



# Flood Lines

Winter 2019

Volume XII Issue 1

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## Coming Soon: Floodplain Development Permit Package for NH Community Officials!

OSI's Floodplain Management Team is developing a Floodplain Development Permit Package for NH community officials. This collection of documents and templates is designed to make the floodplain development permit process easier for community officials to manage and for property owners to understand and comply with. The package will include the following materials:

- Floodplain Development Permit Worksheet for Community Officials
- Floodplain Development Permit Application including Substantial Improvement Determination form/fact sheet
- Flowchart explaining the floodplain development permit process
- Permit Templates (including a Minor Development Permit template for non-building development)
- Customizable flyer for property owners located in the floodplain

While these materials are intended to be useful for all NH communities in the NFIP, we expect them to be especially useful for no zoning/building inspector in place.

We'll send out a notification through our [Flood Lines email listserv](#) once the permit package is available!

**FLOODPLAIN DEVELOPMENT PERMIT APPLICATION**  
 [Insert Community Name], NH

A Substantial Improvement permit is required for any new **Substantial Improvements** and flood insurance rates may be increased, suspension of materials, and other activities of development that occur in the FEMA flood zone.

**Floodplain Development Permit Review Worksheet**

Building Permit #: \_\_\_\_\_ Property Owner Name: \_\_\_\_\_  
 Date Application Submitted: \_\_\_\_\_ Tax Map #: \_\_\_\_\_  
 Property Address: \_\_\_\_\_ Worksheet completed by: \_\_\_\_\_

**Section 1: Ensure the Permit Application is Complete**  
 Before reviewing the permit application in detail, answer the following questions. If the answer is "No" for any of the questions, follow up with the Applicant to provide the missing information before proceeding with the application review.

- Have all questions in the Floodplain development permit application been answered and the application signed by the Applicant?  
 Yes  No
- For any additions, renovations, repairs, and/or maintenance to an existing residential or non-residential structure or manufactured home, has a completed and signed Application for Substantial Improvement/Substantial Damage Determination been submitted?  
 Yes  No
- Have copies of all required Federal and State permits been provided?  
 Yes  No

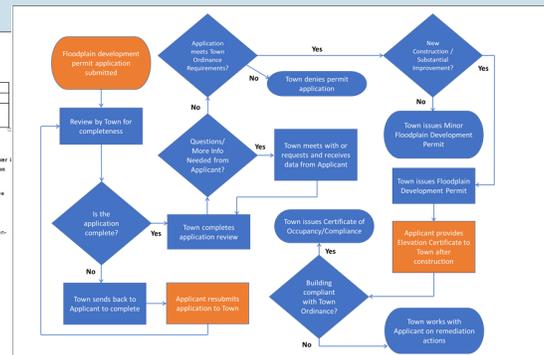
**Section 2: Verify Effective FEMA Flood Insurance Rate Map (FIRM) Information**

- FIRM panel number: \_\_\_\_\_
- FIRM panel effective date: \_\_\_\_\_
- Name of flooding source affecting site: \_\_\_\_\_
- Special Flood Hazard Area (SFHA) flood zone affecting site is confirmed as:  
 A  AE (or A1-30)  AO

Note that if a site is located in more than one flood zone, the most restrictive flood zone will apply.

- For AO zones only: the depth in feet listed on the FIRM: \_\_\_\_\_
- The Base Flood Elevation (BFE) that applies to the site is confirmed as: \_\_\_\_\_ feet.

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# Coming this Fall: A Flood Response Toolkit for NH Community Officials!

The [NH Silver Jackets team](#) is currently developing a *Flood Response Toolkit* designed for NH community officials. This new quick reference guide is intended to help community officials across our state understand roles and responsibilities, and resources and assistance available to them through Federal, State, and other sources, before, during, and after a flood. The toolkit is expected to be released this October so more information will be forthcoming about this project!

The NH Silver Jackets team is a group of people from Federal and State agencies working together on our state's flood risk management priorities and providing technical expertise to help reduce flood risk in our communities. Partners on the NH Silver Jackets team include:

- U.S. Army Corps of Engineers, New England District
- FEMA Region 1
- NOAA, National Weather Service, Gray, ME
- NH Department of Environmental Services
- NH Department of Natural and Cultural Resources
- NH Department of Transportation
- NH Fish and Game Department
- NH Homeland Security and Emergency Management
- NH Office of Strategic Initiatives
- U.S. Department of Agriculture, Natural Resources Conservation Service
- U.S. Department of Agriculture, U.S. Forest Service, White Mountain National Forest
- U.S. Geological Survey—New England Water Science Center



## Publication Spotlight: Floodplain Management Bulletin on Historic Structures (FEMA P-467-2)

*Here we highlight publications that may not be brand new but still are great resources with important information for floodplain managers and others.*

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So your community receives a permit application for a Substantial Improvement to a building in the Special Flood Hazard Area (SFHA). It also happens to be designated as a historic structure. Does that affect which NFIP requirements apply? It can! FEMA's [Floodplain Management Bulletin about Historic Structures \(FEMA P-467-2\)](#) explains the implications an historic structure designation can have on NFIP requirements. It also includes suggestions for mitigation measures that can be taken to reduce flood risk to such structures. Got historic buildings in your community? (Of course you do—this is New Hampshire!) Check out this publication today [online](#) or [order a free hard copy from FEMA](#) today.



National Flood Insurance Program (NFIP)

Floodplain Management Bulletin  
Historic Structures

FEMA P-467-2

May 2008



# New Hampshire Flood Mapping Update

The following is an update on the current status of FEMA flood mapping activities in New Hampshire:

**Coastal Mapping Project: Rockingham County** - FEMA is moving forward with finalizing preliminary flood maps issued in 2014 and 2016. It is expected the maps will become effective in late 2019 or early 2020.

**Contoocook/Pemigewasset Watersheds** - A Discovery project to determine flood map update needs is underway. Discovery Meetings with local officials to gather input were held December 11-12, 2018.

**Coos County Mapping Project** - Zone A floodplain boundaries are being updated and Zone AE areas redelineated based on more recent/detailed topographic data. These updates will be incorporated into the flood maps at a later date.

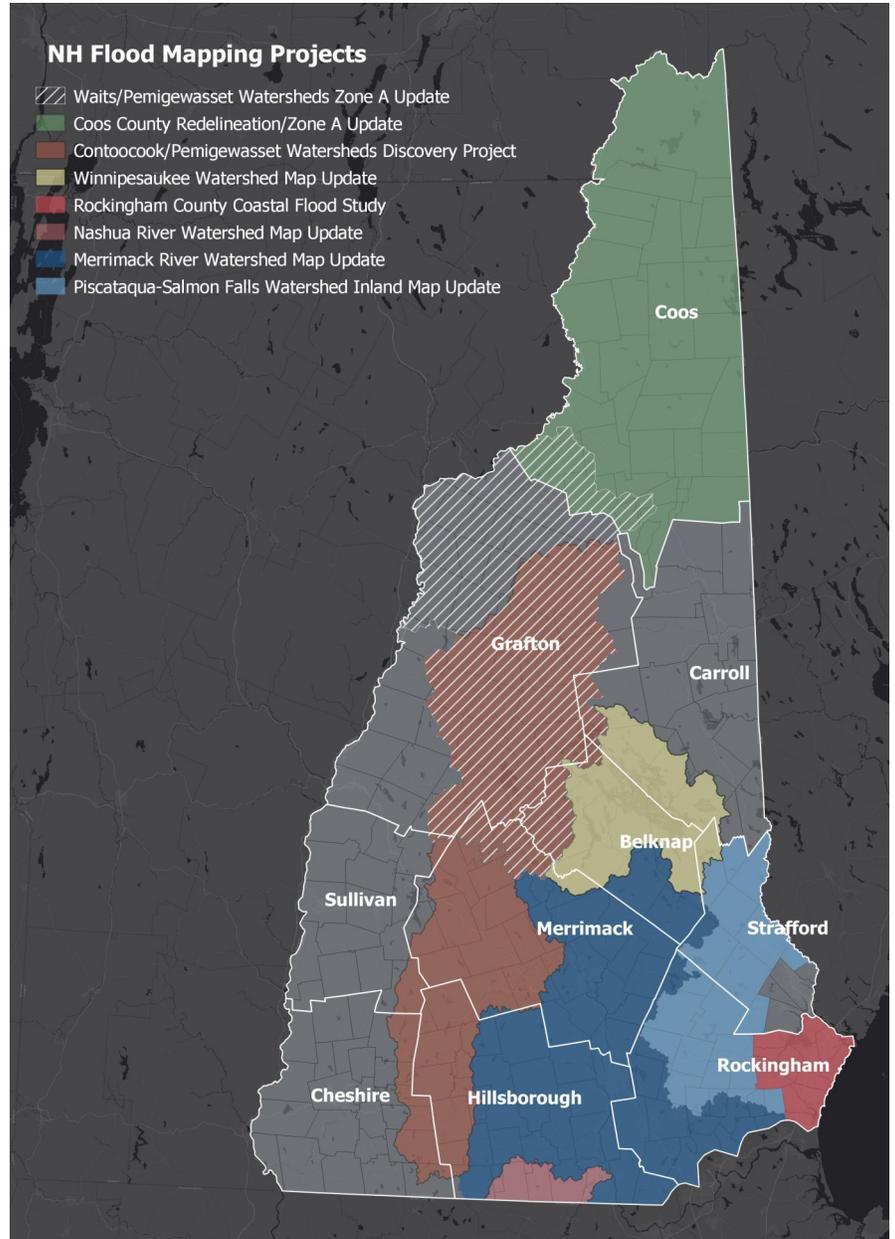
**Merrimack River Watershed** - The development of revised flood maps based on updated engineering analyses and topographic information is currently underway. Work maps are expected to be ready for review by community officials in early 2019 followed by issuance of preliminary flood maps.

**Nashua River Watershed** - Updated flood analyses were expected to be completed in 2018. Updated maps based on the analyses and new topographic information will be developed once that work is complete.

**Salmon Falls—Piscataqua Rivers Watershed (Outside coastal area)** - Preliminary flood maps showing revised flood hazard information based on new engineering analyses and topographic information are currently being prepared. An issue date is to be determined.

**Waits/Pemigewasset Watersheds** - Zone A floodplain boundaries have been updated using more recent/detailed topographic data and new engineering analyses. These updates will be incorporated into the flood maps at a later date.

**Winnepesaukee River Watershed** - Updated flood analyses are currently being performed which, along with new topographic data, will be used to create digital flood maps.



Note that the recent Federal government shutdown may impact some of the dates above. We'll post any updates once we receive them from FEMA to OSI's [Current NH Floodplain Mapping Activities webpage](#). You can also view our interactive map showing project locations [here](#).

## NFIP Changes Going into Effect on April 1, 2019

FEMA previously announced NFIP changes that will go into effect on April 1, 2019. These changes include an 8.2% average premium increase. Details about these upcoming changes and additional changes scheduled for January 1, 2020 are provided in FEMA's [October 1, 2018 memo to Write Your Own \(WYO\) coordinators](#).



## NFIP Reauthorization — the Saga Still Continues...Yes, Still

In order for the NFIP to continue to operate, the program was required to be reauthorized by Congress by September 30, 2017. After multiple short term authorizations occurring since that deadline, on December 21, the President signed legislation passed by Congress authorizing the program until May 31, 2019. Congress has remained deadlocked on moving forward with a number of bills proposing long-term reform of the NFIP as a program since last year. FEMA's [NFIP Reauthorization webpage](#) provides the latest on the status of the reauthorization.

## FEMA Releases Draft Policy on Floodplain Management Requirements for Agricultural Structures and Accessory Structures

FEMA recently released a [draft policy document](#) intended to provide guidance on the minimum NFIP construction requirements for agricultural structures and accessory structures located in the Special Flood Hazard Area. This policy document will supersede existing guidance on these types of structures found in FEMA's Technical Bulletins 1 (Openings in Foundation Walls and Walls of Enclosures) and 7 (Wet Floodproofing Requirements).

## Federal Government Shutdown Impacts on the NFIP

For the most part, the recent Federal shutdown did not cause noticeable impacts in terms of most NFIP-related services, such as flood insurance availability and Letter of Map Amendment (LOMA) processing. However, it is possible that there will be some effects on the schedules of flood mapping projects in the state. We'll post any relevant schedule updates as we receive them from FEMA to OSI's [Current NH Floodplain Mapping Activities webpage](#) and the next issue of the newsletter.

OSI Principal Planner Samara Ebinger, inspired by the [NH Coastal Adaptation Workgroup's Holiday Gingerbread House contest](#), made an elevated flood-resilient gingerbread house for her family's holiday gathering this year. Constructed along with a landscape of marzipan trees, Rice Krispy treat land area, and meringue ocean waves, Samara expects she may be ready to eat foods containing sugar again by next December.



# Community Rating System (CRS) Update

## Next New Hampshire CRS Users Group Meeting is Scheduled for February 5th!

The next meeting of the NH CRS Users Group will be on February 5th from 10:00 am to 12:00 pm in Concord! A web conference option for those who can't make the trip to Concord will also be available. These meetings serve as a way to share ideas and best practices and learn more about joining or continuing to participate in the [CRS program](#). If your community is interested in attending and has not previously expressed an interest, please contact Samara Ebinger at OSI at [samara.ebinger@osi.nh.gov](mailto:samara.ebinger@osi.nh.gov) or 603-271-1755.

## Coming this Summer: Free Two-Day CRS Training Course in Concord

FEMA is offering a free two-day course about CRS on August 13-14 in Concord. See details on page 7!

## Upcoming CRS Webinars

Below are upcoming, free CRS webinars, which all begin at 1 pm. Many of the courses are eligible for Continuing Education Credits for Certified Floodplain Managers (CFMs). To register, visit the [NFIP Training website](#) and click the "Upcoming" tab. When asked during registration which FEMA Region you are in, reply "1".

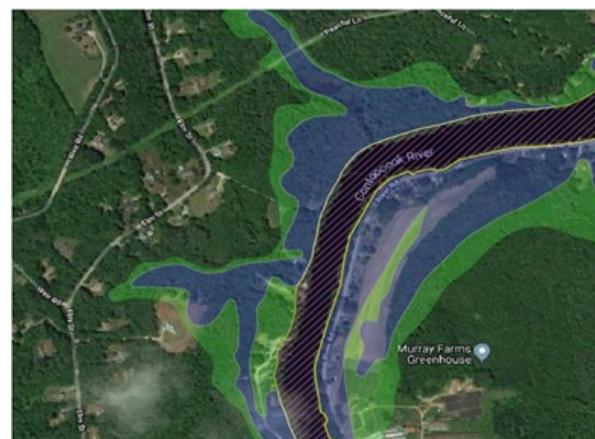
- The Role of the CRS Coordinator (February 19)
- Repetitive Loss Properties and CRS (February 20)

## GIS Resources For Floodplain Managers

*Here we highlight free GIS tools and data that can be helpful for local communities and others in the floodplain management field.*

FEMA's flood hazard data from digitally produced flood maps (known as the [National Flood Hazard Layer or NFHL](#)) is available for free in different GIS formats, including shapefiles. To download NFHL shapefiles:

1. Go to the [FEMA Map Service Center website](#) and click on the [Search All Products link](#).
2. Under the *Jurisdiction* section, select your state, county, and then community. Then click *Search*.
3. Click on *Effective Products* and then *NFHL Data-County*. (FEMA distributes their maps at the county level but you can also download the data for the entire state by clicking on *NFHL Data-State*.)
4. Click the green arrow to download a zip file with shapefiles of the flood hazard information. FEMA's [NFHL GIS Data fact sheet](#) explains which shapefiles contain which information. (The more useful ones include S\_FLD\_HAZ\_AR.shp, S\_BFE.shp, S\_XS.shp, and S\_POL\_AR.shp.)

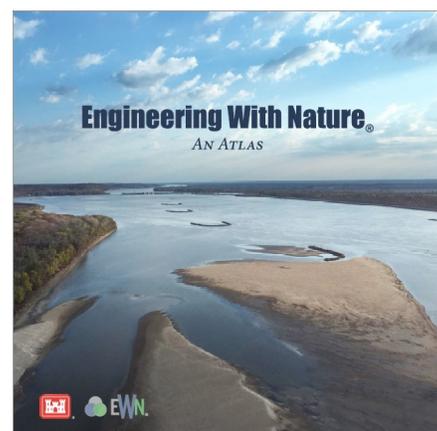
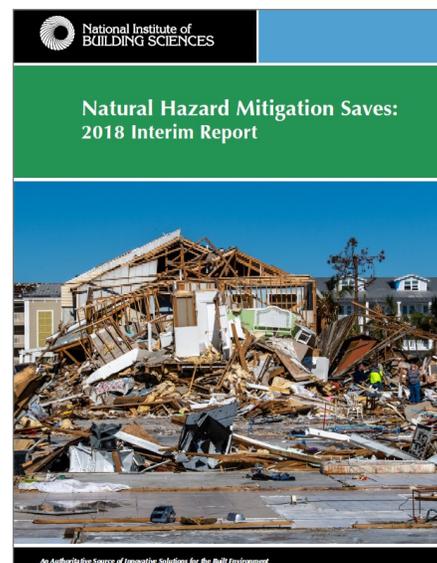


GIS data from FEMA flood maps is available for all NH communities except those in Belknap County.

FEMA also makes the NFHL data available in their [online map viewer](#) from which you can download the same shapefiles. It also provides WMS and REST web services of the same data as described in this [fact sheet](#). Don't know what those acronyms mean? That's okay—we'll talk about them next time!

## New Publications and Resources Available!

- ◆ [Map Changes and Flood Insurance: What Property Owners Need to Know](#) This FEMA brochure provides an overview of FEMA flood maps and flood insurance and includes different scenarios showing how flood insurance rates are impacted when the maps change the flood zone for a property.
- ◆ [Coastal Hazards and Flood Mapping: A Visual Guide](#) This new guide from FEMA explains technical terms related to coastal flood hazards and mapping. It is a companion to a recently released interactive website from FEMA, [An Introduction to FEMA Coastal Floodplain Mapping](#) that provides more detail about these topics.
- ◆ [Adapting Stormwater Management for Coastal Floods](#) This new website from NOAA Digital Coast can help coastal communities understand how current and future flooding can affect their stormwater systems. Users can generate a report that can be used to educate people about coastal stormwater flooding in their community and to inform planning efforts/ make the case for funding.
- ◆ [Using Flood Risk Products in Hazard Mitigation Plans](#) This FEMA fact sheet explains how [flood risk products](#) can be used to support local mitigation planning. Not all communities have FEMA flood risk products which are different than the FEMA flood maps and Flood Insurance Study reports—if you're not sure if your community has them, contact Samara Ebinger at OSI at [samara.ebinger@osi.nh.gov](mailto:samara.ebinger@osi.nh.gov) or 603-271-1755.
- ◆ [FEMA NFIP Public Awareness Materials Order Form](#) This form lists suitable outreach materials for distribution about the NFIP and flood insurance to clients by insurance agents, realtors and lenders. It also lists materials for distribution before and after a flood that can be distributed by community officials to their residents. Links to online versions of the materials are also provide in this document.
- ◆ [Natural Hazard Mitigation Saves: 2018 Interim Report](#) This report, part of a multi-year study by the National Institute of Building Sciences, examines the benefits and costs of disaster mitigation measures, including for floods. In this latest report, NIBS looked at benefits of designing buildings to meet the 2018 International Residential Code (IRC) and the International Building Code (IBC). The project team's analysis showed that "for flood resistance, incorporating at least one foot of freeboard into the elevation requirements to comply with the 2018 I-Codes saved \$6 for every \$1 invested." The NH State Building Code currently adheres to 2009 I-Code standards.
- ◆ [Engineering With Nature: An Atlas](#) This U.S. Army Corps of Engineers publication highlights 56 Corps projects across the country and overseas that focus on restoring natural features and processes such as dunes, wetlands, and floodplains. These "natural infrastructure" projects reduce flood and erosion risk and improve the resiliency of local communities while at the same time providing other environmental, economic, and social benefits.
- ◆ [The Growing Threat of Urban Flooding: A National Challenge](#) This report from the University of Maryland, College Park and Texas A&M University focuses on the risk of urban/stormwater flooding in the United States and includes recommendations for potential actions to reduce future flooding.



## **FEMA 2-Day Introduction to the Community Rating System (CRS) Training Course**

*August 13 - 14, 2019, 8:30 am to 5:00 pm, Concord, NH*

FEMA is offering a free 2-day training course (L0278) about the Community Rating System (CRS). Whether your community is already participating in CRS or is potentially interested in joining the program, this course is a great opportunity to dive into the basics of the program! To register, please contact Samara Ebinger at OSI at [samara.ebinger@osi.nh.gov](mailto:samara.ebinger@osi.nh.gov) or 603-271-1755. Certified Floodplain Manager (CFM) CECs are available for attending this course.

## **NFIP Online Training Webinars**

Free, online NFIP-related training is available through FEMA's contractor, STARR II. Many of the courses are eligible for CECs for Certified Floodplain Managers (CFMs). Be sure to check the website periodically as new webinars are always being added. To learn more about these webinars and to register, visit the [NFIP Training website](#) and click the "Upcoming" tab. When asked during registration what FEMA Region you are in, please reply "1". Upcoming webinars include:

- Elevation Certificates (January 31, 1-3:30 pm)
- Tools for Determining Base Flood Elevations (February 14, 1-2 pm)
- NFIP Basics (February 21, 1-2 pm)



*We had a great turnout at our NH Coastal Adaptation Workgroup-sponsored Floodplain Administrator 101 workshop at the Hugh Gregg Coastal Conservation Center in Greenland in December!*

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