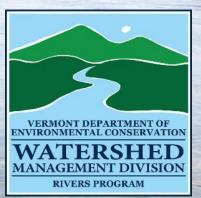
Flood Hazards & Flood Disclosure H.639

Prepared for the House Committee on General & Housing Affairs

March14th, 2024

Rebecca Pfeiffer, CFM

Vermont NFIP Coordinator River Corridor & Floodplain Protection Program VT Agency of Natural Resources (VTANR)



FLOODPLAIN MANAGEMENT PRINCIPLES

CLIMATE CHANGE IS INCREASING EXPOSURE

1798-

1814

1834 1838

1850

1858

1869

1903-

1912

1927-

1938-

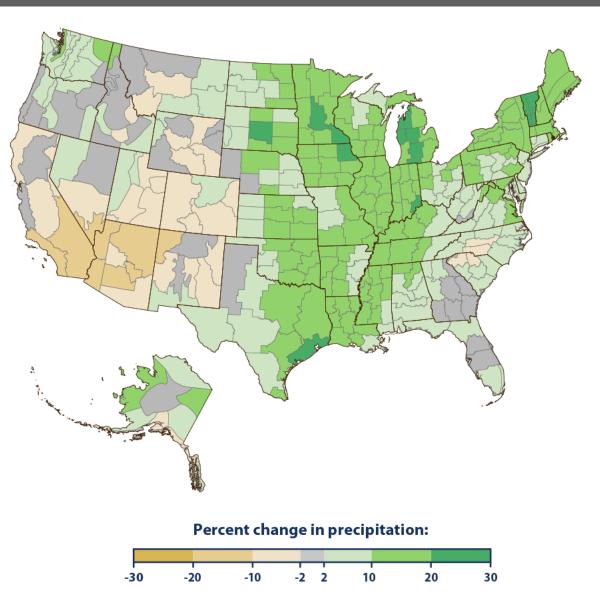
1969

1971 **-**1973 **-**

1976 -

1998-

2011 -

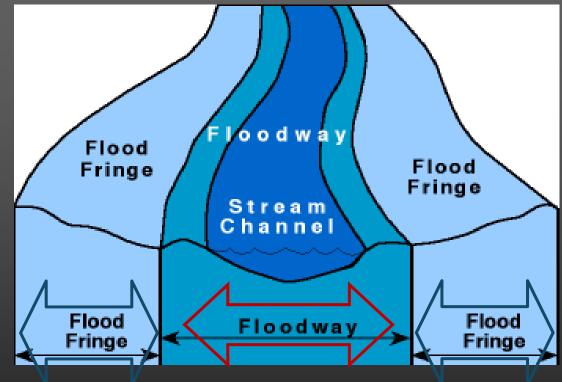


Change in Precipitation in the United States 1901-2021: NOAA (National Oceanic and Atmospheric Administration). 2022. Climate at a glance. Accessed March 2022. www.ncd <u>c.noaa.gov/ca</u> g

FEMA'S SPECIAL FLOOD HAZARD AREA (SFHA)

Floodway = Flood Right-of-Way

Flood Fringe = More Shallow and Slower Floodwaters



Special Flood Hazard Area

Land area inundated by the base flood, or the area affected in the 1% annual chance flood, aka the "100 year" floodplain

INUNDATION VS. EROSION FLOODING





FLOOD CHANCE & BASE FLOOD

Chance of Flooding over a Period of Years

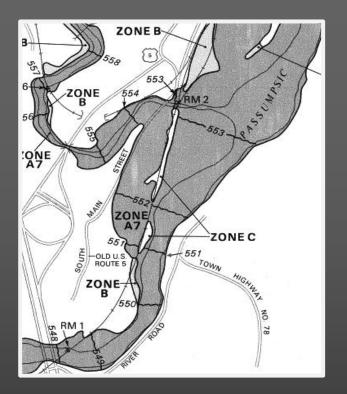
Time	Flood Size						
Period	10-year	25-year	50-year	100-year			
1 year	10%	4%	2%	1%			
10 years	65%	34%	18%	10%			
20 years	88%	56%	33%	18%			
30 years	96%	71%	45%	26%			
50 years	99%	87%	64%	39%			

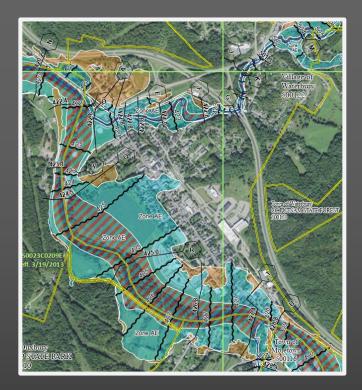


NATIONAL FRAMEWORK FOR FLOODPLAIN MANAGEMENT

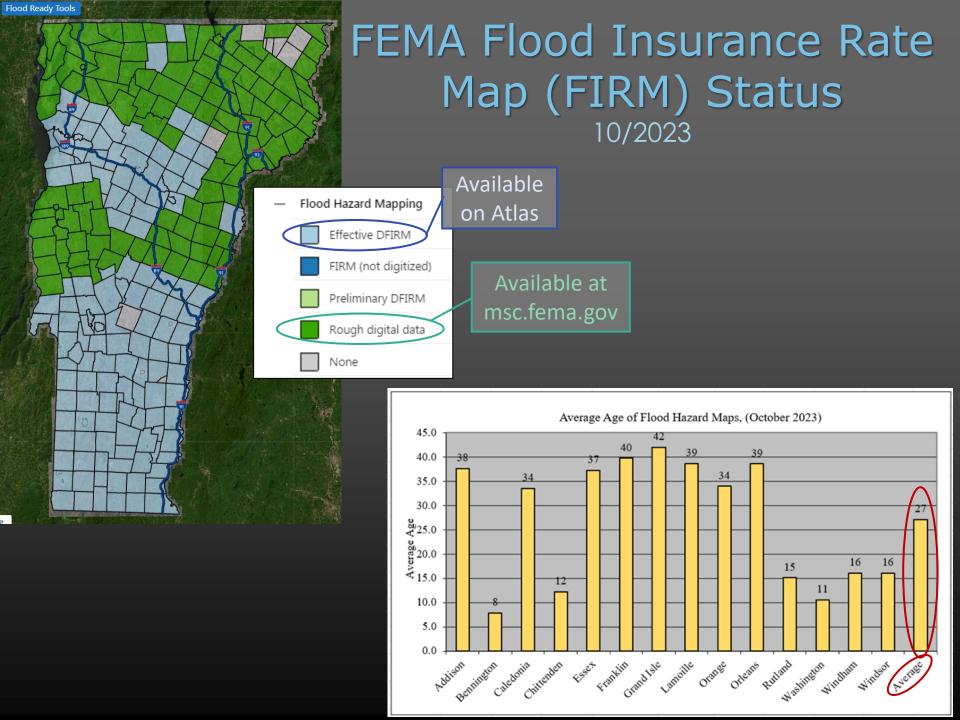
NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

Flood Insurance policies available to residents Floodplain Regulations enforced by communities Flood Hazard Mapping completed by FEMA Flood Hazard Mitigation Grants available to communities

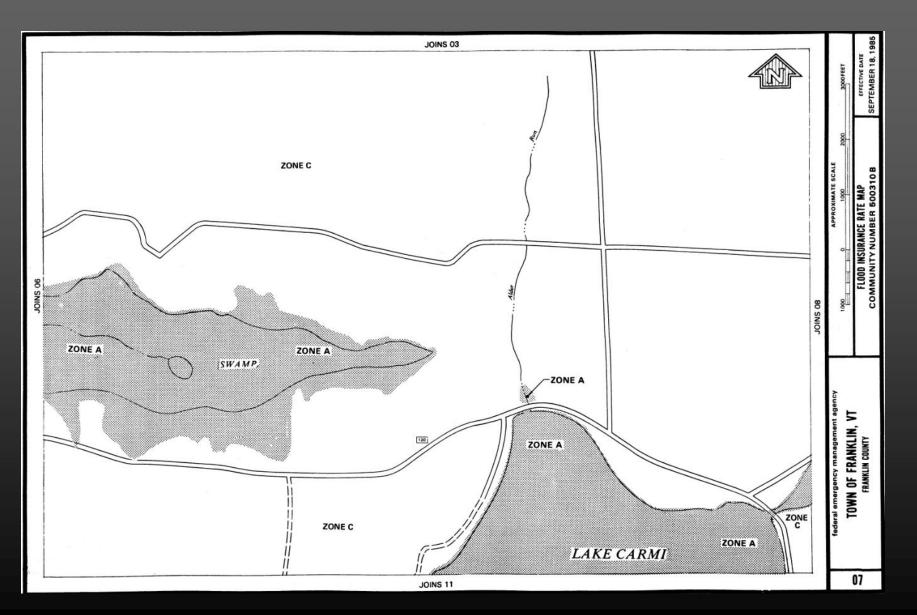




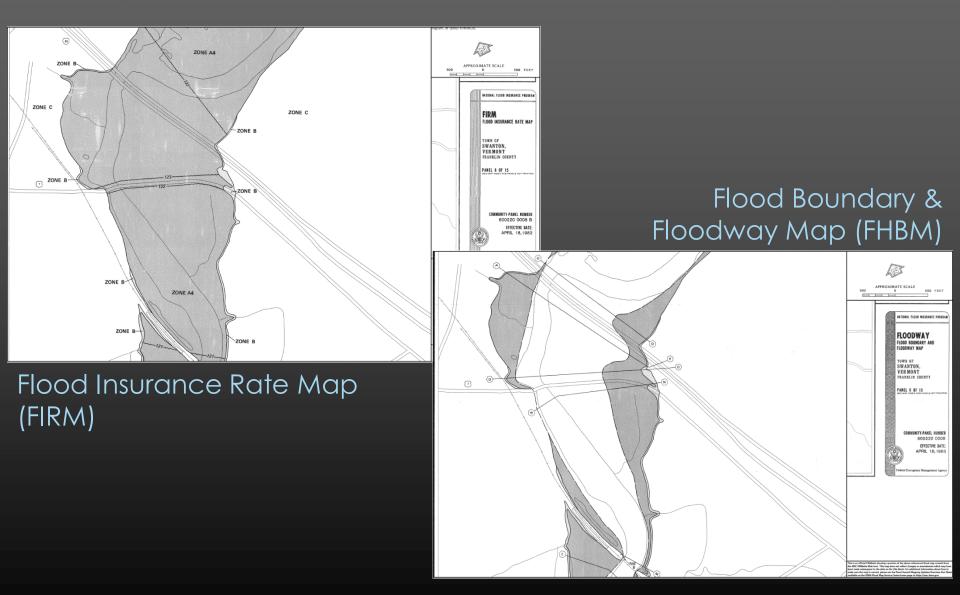
NFIP FLOOD HAZARD MAPS



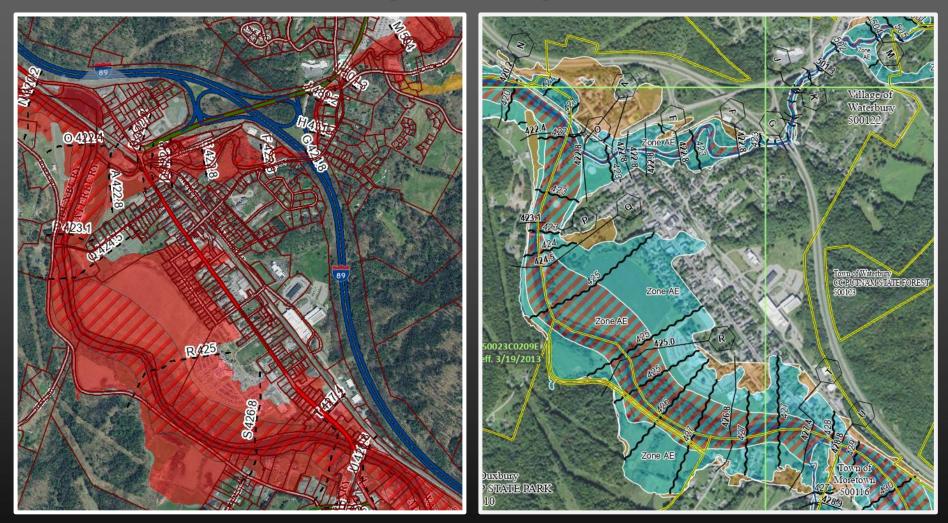
FLOOD HAZARD BOUNDARY MAPS (MAY STILL BE THE MAPS FOR FRANKLIN COUNTY OR THE NEK)



1980'S VINTAGE FLOOD MAPS (STILL THE MAPS FOR ABOUT 1/3 OF VERMONT COUNTIES)

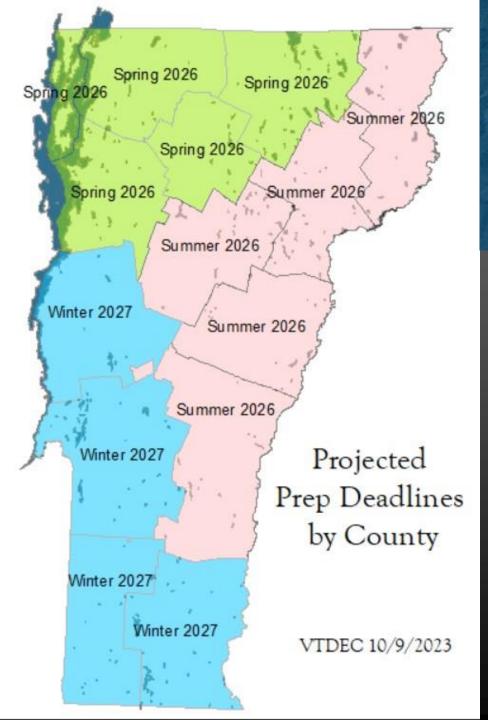


DIGITAL FLOOD INSURANCE RATE MAP (DFIRM)

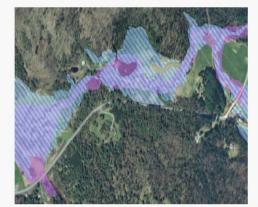


VT ANR Natural Resource Atlas

FEMA's Map Service Center



GET READY FOR NEW FEMA MAPS





In this example, the purple areas are current Zone A and the blue lined areas are proposed new Zone A. Notice that the new Zone A is more detailed and often changes which areas of land are considered at a high risk of flooding.

*Prep deadline is approximately 4 months prior to new map effective dates

https://floodtraining.vermont.gov/protection-tools/getready-new-fema-flood-insurance-rate-maps#status

GETTING A FLOOD MAP

MSC.FEMA.GOV



FEMA Flood Map Service Center : Welcome!



Navigation

Q Search

🔇 Languages

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MSC Search All Products

MSC Products and Tools

Hazus

LOMC Batch Files

Product Availability

MSC Frequently Asked Questions (FAQs)

MSC Email Subscriptions

Contact MSC Help

Looking for a Flood Map? 🛛

Enter an address, a place, or longitude/latitude coordinates:

Enter an address, a place, or longitude/l

Search



Looking for more than just a current flood map?

Visit **Search All Products** to access the full range of flood risk products for your community.

About Flood Map Service Center

The FEMA Flood Map Service Center (MSC) is the official public source for flood hazard information produced in support of the National Flood Insurance Program (NFIP). Use the MSC to find your official flood map, access a range of other flood hazard products, and take advantage of tools for better understanding flood risk.



Navigation

FEMA Flood Map Service Center : FAQs

Q) Search 📢 Languages MSC Home MSC Search by Address MSC Search All Products MSC Products and Tools Hazus LOMC Batch Files Product Availability MSC Frequently Asked Questions (FAQs) MSC Email Subscriptions Contact MSC Help

This page serves as a reference guide for some of the most common uses of the FEMA Flood Map Service Center. New users of the site will find directions here on how to accomplish various common activities associated with understanding flood risk.

> Expand All Sections

- > FAQ: General Information
- > FAQ: Locating Our Products
- > FAQ: Using Our Products



> FAQ: Flood Insurance

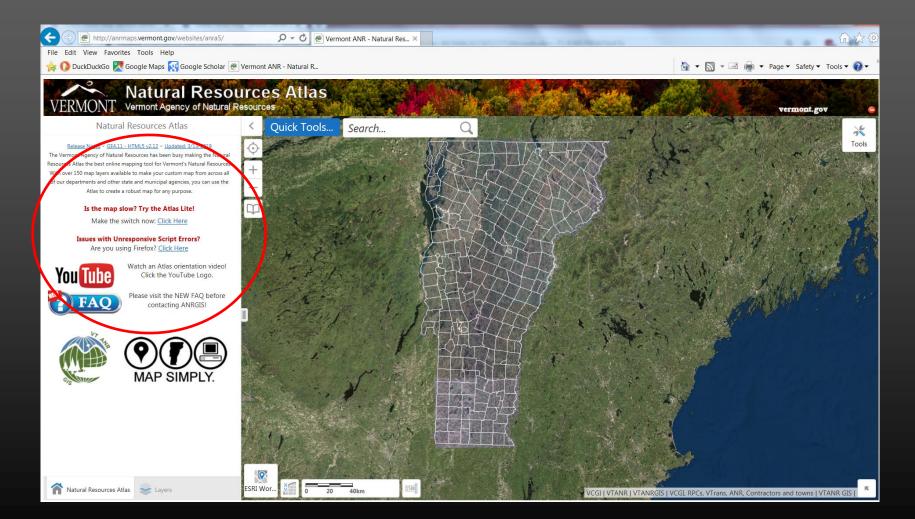
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Cfficial website of the Department of Homeland Security

ANR NATURAL RESOURCE ATLAS

http://anrmaps.vermont.gov/websites/anra/



FEMA ELEVATION CERTIFICATE

Elevation	Form Instructions U.S. DEPARTMENT OF HOMELAND SECURITY OM8 Control No. 1660-00 Federal Emergency Management Agency Expiration Date: 06/30/20 National Flood Insurance Program
	ELEVATION CERTIFICATE IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11 Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building own
Certificate	SECTION A – PROPERTY INFORMATION FOR INSURANCE COMPANY US
	A1. Building Owner's Name: Policy Number:
ortinouto	A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: Company NAIC Number:
	City: State: ZIP Code:
and Instructions	A3. Property Description (e.g., Lot and Block Numbers or Legal Description) and/or Tax Parcel Number:
	A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.):
	A5. Latitude/Longitude: Lat. Long. Horiz. Datum: NAD 1927 NAD 1983 WGS
2023 EDITION	A6. Attach at least two and when possible four clear color photographs (one for each side) of the building (see Form pages 7 and 8).
	A7. Building Diagram Number:
	A8. For a building with a crawlspace or enclosure(s):
	a) Square footage of crawlspace or enclosure(s): sq. ft.
	b) Is there at least one permanent flood opening on two different sides of each enclosed area?
	c) Enter number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade: Non-engineered flood openings: Engineered flood openings:
	d) Total net open area of non-engineered flood openings in A8.c: sq. in.
	e) Total rated area of engineered flood openings in A8.c (attach documentation – see Instructions): sq. ft.
	f) Sum of A8.d and A8.e rated area (if applicable – see Instructions): sq. ft.
	A9. For a building with an attached garage:
	a) Square footage of attached garage:
1 B 27	b) Is there at least one permanent flood opening on two different sides of the attached garage? [] Yes [] No [] N/A
OFPANIMEN	c) Enter number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade: Non-engineered flood openings: Engineered flood openings:
State 19	d) Total net open area of non-engineered flood openings in A9.c: 59. in.
	e) Total rated area of engineered flood openings in A9.c (attach documentation – see Instructions): sq. ft.
EL S	f) Sum of A9.d and A9.e rated area (if applicable – see Instructions): sq. ft.
A CONTRACTOR OF A CONTRACTOR OFTA CONTRACTOR O	SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION
AND SEC	B1.a. NFIP Community Name: B1.b. NFIP Community Identification Number:
	B2. County Name: B3. State: B4. Map/Panel No.: B5. Suffix:
	B6. FIRM Index Date: B7. FIRM Panel Effective/Revised Date:
FEMA	B8. Flood Zone(s): B9. Base Flood Elevation(s) (BFE) (Zone AO, use Base Flood Depth):
	B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9: FIS FIRM Community Determined Other:
	B11. Indicate elevation datum used for BFE in Item B9: NGVD 1929 NAVD 1988 Other/Source:
	B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? Yes No Designation Date: CBRS OPA
	B13. Is the building located seaward of the Limit of Moderate Wave Action (LiMWA)? Yes No

FEMA Form FF-206-FY-22-152 (formerly 086-0-33) (8/23)





Form Page 2 of 8

LOMA: LETTER MAP AMENDMENT

Removes a portion of the property or the structure

Page 1 of 2 Date: June 06, 2013 Case No.: 13-01-1653A LOM/ Federal Emergency Management Agency Washington, D.C. 20472 LETTER OF MAP AMENDMENT DETERMINATION DOCUMENT (REMOVAL) COMMUNITY AND MAP PANEL INFORMATION LEGAL PROPERTY DESCRIPTION A portion of Parcel A, as described in the Quit Claim Deed, recorded TOWN OF WILLISTON, in Book 452, Pages 47 and 48, in the Office of the Town Clerk, Town CHITTENDEN COUNTY, VERMONT of Williston, Vermont. COMMUNITY The portion of property is more particularly described by the following metes and bounds: COMMUNITY NO.: 500043 NUMBER: 50007C0292D AFFECTED MAP PANEL DATE: 7/18/2011 APPROXIMATE LATITUDE & LONGITUDE OF PROPERTY: 44.430, -73.029 FLOODING SOURCE: WINOOSKI RIVER SOURCE OF LAT & LONG: ARCGIS 10 DATUM: NAD 83 DETERMINATION 1% ANNUAL LOWEST LOWEST OUTCOME CHANCE ADJACENT LOT WHAT IS BLOCK/ SUBDIVISION FLOOD GRADE FLOOD ELEVATION REMOVED FROM LOT STREET SECTION ZONE THE SFHA ELEVATION ELEVATION (NAVD 88) (NAVD 88) (NAVD 88) 10191 Williston Road 302.8 feet 304.0 feet Portion of х Parcel Property (shaded)

Special Flood Hazard Area (SFHA) - The SFHA is an area that would be inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood).

ADDITIONAL CONSIDERATIONS (Please refer to the appropriate section on Attachment 1 for the additional considerations listed below.)

LEGAL PROPERTY DESCRIPTION

Δ

PORTIONS REMAIN IN THE FLOODWAY

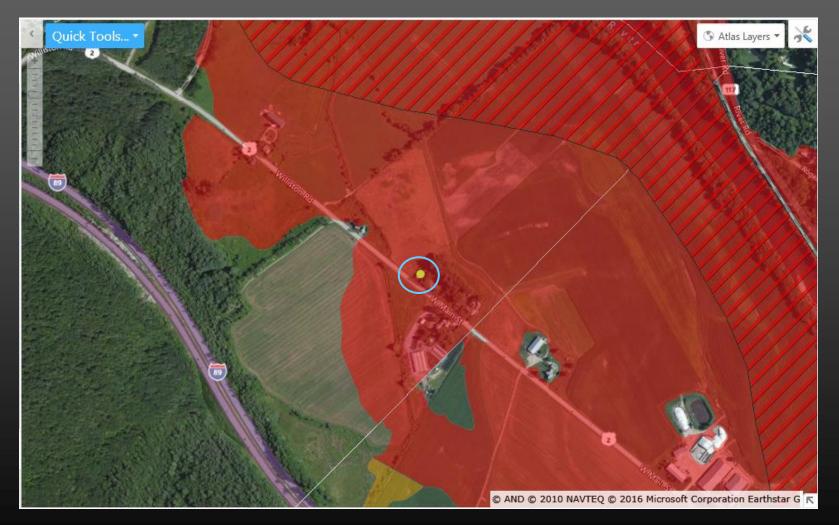
This document provides the Federal Emergency Management Agency's determination regarding a request for a Letter of Map Amendment for the property described above. Using the information submitted and the effective National Flood Insurance Program (NFIP) map, we have determined that the described portion(s) of the property(ies) is/are not located in the SFHA, an area inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood). This document amends the effective NFIP map to remove the subject property from the SFHA located on the effective NFIP map; therefore, the Federal mandatory flood insurance requirement does not apply. However, the lender has the option to continue the flood insurance requirement to protect its financial risk on the loan. A Preferred Risk Policy (PRP) is available for buildings located outside the SFHA. Information about the PRP and how one can apply is enclosed.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at (877) 336-2627 (877-FEMA MAP) or by letter addressed to the Federal Emergency Management Agency, LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605.

- Can - P

Luis Rodriguez, P.E., Chief Engineering Management Branch Federal Insurance and Mitigation Administration

A LOMA REMOVES THE BUILDING OR PROPERTY FROM THE SHFA, BUT THE MAP REMAINS



Search Results—P	-Products for BARTON, VILLAGE OF Show					w ALL Products »					
Section 2012 Service Center × 🕒 10-01-0265A	-500082.pdf	× +	Name Stations (1920)	artanti Senta	-	ter Witness		49.1	100	100	
$\leftarrow \rightarrow \mathbf{C}$ \triangleq Federal Emergency Management A	Agency [US]	nttps://map1.msc.fen	na.gov/data/50/L/10	-01-0265A-50008	2.pdf?LOC=	eed73a64a2bd	1ce57f30ccd139	946b2ae		6 ☆	• •
10-01-0265A-500082.pdf				1/2						Ċ	± 🙃
	Page 1 of 2			Date: February 04	, 2010 Ca	se No.: 10-01-0	265A	LOMA			
			Federal E	mergency Washington	Manag		gency				
		DET									
DETERMINATION DOCUMENT (REMOVAL) COMMUNITY AND MAP PANEL INFORMATION LEGAL PROPERTY DESCRIPTION											
	COMMUNITY			A parcel of land, as described in the Warranty Deed, recorded in Book 154, Pages 347 and 348, in the Office of the Town Clerk, Village of Barton, Vermont							
	AFFECTED	NUMBER: 500082000	1C								
	MAP PANEL	DATE: 2/2/1994									
	FLOODING SC	URCE: BARTON RIVER	APPROXIMATE LATITUDE & LONGITUDE OF PROPERTY: 44.745, -72.180 SOURCE OF LAT & LONG: STREETS & TRIPS 2009 DATUM: WGS 84								
				DETERMINATIO	N						
	LOT BLO		STREET	OUTCOME WHAT IS REMOVED FROM THE SFHA	FLOOD ZONE	1% ANNUAL CHANCE FLOOD ELEVATION (NGVD 29)	LOWEST ADJACENT GRADE ELEVATION (NGVD 29)	LOWEST LOT ELEVATION (NGVD 29)			
		-	291 Glover Road	Structure	X (unshaded)	859.5 feet	864.8 feet	-			
		d Hazard Area (SFHA ceeded in any given yea		area that would be	inundated by	y the flood havin	g a 1-percent cl	hance of being			#
		CONSIDERATIONS (PIE MAIN IN THE SFHA	ease refer to the appropria	te section on Attachme	ent 1 for the add	litional consideration	is listed below.)				+
	the property determined that	provides the Federal described above. Using t the structure(s) on the or exceeded in any giv	the information submered property(ies) is/are not	itted and the effect t located in the SFH	tive National A, an area int	Flood Insurance undated by the flo	Program (NFIP) od having a 1-per	map, we have rcent chance of			
No Digital Data Available	- Bones	5 9 9 9 1		USGS The Nat	ACCOUNTS AND	 Advantage and a second s	ry. Data refre	shed Octobe	POWERED BY C 2017		

LOMA QUESTIONS:

FEMA Flood Map Service Center: Contact Us

For questions regarding the **FEMA Flood Map Service Center (MSC)** website or other flood mapping-related questions, please visit our self-service options or contact a **Map Specialist** with the <u>FEMA Map Information eXchange</u> (FMIX).

> Expand All Sections

Self Service

- MSC General Information
- Frequently Asked Questions

> Contact A Map Specialist

> Flood Insurance Questions



HAZARD DISCLOSURE

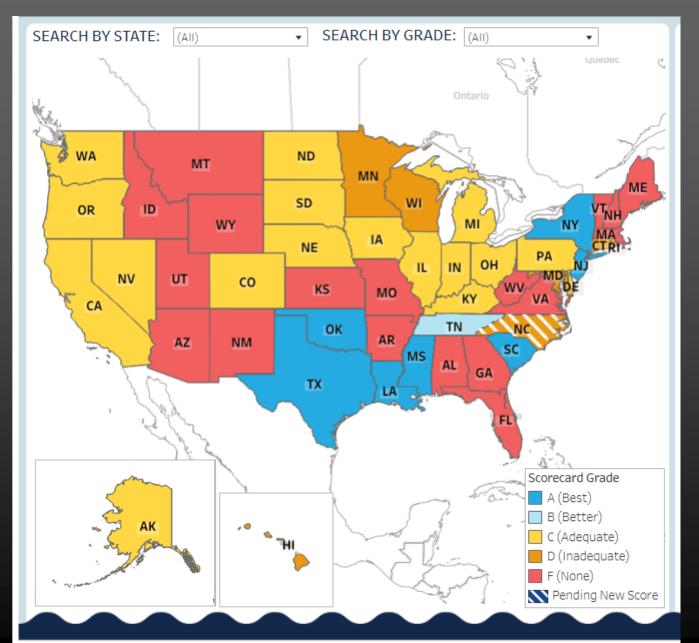
"Home Sales Need Better Disclosure of Flood Risk, Experts Say" <u>Scientific American</u> -- February 2, 2021



Behind this sign was a house—no trace remains Photo credit: Lars Gange, Mansfield Heliflight

FLOOD RISK DISCLOSURE LAWS SCORECARD





Natural Resources Defense Council's Flood Risk Disclosure Scorecard



FLOOD RISK DISCLOSURE LAWS SCORECARD

Vermont | F (None)

Vermont has no statutory or regulatory requirements for a seller to disclose a property's flood risks or past flood damages to a potential buyer. As such, Vermont home buyers are greatly disadvantaged when it comes to learning of a home's past flood history or potential for future flooding.

While the Vermont Association of Realtors has created a disclosure statement for sellers to use, the form is voluntary and, as such, sellers do not have to provide it to a buyer. The association's form asks the seller to disclose whether:

- the property is located in a flood hazard zone designated by federal, state, or local statute, regulation or ordinance;
- there are any past or present flood problems affecting the property; and
- there has been significant damage to the property or any of its structures from floods.

Natural Resources Defense Council's Flood Risk Disclosure Scorecard



FLOOD RISK DISCLOSURE LAWS SCORECARD

New York | A (Best)

Per New York law, a seller must disclose the following:

- whether any or all of the property is located wholly or partially in the Special Flood Hazard Area ("SFHA"; "100-year floodplain") according to the Federal Emergency Management Agency's (FEMA's) current flood insurance rate maps for your area
- whether any or all of the property is located wholly or partially in a moderate risk flood hazard area ("500-year floodplain") according to FEMA's current flood insurance rate maps for your area
- whether the property is subject to any requirement under federal law to obtain and maintain flood insurance on the property
- whether they ever received assistance, or are aware of any previous owners receiving assistance, from FEMA, the U.S. Small Business Administration, or any other federal disaster flood assistance for flood damage to the property
- · whether there is flood insurance on the property
- whether there is a FEMA elevation certificate available for the property
- whether a claim for flood damage to the property has been filed with any insurance provider, including the National Flood Insurance Program
- whether the structure on the property has experienced any flood damage, water seepage, or pooled water due to a natural flood event, such as heavy rainfall, costal storm surge, tidal inundation, or river overflow.

(In 2023, New York adopted these requirements and eliminated the \$500 credit that sellers could pay to avoid

Natural Resources Defense Council's Flood Risk Disclosure Scorecard



GENERAL RECOMMENDATIONS:

Recommendations based on existing draft and Vermont specific issues:

- In addition to flood disclosure for real property, include a flood disclosure requirement for a seller to report any previous flood damage for the purchase and sale of manufactured homes.
- Consider requiring flood hazard disclosure for commercial leases, in addition to residential leases
- Remove the requirement for disclosure of actual paid flood insurance premiums (but keep disclosure of existence of a policy)
 - NFIP policies and premiums are generally protected as PII (Personal Identifiable Information)
 - While policies can be transferred (policy assumption), this may not occur at a sale, or changes to the transferred policy (like occupancy) may result in significantly different insurance rates and premiums

TOP RECOMMENDATIONS FROM THE NRDC ASSESSMENT:

Top Recommendations based on provisions from top-tier states (New York, New Jersey, South Carolina, Texas, Oklahoma, Lousiana, Mississippi):



Indicating whether any or all of the structure or the property is included of <u>**both**</u> 100 and 500-year SFHA, <u>**and**</u> the floodway;

Whether the property is subject to requirements under Federal law The owner to maintain flood insurance on the property;

(Vermont specific) Whether the property was subject to flooding while the seller possessed the property. This would include reporting flood damage from either inundation or <u>flood-related</u> <u>erosion or landslide</u> damage during flooding.



Whether there is a FEMA Elevation Certificate available for the property;

OTHER RECOMMENDATIONS FROM THE NRDC ASSESSMENT:

Whether the owner has ever received federal assistance from Federal flood disaster programs for flood damage on the property or is aware of any previous owners receiving assistance. And if yes, the type and amount of aid received;

Whether the current owner has flood insurance on the property (but not require the rate that is paid), either NFIP-backed policy or private flood insurance policy;



Whether a claim for flood insurance has been filed with an insurance provider, including NFIP-backed or private flood insurance;

Flood damage repairs made to the property as a result of flood events that were NOT filed with a private or public insurance provider during their ownership;



Provide a description and dates of damage to the structure due to flooding;

Rebecca Pfeiffer, CFM Vermont NFIP Coordinator; State Floodplain Manager Rebecca.Pfeiffer@vermont.gov, 802-490-6157

Visit:



MORE INFORMATION

For complete details on Substantial Damage requirements, see FEMA's Substantial Improvement/ Substantial Damage Desk Reference Guide (P-758):

www.fema.gov/media-library/assets/documents/18562

For more resources for local officials, please go to VTDEC's **After the Flood** website:



https://dec.vermont.gov/watershed/rivers/rivercorridor-and-floodplain-protection/after-a-flood For questions, please contact your local VT DEC Regional Floodplain Manager at:



https://dec.vermont.gov/sites/dec/files/wsm/rivers/d ocs/floodplain_mngr_regions.pdf

Flood Ready Vermont (River Corridor FAQs, ERAF & More) : http://Floodready.Vermont.gov

Vermont Rivers Program (Municipal Assistance): http://watershedmanagement.vt.gov/rivers/htm