

CRS Activities

- Mapping & Regulatory Activities
 - Additional Flood Data (0)
 - Open Space Preservation* (179)
 - Higher Regulatory Standards (165)
 - Flood Data Maintenance (59)
 - Stormwater Management (28)

(#) – NH Avg CRS Points

* Credit is automatically given to NH community's because of the state's shoreland 50-foot buffer requirement. The actual points per community is based on a community impact adjustment.

CRS Activities

- Flood Damage Reduction Activities
 - Floodplain Management Planning (0)
 - Acquisition and Relocation (5)
 - Flood Protection (0)
 - Drainage System Maintenance (156)

(#) – NH Avg CRS Points

CRS Activities

- Flood Preparedness Activities
 - Flood Warning Program (0)
 - Levee Safety (0)
 - Dam Safety (0-45)*

(#) – NH Avg CRS Points

* Credit is given to a community that would be affected by a flood from the failure of a high-hazard potential dam

CRS Pilot Toolkit

- Currently developing a toolkit to make available information and data which are eligible for CRS credit points easily accessible.
- Can assist communities interested in joining CRS or existing CRS communities

What's Next?

- Communities Interested in Higher Standards and/or Community Rating System
 - Review materials provided on handout
 - Contact Jennifer at OEP for further assistance
 - Talk to the other communities that are already enforcing higher regulations and/or participating in CRS

Contact Information

Jennifer Gilbert, CFM, ANFI

NH Floodplain Management Coordinator

NH Office of Energy and Planning

(603) 271-1762

jennifer.gilbert@nh.gov

[www.nh.gov/oep/programs/
floodplainmanagement/](http://www.nh.gov/oep/programs/floodplainmanagement/)