

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community: Montpelier C.I.D. 505518 State Vermont

Reviewed by: Ned Swanberg, VT DEC 241.4596 ned.swanberg@state.vt.us Date of Review: 10/5/10

Review of: Montpelier Zoning Regs (Flood) - tracked.docx (draft of 9/29/10)

Reviewer's Determination: / The floodplain management regulations are compliant.
/ The floodplain management regulations are not compliant.

Approved by: _____ (FEMA only) Date of Approval: ___/___/___

The "Item Description" is a synopsis of the regulatory requirement and should not be construed as a complete description. Refer to the actual language contained in the National Flood Insurance Program Floodplain Management Regulations at Title 44 Code of Federal Regulations (CFR) Part 59 and 60 for the complete description of the required minimum criteria. Below the "Level of Regulations" column, you can indicate whether the community ordinance meets or exceeds the respective provision in the non-shaded areas.

Item Description <i>(Section reference to the NFIP Regulations follows)</i>	Level of Regs					Applicable Ordinance Section/Comments
	a	b	c	d ¹	e ¹	
ORDINANCES MUST CONTAIN THE FOLLOWING PROVISIONS:						
1. Citation of Statutory Authority				Y		101 Enactment 309.A 1
2. Framework for administering the ordinance (including permit system, establishment of the office for administering the ordinance, record keeping, etc.).						201 Reg of development 309.E 1 FHAR 1101 AO Appt DRB Appt? Section 303, 304 209 Records 309 H FH Records Please see note below.
3. Adequate enforcement provisions (including a violation and penalty section specifying actions the community will take to assure compliance).				Y		901 Certificate of Compliance 309 J Certificate of Compliance 1104.C 1104.D FP 1316
4. Variance section with evaluation criteria and insurance				Y		309 I Variances in

¹ If a community has both floodways and coastal high hazard areas, it must meet the requirements of both level 60.3(d) and 60.3(e).

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review: _____

Item Description <i>(Section reference to the NFIP Regulations follows)</i>	Level of Regs					Applicable Ordinance Section/Comments
	a	b	c	d ¹	e ¹	
notice. [60.6(a)]						the Flood Plain Article 10 Variances Article 8, Non- conforming 804.C Non-conf in SFHA
5. Effective Date: Adoption Date:				Y		Draft of 9.29.10
6. Signature of Appropriate Official and Certification Official.				n/a		Draft
OTHER PROVISIONS AND ACTIONS THAT MAY BE NECESSARY TO MAKE THE ORDINANCE LEGALLY ENFORCEABLE AND ENSURE THAT IT CAN BE PROPERLY ADMINISTERED:						
7: Purpose section citing health, safety, and welfare reasons for adoption.				Y		309.A.2
8: Disclaimer of Liability section advising that the degree of flood protection required by the ordinance is considered reasonable but does not imply total flood protection.				Y		309.K
9. Abrogation and Greater Restriction section. (e.g., This Ordinance shall not in any way impair/remove the necessity of compliance with any other applicable laws, ordinances, regulations, etc. Where this Ordinance imposes a greater restriction, the provisions of this Ordinance shall control.)				Y		309 A 3 Greater 201 Conformity
10. Severability section. (e.g., If any section, provision, or portion of this ordinance is adjudged unconstitutional or invalid by a court, the remainder of the ordinance shall not be affected.)				Y		103
11. Public hearing (State/local laws may require hearings)						Draft
12. Publication (State/local laws may require public notices)						
MINIMUM NFIP CRITERIA:						
13. Definitions: [59.1] <u>Y</u> Base Flood; <u>Y</u> Base Flood Elevation; <u>Y</u> Development; <u>Y</u> Existing manufactured				Y		1303

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review: _____

Item Description <i>(Section reference to the NFIP Regulations follows)</i>	Level of Regs					Applicable Ordinance Section/Comments
	a	b	c	d ¹	e ¹	
<p>home park or subdivision; <u>Y</u> Expansion to an existing manufactured home park or subdivision; <u>Y</u> Flood Insurance Rate Map; <u>Y</u> Flood Insurance Study; <u>Y</u> Floodway; <u>Y</u> Lowest Floor; <u>Y</u> Manufactured Home; <u>Y</u> Manufactured Home Park or Subdivision; <u>Y</u> New Construction; <u>Y</u> New Manufactured Home Park or Subdivision; <u>Y</u> Recreational Vehicle; <u>Y</u> Special Flood Hazard Area; <u>Y</u> Start of Construction; <u>Y</u> Structure; <u>Y</u> Substantial Damage; <u>Y</u> Substantial Improvement; <u>Y</u> Violation;</p> <p>Other Definitions as appropriate such as <u>Y</u> Floodproofing; <u>n/a</u> Highest adjacent grade for community's with mapped AO Zones; <u>Y</u> Historic Structures</p>						
14. Adopt or reference correct Map and date. [60.3(b)] (If the community has an automatic adoption provision in its ordinance, is it a valid provision?)				Y		309 B
15. Adopt or reference correct Flood Insurance Study and date. [60.3(c), (d), and/or (e)] (If the community has an automatic adoption provision in its ordinance, is it a valid provision?)				Y		309.B
16. Require permits for all proposed construction or other development including placement of manufactured homes to determine whether such construction or development is in a floodplain. [60.3(a)(1)]						
17. Require permits for all proposed construction and other development within SFHAs. [60.3(b)(1)]				Y		203 A 3 Permit in SFHA 309.D - Permit

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review: _____

Item Description <i>(Section reference to the NFIP Regulations follows)</i>	Level of Regs					Applicable Ordinance Section/Comments
	a	b	c	d ¹	e ¹	
						required in FP 202 - Exemptions (except in SFHA)
18. Assure that all other State and Federal permits are obtained. [60.3(a)(2)]				Y		203 A 3 Requires 309 D 309.H.1 Project Review Sheet
19. Review permits to assure sites are reasonably safe from flooding and require for new construction and substantial improvements in flood-prone areas [60.3(a)(3): (a) Anchoring (including manufactured homes) to prevent flotation, collapse, or lateral movement of the structure. [60.3(a)(3)(i)]				Y		716.A.1 , 2
(b) Use of flood-resistant materials. [60.3(a)(3)(ii)]				Y		716. A 3
(c) Construction methods and practices that minimize flood damage. [60.3(a)(3)(iii)]				Y		716.A.4
(d) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities designed and/or located to prevent water entry to accumulation. [60.3(a)(3)(iv)]				Y		716.A.13
20. Review subdivision proposals and other development, including manufactured home parks or subdivisions, to determine whether such proposals will be reasonably safe from flooding [60.3(a)(4)]. If a subdivision or other development proposal is in a flood-prone area, assure that: (a) Such proposals minimize flood damage. [60.3(a)(4)(i)]				Y		716 A 1 safe 716 A 12 (a) access 309. F 3
(b) Public utilities and facilities are constructed so as to minimize flood damage. [60.3(a)(4)(ii)]				Y		716.A.12 b
(c) Adequate drainage is provided. [60.3(a)(4)(iii)]				Y		716.A.12 c
21. Require new and replacement water supply and sanitary				Y		716.A.5,

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review: _____

Item Description <i>(Section reference to the NFIP Regulations follows)</i>	Level of Regs					Applicable Ordinance Section/Comments
	a	b	c	d ¹	e ¹	
sewage systems to be designed to minimize or eliminate infiltration. [60.3(a)(5) and 60.3(a)(6)]						716.A.6
22. Require onsite waste disposal systems be designed to avoid impairment or contamination. [60.3(a)(6)(ii)]				Y		716.A.7
23. Require base flood elevation data for subdivision proposals or other developments greater than 50 lots or 5 acres. [60.3(b)(3)]				Y		716.A.12.d
24. In A Zones, in the absence of FEMA BFE data and floodway data, obtain, review, and reasonably utilize other BFE and floodway data as a basis for elevating residential structures to or above the base flood level, and for floodproofing or elevating non-residential structures to or above the base flood level. [60.3(b)(4)]				Y		716.C
25. Where BFE data are utilized in Zone A, obtain and maintain records of the lowest floor and floodproofing elevations for new and substantially improved construction. [60.3(b)(5)]				Y		309.H.3, 309.H 4
26. In riverine areas, notify adjacent communities of watercourse alterations and relocations. [60.3(b)(6)]				Y		716.B.5
27. Maintain the carrying capacity of an altered or relocated watercourse. [60.3(b)(7)]				Y		716.B.5
28. Require all manufactured homes to be elevated and anchored to resist flotation, collapse, or lateral movement. [60.3(b)(8)]				Y		716.A.8 lowest floor at least one foot above BFE 716 A 2 anchored 716 B 1 Res Const.
29. Require all new and substantially improved <u>residential</u> structures within A1-30, AE, and AH Zones have their lowest floor (including basement) elevated to or above the Base Flood Elevation. [60.3(c)(2)]				Y		716.A 8 716 B 1

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review: _____

Item Description <i>(Section reference to the NFIP Regulations follows)</i>	Level of Regs					Applicable Ordinance Section/Comments
	a	b	c	d ¹	e ¹	
30. ² In AO Zones, require that new and substantially improved <u>residential</u> structures have their lowest floor (including basement) to or above the highest adjacent grade at least as high as the FIRM's depth number. [60.3(c)(7)]				n/a		Montpelier does not have any mapped AO Zones.
31. Require that new and substantially improved <u>non-residential</u> structures within A1-30, AE, and AH Zones have their lowest floor elevated or floodproofed to or above the Base Flood Elevation. [60.3(c)(3)]				Y		716.A.9 716. B 2
32. ² In AO Zones, require new and substantially improved <u>non-residential</u> structures have their lowest floor elevated or completely floodproofed above the highest adjacent grade to at least as high as the depth number on the FIRM. [60.3(c)(8)]				n/a		
33. Require that for floodproofed non-residential structures, a registered professional engineer/architect certify that the design and methods of construction meet requirements at 60.3(c)(3)(ii). [60.3(c)(4)]				Y		309.F 4, 716.B.2 floodproof to at least 2 feet above BFE.
34. Require, for all new construction and substantial improvements, that fully enclosed areas below the lowest floor that are used solely for parking of vehicles, building access or storage in an area other than a basement and which is subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing the entry and exit of floodwaters in accordance with the specifications in 60.3(c)(5). (Openings requirement)				Y		716.A 9, below grade prohibited 716.A 10

² Item 30 and 32 are not required if the community has no AO Zones.

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review: _____

Item Description <i>(Section reference to the NFIP Regulations follows)</i>	Level of Regs					Applicable Ordinance Section/Comments
	a	b	c	d ¹	e ¹	
35. ³ Until a regulatory floodway is designated, no encroachment may increase the Base Flood level more than 1 foot. [60.3(c)(10)]				Y		716.B.4 716 C A Zones
36. ⁴ In Zones AO and AH, require drainage paths around structures on slopes to guide water away from structures. [60.3(c)(11)]				n/a		Montpelier does not have mapped AO or AH zones.
37. Require that manufactured homes placed or substantially improved within A1-30, AH, and AE Zones, which meet one of the following location criteria, to be elevated such that the lowest floor is to or above the Base Flood Elevation and be securely anchored: (i) outside a manufactured home park or subdivision; (ii) in a new manufactured home park or subdivision; (iii) in an expansion to an existing manufactured home park or subdivision; (iv) on a site in an existing park which a manufactured home has incurred substantial damage as a result of a flood. [60.3(c)(6)]				Y		716.A.8 lowest floor at least one foot above BFE 716 A 2 anchored 716 B 1 Res Const.
38. In A-1-30, AH, and AE Zones, require that manufactured homes to be placed or substantially improved in an <u>existing</u> manufactured home park to be elevated so that (i) the lowest floor is at or above the Base Flood Elevation; OR (ii) the chassis is supported by reinforced piers no less than 36 inches in height above grade and securely anchored. [60.3(c)(12)]				Y		716.A.8 - all MH at least one foot above BFE

³ Item 35 is not required if all streams have floodways designated.

⁴ Item 36 is not required if the community has no AO or AH Zones.

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review: _____

Item Description <i>(Section reference to the NFIP Regulations follows)</i>	Level of Regs					Applicable Ordinance Section/Comments
	a	b	c	d ¹	e ¹	
39. In A1-30, AH, and AE Zones, all recreational vehicles to be placed on a site must (i) be elevated and anchored; OR (ii) be on the site for less than 180 consecutive days; OR (iii) be fully licensed and highway ready. [60.3(c)(14)]				Y		716.A.11
40. Designate a regulatory floodway which will not increase the Base Flood level more than 1 foot. [60.3(d)(2)]				Y		309 B, 1303 definition of "Floodway, Regulatory in the City of Montpelier"
41. In a regulatory floodway, prohibit any encroachment, which would cause any increase in the Base Flood level unless hydrologic and hydraulic analyses prove that the proposed encroachment would not increase flood levels during the Base Flood discharge. [60.3(d)(3)]				Y		716.B.3
42. In V1-30, VE, and V Zones, obtain and maintain the elevation of the bottom of the lowest horizontal structural member of the lowest floor of all new and substantially improved structures. [60.3(e)(2)]						
43. In V1-30, VE, and V Zones, require that all new construction and substantial improvements: (a) Are elevated and secured to anchored pilings or columns so that the bottom of the lowest horizontal structural member is at or above the Base Flood Elevation. [60.3(e)(4)]						
(b) A registered professional engineer/architect certify that the design and methods of construction meet elevation and anchoring requirements at 60.3(e)(4)(i) and (ii). [60.3(e)(4)]						
(c) Have the space below the lowest floor either free of obstruction or constructed with breakaway walls. Any enclosed space shall be used solely for parking,						

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review: _____

Item Description <i>(Section reference to the NFIP Regulations follows)</i>	Level of Regs					Applicable Ordinance Section/Comments
	a	b	c	d ¹	e ¹	
building access, or storage. [60.3(e)(5)]						
(d) All new construction is landward of mean high tide. [60.3(e)(3)]						
(e) Prohibit use of fill for structural support. [60.3(e)(6)]						
(f) Prohibit alteration of sand dunes and mangrove stands, which would increase potential flood damage. [60.3(e)(7)]						
44. Require that manufactured homes placed or substantially improved within V1-30, VE, and V Zones, which meet one of the following location criteria, meet the V Zone standards in 60.3(e)(2) through (e)(7): (i) outside a manufactured home park or subdivision; (ii) in a new manufactured home park or subdivision; (iii) in an expansion to an existing manufactured home park or subdivision; (iv) on a site in an existing park which a manufactured home has incurred substantial damage as a result of a flood. [60.3(e)(8)]						
45. In V1-30, VE, and V Zones, require that manufactured homes to be placed or substantially improved in an <u>existing</u> manufactured home park to be elevated so that (i) the lowest floor is at or above the Base Flood Elevation; OR (ii) the chassis is supported by reinforced piers no less than 36 inches in height above grade and securely anchored. [60.3(e)(8)(iv)]						
46. In V1-30, VE, and V zones, all recreational vehicles to be placed on a site must (i) be elevated and anchored; OR (ii) be on the site for less than 180 consecutive days; OR (iii) be fully licensed and highway ready. [60.3(e)(9)]						

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review: _____

Item Description <i>(Section reference to the NFIP Regulations follows)</i>	Level of Regs					Applicable Ordinance Section/Comments
	a	b	c	d ¹	e ¹	

Additional Information:

- N Stand-alone Ordinance?
- Y Automatic Adoption?
- N Additional Regulatory Measures? If yes, specify:

- Lowest floor of new or replaced structures at least one foot above BFE.
- Lowest floor of non-residential at least one foot above BFE or flood proofed to at least 2 feet above.
- Fully enclosed areas below grade and below BFE prohibited.
- 309.J – Requires Certificate of Compliance at the completion of construction

State Requirement:

Y ANR Referral Requirement [24 VSA §4424]? 309.E.2, 3

Comments:

A revised Preliminary Digital Flood Insurance Rate Map (DFIRM) was released for review in Washington County on 6/22/2010. The City of Montpelier appealed data along the Winooski River and the data is now under review by FEMA Region 1. After the release of this second revision it likely that there will be another Appeal Period and a six month adoption period leading to an effective DFIRM in the summer of 2011.

Looking at the current situation in Montpelier using the locations of structures as represented by E-911 points and the 6/09 preliminary data on flood hazards we can get a general picture of the community’s very high exposure to inundation damage.

The E-911 locations are not representative of the extent of an entire structure so it is likely that other buildings are actually in the mapped hazard zone. Additionally, the boundaries of the Special Flood Hazard Area do not represent inundation along smaller brooks or from high frequency storm water discharges.

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review: _____

**E-911 Structures in
Special Flood Hazard Area**

R1-SINGLE FAMILY	97
C1-COMMERCIAL	90
R2-MULTI FAMILY	56
P1-GOVERNMENT	22
P3-CHURCH	8
C9-OTHER COMMERCIAL	6
I1-INDUSTRIAL	6
A1-ACCESSORY BLDG	3
R4-OTHER RESIDENTIAL	3
98-OTHER	2
CL-LODGING	2
P8-PUBLIC GATHERING	2
C2-COMMECIAL W/APT	1
P4-EDUCATIONAL	1
P5-CULTURAL	1
P6-POLICE	1
P7-FIRE	1
R3-MOBILE HOME	1
Total	303

Over 150 families currently reside in the flood hazard area.

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review: _____

Additionally, seven structures including two families and a government structure are shown to be in the floodway an area that can be subject to high velocity flow and very high hazard.

E-911 Structures in the Floodway

C1-COMMERCIAL	4
P1-GOVERNMENT	1
R1-SINGLE FAMILY	1
R3-MOBILE HOME	1
Total	7

Flood hazard data includes some areas noted to be at risk of inundation in the .2% annual chance flood. Structures in this zone are not required to carry flood insurance. Federal policy prohibits federal capital funds to critical facilities in the 1% and .2% annual chance flood hazard areas. Vermont DEC recommends adopting a standard to prohibit the establishment of new critical facilities in these areas of known hazard.

Currently in Montpelier four government structures, and two educational structures, as well as other private E-911 structures are in the .2% annual chance flood hazard area.

Here is a list of critical facilities that are currently known to be in the Special Flood Hazard Area (1% annual chance/base flood).

Critical Facilities in Special Flood Hazard Area

811 DOG RIVER RD	P1-GOVERNMENT
13 GREEN MOUNTAIN DR	P1-GOVERNMENT
61 MAIN ST	P7-FIRE
15 E STATE ST	P1-GOVERNMENT
11 E STATE ST	P1-GOVERNMENT

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review: _____

58 STATE ST	P1-GOVERNMENT
5 HIGH SCHOOL DR	P4-EDUCATIONAL
25 SCHOOL ST	P1-GOVERNMENT
10 TAYLOR ST	P1-GOVERNMENT
45 STATE ST	P1-GOVERNMENT
1 BAILEY AV	P1-GOVERNMENT
61 STATE ST	P1-GOVERNMENT
110 STATE ST	P1-GOVERNMENT
116 STATE ST	P1-GOVERNMENT
87 STATE ST	P1-GOVERNMENT
89 STATE ST	P1-GOVERNMENT
118 STATE ST	P1-GOVERNMENT
10 ELM ST	P6-POLICE
120 STATE ST	P1-GOVERNMENT
128 STATE ST	P1-GOVERNMENT
132 STATE ST	P1-GOVERNMENT
134 STATE ST	P1-GOVERNMENT
136 STATE ST	P1-GOVERNMENT
144 STATE ST	P1-GOVERNMENT
149 STATE ST	P1-GOVERNMENT

The City of Montpelier joined the National Flood Insurance Program on 10/20/1972 and received a Flood Insurance Rate Map on 6/22/1973.

As of 10/5/10 257 flood insurance policies are in force covering \$46,659,400. 96 claims have been paid covering losses of \$1,584,916.26.

Checklist Items:

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review: _____

Item 2 Appointment of Development Review Board. Is there a place that establishes the DRB?

Other Items:

In 1303 Definitions:

This definition for “**Flood Plain Approval**” is not required and may be a bit tricky. My edit in yellow. Isn't this adequately carried in 309 E?

Flood Plain Approval: Flood plain approval is granted to a project that is within the flood plain provided that it meets the requirements of the Federal Emergency Management Agency, State of Vermont, and the City of Montpelier and that it is adequately flood proofed or is shown to be above the 1% chance of flooding within a given year.

Definition of “**Structure**” – the last sentence is an awkward combination. I have offered a modified text as highlighted below:

Structure: An assembly of materials for occupancy or use, including, but not limited to, a building, mobile home, billboard, sign, wall or fence. A trailer that is not for habitation is considered a structure if located on a lot for more than 90 days.

For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. *Structure*, for insurance purposes, means: (a) A building with two or more outside rigid walls and a fully secured roof, that is affixed to a permanent site;

(b) A manufactured home (“a manufactured home,” also known as a mobile home, is a structure: built on a permanent chassis, transported to its site in one or more sections, and affixed to a permanent foundation); or

(c) A travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community’s floodplain management and building ordinances or laws. For the latter purpose “structure” does not mean a recreational vehicle or a parked trailer or other similar vehicle, except as described in (c) of this definition. **The term “structure includes a gas or liquid storage tank.**

Definition of “**Substantial Improvement**” has two entries. The model encourages communities to adopt the a definition using a cumulative calculation over 3 years or more. For CRS credit on Substantial Improvement – the calculation may need to be cumulative over 10 years or more.

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review: _____

Regarding “interpretation” in 309 C. The determination should be made by the ZA and appeals really need to be based on technical data. The current text is in blue. The Vermont model recommends language as shown below in green.

309.C. Interpretation of District Boundaries.

The Administrative Officer shall determine the boundaries of any designated flood hazard area by scaling distance on the Flood Insurance Rate Maps or by reviewing revised boundaries determined by survey of actual grades in relation to flood hazard elevations. Any interested person may appeal the decision of the Administrative Officer to the Development Review Board according to the provisions of Article 10.

Lands to Which these Regulations Apply

A. Regulated Flood Hazard Areas

These regulations shall apply to the Special Flood Hazard Area in and on the most current flood insurance studies and maps published by the Department of Homeland Security, Federal Emergency Management Agency, National Flood Insurance Program, as provided by the Secretary of the Agency of Natural Resources pursuant to 10 V.S.A. Chapter 32 § 753, which are hereby adopted by reference and declared to be part of these regulations. The location of the boundary shall be determined by the Administrative Officer (AO). If the applicant disagrees with the determination made by the AO, a Letter of Map Amendment from FEMA shall constitute proof.

804 B Nonconforming Reconstruction of a Nonconforming Structure

The reconstruction is possible in the SFHA as long as it meets the standards as required for a substantially destroyed/substantially improved structure. On the other hand, this might be a good time to persuade owners to not rebuild if in the floodway or to relocate when possible.

Typos:

716 A 12

d. Base flood elevation data shall be provided for subdivision proposals and other proposed development which is greater than 50 lots or 5 acres, whichever is less.

309 F 4

When the finished floor is proposed to be constructed below flood level a floodproofing certification from a licensed architect or engineer that the proposed design is in compliance with the flood plain development standards contained in Section 716.

716 B.5 format... insert “return” for new paragraph

10/5/2010

Page 15 of 17

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review: _____

716.B.3 floodway criteria...Your choice. The second set of language is from the Vermont model.

Montpelier has many structures already including over 150 families already living in a high flood hazard area. Additional structures are near the hazard area but not currently as exposed to flooding or required to purchase flood insurance. As development proceeds in the watershed (impervious surface) and fill together with new structures are placed in the floodplain more structures will have more risk.

The VT model recommends no fill in the Special Flood Hazard Area - except as necessary to elevate an existing structure and not to place new structures (and their fill) in the hazard zone since this will increase water surface elevations (and extent) or flood water velocity causing a risk of adverse impact to existing properties, structures, and families.

The community of Waterbury is in a situation similar to Montpelier and so as to avoid increasing the hazards faced by existing structures they require in their Application section 606(a) (4) :

(4) Certification from a registered professional engineer or architect that the **proposed development will not result in any increase in flood levels** during the occurrence of the base flood and that the floodproofed structure meets the floodproofing criteria of this Article and

I understand that at this time the Montpelier Planning Commission is trying to make changes as needed to be sure that the effective flood hazard area regulations meet or exceed the requirements of the National Flood Insurance Program before the upcoming DFIRM effective date. Later on the Planning Commission intends to revisit the flood hazard area regulations to more fully consider how to address the needs of the community, shape the future, and qualify for programs such as the FEMA Community Rating System.

Montpelier does not seem to have any current setbacks or buffers from surface water. Vermont DEC has mapped Fluvial Erosion Hazard Zone along the North Branch and, on request, can provide recommended erosion hazard setbacks for the other streams in the community.

As part of the Planning Commission's work on the flood hazard area policy it would be important to check the *Emergency Response Plan* to consider what the needs will be during the base flood and what services will be available. Consider what investments, training, and equipment are necessary for the Emergency Response Providers to meet the current known situation.

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY FLOODPLAIN MANAGEMENT REGULATIONS REVIEW CHECKLIST

Community _____ C.I.D. _____ State _____

Reviewed by: _____ Date of Review:

Also, the community and regional *Pre-Disaster Hazard Mitigation Plan* is in revision at this time. Please check with Central Vermont Regional Planning Commission to see how the flood hazard needs of the community are described. The Mitigation Plan identifies priorities to support the community if/when it seeks funding from FEMA to reduce the current exposure of the community and its residents to natural hazards such as flooding and landslide.

Also, with regards to the Community Rating System (CRS), Rebecca Pfeiffer is available to support the Planning Commission in identifying steps to qualify for CRS credits and thereby reduce the flood insurance rates for structures anywhere in the community.

Please let me know if I can clarify anything.

Thank you, Ned

Ned Swanberg
VT DEC Flood Plain Mapping Coordinator
103 South Main St., Building 10 N
Waterbury, VT 05671-0408
802.241.4596
ned.swanberg@state.vt.us
www.vtwaterquality.org