

ARTICLE VI. FLOOD HAZARD AREA REVIEW

Section 6.1 Statutory Authorization & Effect

A. Flood Hazard Area Regulations for the Town of Underhill are hereby incorporated under these unified regulations in accordance with the Act [§§4419, 4424]. Regulations under this article shall be known and cited as the “Underhill Flood Hazard Area Regulations.”

B. Flood hazard area regulations under this article shall be amended, administered and enforced in the same manner as other provisions of these regulations, except as specified under this article as necessary to meet minimum requirements for community participation in the National Flood Insurance Program (NFIP). Proposed amendments to these regulations shall be sent to the State National Flood Insurance Program Coordinator at least fifteen days prior to the first public hearing to be reviewed for conformance with federal and state program requirements (see Section 1.5).

C. Previous flood hazard area regulations as adopted by the Town of Underhill on June 23, 1988, and as amended through March 2, 2010, are repealed as of the effective date of these regulations. All permits and approvals issued under previous regulations remain in effect.

D. These regulations shall not in anyway impair or remove the need to comply with other sections of these regulations, or with other municipal, state or federal laws. Where these regulations impose a greater restriction on development, as defined under Section 11.3 for purposes of flood hazard area management and regulation, they shall control.

E. For the purposes of flood hazard area management, National Flood Insurance Program (NFIP) definitions contained in 44 CFR Section 59.1 are adopted by reference and shall be used to interpret and enforce these regulations. Definitions of commonly used terms are provided under Section 11.3 Where NFIP definitions differ from similar definitions under the Act [§4303] or these regulations (under Section 11.2), for purposes of flood hazard area regulation NFIP definitions shall control.

F. In accordance with Section 1.6, if any portion of these regulations is held unconstitutional or invalid by a competent court, the remainder of these regulations shall not be affected.

G. These regulations do not imply that land outside of mapped Special Flood Hazard Areas will be free from flooding. These regulations shall not create liability on the part of the Town of Underhill, or any municipal official or employee thereof, for any flood damages that result from reliance on these regulations, or any administrative decision lawfully made hereunder.

Section 6.2 Statement of Purpose

A. It is the purpose of these flood hazard area regulations to:

1. Promote public health, safety and general welfare.
2. Prevent increases in flooding caused by uncontrolled development of lands in special flood hazard areas.
3. Avoid or minimize loss of life and property, the disruption of commerce, the impairment of the tax base, and extraordinary public expenditures and demands on public services that result from flooding.
4. Minimize flood losses by restricting or prohibiting uses that are dangerous to health, safety or property in times of flooding or cause excessive increase in flood heights or velocities.
5. Ensure that development within flood hazard areas is reasonably safe from flooding, occurs in a manner that minimizes or eliminates potential flood hazards to life and property, and maintains the functional capacity of floodplains to carry flood waters.
6. Implement goals and objectives of adopted municipal and hazard mitigation plans, and related state planning goals under the Act [§4302].
7. Manage flood hazard areas designated by the state (under 10 V.S.A. §753) in accordance with requirements for community participation in the National Flood Insurance Program, and thereby ensure that the Town of Underhill, its residents and businesses are eligible for available federal flood insurance, disaster recovery funds, and hazard mitigation funds.

Section 6.3 Lands to Which These Regulations Apply

A. These regulations shall apply to development in all areas in the Town of Underhill, Vermont identified as Special Flood Hazard Areas (SFHAs) in and on the most current Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRMs) 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. These studies and maps are hereby adopted by reference and declared to be part of these regulations (see Section 2.1).

B. Where available (i.e., Zones A1–A30, AE and AH), base flood elevations and floodway limits provided by the National Flood Insurance Program, in the Flood Insurance Study and accompanying Flood Insurance Rate Maps for the town, shall be used to administer the provisions of these regulations. In areas where base flood elevations and floodway limits have not been provided by the National Flood Insurance Program (i.e. Zone A), it is the applicant's responsibility to develop the necessary data. Where available, the applicant shall use base flood elevation and floodway data provided by the Federal Emergency Management Agency, other federal agencies or the state.

C. Until a regulatory floodway has been designated, no new construction, substantial improvements, or other development shall be permitted in Zones A, A1-30, AE, and AH unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing development and anticipated development will not increase the water surface elevation of the base flood more than one (1.00) foot at any point within the community. This demonstration must be supported by technical data that conform to standard hydraulic engineering principles and are certified by a registered professional engineer.

D. If uncertainty exists with respect to the boundary of a Special Flood Hazard Area (SFHA) or floodway, the boundary shall be determined by the Zoning Administrator in consultation with the National Flood Insurance Program Coordinator at the Vermont Agency of Natural Resources. If the applicant disagrees with the determination made by the Zoning Administrator, a Letter of Map Amendment (LOMA) from FEMA shall constitute proof.

Section 6.4 Permit Requirements

A. Municipal zoning permits and approvals are required, to the extent authorized under the Act [§§4412, 4424], for all development allowed within Special Flood Hazard Areas as “development” is defined under Section 11.3 for purposes of flood hazard area management and regulation. Development in this context may include uses or activities that otherwise may be exempt from municipal permit requirements under Section 10.2.

B. **Exemptions.** The following uses or activities are exempt from municipal flood hazard area regulation in accordance with the Act [§4413]:

1. Removal of a structure in whole or part.
2. Maintenance of existing infrastructure, including existing roads, utilities, drainage, and stormwater systems.
3. Silvicultural (forestry) activities conducted in accordance with Vermont Department of Forest, Parks and Recreation Accepted Management Practices (AMPs).
4. Agricultural activities conducted in accordance with Vermont Agency of Agriculture Accepted Agricultural Practices (AAPs); however prior to the construction of a farm structure, the farmer shall notify the Zoning Administrator in writing of proposed construction, to include a sketch plan showing required setbacks.
5. Public utilities regulated by the Vermont Public Service Board, including power generation and transmission facilities.

C. **Prohibited Uses.** The following uses and activities are prohibited within Special Flood Hazard Areas, as specified:

1. All above grade development and encroachments are prohibited within floodway areas unless a registered professional engineer certifies, based on hydrologic and hydraulic analyses conducted in accordance with standard engineering practices, that the proposed development will result in no (0.00 foot) increase in flood levels during the

occurrence of the base flood, and no increased risk to surrounding properties, facilities or structures from flooding or erosion.

2. Public utilities may be placed below grade within floodway areas without the required analyses if a registered professional engineer certifies that there will be no change in grade and the utilities will be adequately protected from scour.

3. Salvage yards and storage facilities for floatable materials, chemicals, explosives, flammable liquids, or other hazardous or toxic materials are prohibited within Special Flood Hazard Areas, including floodway areas.

4. New structures, including accessory structures are prohibited within floodway areas.

5. New critical public facilities, as defined under Section 11.3 for purposes of flood hazard area management and regulation, are prohibited within Special Flood Hazard Areas (mapped 100-year floodplains), including floodway areas, and mapped 500-year floodplains (areas have a 0.2% or greater chance of flooding in any given year).

6. New fill, except as required to elevate structures above the base flood elevation, is prohibited within Special Flood Hazard Areas, including floodway areas.

7. Fully enclosed areas that are below grade on all sides (including below grade crawlspaces and basements) are prohibited within Special Flood Hazard areas, including floodway areas.

D. **Permitted Uses.** For purposes of flood hazard area regulation, the following development activities in Special Flood Hazard Areas that are located outside of floodways may be issued a zoning permit by the Zoning Administrator, following review by the state under Section 6.5, if they meet applicable development standards under Section 6.6:

1. Accessory structures that have a building footprint of no more than 500 square feet.

2. Fuel storage tanks.

3. Minor (non-substantial) improvements to existing structures.

4. Parking, at grade.

5. Recreational vehicles.

6. Stream channel, stormwater and floodplain management activities, as approved by the state.

7. Stream crossings (bridges and culverts) as approved by the state, where applicable.

8. Water supply and wastewater systems, as approved by the state.

E. **Conditional Uses.** For purposes of flood hazard area regulation, conditional use review and approval as prescribed under Section 5.4 shall be required for all other development within Special Flood Hazard Areas prior to the issuance of a zoning permit. This includes, but may not be limited to:

1. Grading and excavation.
2. New structures, including new manufactured (mobile) homes.
3. Relocation, elevation, substantial improvement or replacement of existing structures.
4. Development within floodways, including improvements to existing structures.
5. New or substantially improved roads and utilities regulated by the municipality.
6. Ponds.

F. **Subdivisions.** For purposes of flood hazard area management and regulation, applicable requirements of these flood hazard area regulations also shall apply to the subdivision and development of land under Articles VII and VIII.

Section 6.5 Development Review Procedures

A. **Development Applications.** In addition to other application requirements under these regulations, applications for development within Special Flood Hazard Areas shall include:

1. A site plan that depicts the proposed development in relation to all water bodies, Special Flood Hazard Areas, floodways, existing and proposed drainage, pre- and post development grades, and the elevation of the lowest floor (including basement) as referenced to the same vertical datum as the elevation on current Flood Insurance Rate Maps.
2. Applicable analyses and certifications required under flood hazard area regulations.
3. A project review sheet prepared by a Vermont Agency of Natural Resources Regional Permit Specialist for any development that may require state and federal permits.

B. **Subdivision Applications.** In addition to other application requirements under these regulations, applications under Article VII for new subdivisions within Special Flood Hazard Areas shall include any information required to determine compliance with these regulations, including the location of Special Flood Hazard Areas and floodways in relation to existing and proposed building lots, structures, roads, driveways, utilities and drainage. Applications for subdivisions greater than 50 lots or 5 acres shall include base flood elevation data.

C. **Application Referrals.** Prior to issuing a permit or approval for any development in a Special Flood Hazard Area, a copy of the completed application and supporting information shall be submitted by the Zoning Administrator to the state for review in accordance with the Act [§4424], as specified below. 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 referred to the Agency, whichever is sooner. State recommendations shall be incorporated as applicable in municipal findings, decisions and conditions of approval.

1. Applications for development within Special Flood Hazard Areas shall be submitted to the State National Flood Insurance Program (NFIP) Coordinator at the Vermont Agency of Natural Resources.
 2. If the applicant proposes to alter or relocate a watercourse, copies of the application also shall be sent to adjacent communities, the Stream Alteration Engineer at the Vermont Agency of Natural Resources and Army Corps of Engineers, as well as the State NFIP Coordinator.
- D. **Hearings.** Public hearings required under these regulations shall be noticed in accordance with the Act [§4464] and Section 10.7, and may be conducted concurrently with other hearings required for the proposed development under these regulations. Decisions of the Development Review Board, including findings under these regulations, shall be issued in writing within 45 days of the date of hearing adjournment, as required under the Act and Section 10.7.
- E. The Zoning Administrator shall assure that all necessary municipal, state and federal permits have been obtained by the applicant prior to the issuance of a certificate of occupancy or compliance under Section 10.4.

Section 6.6 Flood Hazard Area Development Standards

- A. No new development shall be allowed within a Special Flood Hazard Area if it can be located outside of this area on the parcel to be developed, or on another parcel in common ownership that is located outside of this area.
- B. All development and building sites within Special Flood Hazard Areas shall be designed to:
1. Be reasonably safe from flooding;
 2. Minimize flood damage to the proposed development and to public facilities and utilities; and
 3. Provide adequate drainage to reduce exposure to flood hazards.
- C. All new construction and substantial improvements within Special Flood Hazard Areas shall be:
1. Designed (or modified), maintained 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 be
 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.

1 D. The flood carrying capacity within an altered or relocated portion of any watercourse
2 shall be maintained, as specified in the conditions of permit approval.

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4 E. New and replacement water supply and sanitary sewer systems, as approved by the
5 state, shall be designed to minimize or eliminate the infiltration of flood waters into the
6 systems and discharges from the systems into flood waters, as documented from state
7 permits.

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9 F. On-site waste disposal systems, as approved by the state, shall be located to avoid
10 impairment to them or contamination from them during flooding, as documented from state
11 permits.

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13 G. The lowest floor, including basement, of all new buildings shall be elevated one foot or
14 more above the base flood elevation, as documented through the submission of a FEMA
15 elevation certificate.

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17 H. Substantial improvements to existing residential buildings shall be elevated to meet the
18 requirements of Subsection G.

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20 I. New, substantially improved and replacement manufactured (mobile) homes, including
21 manufactured homes within existing, expanded or new manufactured (mobile) home parks
22 or subdivisions, shall be elevated on a permanent foundation above the base flood elevation
23 and anchored to resist flotation, collapse or lateral movement. The manufactured home
24 shall be elevated on properly compacted fill such that the top of fill (pad) under the entire
25 manufactured home is above the base flood elevation.

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27 J. Substantial improvements to existing nonresidential buildings shall either:

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29 1. Meet the requirements of Subsection G; or

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31 2. Together with attendant utility and sanitary facilities, be designed so that the structure
32 is watertight below the base flood elevation with walls that are substantially
33 impermeable to the passage of water and structural components that have the
34 capability to resist hydrostatic and hydrodynamic loads and effects of buoyancy. A
35 permit for a building proposed to be floodproofed below the base flood level shall not
36 be issued until a registered professional engineer or architect has reviewed the
37 structural design, specifications, and plans, and has certified that the design and
38 proposed methods of construction are in accordance with accepted standards of
39 practice for meeting the provisions of this subsection.

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41 K. Fully enclosed areas that are above grade, below the lowest floor, that are subject to
42 flooding (below the base flood elevation) shall be:

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44 1. used only for parking vehicles, storage, or building access, as specified in written
45 conditions of permit approval; and be

2. designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. 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 cover coverings or devices provided that they permit the automatic entry and exit of floodwaters.

L. Recreational vehicles shall:

1. be fully licensed and ready for highway use (on wheels, with quick disconnect utilities and no permanently attached additions), or
2. meet elevation and anchoring requirements for manufactured (mobile) homes under Subsection H and 44 CFR 60.3(c)(6).

M. A small accessory structure that has a footprint of 500 square feet or less and represents a minimal investment need not be elevated to the base flood elevation, provided the structure shall be:

1. Used only for parking or the storage of non-hazardous materials, as specified in the written conditions of permit approval. Such structures shall not be used for human habitation.
2. Designed to have low flood damage potential.
3. Constructed with flood-resistant materials, and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.
4. Firmly anchored to prevent flotation, collapse or lateral movement which may result in damage to other structures.
5. Constructed with 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. 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. Constructed so that electrical and heating equipment and other utilities are elevated above the base flood elevation or adequately floodproofed.

N. All subdivisions and planned unit developments within Special Flood Hazard Areas must meet the following requirements:

1. Subdivisions shall be designed to avoid locating building sites, structures, driveways and roads within Special Flood Hazard Areas, and to minimize potential flood damage within these areas.
2. All utilities and facilities, such as sewer, gas, electrical, and water systems serving the subdivision shall be located and constructed to minimize or eliminate flooding.
3. Adequate drainage shall be provided to reduce exposure to flood hazards.
4. The subdivision must be accessible by dry land during base flood occurrences.
- O. Bridges and culverts must have a stream alteration permit from the Agency of Natural Resources where applicable.
- P. Fuel storage tanks must be elevated at or above the base flood elevation and securely anchored to prevent flotation; or may be placed underground, if securely anchored as certified by a qualified professional.

Section 6.7 Nonconforming Structures

- A. The repair, enlargement, replacement or relocation of a nonconforming structure within a Special Flood Hazard Area is subject to conditional use review and must comply with applicable requirements of these regulations in addition to any other requirements for nonconforming structures under Section 3.9.
- B. A substantially damaged or destroyed nonconforming structure within a Special Flood Hazard Area may be reconstructed in the same location only if it cannot be relocated to a less hazardous location on the parcel. The lowest floor of the reconstructed structure must be elevated above the base flood elevation, and the structure must otherwise comply with all applicable requirements of these regulations.
- C. In accordance with the Act [§4412] and Section 4.13, a vacated manufactured (mobile) home site in an existing, nonconforming mobile home park shall not be considered a discontinuance or abandonment of a nonconformity; however, a replacement mobile home on a site within a Special Flood Hazard Area must meet the requirements of these regulations.

Section 6.8 Variances

- A. In addition to hardship criteria for granting variances under Section 5.5 and the Act [§4469(a)], variances from the requirements of flood hazard area regulations (e.g., elevation requirements) shall be granted by the Development Review Board only in accordance with the Act [§4424(2)(E)] and the following:

1. The criteria for granting variances found in 44 CFR, Section 60.6 of the National Flood Insurance Program Regulations.
 2. The determination that during the base flood discharge the variance will not result in increased flood levels.
 3. The determination that the structure or other development is protected by methods that minimize flood damages during the base flood.
 4. The determination that the variance will result in no additional threats to public safety, extraordinary public expense, or nuisances, or fraud or victimization of the public.
 5. The determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- B. Variances may be issued for the repair or rehabilitation of an historic structure within a Special Flood Hazard Area upon the determination the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- C. Any variance decision issued for development within a Special Flood Hazard Area shall include, in writing over the signature of a municipal official, the statement that "The issuance of a variance to construct a structure below the base flood elevation increases risks to life and property, and will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage." A record of all variance decisions, including this written notification, shall be maintained as required under Section 10.7.

Section 6.9 Administration & Enforcement

- A. **Certificates of Occupancy and Compliance.** A certificate of occupancy or compliance issued by the Zoning Administrator under Section 10.4 is required prior to the use or occupancy of any land, structure, or part of a structure within a Special Flood Hazard Area for which a zoning permit has been issued under these regulations. The purpose of these certificates are to ensure that the use or structure, as constructed, conforms to these regulations and the conditions of approval. In addition to the requirements of Section 10.4,
1. The applicant shall submit with the application for a certificate of occupancy or compliance, a state project review sheet, and copies of any required state permits and certifications.
 2. A certificate of occupancy shall not be issued until the applicant demonstrates that:
 - a. All required municipal permits and approvals have been obtained, and the Zoning Administrator determines that the development has been completed in conformance with all such permits and approvals.

- b. State and federal permits and approvals, as identified in from the project review sheet, have been obtained including, but not limited to state wastewater and potable water supply system certifications and approvals.
- c. The applicant shall also provide certification from an engineer or site designer that all permitted road and driveway improvements have been completed in accord with submitted plans.
- d. The Zoning Administrator shall inspect the site or premises to ensure that all work has been completed in conformance with the zoning permit and associated approvals prior to issuing a certificate.

3. The decision of the Zoning Administrator to grant or deny a certificate may be appealed to the Development Review Board within 15 days of the date of the decision, in accordance with the Act (§4465). If a certificate cannot be issued following the appeal, notice will be sent to the applicant, and copied to the State NFIP Coordinator and any lender(s).

B. Violations and Enforcement. Any structure or other development in a Special Flood Hazard Area that is not fully compliant with these regulations, or permits and conditions of approval issued under these regulations shall constitute a violation. Violations shall be pursued by the Zoning Administrator in accordance with the Act [§§4451, 4452] and Section 10.6. In addition:

1. A copy of the notice of violation shall be mailed to the State NFIP Coordinator.
2. If the violation remains after all appeals have been resolved, the Zoning Administrator shall submit a declaration of violation to the Administrator of the National Flood Insurance Program requesting denial of flood insurance for the property in violation, pursuant to Section 1316 of the National Flood Insurance Act of 1968 as amended. A valid declaration of a violation shall consist of:
 - a. The name(s) of the property owner(s) and address or legal description of the property sufficient to confirm its identity and location;
 - b. A clear and unequivocal declaration that the property is in violation of cited sections of these regulations;
 - c. A clear statement that the Zoning Administrator has authority to make the declaration under the Act and these regulations;
 - 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.
3. Violations of state Accepted Agricultural Practices (AAPs) within Special Flood Hazard Areas shall be reported immediately to the Secretary of the Agency of Agriculture for state enforcement under 6 V.S.A. §4812. A copy of the notification shall be mailed to the State NFIP Coordinator.

1 C. **Recordkeeping Requirements.** In addition to other recording requirements under
2 Section 10.7, the Zoning Administrator also shall maintain a record of:

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- 4 1. All municipal permits and approvals for development in Special Flood Hazard Areas.
 - 5 2. Elevation certificates that confirm the elevation in relation to mean sea level (consistent
6 with the elevation datum on current Flood Insurance Rate Maps), of the lowest floor,
7 including basement, of all new or substantially improved buildings.
 - 8 3. Floodproofing certificates that confirm the elevation, in relation to mean sea level,
9 (consistent with the elevation datum on current Flood Insurance Rate Maps),to which
10 buildings have been floodproofed.
 - 11 4. All other certifications required under these regulations.
 - 12 5. All variances and notices of violation, including supporting findings and justification for
13 their issuance.