



**New Hampshire Office of Strategic Initiatives
Floodplain Management Program**

**Model Floodplain Management Ordinance Notes
For New Hampshire Communities**

November 2018

New Hampshire Floodplain Management Program

Model Floodplain Management Ordinance Notes

This document provides explanations and website-linked reference information that support the regulations provided in the Model Floodplain Management Ordinance for New Hampshire Communities. Each section number and sub-section letter corresponds to the appropriate section and sub-section of the model ordinance.

Sections or items that are optional for communities to adopt are noted as [optional](#) in this document and noted in *italics* in the Model Ordinance.

This document also identifies recommendations for exceeding the minimum National Flood Insurance Program (NFIP) requirements in the ordinance through higher standards, which are noted as [Higher Standards](#). Exceeding minimum NFIP requirements can improve the resilience of your community to future flooding and in many cases result in NFIP Community Rating System (CRS) credit for participating communities. Some of the higher standards reference [Menu of Higher Floodplain Regulation Standards](#), which is where more details about the higher standards can be found along with whether CRS credit points are available for each standard and what additional resources are available.

Each section of the model ordinance also includes website-linked references to the applicable Federal, State, and State building code (established in RSA 155-A, which includes the 2009 International Building Code (IBC) and International Residential Code (IRC), and ASCE 24-05 - Flood Resistant Design and Construction) requirements. Please note the regulation references are not all inclusive and are provided in this document for informational purposes only.

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Model Ordinance Section	Regulation	Reference
SECTION 1 – STATUTORY AUTHORITY AND PURPOSE		
A. Citation of statutory authority.	State Statute (RSA)	674:56 674:16 & 17
B. Details the purpose of the Ordinance.	State Statute (RSA)	674:16
	State Bldg. Code	IBC & IRC 101.3
SECTION 2 – FINDINGS OF FACT AND APPLICABILITY		
<i>RESOURCE: FEMA NFIP Floodplain Management Requirements – Unit 5 (FEMA-480)</i>		
A. Details that the community has chosen to participate in the National Flood Insurance Program and agreed to comply with its requirements.	NFIP (44 CFR)	60.1 60.2
B. Identifies the applicable areas in the community that the ordinance applies to and identifies the current FEMA map date and panels and Flood Insurance Study that apply to the community. NFIP regulations must be legally-enforceable, applied uniformly throughout the community to all privately and publicly owned land, including land and structures owned by the community, within flood-prone, mudslide (i.e., mudflow) or flood-related erosion areas, and the community must provide that the regulations take precedence over any less restrictive conflicting local laws, ordinances or codes.	NFIP (44 CFR)	60.3(b) 60.12
	State Statute (RSA)	674:57
	State Bldg. Code	IBC 1612.3 IRC Table - R301.2(1)
C. Identifies the requirement to have a permit system in place for development in a special flood hazard area.	NFIP (44 CFR)	60.3
	State Bldg. Code	IBC 105.1 IRC R105.1
SECTION 3 – ADMINISTRATIVE PROVISIONS		
<i>RESOURCE: NFIP Floodplain Management Requirements – Unit 7 (FEMA-480)</i>		
A. Addresses any conflicts with other ordinances or regulations and identifies the standard that shall be controlling.	State Statute (RSA)	676:14
B. Addresses if any section or provision is considered invalid that the remaining portions are still	State Statute (RSA)	35-A:38

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valid.		
C. This item identifies the state statute regarding the provisions of enforcement and administration of the ordinance.	State Statute (RSA)	676
D. This item addresses that flooding and flood damage can still occur even if compliance with this ordinance is met.		
SECTION 4 – FLOODPLAIN ADMINISTRATOR DUTIES AND RESPONSIBILITIES		
<i>RESOURCE: FEMA NFIP Floodplain Management Requirements – Unit 7 (FEMA-480)</i>		
A. Identifies the designated community official responsible for administering the regulations as the Floodplain Administrator, who is then referenced throughout the ordinance.	NFIP (44 CFR)	59.22(b)(1)
	State Bldg. Code	IBC 104.1; IRC R104.1
B. This item more clearly details the Floodplain Administrator’s duties and responsibilities. These are not new requirements and are actions that the Floodplain Administrator should already be taking to ensure compliance with the ordinance requirements.	NFIP (44 CFR)	60.2(e) 60.3(a)(2) 60.3(b)(5)(6)(7) 60.3(e)(2) 65.3 59.22(a)(9) (iii)
	State Bldg. Code	IBC 102.2, 104 IRC R102.2, R104
SECTION 5 – FLOOD ZONE AND FLOODWAY DETERMINATIONS		
<i>RESOURCE: NFIP Floodplain Management Requirements – Units 4 & 5(FEMA-480)</i>		
A. Provides details on how the Floodplain Administrator determines whether the location of a proposed development is located in a special flood hazard area and whether in a floodway, if applicable.	NFIP (44 CFR)	60.3(d) 60.3(b)(4)
	State Bldg. Code	IRC R322.1 ASCE 24-05 1.4

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B. If the location of the proposed development is unclear, this item provides that the Floodplain Administrator can request further information from the applicant.	State Bldg. Code	IBC 1612.3.1
C. Provides guidance when the development including a structure and its attachments is located in more than one flood zone.	State Bldg. Code	IBC 1612.1 ASCE 24-05 9.2
D. This item provides details on when there is a discrepancy between the FIRM and actual ground elevations and how to address the discrepancy.		
E. Requires the Floodplain Administrator to obtain, review, and utilize any floodway data for developments in Zone A with no mapped floodway.	NFIP (44 CFR)	60.3(b)(4)
	State Bldg. Code	IBC 1612.2 IRC R322.1.4.1
SECTION 6 – SUBSTANTIAL IMPROVEMENT AND DAMAGE DETERMINATIONS		
RESOURCES: FEMA Substantial Improvement/Damage Desk Reference (P-758) NFIP Floodplain Management Requirements – Unit 8 (FEMA-480)		
<p>This section details the community’s responsibilities in making substantial improvement and damage determinations. These are not new requirements. They are duties that the community should already be performing. This section provides clarity to the community and the property owner as to what the community’s responsibilities are in making a substantial improvement or damage determination.</p> <p>Higher Standards: Communities can choose to:</p> <ul style="list-style-type: none"> • Require that improvements and repairs be tracked cumulatively over a defined period of time. • Require a lower threshold than 50 percent. <p>See Menu of Higher Floodplain Regulation Standards for more information.</p>	NFIP (44 CFR)	60.3
	State Bldg. Code	IBC 1612 IRC R105.3.1.1 IRC R112.2.1

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SECTION 7 – FLOODPLAIN PERMITTING REQUIREMENTS		
<i>RESOURCE: NFIP Floodplain Management Requirements – Units 5 and 7 (FEMA-480)</i>		
<p>A. Requires a permit from the community for all proposed development, which includes building and non-building developments. Develop an administrative process and/or a permit for minor developments and non-building developments.</p> <p>Higher Standard: Communities can choose to:</p> <ul style="list-style-type: none"> Require a two part floodplain development permit process for new construction and substantial improvements similar to Maine’s process. The process requires following issuance of the first part of the permit, applicants must provide an Elevation Certificate to the community establishing the as-built lowest floor elevation upon completion of the lowest floor of the structure to ensure compliance with elevation requirements of the floodplain management ordinance. Only then will the community issue the 2nd part of the permit allowing for completion of the structure and issuance of a Certificate of Occupancy. The two part permit process ensures that elevation requirements are met before a structure is completed and remediation much more expensive and difficult. 	<p>NFIP (44 CFR)</p> <p>State Bldg. Code</p>	<p>60.3(b)(c)</p> <p>IBC 105.1 IRC R105.1</p>
<p>B. Details some minimum requirements for the community’s floodplain permit applications.</p> <p>Communities are encouraged to customize and add to this list.</p>	<p>NFIP (44 CFR)</p> <p>State Bldg. Code</p>	<p>60.3</p> <p>IRC R106.1.3</p>
<p>C. Details the Floodplain Administrator’s responsibilities for reviewing a permit application and either issuing or denying the application.</p>		
<p>D. Details the as-built elevation submittal requirements of the applicant following the completion of the development.</p> <p>This item includes the forms that a community should require to meet their required as-built certification requirements.</p> <ul style="list-style-type: none"> Require the submittal of the FEMA Elevation Certificate to meet the NFIP requirement that 	<p>NFIP (44 CFR)</p> <p>State Bldg. Code</p>	<p>60.3(b)(5) 60.3(c)(1) 60.3(c)(4) 60.3(e)(4)</p> <p>IBC 1612.5 IRC R322.1.10</p>

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<p>communities must maintain data on file that includes the as-built elevation of the lowest floor of the structure and whether or not the structure has a basement. The use of the Elevation Certificate meets these requirements and can also be used by property owners for flood insurance rating and Letter of Map Amendment applications.</p> <ul style="list-style-type: none"> Require the submittal of a FEMA Floodproofing Certificate for Non-Residential Structures to meet the NFIP requirement that communities must maintain the following on file for non-residential structures that have been dry floodproofed: the as-built elevation to which the structure has been floodproofed and certification by a registered professional engineer/architect that the design and methods of construction meet NFIP standards. The use of the FEMA Floodproofing Certificate for Non-Residential Structures was created to meet these requirements. 		
<p>E. This item details the Floodplain Administrator’s responsibility to review and verify that all permit conditions and all required as-built documentation and other information submitted by the applicant has been completed in compliance with this Ordinance prior to occupancy of the structure. This item includes general language, which can be amended to align with a community’s already established process.</p>	State Statute (RSA)	676
	State Bldg. Code	IBC 111 IRC R110
SECTION 8 –FLOOD ELEVATION DETERMINATIONS		
<i>RESOURCE: NFIP Floodplain Management Requirements – Unit 4 (FEMA-480)</i>		
<p>A. Details how the Floodplain Administrator determines the flood elevation for each flood zone.</p>	NFIP (44 CFR)	60.3(b)(3) 60.3(b)(4) 60.3(c)(7) 60.3(c)(8)
	State Bldg. Code	IBC 1612.3.1 IRC R322.1.4
<p>B. Clarifies what base flood elevation applies when the structure is affected by more than one base flood elevation.</p>	State Bldg. Code	IBC 1612.1

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SECTION 9 – FLOODPLAIN DEVELOPMENT REQUIREMENTS		
RESOURCES: NFIP Floodplain Management Requirements – Units 5 and 6 (FEMA-480) Protecting Building Utility Systems from Flood Damage (FEMA P-348)		
<p>A. Details general requirements for all development in a special flood hazard area.</p> <p>Item #7 is an optional item for communities that enforce the State Building Code. This item serves a reminder that the State Building Code includes flood provisions. Most of these provisions are the same as the NFIP requirements but there are some that exceed the NFIP requirements.</p> <p>Higher Standards: Communities can choose to:</p> <ul style="list-style-type: none"> • Require building utilities and mechanicals be elevated to the same elevation as required for the lowest floor. • Require new critical facilities be prohibited in a special flood hazard area. • Prohibit certain uses and/or buildings (such as residential and commercial) in a special flood hazard area. • Preserve open space in special flood hazard areas through setbacks, low-density development, and cluster development regulations. • Require compensation for the loss of floodplain storage caused by development in a special flood hazard area. • Require dry land access to new development. <p>See Menu of Higher Floodplain Regulation Standards for more information.</p>	NFIP (44 CFR)	60.3(a)(3)
	State Bldg. Code	IBC 1403.5 IBC 1605.2.2 IBC 1612.4 ASCE 24-05 IRC R322
<p>B. Details requirements for developments located in Zone AO, which are only applicable in communities that have Zone AO areas on their community’s effective FIRM.</p>	NFIP (44 CFR)	60.3(c)(11)
	State Bldg. Code	IRC R401.3

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<p>SECTION 10 – STRUCTURE REQUIREMENTS</p> <p>RESOURCES: NFIP Floodplain Management Requirements – Unit 5 (FEMA-480) Floodproofing Non-Residential Buildings (FEMA P-936) Openings in Foundation Walls and Walls of Enclosures (FEMA Technical Bulletin 1)</p>		
<p>A. Elevation requirements for the lowest floor of a structure in a special flood hazard area. The minimum requirement is that the lowest floor be elevated to the base flood elevation.</p> <p>Higher Standards: Communities can choose to:</p> <ul style="list-style-type: none"> Require the lowest floor of a structure be elevated a certain number of feet above the base flood elevation to provide additional protection and reduction in flood insurance rates. Require new and substantially improved existing critical facilities and their access routes meet certain elevation requirements. <p>See Menu of Higher Floodplain Regulation Standards for more information.</p>	NFIP (44 CFR)	60.3(c)(2) 60.3(c)(7)
	State Bldg. Code	IBC 1612.4 IRC R322.2.1
<p>B. Details the requirement options for non-residential structures, which can either meet the lowest floor elevation requirement or meet the dry floodproofing requirements. Item details the floodproofing requirements and certification.</p> <p>The minimum NFIP requirement is to dry floodproof a structure up to the base flood elevation. However, when it is rated for flood insurance, 1 foot is subtracted from the floodproofed elevation. Therefore, a structure has to be dry floodproofed to 1 foot above the base flood elevation to receive the same favorable flood insurance rate as a structure elevated to the base flood elevation. In addition, the State’s Building Code references requirements that a structure be dry floodproofed at least to 1 foot above base flood elevation.</p> <p>Higher Standards: Communities can choose to:</p> <ul style="list-style-type: none"> Require dry floodproofing be elevated more than 1 foot above the base flood elevation to provide additional protection and reduction in flood insurance rates. 	NFIP (44 CFR)	60.3(c)(3) 60.3(c)(4)
	State Bldg. Code	IBC 1612.4 IBC 1612.5 IBC 3403.2 IBC 3404.2 IBC 3405.5

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<ul style="list-style-type: none"> Require new non-residential structures to be elevated (no dry floodproofing). 		
<p>C. Details the requirements for fully enclosed areas below the lowest floor and below the base flood elevation.</p> <p>Higher Standards: Communities can choose to:</p> <ul style="list-style-type: none"> Require property owners with enclosures below the base flood elevation to sign a non-conversion agreement to prevent the enclosure from being finished. (See Menu of Higher Floodplain Regulation Standards for more information). Prohibit fully enclosed areas below the lowest floor of a structure in a floodway area by requiring that the lowest floor be elevated on piers or columns. 	<p>NFIP (44 CFR)</p> <p>State Bldg. Code</p>	<p>60.3(c)(5)</p> <p>IBC 1612.4 IBC 1612.5 IRC R322.2.2 IRC R309.3 IRC R408.7</p>
<p>D. Clarifies that enclosures with a floor below grade on all sides for new construction and substantial improvements are prohibited in a special flood hazard area.</p>	State Bldg. Code	<p>IRC R408.7 IRC R322.2.1</p>
SECTION 11 – DETACHED ACCESSORY STRUCTURES		
<i>RESOURCE: Wet Floodproofing Requirements (FEMA Technical Bulletin 7-93)</i>		
<p>This optional section allows small, detached accessory structures to meet certain requirements without requiring them to meet the elevation or dry floodproofing requirements, which may be cost-prohibitive. The community can amend the size requirement of the accessory structure and/or establish a dollar value threshold for detached accessory structures.</p>	State Bldg. Code	IRC R309.5
SECTION 12 – MANUFACTURED HOMES AND RECREATIONAL VEHICLES		
<i>RESOURCES:</i> NFIP Floodplain Management Requirements – Unit 5 (FEMA-480) Protecting Manufactured Homes from Floods and Other Hazards (FEMA P-85, Second Edition)		
<p>A. Details the requirements for manufactured homes.</p> <p>Higher Standards: Communities can choose to:</p>	<p>NFIP (44 CFR)</p> <p>State Bldg. Code</p>	<p>60.3(b)(8)</p> <p>IRC R322.1.9</p>

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<ul style="list-style-type: none"> Require a manufactured home’s lowest floor be elevated a certain number of feet above the base flood elevation to provide additional protection and reduction in flood insurance rates. Prohibit manufactured homes in the floodway or the entire special flood hazard area. 		
<p>B. Details the requirements for recreational vehicles in special flood hazard areas.</p> <p>Higher Standards: Communities can choose to:</p> <ul style="list-style-type: none"> Require that both Items #1 and #2 must be met by replacing “or” with “and” following Item #1. Prohibit recreational vehicles in the floodway or the entire special flood hazard area. 	NFIP (44 CFR)	60.3(d)(14)
SECTION 13 – WATER SUPPLY AND SEWAGE DISPOSAL SYSTEMS		
RESOURCE: NFIP Floodplain Management Requirements – Unit 5 (FEMA-480)		
<p>A. Details the requirements for water supply and sewage disposal systems in special flood hazard areas.</p> <p>Higher Standards: Communities can choose to:</p> <ul style="list-style-type: none"> Prohibit new water supply and sewage disposal systems in the floodway. 	NFIP (44 CFR)	60.3(a)(5) 60.3(a)(6)
	State Bldg. Code	IRC R322.1.7
SECTION 14 – FLOODWAY REQUIREMENTS		
RESOURCE: NFIP Floodplain Management Requirements – Unit 5 (FEMA-480)		
<p>A. Details the technical data and analysis requirements for allowing development in floodways and what requirements need to be met when proposed development results in an increase in the</p>	NFIP (44 CFR)	60.3(d)(3)(4)

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<p>base flood elevation.</p> <p>Higher Standards: Communities can choose to:</p> <ul style="list-style-type: none"> Prohibit all development in the floodway. Require only certain uses (such as recreational and agricultural) and/or structures in the floodway. 	State Bldg. Code	IBC 1804.4; IBC 1612.4 IRC R301.2.4
<p>B. Details the technical data and analysis requirements for a development in riverine Zone AE areas with no mapped floodway and what requirements need to be met when proposed development results in more than a one foot increase in the base flood elevation. Applicable only to a community with riverine Zone AE or A1-30 but no floodway shown on the FIRM.</p> <p>Higher Standards: Communities can choose to:</p> <ul style="list-style-type: none"> Prohibit proposed development from causing any increase in the base flood elevation. 	NFIP (44 CFR)	60.3(c)(10)
	State Bldg. Code	IBC 1804.4; IBC 1612.4 IBC 1612.3.2; IRC R322.1.4.2
SECTION 15 – WATERCOURSE ALTERATIONS		
RESOURCE: NFIP Floodplain Management Requirements – Unit 5 (FEMA-480)		
<p>This section details the requirements that have to be met for alteration or relocation of a watercourse. These requirements must be met prior to a permit being issued.</p> <p>Higher Standards: Communities can choose to:</p> <ul style="list-style-type: none"> Require the applicant to apply and submit for a FEMA Conditional Letter of Map Revision (CLOMR) for any alteration or relocation of a watercourse prior to issuance of a permit. A CLOMR is a process in which FEMA provides comments on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing floodway, base flood elevation(s), or the special flood hazard area. 	NFIP (44 CFR)	60.3(b)(6)(7)
	State Statute (RSA)	482-A:3

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SECTION 16 – VARIANCES AND APPEALS		
RESOURCES:		
<i>Variances and the NFIP (FEMA P-993)</i>		
<i>NFIP Floodplain Management Requirements – Unit 7 (FEMA-480)</i>		
A. Details that an appeal be directed to the community’s Zoning Board of Adjustment.	State Statute (RSA)	674:56, 674:33
A municipality that has adopted a floodplain ordinance but does not have a comprehensive zoning ordinance must create a special Board of Adjustment for any floodplain ordinance appeals.	State Bldg. Code	IBC 113 IRC R104.10.1
B. Details the NFIP variance standards, which are required in addition to the state’s variance criteria. The NFIP variances procedures are designed to help local governments protect their citizens and property from flood damages. Allowing variances to the local floodplain management standards may significantly increase the property’s flood insurance rate and decrease the community’s resilience. Therefore, by implementing the NFIP variance procedures, a community will ensure that alternative actions are taken that protect and encourage safe development in the floodplain.	NFIP (44 CFR)	60.6
	State Statute (RSA)	674:33
	State Bldg. Code	IRC R112.2.2
C. Details the Zoning Board of Adjustment notification requirements to the applicant.	NFIP (44 CFR)	60.6
D. Details the community’s maintenance and reporting requirements regarding variances.	NFIP (44 CFR)	60.6
SECTION 17 – DEFINITIONS		
Includes defined terms that are used throughout the floodplain ordinance. New terms have been added to help define terms in new additional ordinance language. The “substantial improvement” definition has been revised to follow the CFR definition.	NFIP (44 CFR)	59.1
	State Bldg. Code	IBC 1612.2 IRC 2