

**Town of Cavendish**  
**Flood Hazard Area Regulations**

**Planning Commission Pubic Hearing August 15, 2007**  
**Select Board Pubic Hearing September 24, 2007**

**Adopted September 24, 2007**

**Cavendish, Vermont**

## **Section 1. Title and Enactment; Amendments**

To effect the purposes of 10 V.S.A. Chapter 32, and in accordance with 24 V.S.A. § 4424, there is hereby established these Flood Damage Prevention Regulations for areas of special flood hazard in the Town of Cavendish, Vermont.

These Regulations may be amended in accordance with 24 VSA §§ 4424 and 4441-4442.

## **Section 2. Purpose**

It is the purpose of these regulations to:

A. Minimize and prevent the loss of life and property, the disruption of commerce, the impairment of the tax base, and the extraordinary public expenditures and demands on public services that result from flooding and other flood related hazards; and

B. Ensure that the design and construction of development in flood and other hazard areas are accomplished in a manner that minimizes or eliminates the potential for flood and loss or damage to life and property; and

C. Manage all flood hazard areas designated pursuant to 10 V.S.A. § 753; and

D. Make the state, municipalities, and individuals eligible for federal flood insurance and other federal disaster recovery and hazard mitigation funds as may be available.

## **Section 3. Lands to Which These Regulations Apply**

These regulations shall apply to all areas in the Town of Cavendish, Vermont identified as areas of special flood hazard, also referred to as Special Flood Hazard Areas (SFHA), in and on the most current flood insurance studies and maps published by the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), National Flood Insurance Program (NFIP), as provided by the Secretary of the Agency of Natural Resources pursuant to 10 V.S.A. § 753, which are hereby adopted by reference and declared to be part of these regulations.

The Flood Insurance Study and maps are on file in the Cavendish Town Offices.

## **Section 4. Administration**

**A. Designation of the Administrative Officer for the Flood Hazard Area Regulations.** The Selectboard of the Town of Cavendish hereby appoints the Town Manager to administer and implement the provisions of these regulations and is herein referred to as the Administrative Officer.

**B. Duties and Responsibilities of the Administrative Officer.** The Administrative Officer is hereby authorized and directed to enforce the provisions of this ordinance. The administrative officer is further authorized to render interpretations of this ordinance, which are consistent with its spirit and purpose.

Duties of the Administrative Officer shall include, but not be limited to:

1. Review all development permits to assure that the permit requirements of this ordinance have been satisfied;
2. Advise permit applicant that additional federal or state permits may be required, and if specific federal or state permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit. Require permit applicant to obtain a Permit Review Sheet from the Agency of Natural Resources and attach it to the permit application.
3. Notify adjacent communities and the Stream Alteration Engineer at the Vermont Agency of Natural Resources, Department of Environmental Conservation, River Management Section at least 30 days prior to issuing any permit for the alteration or relocation of a watercourse and copies of such notification shall be submitted to the Administrator of the National Flood Insurance Program. Any permit issued shall assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
4. Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
5. Where base flood elevation (BFE) data in relation to mean sea level are available per Section 7 from the Flood Insurance Rate Map (FIRM) or other available data, verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved buildings, and verify that actual elevation of the lowest floor is in compliance with Section 8.
6. When no elevation data is available as provided in Section 7, in AO Zones and A Zones without elevations, verify and record the elevation of the lowest floor of the proposed structure in relation to highest adjacent grade and verify that the elevation of the lowest floor exceeds by one foot the elevation determined pursuant to Section 4B10, below.
7. Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved buildings have been flood-proofed, in accordance with Section 8, except as provided in Section 8 C (3).
8. Review certified plans and specifications for compliance.
9. Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (determination of the horizontal limits only, not vertical) the Administrative Officer shall make the necessary interpretation. The person contesting the location of the boundary may appeal the interpretation to the Planning Commission.
10. When base flood elevation data or floodway data have not been provided in accordance with Section 3, then the Administrative Officer shall obtain, review, and reasonably utilize any base flood elevation and floodway data that is available from a federal, state, or other source, as provided in Section 7, in order to administer the provisions of Section 8.

11. When an application for a permit for development in a SFHA is received by the Administrative Officer, the Administrative Officer shall submit a copy of the application and supporting information to the State National Floodplain Insurance Program Coordinator at the Vermont Agency of Natural Resources, Department of Environmental Conservation, River Management Section in accordance with 24 V.S.A. § 4424(2)(D). A permit may be issued only following receipt of comments from the Agency or the expiration of 30 days from the date the application was mailed to the Agency, whichever is sooner.
12. Provide information, testimony, or other evidence, as needed, during variance request hearings.
13. When damage occurs to a building or buildings, the following actions shall be conducted:
  - a. Determine whether damaged structures are located within the Special Flood Hazard Area;
  - b. Conduct damage assessments for those damaged structures located in the SFHA, and;
  - c. Make a reasonable attempt to notify owner(s) of damaged structure(s) of the requirement to obtain a building permit / floodplain development permit prior to repair, rehabilitation, or reconstruction.

### **C. Responsibilities: Record Keeping**

The administrative officer shall maintain a record of:

1. All permits issued for development in areas of special flood hazard;
2. The elevation (consistent with the datum of the elevation on the NFIP maps for the community) in relation to mean sea level-of the lowest floor, including basement, of all new or substantially improved buildings;
3. The elevation (consistent with the datum of the elevation on the NFIP maps for the community) in relation to mean sea level to which buildings have been floodproofed;
4. All floodproofing certifications required under this regulation; and
5. All variance actions as required under Section 9B6.

### **Section 5. Development Permit Required**

A permit is required, to the extent authorized by State law, for all proposed construction or other development, including the placement of manufactured homes, in areas of special flood hazard. Conditional use approval by the appropriate municipal panel is required for:

1. New buildings,
2. Substantial improvement of existing buildings, and
3. Development in a floodway

Prior to being permitted by the administrative officer all development and subdivisions shall be reviewed to assure that such proposals minimize potential flood damage, public facilities and utilities such as sewer, gas, electrical, and water systems are constructed so as to minimize flood damage, and adequate drainage is provided to reduce exposure to flood hazards.

## **Section 6. Procedures**

### **A. Applications and Hearings**

1. All applications for permits for development in the SFHA must be heard as a conditional use by the Planning Commission. Those hearings shall be scheduled, noticed and heard in accordance with 24 VSA Chapter 117, Subchapter 11, Sections 4465 et seq.
2. Submission Requirements - Applications for Flood Hazard Review shall be submitted to the Administrative officer on the approved blank available from the Town office and shall be accompanied by:
  - a. Two (2) copies of a map drawn to scale showing:
    - (1) The dimensions of the lot;
    - (2) The location of existing and proposed structures;
    - (3) The elevation of the lowest floor, including basement, either
      - (a) in relation to mean sea level where base flood elevation data in relation to mean sea level is available, or
      - (b) in relation to the elevation determined pursuant to Section 7B, or
      - (c) if neither (a) or (b) apply for lack of a determined elevation, in relation to highest adjacent grade
    - (4) of all new or substantially improved structures and notations as to whether or not such structures contain a basement; and
  - b. The relationship of the above to the streambank and, based upon the best information available (including Federal Insurance Administration data, if issued), the elevation and limits of the SFHA.
  - b. If any portion of the proposed development is within a designated Floodway, the application must show that the development standards in Section 8 A. and B. are met.
  - c. If the proposed development is in the Floodway Fringe Area(s), the application must show that the development standards in Section 8 A and C. are met.
  - d. All permits required for the proposed development by municipal law.
  - e. The applicant shall contact a permit specialist at ANR and request the specialist to complete a permit review for the project. The permit review sheet, which informs the applicant of all governmental agencies from which permit approval for the proposed

development is required by federal or state law, shall be filed as a required attachment to the Town permit application.

3. Review Procedure. The PC shall review the application, comments from the State National Floodplain Insurance Program Coordinator at the Vermont Agency of Natural Resources, Department of Environmental Conservation, River Management Section, if available, and other pertinent information available to insure compliance with the development standards set forth in Section 9. Development Standards, below; and
  - a. The PC shall review the application and assure that all permits required for the proposed development by municipal law have been received by the applicant.
  - b. If the PC approves the proposed project, among other conditions, the PC shall, in its decision, make the approval contingent on the applicant obtaining all permits required by federal or state agencies, as shown on the project review sheet.
  - c. The permit issued by the Administrative Officer after the PC approval shall contain, among other conditions, a statement that the validity of the permit is contingent on the applicant obtaining all permits required by federal or state agencies, as shown on the project review sheet.
  - d. Applicant is required to obtain the legally required permits from the entity indicated on the permit review sheet, or, if it is determined by that agency that a permit is not required, a letter so stating from the agency, and as received provide copies of the permit or letter to the Administrative Officer for the applicant's file
4. Permit Expiration. Any permit issued for development within the SFHA shall become void if the work described therein is not commenced within a period of one (1) year from the date of issuance and diligently prosecuted thereafter.

### **Section 7. Base Flood Elevations and Floodway Limits**

A. Where available, base flood elevations and floodway limits (or data from which a community can designate regulatory floodway limits) provided by the National Flood Insurance Program in the Flood Insurance Study and accompanying maps, referred to in Section 3, shall be used to administer and enforce these regulations.

B. In areas where base flood elevations and floodway limits have not been provided by the National Flood Insurance Program in the Flood Insurance Study and accompanying maps, the Administrative Officer shall obtain and reasonably utilize base flood elevations and floodway data provided by FEMA or available from State or Federal agencies or other sources, including data developed pursuant to Section 8C3 or 4., to administer and enforce these regulations.

“Available” base flood elevations and floodway data means existing and readily available from State or Federal agencies or from data previously obtained pursuant to 8C3 or 4. The reference for this action is to be FEMA 265 “Managing Floodplain Development in Approximate Zone A Areas: A Guide for Obtaining and Developing Base Flood Elevation,” dated July 1995.

C. In special hazard areas with base flood elevations (Zones AE and A1 – A30) but without floodways, no encroachments, including fill material or structures, shall be permitted unless certification by a registered professional engineer is provided demonstrating that the cumulative

effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community. The engineering certification must be supported by technical data that conforms to standard hydraulic engineering principles.

## **Section 8. Development Standards**

A. All Development - All development within the SFHA shall be reasonably safe from flooding and:

1. designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure during the occurrence of the base flood,
2. constructed with materials resistant to flood damage,
3. Constructed by methods and practices that minimize flood damage, and
4. Constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
5. All new development and substantial improvements in the SFHA to be elevated no less than one foot above the BFE.
6. All new development in the SFHA will be permitted only if the results of a hydraulic and hydrology analysis indicates that there would be no rise (0.00 feet) in the BFE

## B. Floodway Areas

Located within the areas of special flood hazard established in Section 3 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and has erosion potential, the following provisions shall apply:

1. Except for 1)substantial improvements within the footprint of existing buildings, 2) grading that does not raise existing grades, or 3) a functionally dependent facility - encroachments, including fill, new construction, substantial improvements, and other development, are prohibited.
2. The placement of manufactured homes (mobile homes) is prohibited.
3. Development or land disturbing activity shall not be permitted within the boundaries of the regulatory floodway unless the potential effect of such on flood heights is fully offset by accompanying improvements which have been approved by appropriate Federal, State, and local authorities.
4. Development within the regulatory floodway, as determined by Section 7, is prohibited unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice by a registered professional engineer certifying that the proposed development will result in no increase in flood levels during the occurrence of the base flood.

5. All development in the regulatory floodway shall meet the standards of Section 8C
6. Provisions of this section, Section 8.B, which restrict development in floodways areas, shall apply to “A Zones” as well. The applicant is required to provide the hydraulic and hydrology analysis for any approximate A Zone to determine the BFE.

C. Floodway Fringe Areas (i.e., special flood hazard areas outside of the floodway)

1. Residential Development:

- (a) New construction and existing buildings to be substantially improved that are located in Zones A1-30, AE, AO and AH shall have the lowest floor, including basement, elevated to one foot above the base flood elevation. New construction and existing buildings to be substantially improved that are located in Zone AO shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in the feet on the community’s FIRM or at least two feet if no depth number is specified.
- (b) Manufactured homes to be placed and existing manufactured homes, which have incurred substantial damage or are to be substantially improved that are:
  - (i) located in a new manufactured home park or subdivision, outside of a manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or in a manufactured home park or subdivision which has incurred substantial damage from a flood shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to one foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist floatation, collapse, and lateral movement during the occurrence of the base flood. The required elevation and adequate anchoring must be certified in writing by a Vermont registered professional engineer.
  - (ii) located in an existing manufactured home park, where elevating a replacement home to or above base flood elevation is not possible, the lowest floor shall be supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 48 inches in height above grade and be securely anchored to an adequately anchored system to resist floatation, collapse, and lateral movement. The required elevation and adequate anchoring must be certified in writing by a Vermont registered professional engineer.
- (c) Residential construction located within Zones AH and AO shall have adequate drainage paths around structures on slopes, to guide floodwater around and away from the proposed structures.

2. Non-residential Development:

- (a) New construction located in Zones A1-30, AE, and AH shall have the lowest floor, including basement, elevated to one foot above the base flood elevation. New construction located in Zone AO shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number



specified in the feet on the community's FIRM or at least two feet if no depth number is specified.

- (b) Existing buildings to be substantially improved located in Zones A1-30, AE, and AH shall have the lowest floor, including basement, elevated to one foot above the base flood elevation or together with attendant utility and sanitary facilities be designed so that below one foot above the base flood elevation the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Existing buildings to be substantially improved located in AO zones shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM or at least two feet if no depth number is specified or together with attendant utility and sanitary facilities be designed so that below the base flood elevation the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
- (c) A permit for a building proposed to be floodproofed shall not be issued until a Vermont licensed registered professional engineer or architect has reviewed the structural design, specifications and plans, and has certified that the design and proposed methods of construction are in accordance with accepted standards of practice for meeting the provisions of this subsection.
- (d) Commercial construction located within Zones AH and AO shall have adequate drainage paths around structures on slopes, to guide floodwater around and away from the proposed structures.

3. Residential and Non-residential Development in SFHA where BFE or floodway data is not available.

When base flood elevation data or floodway data are not available in accordance with Section 3 and Section 7 B, in Special Flood Hazard Areas without Base Flood Elevation Data, new construction or substantial improvements of residential structures and new construction of nonresidential structures shall be elevated, and substantially improved nonresidential development shall be elevated or floodproofed, elevations that have been determined by a hydraulic and hydrology analysis to be provided by the applicant. If flood proofed as provided in the previous sentence, the floodproofing shall be to the standards of C 2 (b) and (c) of Section 8.

4. Subdivisions:

- (a) New subdivision proposals and other proposed development (including proposals for manufactured home parks and subdivisions) that are greater than 50 lots or 5 acres, whichever is the lesser, shall include base flood elevation data.
- (b) Subdivisions (including manufactured home parks) shall be designed to assure:
  - (i) Such proposals minimize flood damage within the flood-prone area,

(ii) public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage, and

(iii) Adequate drainage is provided to reduce exposure to flood hazards.

5. Enclosed Areas Below the Lowest Floor:

(a) Enclosed areas below the lowest floor which are subject to flooding shall be used solely for parking of vehicles, building access, or storage.

(b) New construction and existing buildings to be substantially improved with fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters.

(c) Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria: A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

6. Recreational Vehicles: Recreational Vehicles placed on sites with special flood hazard areas shall either:

(a) Be on the site for fewer than 180 consecutive days,

(b) Be fully licensed and ready for highway use, or

(c) Be permitted in accordance with the elevation and anchoring requirements for “manufactured homes” in B.2.(b) of this Section 8.

7. Accessory Structures. A small accessory building that represents a minimal investment need not be elevated to the base flood elevation provided the building meets the following requirements:

(a) The structure must only be used for parking or storage,

(b) The structure must have the required openings to allow floodwaters in and out,

(c) The structure must be constructed using flood resistant materials below the Base Flood Elevation,

(d) The structure must be adequately anchored to resist flotation, collapse, and lateral movement, and

(e) All building utility equipment including electrical and heating must be elevated or floodproofed.

8. Water Supply Systems: New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems.

9. Sanitary Sewage Systems: New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
10. On-Site Waste Disposal Systems: On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
11. Watercourse Carrying Capacity: The flood carrying capacity within any altered or relocated portion of a watercourse shall be maintained.
12. Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding, such facilities shall be located a minimum of one foot above the Base Flood Elevation;
13. Bulk or individual fuel storage tanks. All fuel storage tanks shall be located a minimum of one foot above the Base Flood Elevation and be tied down to prevent flotation. No underground fuel storage tanks are allowed in the SFHA.
14. All development. Until a regulatory floodway is designated, in Zones A1-30 and AE the requirements of Section 7C. shall be met.

### **Section 9. Variances to the Development Standards**

Variances shall be granted by the PC only in accordance with 24 V.S.A. § 4469 and in accordance with the criteria for granting variances found in 44 CFR, Section 60.6, of the National Flood Insurance Program regulations.

#### **A. Matters to be Considered in Variance Procedures**

In passing upon such applications, in addition to the requirements of said § 4469, the PC shall consider all technical evaluations, all relevant factors, standards specified in other sections of these regulations , and:

1. The danger that materials may be swept onto other lands to the injury of others;
2. The danger of life and property due to flooding or erosion damage;
3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
4. The importance of the services provided by the proposed facility to the community;
5. The necessity to the facility of a waterfront location, where applicable;
6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
7. The compatibility of the proposed use with existing and anticipated development;

8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
10. The expected heights, velocity, duration, rate of rise, and sediment of transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
12. Upon consideration of factors listed above, and the purpose of these regulations, the PC may attach such conditions to the granting of variances as it deems necessary to further the purposes of these regulations.

#### B. Procedures for Variance Hearings.

In addition to the requirements of 24 VSA § 4469, in considering variances to these flood hazard area regulations, the PC shall follow the following procedures, which include the procedures for the granting of variances found in 44 CFR, Section 60.6, of the National Flood Insurance Program regulations:

1. No-Impact Certification within the Floodway. Variances shall not be issued within any designated floodway if any impact in flood conditions or increase in flood levels during the base flood discharge would result. A No-Impact Certification within the Floodway from a Vermont registered professional engineer is required to satisfy this prohibition set forth in 44 CFR, Section 60.6(a)(1).
2. Variances may be issued for new construction and substantial improvement to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with the procedures set forth in 9B. 3., 4., 5. and 6. herein.
3. Variances shall only be issued when there is:
  - a. A showing of good and sufficient cause;
  - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and,
  - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances;
4. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief;

5. Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:
  - a. The issuance of a variance to construct a structure below the base flood elevation will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage, and,
  - b. Such construction below the base flood level increases risks to life and property.

A copy of the notice shall be recorded by the Administrative Officer in the Office of the Town Clerk and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.

6. The Administrative Officer will maintain a record of all variance actions, including justification for their issuance, and report such variances issued in the community's annual or biennial report submission to the Federal Emergency Management Agency or State NFIP Coordinator upon request.
7. Historic Structures. Variances may be issued for the repair or rehabilitation of "historic structures" upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as an "historic structure" and the variance is the minimum to preserve the historic character and design of the structure.
8. Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that
  - a. the criteria of paragraphs 9B 1. through 4. of this section, above , are met, and
  - b. the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

#### **Section 10. Warning of Disclaimer of Liability**

These regulations do not imply that land outside of the areas of special flood hazard or land use permitted within such districts will be free from flooding or flood damages. These regulations shall not create liability on the part of the Town of Cavendish or any town official or employee thereof for any flood damages that result from reliance on these regulations or any administrative decision lawfully made thereunder.

#### **Section 11. Validity and Severability**

If any portion of these regulations is held unconstitutional or invalid by a competent court, the remainder of these regulations shall not be affected.

#### **Section 12. Precedence of Ordinance**

The provisions of these regulations shall not in any way impair or remove the necessity of compliance with any other applicable ordinances. Where these regulations impose a greater restriction, the provisions of these regulations shall take precedence.

### **Section 13. Enforcement and Penalties**

It shall be the duty of the Administrative Officer to enforce the provisions of these regulations. Whenever any development occurs contrary to these flood hazard area regulations, the Administrative Officer, in his/her discretion, shall institute appropriate action in accordance with the provisions of 24 V.S.A. §1974a or pursuant to 24 V.S.A. § 4451 or 24 V.S.A. § 4452 to correct the violation. No action may be brought unless the alleged offender has had at least a seven-day warning notice by certified mail. An action may be brought without the seven-day notice and opportunity to cure if the alleged offender repeats the violation after the seven-day notice period and within the next succeeding twelve months. The seven-day warning notice shall state that a violation exists, that the alleged offender has an opportunity to cure the violation within the seven days, and that the alleged offender will not be entitled to an additional warning notice for a violation occurring after the seven days.

If the structure is still noncompliant after the opportunity to cure has passed, the Administrative Officer shall submit a declaration to the Administrator of the NFIP requesting a denial of flood insurance. Section 1316 of the National Flood Insurance Act of 1968, as amended, authorizes FEMA to deny flood insurance to a property declared by a community to be in violation of their flood hazard area regulations. The declaration shall consist of: (a) the name of the property owner and address or legal description of the property sufficient to confirm its identity or location, (b) a clear and unequivocal declaration that the property is in violation of a cited State or local law, regulation, or ordinance, (c) a clear statement that the public body making the declaration has authority to do so and a citation to that authority, (d) evidence that the property owner has been provided notice of the violation and the prospective denial of insurance, and (e) a clear statement that the declaration is being submitted pursuant to Section 1316 of the National Flood Insurance Act of 1968, as amended.

Bond Term & Forfeiture – a performance bond or other surety may be required by the Board of Adjustment pursuant to their review. The amount, term, and conditions of the forfeiture shall be stated in the decision which requires the surety and shall be reflected in the surety contract. The surety contract shall be filed with the Town Clerk and shall be satisfactory to the Legislative Body as to form, sufficiency and manner of execution.

## **Section 14. Definitions**

Unless specifically defined below, words or phrases used in these regulations shall be interpreted so as to give them the meaning they have in common usage and to give these regulations its most reasonable application.

**Administrative Officer** means the person appointed by the Selectboard to administer and implement the provisions of these regulations, which are also referred to at the Floodplain Administrator.

**A Zone** means portions of the SFHA in which the principle source of flooding is runoff from rainfall, snowmelt, or a combination of both. In A zones, flood waters may move slowly or rapidly, but waves are usually not a significant threat to buildings. A Zones are areas of 100-year flood, in which base flood elevations and flood hazard factors have not been determined.

**A1 – A 30 and AE zone** is the Special Flood Hazard Area inundated by the 100-year flood, base flood elevations are determined.

**Accessory structure** (Appurtenant structure) means a structure which is located on the same parcel of property as the principle structure and the use of which is incidental to the use of the principle structure. Accessory structures should constitute a minimal initial investment, may not be used for human habitation, and be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.

**Addition** (to an existing building) means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a firewall. Any walled and roofed addition, which is connected by a firewall or is separated by independent perimeter load-bearing walls, is new construction.

**AH Zone** is an area of 100-year shallow flooding where depths are between 1 and 3 feet (usually shallow ponding), base flood elevations are shown.

**AO Zone** is an area of 100-year shallow flooding where depths are between 1 and 3 feet (usually sheet flow on sloping terrain), base flood elevations are shown.

**Appeal** means a request for a review of the floodplain administrative officer's interpretation of any provision of these regulations or a request for a variance.

**Appropriate Municipal Panel** means a planning commission performing development review, a board of adjustment, a development review board, or a legislative body performing development review.

**Area of shallow flooding** means a designated AO or AH Zone on the community's Flood Insurance Rate Map (FIRM) with flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

**Area of special flood hazard** means that portion of the floodplain within a community subject to inundation by the base flood and / or flood-related erosion hazards as shown on a FIRM as Zone A, AE, A1-A30, AH, or AO.

**B and X zones (shaded)** are areas of 500-year flood, areas subject to the 100-year flood with average depths of less than 1 foot or with contributing drainage area less than 1 square mile, and areas protected by levees from the base flood.

**Base flood** means the flood having a one percent chance of being equaled or exceeded in any given year.

**Base Flood Elevation (BFE)** is the elevation, expressed in feet, shown on the Flood Insurance Rate Map (FIRM) for Zone AE, AH, AO, and A1-30 that indicates the surface water elevation resulting from a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year.

**Basement** means that portion of a building having its floor elevation below ground level on all sides.

**Building** see Structure.

**C Zones** are areas determined to be outside the 500-year floodplain.

**Community** is a political entity that has the authority to adopt and enforce floodplain ordinances for the area under its jurisdiction.

**Critical facility** means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

**Development** means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

**Elevated building** means a non-basement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), shear walls, or breakaway walls.

**Elevation Certificate** is a certified statement that verifies a building's elevation information.

**Existing Construction** any structure for which the "start of construction" commenced before [the date of the **initial** Flood Insurance Rate Map, which can be found on the map index panel].

**Existing manufactured home park or subdivision** means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community before.

**Expansion to an existing manufactured home park or subdivision** means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

**Fill** means a deposit of earth material placed by artificial means.



**Five-Hundred Year Flood** means the flood that has a 0.2 percent or greater chance of being equaled or exceeded in any year. Areas subject to the 500-year flood have a moderate to low risk of flooding.

**Flood or flooding** means a general and temporary condition of part or complete inundation of normally dry land areas from:

- a.) The overflow of inland or tidal waters;
- b.) The unusual and rapid accumulation or runoff of surface waters from any source.

**Flood Boundary and Floodway Map (FBFM)** means the official map on which the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA) has delineated the areas of flood hazards and regulatory floodway.

**Flood Hazard Boundary Map (FHBM)** means an official map of a community, issued by FEMA, where the boundaries of the areas of special flood hazard have been identified as Zone A.

**Flood Insurance Rate Map (FIRM)** means an official map of a community, on which FEMA has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

**Flood Insurance Study (FIS)** means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations or an examination, evaluation and determination of mudslide (i.e., mudflow) and /or flood related erosion hazards.”

**Floodplain or flood-prone area** means any land area susceptible to being inundated by water from any source.

**Floodplain management** means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

**Floodplain Administrator** is the individual appointed to administer and enforce these floodplain management regulations.

**Floodplain management regulations** means these regulations and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power which control development in flood-prone areas. This term describes federal, state or local regulations in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

**Flood proofing** means any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

**Floodproofing Certificate** is a form used to certify compliance for non-residential structures as an alternative to elevating buildings to or above the BFE or ABFE.

**Floodway** means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot at any point.

**Floodway fringe** means that area of the floodplain on either side of the regulatory floodway.

**Floor** means the top surface of an enclosed area in a building, including basement, i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

**Freeboard** means a factor of safety, usually expressed in feet above the BFE, which is applied for the purposes of floodplain management. It is used to compensate for the many unknown factors that could contribute to flood heights greater than those calculated for the base flood.

**Functionally dependent facility** means a facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

**Hardship** (as related to variances of these regulations ) means the exceptional hardship that would result from a failure to grant the requested variance. The [Governing body] shall require that the variance is exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is NOT exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

**Highest adjacent grade** means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a building.

**Historic Structure** means any structure that is: (a) listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; (b) certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; (c) individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or (d) individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either: (i) by an approved state program as determined by the Secretary of the Interior or (ii) directly by the Secretary of the Interior in states without approved programs.

**Hydrologic and hydraulic engineering analysis** means an analysis performed by a professional engineer, registered in the State of Vermont, in accordance with standard engineering practices as accepted by FEMA, used to determine flood elevations and / or floodway boundaries.

**Increased Cost of Compliance (ICC)** means the cost to repair a building substantially damaged by flooding that exceeds the minimal repair cost and that is required to bring a substantially damaged building into compliance with the local flood damage prevention ordinance. Acceptable mitigation measures are elevation, relocation, demolition, or any combination thereof. All renewal and new business policies with effective dates on or after June 1, 1997, will include ICC coverage.

**Legislative Body** means the selectboard in the case of a town, the trustees in the case of an incorporated village, and the mayor, alderpersons, and city council members in the case of a city, and the supervisor in the case of an unorganized town or gore.

**Letter of Map Change (LOMC)** is an official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, and Flood Insurance Studies. LOMCs are broken down into the following categories:

Letter of Map Amendment (LOMA)

A revision based on technical data showing that a property was incorrectly included in a designated SFHA. A LOMA amends the current effective FIRM and establishes that a specific property is not located in a SFHA.

Letter of Map Revision (LOMR)

A revision based on technical data that, usually due to manmade changes, shows changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features. One common type of LOMR, a LOMR-F, is a determination concerning whether a structure or parcel has been elevated by fill above the BFE and is, therefore, excluded from SFHA.

Conditional Letter of Map Revision (CLOMR)

A formal review and comment by FEMA as to whether a proposed project complies with the minimum NFIP floodplain management criteria. A CLOMR does not amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.

**Lowest adjacent grade** means the elevation of the sidewalk, patio, deck support, or basement entryway immediately next to the structure and after the completion of construction. It does not include earth that is emplaced for aesthetic or landscape reasons around a foundation wall. It does include natural ground or property compacted fill that comprises a component of a building's foundation system.

**Lowest floor** means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, 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 non-elevation provisions of these regulations.

**Manufactured home** means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when attached to the required utilities. The term manufactured home does not include a "recreational vehicle."

**Manufactured home park or subdivision** means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

**Map Panel Number** is the four-digit number followed by a letter suffix assigned by FEMA on a flood map. The first four digits represent the map panel, and the letter suffix represents the number of times the map panel has been revised.

**Market value** means the building value, excluding the land (as agreed between a willing buyer and seller), as established by what the local real estate market will bear. Market value can be established by independent certified appraisal, replacement cost depreciated by age of building (Actual Cash Value) or adjusted assessed values.

## **Mean Sea Level:**

- a.) On a FIRM: The average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of these regulations, the term is synonymous with National Geodetic Vertical Datum (NGVD).
- b.) On a DFIRM: The average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of these regulations, the term is synonymous with North American Vertical Datum (NAVD).

**Mitigation** means sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects. The purpose of mitigation is twofold: to protect people and structures, and to minimize the costs of disaster response and recovery.

**National Flood Insurance Program (NFIP)** is the federal program that makes flood insurance available to owners of property in participating communities nationwide through the cooperative efforts of the Federal Government and the private insurance industry. **National Geodetic Vertical Datum (NGVD)**, as corrected in 1929, is a vertical control used on a FIRM as a reference for establishing varying elevations within the floodplain.

**New construction** means, for the purposes of determining insurance rates, structures for which the “start of construction” commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, *new construction* means structures for which the *start of construction* commenced on or after the effective date of the floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

**New manufactured home park or subdivision** means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain regulations adopted by a community.

**North American Vertical Datum (NAVD)**, as corrected in 1988, is a vertical control used on a DFIRM as a reference for establishing varying elevations within the floodplain.

**Obstruction** includes, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, or due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream.

**One-Hundred Year Flood (100 Year Flood)** is the flood that has a 1-percent or greater chance of being equaled or exceeded in any given year. Over the life of a 30-year loan, there is a 26-percent chance of experiencing such a flood within the SFHA.

**Participating Community** is any community that voluntarily elects to participate in the NFIP by adopting and enforcing floodplain management regulations that are consistent with the standards of the NFIP.

**Probation** means formally notifying participating communities of violations and deficiencies in the administration and enforcement of the local floodplain management regulations.

**Public safety and nuisance** means anything which is injurious to safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

**Recreational vehicle** means a vehicle which is: (a) built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projection; (c) designed to be self-propelled or permanently towable by a light duty truck; and (d) designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

**Regulatory floodway** means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

**Repair** means the reconstruction or renewal of any part of an existing building.

**Repetitive Loss** means flood-related damages sustained by a structure on two separate occasions during a 10-year period ending on the date of the event for which the second claim is made, in which the cost of repairing the flood damage, on the average, equaled or exceeded 25% of the market value of the building at the time of each such flood event.

**Special Flood Hazard Area** is the land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. The area may be designated a Zone A on the Flood Hazard Boundary Map (FHBM). After detailed ratemaking has been completed in preparation for publication of the Flood Insurance Rate Map (FIRM), Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/AI-30, AR/AE, AR/AO, AR/AH, AR/A, VO or V1-30, VE, or V. For purposes of these regulations, the term “special flood hazard area” is synonymous in meaning with the phrase “area of special flood hazard.”

**Section 1316** is that section of the National Flood Insurance Act of 1968, as amended, which states that no new flood insurance coverage shall be provided for any property that the Administrator finds has been declared by a duly constituted state or local zoning authority or other authorized public body to be in violation of state or local laws, regulations, or ordinances that are intended to discourage or otherwise restrict land development or occupancy in flood-prone areas.

**Start of Construction** includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footing, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, regardless whether that alteration affects the external dimensions of the building.

**Structure** means, 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.

For insurance purposes, “structure” 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 park trailer or other similar vehicle, except as described in (c) of this definition, or a gas or liquid storage tank.

**Subrogation** means an action brought by FEMA when flood damages have occurred, flood insurance has been paid, and all or part of the damage can be attributed to acts or omissions by a community or other third party.

**Substantial damage** means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged conditions would equal or exceed 50 percent of the market value of the structure before the damage occurred.

**Substantial improvement** means any reconstruction, rehabilitation, addition, or 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 the actual repair work performed. 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(s) and which are the minimum necessary to assure safe living conditions or (b) any alteration of a “historic structure”, provided that the alteration will not preclude the structure’s continued designation as a “historic structure”.

**Substantially improved existing manufactured home parks or subdivisions** is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

**Suspension** means the removal of a participating community from the NFIP because the community has not enacted and/or enforced the proper floodplain management regulations required for participation in the NFIP

**Variance** is a grant of relief from the requirements of these regulations , which permits construction in a manner otherwise prohibited by these regulations where specific enforcement would result in an unnecessary hardship.

**Violation** means the failure of a structure or other development to be fully compliant with these regulations . A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in these regulations is presumed to be in violation until such time as that documentation is provided.

**Watercourse** means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

**Water surface elevation** means

- a.) On a FIRM: The height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

- b.) On a DFIRM: The height, in relation to the North American Vertical Datum (NAVD) of 1988, (or other datum where specified) of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

**X zone** means the area where the flood hazard is less than that in the SFHA. Shaded X zones shown on recent FIRMs (B zones on older FIRMs) designate areas subject to inundation by the flood with a 0.2-percent or greater annual probability of being equaled or exceeded (the 500-year flood). Unshaded X zones (C zones on older FIRMS) designate areas where the annual exceedance probability of flooding is less than 0.2 percent.

**Zone** means a geographical area shown on a Flood Hazard Boundary Map or a Flood Insurance Rate Map that reflects the severity or type of flooding in the area.