

Mendon, Vermont
2022 Local Hazard Mitigation Plan



Town Bridge #25 on Medway Road over Mendon Brook – April 2019 (DR4445)

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Other Key Partners

Rutland Natural Resources Conservation District
Western Vermont Floodplain Manager
Vermont Department of Health
Vermont Agency of Transportation District 3 Program Manager
Green Mountain National Forest
Vermont Department of Forests, Parks, and Recreation
City of Rutland, Vermont



**GREEN MOUNTAIN
& FINGER LAKES
National Forests**

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1 INTRODUCTION

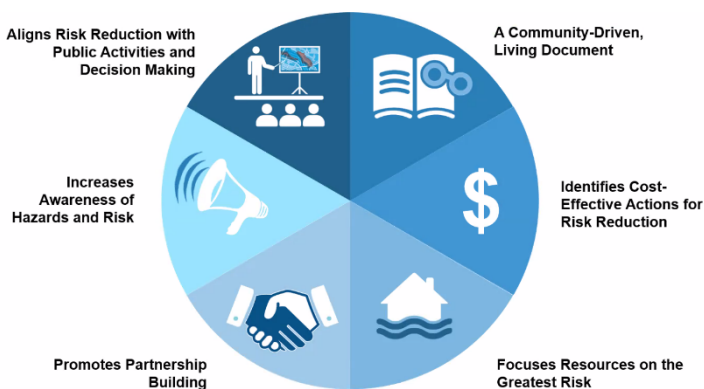
The impact of expected, but unpredictable natural events can be reduced through community planning and action. The goal of this Plan is to provide a natural hazards local mitigation strategy that makes Mendon (the Town) more disaster resistant and more resilient after a disaster.

Hazard Mitigation is any sustained policy or action that reduces or eliminates long-term risk to people and property from natural hazards and their effects. FEMA and state agencies have come to recognize that it is less expensive to prevent disasters than to repeatedly repair damage after a disaster has struck. This Plan recognizes that communities have opportunities to identify mitigation strategies and measures during all the other phases of Emergency Management – Preparedness, Response and Recovery. Hazards cannot be eliminated, but it is possible to determine what the hazards are, where the hazards are most severe, and identify local actions and policies that can be implemented to reduce the severity of the hazard.

2 PURPOSE

The purpose of this Plan is to assist the Town in identifying all natural hazards facing the community, ranking them according to local vulnerabilities, and developing strategies to reduce risks from those hazards. Once adopted, this Plan is not legally binding; instead, it outlines goals and actions to prevent future loss of life and property.

The benefits of mitigation planning include:



Source: FEMA LHMP Skill Share Workshop 2021

Furthermore, the Town seeks to be in accordance with the strategies, goals, and objectives of the 2018 State Hazard Mitigation Plan.

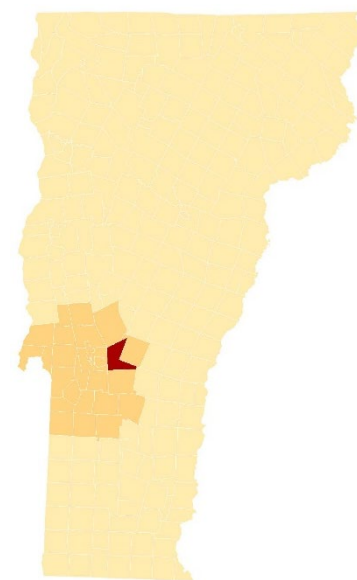
3 COMMUNITY PROFILE

Land Use and Development Patterns

Mendon is a rural residential community. The village area is on US Route 4 and contains the Town Office, a church, eateries, gift shops, numerous other commercial enterprises, and several residences.

Historically, Mendon’s rural character and its proximity to major commercial districts resulted in the Town’s identity as a “bedroom community” with residents commuting to work in adjacent communities.

Technological advances and an enhanced appreciation for outdoor recreational activities with associated economic opportunities provide new options for Mendon residents who live and work in town.



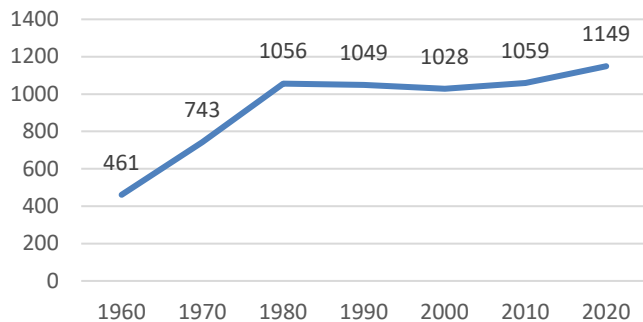
Outside of the US Route 4 corridor, Mendon is sparsely developed with clusters of housing. This is partly due to the terrain and other natural features of the area that limit development, and partly a result of the fact that large tracts of undeveloped land (±9,000 acres) are preserved as forestlands. This includes Green Mountain National Forest, Aitken State Forest, Coolidge State Forest, Jim Jeffords State Forest, and Rutland City Forest (designed to protect the watershed for the City’s public drinking water source). These areas are open to the public and are a critical outdoor recreation asset for Rutland County as residents of many neighboring towns hike, bike, ski, and snowmobile within Mendon’s boundaries.

Land Features

The mountains and forests in Mendon serve as an important regional resource for watersheds, wildlife habitat, climactic barrier, and recreation. The steep slopes of East Mountain, Mendon Peak, Killington Peak, and Blue Ridge define much of Mendon and as a result soils in town are generally thin. Elevations in town range from a low of 805 feet above sea level on Town Line Road to a high of 4,235 feet above sea level on the summit of Killington Peak.

Demographics and Growth Potential

The 2020 American Community Survey Five-Year Estimates prepared by the U.S. Census Bureau shows an estimated population of 1,149 and 697 housing units. Mendon's population has remained stable since 1980, with a slight uptick in 2020.



Between 2010 and 2020, the median age of Mendon residents increased from 49.2 to 52.6; higher than the Vermont median age of 42.8. The portion of the population over 65 is 23.6%, compared to 19% in Vermont and 16% in the country. The population density of the Town is 30 people per square mile compared to an overall state density of 68.

In addition to the mountainous terrain which makes building on the steep slopes unfeasible, shallow depth to bedrock, soil types that make on-site septic challenging, and a high water table all place limitations on the amount and location of development that is permitted in Mendon.

Although the rugged topography in Mendon and lack of land availability limits economic growth, there is growth potential along US Route 4.

Mendon has applied for Village Center Designation to support Mendon's economic development and preservation of historic and cultural resources and encourage compact village centers surrounded by working rural lands.

There are current revitalization activities associated with "Mendon on the Move", which encourages strategic economic development goals.

There is opportunity for involvement in Vermont's Tax Increment Financing (TIF) program to meet smart growth goals, promote long-term planning, and contribute to development and growing tax revenues.

Construction of the new US Forest Service headquarters in Mendon (scheduled completion in 2023), plus the proposed Velomont trail system sections in Mendon will provide more stimulus to our recreational economy.

Mendon is also a member of the Otter Creek Communication Union District (CUD), which will build out high speed fiber optic cable to every premise in town that is not currently served.

Precipitation and Water Features

Average annual precipitation is 43 inches of rain; with July being the wettest month. Average annual snowfall is 78 inches; with January being the snowiest month.

Mendon Brook and its tributaries, including Brewers Brook, are the dominant water feature in Mendon. Other notable rivers include Tenney Brook, Moon Brook, Mussey Brook, Eddy Brook, and North Branch Cold River.

Drinking Water and Sanitary Sewer

Given the rural nature of the town, there is no municipal drinking water system. Most residents depend on individual wells or springs. There are several private water systems that serve multi-unit and commercial properties.

Along the US Route 4 corridor, residents and businesses can connect to the Alpine Pipeline, a private sanitary sewer system that discharges into the Rutland City treatment plant.

Sewer connections to the Alpine Pipeline are encouraged for new construction along US Route 4 since challenging soil conditions may limit the suitability of on-site wastewater treatment systems. Mendon's allotment for discharge to the Pipeline is sufficient to allow additional development.

Transportation

Mendon is about 38 square miles in size with primary access via US Route 4, connecting Rutland and points west with the Killington-Pico ski areas. Town Line Road, Park Lane, and Meadow Lake Drive are other primary collector roads.

The 2015 VTrans Town Highway data indicates that Mendon has a total of 30.47 road miles: 4.44 miles of Class 2; 16.82 miles of Class 3; 3.28 miles of Class 4; and 5.93 miles of State highway. Approximately 44% of these roads are paved and 56% are gravel.

Several roads have been identified as locally important for use as through-ways, detours, short-cuts, and access to critical facilities: Town garage and office. These are shown in orange in **Figure 1**.

According to the Town's road erosion inventory, approximately 85% of Mendon's road mileage is hydrologically connected - meaning it is within 100-feet of a water resource (i.e., stream, wetland, lake, or pond). Proximity to water resources can make these sections of road more vulnerable to flooding and fluvial erosion.

According to the Town's structures inventory, Mendon has a total of 16 municipal structures – 8 short structures (6'-20' length) and 8 long structures (>20' length). The Town's long structures are inspected every two years by VTrans through the Town Highway Bridge Program.

Mendon has a total of 306 culverts within the municipal road right-of-way, all of which were inventoried in 2020. Only 10% of culverts are listed in poor, critical, or urgent condition and should be considered for replacement and/or upgrade in accordance with the Town Road and Bridge Standards. The local road network is maintained by the municipal highway department, whose garage is located at 157 Park Lane.

Electric Utility Distribution System

Electric service to approximately 790 accounts is provided by Green Mountain Power via several circuits. Average annual outage statistics between 2017 and 2021 are summarized in **Table 1**.

Table 1: Power Outage Summary

Average Annual (2017-2021)	
Avg # of times a customer was without power in a year	1.91
Avg length of each outage in hours	3.43
# of hours the typical customer was without power	6.56
2021 only	
Avg # of times a customer was without power in a year	1.32
Avg length of each outage in hours	1.71
# of hours the typical customer was without power	2.27

The longest power outage affecting the greatest number of accounts between 2017 and 2021 was 4.10 hours and impacted 114 accounts. There was an outage lasting 77.35 hours in 2017, but it affected only 1 account.

Public Safety

Mendon contracts with Rutland City Fire Department for fire protection services. Mendon contracts with the Rutland County Sheriff's Department for limited law enforcement services, which are supplemented by an elected Level III-certified local constable. The nearest hospital is the Rutland Regional Medical Center. Ambulance service is provided by the Regional Ambulance Service.

Emergency Management

Mendon's constable serves as the Emergency Management Director (EMD). He is supported by a local emergency management coordinator and public information officer. Together, they work with others in town to keep the Local Emergency Plan up to date as well as to coordinate with nearby towns and regional emergency planning efforts.

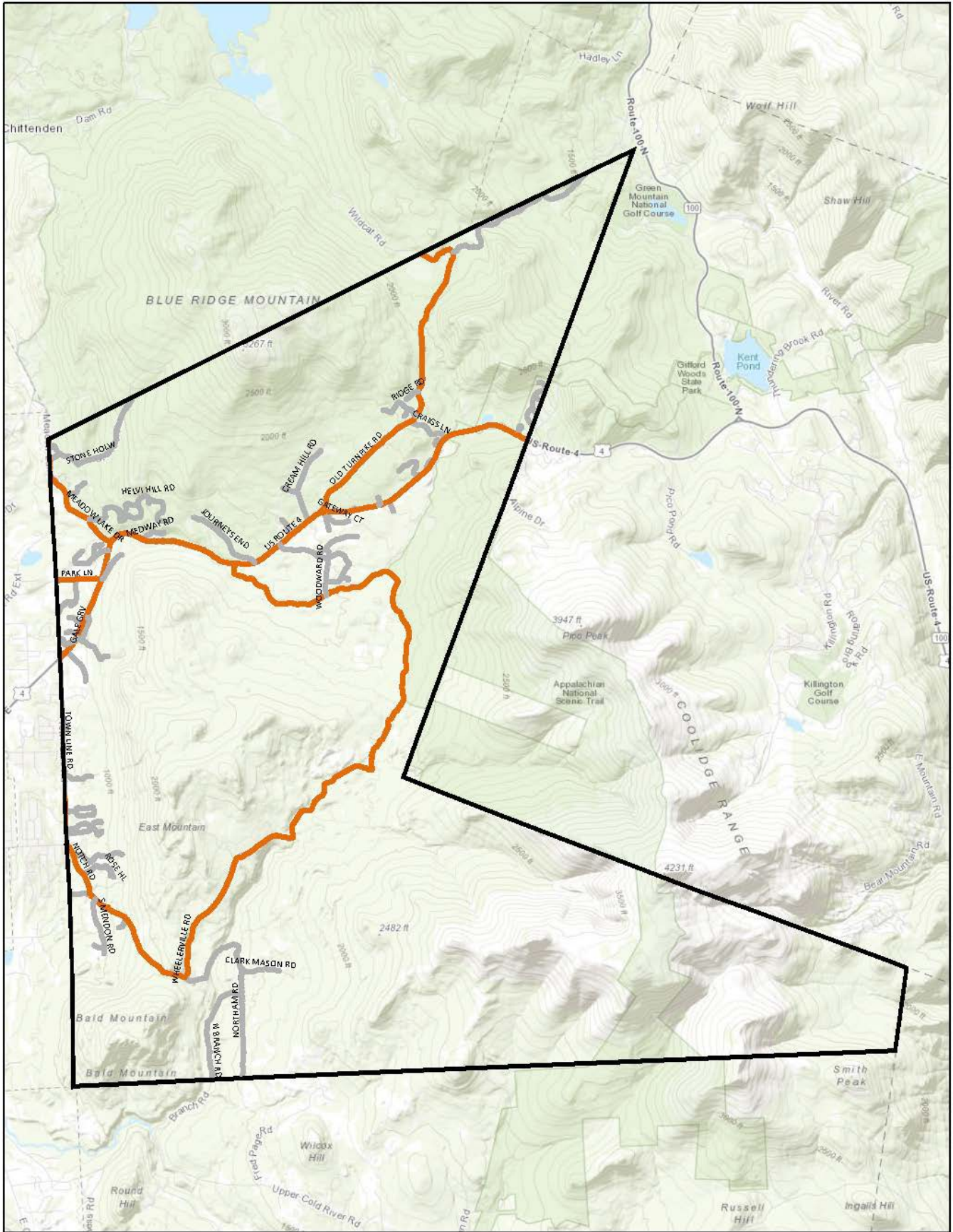


Figure 1: Locally Important Routes for Through-Ways, Detours, Short-Cuts, and Access to Critical Facilities
Shown in orange

4 PLANNING PROCESS

Plan Developers

Steffanie Bourque, an Emergency Management Planner at the Rutland Regional Planning Commission (RRPC), assisted the Town with updating its Local Hazard Mitigation Plan. Pre-Disaster Mitigation Program funds from FEMA supported this process.

The Hazard Mitigation Planning Team members who assisted with the update include the local constable/EMD, Road Commissioner, and representatives from the Select Board and local Planning Commission.

Plan Development Process

The 2022 Mendon Local Hazard Mitigation Plan is an update to the 2017 single jurisdiction mitigation plan. A summary of the process taken to develop the 2022 update is provided in **Table 2**.

Table 2: Plan Development Process

April 12, 2022: Hazard Mitigation Planning Team kick-off meeting. Planning Team members were confirmed. Discussed what an LHMP is; benefits of hazard mitigation planning; current plan status; planning process; outreach strategy; and plan sections. Planning Team meetings were not open to the public.

April 2022: Notice posted on RRPC and Town websites/social media that the Town is engaged in hazard mitigation planning and updating the LHMP. Notice emailed to officials (Selectboard and Planning Commission chairs, Town Managers, Clerks, Emergency Management Directors) in neighboring towns of Chittenden, Killington, Rutland Town, Shrewsbury, Plymouth, Clarendon and Key Partners (Rutland Natural Resources Conservation District, Western VT Floodplain Manager, VT Dept of Health Emergency Preparedness Specialist, VTrans District 3 Projects Manager, Green Mountain National Forest, VT Dept of Forests, Parks, and Recreation, City of Rutland). Notice included instructions to contact the RRPC for information on the planning process and opportunities for public input – see **Appendix D**.

May 10, 2022: Planning Team meeting – confirmed plan purpose and completed work on community profile. Began work on community hazard risk assessment, storm history, and identifying assets vulnerable to the highest risk natural hazards.

June 7, 2022: Planning Team meeting – completed work on hazard identification and risk assessment. This is a critical milestone in the plan development process and the draft plan was readied for public meeting on June 13.

June 13, 2022: Draft LHMP presented at a joint meeting of the Mendon Selectboard and Planning Commission to encourage public input from local government and the public that could affect the plan’s conclusions and better integrate with Town initiatives. Draft shared with Key Partners for input on vulnerable locations and assets. Draft posted for public comment period with instructions to email comments to Town Administrator, Sara Tully. Comments were accepted until June 27, 2022 – see **Appendix D**.

June 27, 2022: Draft LHMP discussed at Mendon Selectboard meeting with an opportunity to share public comments.

July 19, 2022: Planning Team meeting – discussed comments received on June draft; completed work on hazard identification and risk assessment. Began work on hazard mitigation strategy – confirmed mitigation goals, discussed community capabilities and status of 2017 mitigation actions.

August 23, 2022: Planning Team meeting – continued work on hazard mitigation strategy – completed community capabilities; updated status of 2017 mitigation actions; and evaluated range of possible mitigation actions.

September 13, 2022: Planning Team meeting – completed work on hazard mitigation strategy; plan maintenance; and changes since the 2017 plan. Draft LHMP finalized for presentation to local officials and the public at joint meeting of the Mendon Planning Commission and Selectboard on November 7, 2022.

November 7, 2022: Final draft LHMP presented at joint meeting of the Mendon Planning Commission and Selectboard for review and comment. Plan emailed to neighboring towns and Key Partners. Draft posted for public comment period with instructions to email comments to Town Administrator, Sara Tully. Comments were accepted until November 28, 2022 – see **Appendix D**.

November 28, 2022: Draft LHMP discussed at Mendon Selectboard meeting with an opportunity to share public comments.

December 5, 2022: Final draft LHMP submitted to Vermont Emergency Management for Approval Pending Adoption.

In addition to the local knowledge of Planning Team members and other relevant parties, several existing plans, studies, reports, and technical information were utilized in the preparation of this Plan. A summary of these is provided in **Table 3**.

Table 3: Existing Plans, Studies, Reports & Technical Information

2022 Local Emergency Management Plan
2022 Mendon Town Plan with Enhanced Energy Plan
2021 FEMA NFIP Insurance Reports
2021 Stormwater Infrastructure Mapping Project
2021 Tenney Brook Report
2021-2017 Green Mountain Power Outage Data
2020 American Community Survey Five-Year Estimate
2018 State of Vermont Hazard Mitigation Plan
2017 Road Erosion Inventory
2014 Mendon Subdivision Regulations
2010 Mendon Zoning Regulations
2008 Moon Brook Watershed River Corridor Plan
VTrans Town Highway Bridge Inspection Reports
Vermont Statewide Highway Flood Vulnerability and Risk Map
VTrans Transportation Resiliency Planning Tool
RRPC Local Liaison Reports of Storm Damage
National Oceanic and Atmospheric (NOAA) National Climatic Data Center's Storm Events Database
FEMA Disaster Declarations for Vermont
OpenFEMA Dataset: Public Assistance Funded Project Summaries for Vermont

Changes Since the 2017 Plan

The 2022 Mendon Town Plan is a framework and guide to support careful and strategic planning. It is based on specific objectives concerning the way the town desires to accommodate future growth and attempts to balance a wide range of competing interests and demands.

The objective of the Mendon Zoning and Subdivision Regulations is to establish standards and policies concerning development of land that further the goals of the Town Plan. Together, the Town Plan and land use regulations are designed to preserve the present natural environment, character, rural appearance and atmosphere of the Town; promote and encourage economic growth in appropriate zoning districts; meet the civic, economic, educational, social, recreational, and cultural needs of residents; preserve the rights of residents to manage their own land, to the fullest extent possible; preserve the existing high scenic quality of Mendon's gateway natural, scenic, and historic areas; and aid the Mendon Historical Society in discovering and preserving the history of the Town and its role in the state and country.

As described in the Community Profile section of this Plan, the Town's population has remained relatively stable since 1980 with a slight uptick in 2020. Since 2017, the most significant development project has been the start of the US Forest Service Green Mountain and Finger Lakes Regional Office, which is slated for completion in 2023. Although this building did not require local permitting because the federal government is exempt and the access came off US Route 4, Mendon was involved in discussions about its access and demands on municipal services. Mendon is excited about what additional economic development opportunities might accompany the opening of this building and its connection to recreational trails.

According to Zoning Permit records, a total of 106 permits were issued between 2017 and 2021. Approximately 83% were for residential applications where sheds, garages, porches, decks, and bedroom additions were among the most requested construction activities. Fifteen (15) permits were issued for new single family homes and four (4) permits for camps.

In addition to residential applications, fourteen (14) site plan reviews were conducted for commercial development – either new business or change of use applications to change the use of an existing commercial property.

None of these approvals were for construction activities within the Flood Hazard Overlay District.

Development in Mendon since 2017 has not made the community more vulnerable to natural hazards.

Like the 2017 Plan, the 2022 update focused exclusively on natural hazards defined as atmospheric, hydrologic, geologic, and wildfire phenomena. Hazards not necessarily related to the physical environment, such as infectious disease, were excluded from consideration by the Planning Team.

The Town's mitigation priorities remained essentially the same. In 2017, Mendon's highest risk natural hazards were Floods and Fluvial Erosion, Thunder and Windstorms/Hail, and Snow and Ice Storms. In 2022, the Town ranked flash flooding and fluvial erosion; extreme cold, snow, ice; and high winds as the community's highest risk natural hazards.

In 2022, the Town did not formally assess the risks associated with invasive species; however, they did discuss the potential hazards and risks associated with the Emerald Ash Borer (EAB) given the confirmed detection in Rutland County in October 2020. Invasive species were not included in the 2017 Plan.

Mendon has made progress completing the mitigation actions identified in the 2017 Plan – see **Appendix C**.

Of all their mitigation accomplishments, the Town is most proud of the Town Plan rewrite and adoption in 2020 and significant transportation system projects completed since 2017, totaling just under \$510,000.

These mitigation projects include:

- Culvert replacement/upsized #02-09 Townline Road in 2017; \$81,731 (Structures Grant)
- Old Turnpike Road Erosion Control Project in 2017; \$12,837 (Better Roads Program)
- Meadowlake Drive Erosion Control Project in 2017; \$17,340 (Better Roads Program)
- Culvert replacement/upsized #07-56 in 2018; \$15,314 (Better Roads Program)
- Wheelerville Road outfall repair in 2018 at Bridge #21; \$73,000 (Structures Grant)
- Wheelerville Intersection with Notch Road (segments 197022 and 142153) ditch stabilization and culvert replacement #02-37A in 2019; \$25,825 (Better Roads Program)
- Culvert replacement/upsized #07-61 in 2019; \$66,897 (Structures Grant)
- Culvert replacement/upsized #07-42 in 2020; \$128,765 (Structures Grant)
- Grants In Aid projects FY19 (segments 197091 & 197092; \$40,712), FY20 (segments 45645.1, 45646.1, 45647.1; \$18,592), FY21 (segments 197079 & 197080; \$28,961), and FY22 (under construction segments 197093 & 197094) – brought hydrologically connected road segments to meet MRGP standards.

Actions taken by Mendon since 2017 have made the community more prepared and less vulnerable to future natural hazard impacts.

Nonetheless, due to an increase in the frequency and intensity of weather events, the Town remains vulnerable to flash flooding and fluvial erosion, severe winter storms, high wind events, and invasive species (particularly the Emerald Ash Borer).

As a result, the Town has identified a range of mitigation actions to address extreme cold/snow/ice, flooding, high wind, and the Emerald Ash Borer – see **Table 6**.

5 HAZARD IDENTIFICATION AND RISK ASSESSMENT

After engaging in discussions, the Town identified the following “highest risk hazards” that they believe their community is most vulnerable to:

Local Vulnerabilities and Risk Assessment

One of the most significant changes from the 2017 Plan is the way hazards are assessed. To be consistent with the approach to hazard assessment in the 2018 State Hazard Mitigation Plan, the Hazard Mitigation Planning Team conducted an initial analysis of known natural hazard events¹ to determine their probability of occurring in the future (high probability events are **orange** in Table 4).

The Planning Team then ranked the hazard impacts associated with the known natural hazard events based on the probability of occurrence and potential impact to life, the economy, infrastructure, and the environment. The ranking results are presented in Table 4.

- **Flash flooding and fluvial erosion associated with thunder/tropical storms and ice jams**
- **Extreme cold, snow, and ice associated with winter storms**
- **High winds associated with thunder/tropical/winter storms**

Each of these “highest risk hazards” (**orange** in Table 4) are further discussed in this section and depicted in the Local Natural Hazards and Vulnerabilities Map in Appendix B.

The “lower risk hazards” that are considered to have a low probability of occurrence and low potential impact are not discussed. For information on these hazards, consult the State Hazard Mitigation Plan.

Table 4: Community Hazard Risk Assessment

Hazard Event	Hazard Impacts	Probability	Potential Impact					Score
			Life	Economy	Infrastructure	Environment	Average	
Thunderstorm	Flash Flood/ Fluvial Erosion	4	2	3	2	2	2.25	9.00
Ice Jam	Inundation Flood	1	1	1	1	1	1.00	1.00
Tropical Storm /Hurricane	High Wind	4	2	2	2	1	1.75	7.00
Tornado	Hail	2	1	1	1	1	1.00	2.00
Landslide	Landslide	2	1	2	2	1	1.50	3.00
Winter Storm	Cold/Snow/Ice	4	3	2	2	1	2.00	8.00
Drought	Heat	1	1	1	1	1	1.00	1.00
	Drought	2	1	1	1	2	1.25	2.50
Wildfire	Wildfire	3	1	1	2	2	1.50	4.50
Earthquake	Earthquake	1	1	1	1	1	1.00	1.00

*Score = Probability x Average Potential Impact

	Frequency of Occurrence: Probability of a plausibly significant event	Potential Impact: Severity and extent of damage and disruption to population, property, environment, and the economy
1	Unlikely: <1% probability of occurrence per year	Negligible: isolated occurrences of minor property and environmental damage, potential for minor injuries, no to minimal economic disruption
2	Occasionally: 1–10% probability of occurrence per year, or at least one chance in next 100 years	Minor: isolated occurrences of moderate to severe property and environmental damage, potential for injuries, minor economic disruption
3	Likely: >10% but <75% probability per year, at least 1 chance in next 10 years	Moderate: severe property and environmental damage on a community scale, injuries or fatalities, short-term economic impact
4	Highly Likely: >75% probability in a year	Major: severe property and environmental damage on a community or regional scale, - multiple injuries or fatalities, significant economic impact

¹ This Plan defines natural hazards as atmospheric, hydrologic, geologic, and wildfire phenomena. Hazards not necessarily related to the physical environment, such as infectious disease, were excluded from consideration by the Planning Team.

Invasive Species

The Planning Team did not formally assess the risk associated with invasive species; however, they did discuss the potential hazards and risks associated with the Emerald Ash Borer (EAB) specifically.

Vermont's EAB infestation was first detected in 2018 in northern Orange County. In October 2020, a new detection of EAB in West Rutland was confirmed making Mendon a town in the High Risk Area. This is the first confirmed detection in Rutland County. An inventory of trees within the road right-of-way would be needed to determine how many Ash trees are at risk. The potential risk to public and private woodlots and impacts on the local economy have not been quantified.

Highest Risk Hazard Profiles

Inundation/Flash Flooding/Fluvial Erosion

Floods can damage or destroy property; disable utilities; destroy or make impassable roads and bridges; destroy crops and agricultural lands; cause disruption to emergency services; and result in fatalities. People may be stranded in their homes for a time without power, heat, or communication or they may be unable to reach their homes. Long-term collateral dangers include the outbreak of disease, loss of livestock, broken sewer lines or wash out of septic systems causing water supply pollution, downed power lines, loss of fuel storage tanks, fires, and release of hazardous materials.

As noted in the State Hazard Mitigation Plan, "Flooding is the most common recurring hazard event in Vermont" (2018: 55). There are two types of flooding that impact Vermont communities: inundation and flash flooding. Inundation is when water rises onto low lying land. Flash flooding is a sudden, violent flood which often entails fluvial erosion (stream bank erosion).

Inundation flooding of land adjoining the normal course of a stream or river is a natural occurrence. If these floodplain areas are in their natural state, floods likely would not cause significant damage.

While inundation-related flood loss can be a significant component of flood disasters, the more common mode of damage in Vermont is associated with fluvial erosion, often associated with physical adjustment of stream channel dimensions and location during flood events. These dynamic and oftentimes catastrophic adjustments are due to bed and bank erosion of naturally occurring unstable stream banks, debris and ice jams, or structural failure of or flow diversion by human-made structures. An ice jam occurs when the ice layer on top of a river breaks into large chunks which float downstream and cause obstructions (State HMP 2018). In Mendon, ice jams occasionally occur along Wheelerville Road in Mendon Brook and/or the North Branch Cold River; however, resultant flooding has had little to no impact on infrastructure.

Several major flooding events have affected the state in recent years, resulting in multiple Presidential Disaster Declarations. From 2003 to 2010, Rutland County experienced roughly \$2.6 million in property damage due to flood events.

The worst flooding event in recent years came in August of 2011 from Tropical Storm Irene (DR4022), which dropped up to 10-11 inches of rain in some areas of Rutland County. Irene caused 2 deaths and \$55,000,000 in reported property damage and \$2.5 million in crop damage in Rutland County.

Although the storm was technically a tropical storm, the effects of the storms are profiled in this flooding section, since the storm brought only large rainfall and flooding to the Town, not the high winds typically associated with tropical storms. This caused most streams and rivers to flood in addition to widespread and severe fluvial erosion. Mendon experienced \$2.2 million in local damage during Irene - \$23,911 Individual Assistance and \$2,204,532 Public Assistance. Total damage in Mendon came to approximately \$9 million, including \$6.7 million in damages to US Route 4.

From 2012 to 2020, Rutland County experienced approximately \$3.5 million in property damage; with \$1.9 million due to a flash flood event in July 2017 (DR4330) and \$1 million due to a flash flood event in April 2019 (DR4445).

In Mendon, flooding is a risk. Damage from Tropical Storm Irene were significant, resulting in approximately \$2.2 million in impacts. In Mendon, damage due to flooding usually consists of impacts to roads, bridges, culverts, and legal trails.

As determined in the Community Hazard Risk Assessment, Table 4, inundation flooding is an unlikely occurrence with low potential impacts – making it a lower risk natural hazard in Mendon.

Three structures are in the Special Flood Hazard Area (< 1% of community structures); including one residential dwelling and an intake structure for the Rutland City municipal drinking water system.

According to FEMA, there are 2 flood insurance policies in Mendon. In total, these 2 policies cover \$700,000 in value.

There are no repetitive loss properties.

On the other hand, flash flooding can occur any time the area has heavy rain. It can impact areas in Town that are located outside of designated floodplains, including along streams confined by narrow valleys. Mendon is most vulnerable to road washouts from flash flooding on Wheelerville Road, Notch Road, Cream Hill Road, and the southern section of Falls Road (legal trail). Impacts can be exacerbated by undersized culverts and inadequate ditching.

As shown in **Figure 1**, Wheelerville and Notch Roads are locally important and heavily travelled. When roads are impacted by flooding, the Road Commissioner coordinates with State Dispatch and emergency services to close the roads and set up detours. The road closures create longer commute times for residents and longer emergency response times.

There are several private dams in Mendon – Orchard Drive, Deermont Pond, Journey’s End, Woodward Road, Elbow Road, and South Mendon Road. Although dam failure with resulting flash flooding is possible, the potential impacts are considered to be low.

None of the Town’s critical facilities or access to them are vulnerable to flooding.

The inventory of hydrologically connected roads completed in 2017 for the Municipal Roads General Stormwater Discharge Permit also identified areas vulnerable to flash flooding and included recommended corrective actions to make these areas more resilient.

Stream Geomorphic Assessments (SGAs) provide information about the physical condition of streams and the factors that influence their stability. SGA of the Moon Brook Watershed was completed in 2005. Using the data from the 2005 assessment, a River Corridor Management Plan for the Moon and Mussey Brooks was completed in 2008. The primary objective of the River Corridor Management Plan is to identify and prioritize river corridor protection and restoration projects within the Moon Brook watershed in Rutland City, Rutland Town, and Mendon. Recommendations for Moon Brook in Mendon include protection of the river corridor.

As previously described, Mendon Brook and its tributaries, including Brewers Brook, are the dominant water feature in Mendon. Mendon Brook fluvial erosion had devastating impacts on US Route 4 during Tropical Storm Irene. Route 4, Medway Road, Woodward Road, and Wheelerville Road remain vulnerable to erosion in Mendon and Brewers Brooks.



Fluvial Erosion Impacts to Bridge #25 over Mendon Brook on Medway Road – April 2019

The north end of Falls Road is vulnerable to erosion in North Branch Cold River. The area has been severely impacted in past storm events. Therefore, the Town completed a scoping study to determine how to stabilize the embankment. Engineering design for slope stabilization is underway.

The lower Notch Road is also vulnerable to erosion in the North Branch Cold River. During Irene, a section of road was washed away. The road remains closed today. As a result, the only viable access for residents living on Clark Mason and Northam roads is via Falls Road, which is not maintained by the Town during the winter.

As weather patterns shift and we see larger storms and more frequent freeze-thaw cycles, the Town will monitor for signs that rivers that have historically been stable becoming less stable, with increased erosion, widening, trees falling in from its banks, etc.

Flooding Hazard History

These are the most up to date significant events impacting Mendon. Federal declarations are depicted in **bold**.

4/15/2019: DR4445 1-2” rain with significant snow melt:

\$15,625 local damage; \$1,000,000 regional damage

7/1/2017: DR4330 3-4” rain the previous 3-4 days with

flash flooding on 7/1/17: no reported local damage;

\$1,972,000 regional damage

6/25-7/11/2013: DR4140 heavy rain over multiple

days: \$8,625 local damage; \$420,000 regional

damage

8/28/2011: DR4022 Tropical Storm Irene with ±11” rain:

\$2.2 million local damage (\$23,910 Individual /

\$2,204,532 Public Assistance)

8/12/2004: heavy rain: \$10,000 regional damage

12/16/2000: DR1358 2-4” rain: \$5,345 local damage

Extreme Cold/Snow/Ice

In the Rutland Region, most winter weather events occur between the months of December and March. Throughout the season, winter weather events can include snowstorms, mixed precipitation events of sleet and freezing rain, blizzards, glaze, extreme cold, the occasional ice storm, or a combination of any of the above. Events can also be associated with high winds or flooding, increasing hazard potential.

The costs of these storms come in the form of power outages due to heavy snow or ice accumulations, damaged trees, school closings and traffic accidents.

From 2001 to 2010, Rutland County experienced \$2.7 million in property and crop damage from winter storms. 2011 to 2020 experienced \$1.58 million in property damage, with \$300,000 due to a 10” - 20” heavy, wet snowfall across the county on December 9, 2014.

There have been four winter storm-related federally declared Disasters in the county (the ice storm of January 1998 – DR 1201; severe winter storms in December 2000 and 2014 – DR 1358 and DR 4207, respectively; and severe storm and flooding in April 2007 – DR 1698).

Typically, towns’ vulnerability to snow and ice storms are power outages and loss of road accessibility. The Town is somewhat prepared for a power outage during a severe winter storm. The primary local shelter has back-up power, but the Town Office, which serves as the alternate local shelter, does not.

Extreme cold can have impacts on public health and safety. Like high wind events, especially if extreme temperatures coincide with power outages which can cut off heat and communication services. Severe winter storm impacts can put vulnerable populations (e.g., older adults, children, sick individuals, pets) at even greater risk. See the High Wind hazard profile below for more information about the Town’s vulnerability to power outages.



Winter Storm – April 16, 2021

In general, snow accumulation has not made the Town vulnerable to loss of road accessibility, except for Falls Road, which is not maintained during the winter. The Town's fleet of snowplows ensures that most roads are accessible, even in major snow events. Roads adjacent to critical facilities are well maintained. Cream Hill and Wright roads are prone to drifting and are maintained accordingly.

Extreme Cold/Snow/Ice Hazard History

These are the most up to date significant events impacting Mendon. Federal declarations are depicted in **bold**.

4/16/2021: 7" snow: \$10,000 regional damage
 2/7/2020: 8-12" snow; ¼" ice: \$15,000 regional damage
 11/26/2018: 4-8" heavy snow: \$25,000 regional damage
 3/31/2017: 13" snow: \$10,000 regional damage
 12/29/2015: 3-5" snow with freezing rain: \$20,000 regional damage
 2/1-2/2015: Record cold month with 15 to 20+ days below zero and 10" snow: \$10,000 regional damage
 1/7/2015: 0 to 10 degrees with winds of 15-30 mph creating wind chills colder than -20 to -30 below zero: no reported local damages
12/9/2014: DR4207 10-20" snow: \$200,000 regional damage
 3/12-13/2014: 22" snow and 35-40 mph wind gusts: \$20,000 regional damage
 12/26/2012: Snowfall rate of 1-2" per hour with accumulations of 8-18": \$10,000 regional damage
 2/1/2011: up to 3" snow: weather-related vehicle fatality in Mendon
 2/23/2010: 6-30" snow: \$200,000 regional damage
 12/11/2008: 5-9" snow/glaze ice: \$25,000 regional damage
4/15-16/2007: DR1698 "Nor'icane" with 3" snow and rain with 60 to 80 mph winds: \$1,000,000 regional damage
 2/14/2007: 20" heavy snow: \$75,000 regional damage
 2/25/2006: 8" snow: \$15,000 regional damage
 10/25/2005: 19" snow: \$100,000 regional damage
3/5/2001: EM3167 2-18" snow: \$3,790 local damage

High Wind

Thunderstorms can produce high winds, lightning, flooding, rain, large hail, and even tornadoes. Thunderstorm winds are generally short in duration, involving straight-line winds and/or gusts more than 50 mph. Thunderstorm winds can cause power and communication outages, transportation and economic disruptions, significant property damage, and pose a high risk of injuries and loss of life.

From 2004 to 2010, for thunderstorms that caused more than \$200,000 in damage, Rutland County experienced nearly \$2 million in property damage. From 2011 to 2020, thunderstorms resulted in just under \$2.4 million in property damage in Rutland County, with \$525,000 due to a high wind event in May 2017.

Violent windstorms are possible here; Mendon is susceptible to high directional winds town-wide, but most damage can come from the east. Many storms with high winds result in downed trees, damaged phone and power lines, buildings, and other property. Mendon is vulnerable to power outages, which pose a potentially significant risk to many residents.

Downed trees within the road right-of-way are the root cause of many power outages during high wind events.



High Wind Event Tree Damage to Town Plow Truck – December 2019

To mitigate the impacts of power outages, the Town's primary local shelter (Barstow Memorial School in neighboring town of Chittenden) has been equipped with back-up power.

The Town Office does not have a source of back-up power. It serves as the alternate local shelter and local Emergency Operations Center (EOC). The Town Garage has a small generator that runs on gas for up to 6 hours. This is not ideal given it serves as an alternate local EOC and shelter.

During a disaster, the municipal response is managed by the EOC, this would include all communications – from phone calls to internet browsing and 2-way radio. Connectivity is crucial in times of crisis. Telecommunications are needed for warning systems before disaster, as well as for response during and recovery after. Power outages are the main reason for stopping communications, leaving the EOC significantly compromised.

Many residents in Mendon no longer have landline phones, even though cell service in Mendon is spotty. In the event of an emergency during a long-term power outage, the ability to contact emergency services could be compromised. This is a concern given Mendon’s remote and seasonal residents.

High Wind Hazard History

These are the most up to date significant events impacting Mendon. Federal declarations are depicted in **bold**.

- 3/1/2021: 46 mph wind: \$35,000 regional damage
- 12/25/2020: 43 mph wind: \$25,000 regional damage
- 8/4/2020: 45 mph wind: \$25,000 regional damage
- 2/24/2019: 48 mph wind: \$25,000 regional damage
- 4/1/2018: 55 mph wind: \$50,000 regional damage
- 10/30/2017: 40 mph wind: \$100,000 regional damage
- 7/23/2016: 55 mph wind: \$20,000 local damage
- 10/28/2015: 40 mph wind: \$50,000 regional damage
- 10/7/2013: 43 mph wind: \$15,000 regional damage
- 10/29/2012: 50 mph wind: \$25,000 regional damage
- 12/1/2010: 56 mph wind: \$250,000 regional damage
- 8/19/2009: 50 mph wind: weather-related vehicle fatality on US Route 4 in Mendon
- 8/25/2007: 55 mph wind: \$400,000 regional damage
- 10/28-29/2006: 50 mph wind: \$15,000 regional damage
- 9/29/2005: 35-45 mph wind: \$50,000 regional damage
- 6/29/2003: 60 mph wind: \$5,000 local damage

Vulnerability Summary

Flash Flooding/Fluvial Erosion

Location¹: *Flash Flooding* – Wheelerville Rd, Cream Hill Rd, Notch Rd, Falls Rd

Fluvial Erosion – US Route 4, Medway Rd, Woodward Rd, Wheelerville Rd, lower Notch Rd, Falls Rd

Vulnerable Assets¹: Roads, bridges, culverts, legal trails

Extent: ±11” rain; extent data for fluvial erosion not available

Impact: \$2.2 million local damage

Probability: >75% chance per year

Extreme Cold/Snow/Ice

Location¹: Town-wide; Drifting on Cream Hill and Wright Rd

Vulnerable Assets¹: Roads, culverts, bridges, trees, power lines, telecommunications systems

Extent: Up to 30” of snow; glaze ice; 80 mph winds; 15-20+ days below zero

Impact: \$3,790 local / \$1 million regional damage

Probability: >75% chance per year

High Wind

Location¹: Town-wide, most damage coming from east

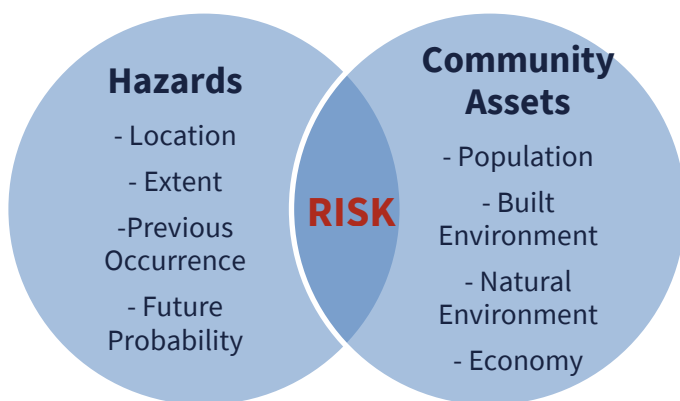
Vulnerable Assets¹: Power lines, telecommunications systems, buildings, trees

Extent: 60 mph winds

Impact: \$20,000 local / \$400,000 regional damage

Probability: >75% chance per year

¹ See **Appendix B:** Local Natural Hazards and Vulnerabilities Map



The Hazard Identification and Risk Assessment is the foundation for the mitigation strategy to reduce future losses.

6 HAZARD MITIGATION STRATEGY

The highest risk natural hazards and vulnerabilities identified in the previous section of this Plan directly inform the hazard mitigation strategy outlined below, which the community will strive to accomplish over the coming years. The mitigation strategy chosen by the Town includes the most appropriate activities to lessen vulnerabilities from potential hazards.

Mitigation Goals

The Hazard Mitigation Planning Team discussed mitigation goals and identified the following as the community's main mitigation goals:

- Reduce or avoid long-term vulnerabilities to identified hazards.
- Reduce the loss of life and injury resulting from these hazards.
- Mitigate financial losses incurred by municipal, residential, industrial, agricultural, and commercial establishments due to disasters.
- Reduce the damage to public infrastructure resulting from these hazards.
- Encourage hazard mitigation planning as a part of the municipal planning process.
- Encourage continued implementation of existing mitigation regulatory capabilities, such as Flood Hazard Area land use bylaws.
- Recognize the connections between land use, stormwater management, road design, maintenance, and the effects from disasters.
- Ensure that mitigation measures are sympathetic to the natural features of community rivers, streams, and other surface waters; historic resources; character of neighborhoods; existing land use and the capacity of the community to implement them.

Community Capabilities

Each community has a unique set of capabilities, including authorities, programs, staff, funding, and other resources available to accomplish mitigation and reduce long-term vulnerability. Mendon's mitigation capabilities that reduce hazard impacts or that could be used to implement hazard mitigation activities are listed below.

Administrative and Technical

In addition to the Emergency Management staff described in Section 3, municipal staff that can be used for mitigation planning and to implement specific mitigation actions include: Town Administrator (who also serves as the Highway Department Grant Administrator and Town Health Officer), Town Clerk and Treasurer, Assistant Town Clerk and Treasurer, Road Commissioner, and crew.

In addition to paid staff, there is a 3-member Select Board, 7-member Planning Commission, Town Health Officer, Tree Warden, Fire Warden, and Zoning Administrator.

To augment local resources, the Town has a formal public works mutual aid agreement for emergency response and a shelter agreement with neighboring town of Chittenden to partner with Barstow Memorial School for local sheltering. Technical support is available through the RRPC in the areas of land use planning, emergency management, transportation, GIS mapping, and grant writing. Technical support is also available through the State ANR for floodplain administration and VTrans Districts for hydraulic analyses.

Strengths: dedicated and highly skilled staff person to administer grants for highway infrastructure; all staff are skilled and experienced in response and recovery, having gone through Tropical Storm Irene

Areas for Improvement: need younger individuals to fill various positions in town as Mendon's aging road crew and volunteers begin to step down

Planning and Regulatory

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Examples of planning capabilities that can either enable or inhibit mitigation include land use plans, capital improvement programs, transportation plans, stormwater management plans, disaster recovery and reconstruction plans, and emergency preparedness and response plans. Examples of regulatory capabilities include the enforcement of zoning ordinances, subdivision regulations, and building codes that regulate how and where land is developed, and structures are built.

Municipal Plan: Adopted March 2022

Description: A framework and guide for reaching community land use goals.

Relationship to Natural Hazard Mitigation Planning: Includes specific goals and policies related to mitigating natural hazards.

Zoning Regulations with Flood Hazard Overlay District Requirements: Adopted March 2010

Description: Provides for orderly community growth in harmony with the goals established in the Mendon Town Plan.

Relationship to Natural Hazard Mitigation Planning: Establish site plan review and zoning districts, including Flood Hazard Overlay District, with specific standards for proposed development. Requirements are designed to minimize and prevent loss of life and property, the disruption of commerce, the impairment of the tax base, and the extraordinary public expenditures and demands on public services that result from flooding and other flood related hazards.

Road and Bridge Standards: Adopted March 2022

Description: Provide minimum codes and standards for construction, repair, maintenance of town roads and bridges.

Relationship to Natural Hazard Mitigation Planning: Standards include management practices and are designed to ensure safety of the traveling public, minimize damage to road infrastructure during flood events, and enhance water quality protections.

Road Erosion Inventory Report: December 2018

Description: Prioritizes those infrastructure projects necessary to improve transportation network resiliency and water quality.

Relationship to Natural Hazard Mitigation Planning: Improvements are designed to minimize or eliminate flood impacts on hydrologically connected road segments.

Local Emergency Management Plan: Adopted April 2022

Description: Establishes lines of responsibility and procedures to be implemented during a disaster and identifies high risk populations, hazard sites, and available resources.

Relationship to Natural Hazard Mitigation Planning: Includes actions for tracking events and response actions including damage reports to facilitate funding requests during recovery. This type of information can be essential to preparing hazard mitigation project applications for FEMA funding.

Strengths: land use ordinances are effective at reducing hazard impacts and are adequately administered and enforced; development of a townwide Stormwater Management Plan is underway

Areas for Improvement: capital planning

Financial

Financial capabilities are the resources that a community has access to or is eligible to use to fund mitigation actions.

Mendon's current annual town budget is approximately \$1,253,186, with \$639,189 to fund the Highway Department. Although the Town has not done so in the past, it is eligible to incur debt through general obligation bonds to fund mitigation actions.

Strengths: highly skilled staff capable of keeping financial records and developing and keeping within town budget; dedicated reserve funds that can be used to fund mitigation actions; maximize grant opportunities (CDBG, FEMA, State funding programs)

Areas for Improvement: None at this time

Education and Outreach

Mendon has several education and outreach opportunities that could be used to implement mitigation activities and communicate hazard-related information:

- Town Website
- Town Facebook Page
- Front Porch Forum
- Mendon on the Move Committee
- Mendon Seniors
- Mendon Historical Society
- Barstow Youth Group
- Mendon Mountain Bike Club

Strengths: several active community groups strong; online presence

Areas for Improvement: better coordination is needed to help implement future mitigation actions

National Flood Insurance Program Compliance

The Town joined the National Flood Insurance Program (NFIP) in 1985. The effective date of the current Flood Insurance Rate Map (FIRM) is August 28, 2008. The Zoning Administrator enforces NFIP compliance through permit review requirements in its Flood Hazard Overlay District regulations. Mendon's regulations outline detailed minimum standards for development in flood hazard areas defined as FEMA Special Flood Hazard Areas and Floodway Areas.

The Town discussed the following as possible actions to continue NFIP compliance:

- 1) Prepare, distribute, or make available NFIP insurance explanatory pamphlets or booklets.
- 2) Participate in NFIP training offered by the State and/or FEMA.
- 3) Establish mutual aid agreements with neighboring communities to address administering the NFIP following a major storm.

State Incentives for Flood Mitigation

Vermont's Emergency Relief Assistance Funding (ERAF) provides state funding to match FEMA Public Assistance after federally declared disasters. Eligible public costs are generally reimbursed by FEMA at 75% with the State matching 7.5%. The State will increase its match to 12.5% or 17.5% of the total cost if communities take steps to reduce flood risk as described below.

12.5% funding for eligible communities that have adopted four (4) mitigation measures:

- 1) NFIP participation
- 2) Town Road and Bridge Standards
- 3) Local Emergency Plan
- 4) Local Hazard Mitigation Plan

17.5% funding for eligible communities that also participate in FEMA's Community Rating System OR adopt river corridor protection bylaws that meets or exceeds the Vermont ANR model regulations.

Mendon's current ERAF rate is 12.5% because they adopted all four mitigation measures. Mendon could increase their ERAF rate to 17.5% by adopting river corridor protection bylaws.

Mitigation Action Identification

The Hazard Mitigation Planning Team discussed the mitigation strategy, reviewed projects from the 2017 Plan, and identified possible new actions from the following categories for each of the highest risk natural hazards identified in Section 5.

- 1) **Local Plans and Regulations:** These actions include government authorities, policies, or codes that influence the way land and buildings are developed and built.

- 2) **Structure and Infrastructure Projects:** These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This applies to public or private structures as well as critical facilities.
- 3) **Natural Systems Protection:** These actions minimize damage and losses and preserve or restore the functions of natural systems.
- 4) **Education and Awareness Programs:** These actions inform and educate the public about hazards and potential ways to mitigate them. Although this type of mitigation reduces risk less directly than structural projects or regulation, it is an important foundation. Greater understanding and awareness are more likely to lead to community support for direct actions.

Local Plans and Regulations

Integrate Mitigation into Capital Improvement Programs: Risk assessment and hazard mitigation principles can be incorporated into capital planning.

Manage Development in Erosion Hazard Areas: The intent of River Corridor Bylaws is to allow for wise use of property within river corridors that minimizes potential damage to existing structures and development from flood-related erosion.

Improve Stormwater Management Planning: Rain and snowmelt can cause flooding and erosion in developed areas. A community-wide stormwater management plan can address stormwater runoff.

Reduce Impacts to Roadways: The leading cause of death and injury during winter storms is automobile accidents, so it is important to plan for and maintain adequate road and debris clearing capabilities.

Develop a Road Right-of-Way Vegetation Management Plan: Identify community priorities and plan of action for site-specific tree and roadside forest management to increase roadside resilience.

Structure and Infrastructure Projects

Remove Existing Structures from Flood Hazard Areas: FEMA policy encourages removal of structures from flood-prone areas to minimize future losses and preserve lands subject to repetitive flooding.

Improve Stormwater Drainage Capacity: Minimize inundation flooding and fluvial erosion by 1) increasing drainage/absorption capacities with green stormwater management practices; 2) increasing dimensions of undersized drainage culverts in flood-prone areas; 3) stabilizing outfalls with riprap and other slope stabilization techniques; and 4) re-establishing roadside ditches.

Conduct Regular Maintenance for Drainage Systems: Help drainage systems and flood control structures function properly with 1) routine cleaning and repair; 2) cleaning debris from support bracing underneath low-lying bridges; and 3) inspecting bridges and identifying if any repairs are needed to maintain integrity or prevent scour.

Protect Infrastructure and Critical Facilities: Minimize losses to infrastructure and protect critical facilities from flood events by 1) elevating roads above base flood elevation to maintain dry access; 2) armoring streambanks near roadways to prevent washouts; 3) rerouting a stream away from a vulnerable roadway; and 4) floodproofing facilities.

Protect Power Lines: Protect power lines by 1) inspecting and maintaining hazardous trees in the road right-of-way and 2) burying power lines.

Protect Critical Roadways: Use snow fences or living snow fences (e.g., rows of trees) to limit blowing and drifting of snow.

Retrofit Critical Facilities: Critical facilities can be protected from the impacts of high winds and winter storms by 1) retrofitting them to strengthen structural frames to withstand wind and snow loads; 2) anchoring roof-mounted mechanical equipment; and 3) installing back-up generators or quick connect wiring for a portable generator.

Natural Systems Protection

Protect and Restore Natural Flood Mitigation Features: Natural conditions can provide floodplain protection, riparian buffers, groundwater infiltration, and other ecosystem services that mitigate flooding. It is important to preserve such functionality. Examples include 1) adding vegetative buffers in riparian areas; 2) stabilizing stream banks; 3) removing berms; 4) minimizing impervious area development; and 5) restore incision areas.

Education and Awareness Programs

Educate Residents about Extreme Winter Weather: Winter storms create a higher risk of car accidents, hypothermia, frostbite, carbon monoxide poisoning, and heart attacks from overexertion. Educational outreach can help minimize these risks.

Assist Vulnerable Populations: Measures could be taken to ensure vulnerable populations are adequately protected from the impacts of natural hazards, such as 1) organizing outreach and 2) establishing and promoting accessible heating or cooling centers in the community.

Mitigation Action Evaluation and Prioritization

For each mitigation action identified, the Hazard Mitigation Planning Team evaluated its potential benefits and/or likelihood of successful implementation. Each action was evaluated against a broad range of criteria, including a planning level assessment of whether the costs are reasonable compared to the probable benefits. Results of this evaluation are presented in **Table 5**.

Mitigation Action Implementation

After careful evaluation and prioritization, the Planning Team agreed on a list of actions that are acceptable and practical for the community to implement.

Actions without overall public support/political will were not selected for implementation. Actions whose costs were not reasonable compared to probable benefits were also not selected.

For the selected actions, the Planning Team then 1) assigned a responsible party to lead the implementation of each action; 2) identified potential funding; and 3) developed a timeframe for implementation. This action plan is presented in **Table 6**.

Note that the Town will make every effort to maximize use of future Public Assistance Section 406 Mitigation opportunities when available during federally declared disasters.

Table 5: Mitigation Action Evaluation and Prioritization

Mitigation Action	Life Safety	Prop Protect	Tech	Political	Admin	Other Obj	Benefit Score	Est Cost	C/B
Local Plans and Regulations									
Recommended for Implementation									
Integrate Mitigation into Capital Improvement Programs	1	1	1	1	1	1	6	1	Yes
Plan for and Maintain Adequate Road and Debris Clearing Capabilities	1	1	1	1	1	1	6	1	Yes
Update Road Erosion and Culvert Inventories	1	1	1	1	1	1	6	1	Yes
Review VTrans Bridge Inspection Reports ¹ and Plan for Identified Repairs to Prevent Scour	1	1	1	1	1	1	6	1	Yes
Plan for Road Right-of-Way Vegetation Management	1	1	1	0	0	1	4	1	Yes
Not Recommended for Implementation									
Improve Stormwater Management Planning by Completing a Stormwater Master Plan	Work began in August 2022 to develop a Stormwater Master Plan.								
Manage Development in Erosion Hazard Areas with River Corridor Bylaws	1	1	1	-1	1	1	4	4	Yes
Structure and Infrastructure Projects									
Recommended for Implementation									
Routinely Clean and Repair Stormwater Infrastructure	1	1	1	1	1	1	6	1	Yes
Install/Re-establish Roadside Ditches	1	1	1	1	1	1	6	1	Yes
Stabilize Outfalls	1	1	1	1	1	1	6	1	Yes
Protect Power Lines and Roadway by Inspecting and Removing Hazardous Trees in Road ROW	1	1	1	1	1	1	6	1	Yes
Install Back-up Generators or Quick Connect Wiring at Critical Facilities	1	1	1	1	1	1	6	1	Yes
Increase Dimension of Drainage Culverts in Flood-Prone Areas	1	1	1	1	1	1	6	1-3	Yes
Not Recommended for Implementation									
Remove Existing Structures from Flood-Prone Areas	The Planning Team did not recommend this action for implementation as <1% of community structures are within the Special Flood Hazard Area and there are no repetitive loss properties.								
Increase Drainage/Absorption Capacities with Green Stormwater Management Practices	The Planning Team did not recommend this action for implementation due to lack of information about appropriate locations for these practices. Once the Town completes a Stormwater Master Plan, appropriate locations may be identified and addressed accordingly.								
Routinely Clear Debris from Support Bracing Underneath Low-Lying Bridges	No low-lying bridges with support bracing, so the Planning Team did not evaluate this action.								
Elevate Roads Above Base Flood Elevation to Maintain Dry Access	As described in Section 5, inundation flooding is a lower risk hazard in Mendon. No roads vulnerable to inundation flooding, so the Planning Team did not evaluate this action.								
Floodproof Critical Facilities	No critical facilities that require floodproofing, so the Planning Team did not evaluate this action.								
Use Snow Fence on Critical Roadways	As described in Section 5, drifting is not an issue on any critical roadways, so the Planning Team did not evaluate this action.								
Retrofit Critical Facilities to Strengthen Structural Frames to Withstand Wind and Snow Loads	No critical facilities that need structural retrofits, so the Planning Team did not evaluate this action.								

¹ VTrans inspects all town-owned bridges in the State's Town Highway Bridge Program every two years. Bridge inspection reports are available on the VTrans website.

Mitigation Action	Life Safety	Prop Protect	Tech	Political	Admin	Other Obj	Benefit Score	Est Cost	C/B
Structure and Infrastructure Projects (cont.)									
Not Recommended for Implementation (cont.)									
Anchor Roof-Mounted Mechanical Equipment on Critical Facilities	No critical facilities with roof-mounted mechanical equipment, so the Planning Team did not evaluate this action.								
Bury Power Lines	1	1	1	-1	-1	0	1	3	No
Natural Systems Protection									
Recommended for Implementation									
Remove Berms and/or Accumulated Debris from Stream to Restore Flood Capacity	1	1	1	1	0	1	5	2	Yes
Not Recommended for Implementation									
Establish Vegetative Buffers in Riparian Areas	Planning Team did not evaluate these actions because there are no known areas within Town road rights-of-way; however, the Town will collaborate with the Natural Resources Conservation District to identify and implement natural systems protection projects that meet the goals of this Plan.								
Stabilize Stream Banks									
Restore Incision Areas									
Education and Awareness Programs									
Recommended for Implementation									
Keep the Ditches Clean Campaign	0	1	0	0	1	0	2	1	Yes
Not Recommended for Implementation									
Educate Residents About Winter Storms	Town already has an awareness program in place to inform residents how to prepare for severe winter storm-related hazards (e.g., extreme cold, freezing pipes).								
Assist Vulnerable Populations	Town already has a plan in place to identify and monitor the needs of vulnerable populations – see current Local Emergency Management Plan.								

Table 5 Evaluation Criteria:

Life Safety – How effective will the action be at protecting lives and preventing injuries?

Property Protection – How effective will the action be at eliminating or reducing damage to structures and infrastructure?

Technical – Is the mitigation action a long-term, technically feasible solution?

Political – Is there overall public support/political will for the action?

Administrative – Does the community have the administrative capacity to implement the action?

Other Community Objectives – Does the action advance other community objectives, such as capital improvements, economic development, environmental quality, or open space preservation?

Rank each of the above criteria in Table 5 with a -1, 0, or 1 using the following table:

1= Highly effective or feasible

0 = Neutral

-1 = Ineffective or not feasible

Estimated Cost – 1 = less than \$50,000; 2 = \$50,000 to \$100,000; 3 = more than \$100,000

C/B – Are the costs reasonable compared to the probable benefits? Yes or No

Table 6 Community Lifelines Description: A Community Lifeline enables the continuous operation of critical government and business functions and is essential to human health and safety or economic security. The primary objective of lifelines is to ensure the delivery of critical services that alleviate immediate threats to life and property when communities are impacted by disasters. These critical services are organized into one of seven lifelines:








 Safety and Security	 Food, Water, Shelter	 Health and Medical	 Energy (Power & Fuel)	 Communications	 Transportation	 Hazardous Materials
<ol style="list-style-type: none"> 1. Law Enforcement 2. Fire Service 3. Search & Rescue 4. Government Service 5. Community Safety 	<ol style="list-style-type: none"> 1. Food 2. Water 3. Shelter 4. Agriculture 	<ol style="list-style-type: none"> 1. Medical Care 2. Public Health 3. Patient Movement 4. Medical Supply Chain 5. Fatality Management 	<ol style="list-style-type: none"> 1. Power Grid 2. Fuel 	<ol style="list-style-type: none"> 1. Infrastructure 2. Responder Communications 3. Alerts, Warnings, & Messages 4. Finance 5. 911 & Dispatch 	<ol style="list-style-type: none"> 1. Highway/Road/Motor Vehicle 2. Mass Transit 3. Railway 4. Aviation 5. Maritime 	<ol style="list-style-type: none"> 1. Facilities HAZMAT, Pollutants, Contaminants

Table 6: Mitigation Action Implementation

Plan for and Maintain Adequate Road and Debris Clearing Capabilities: A leading cause of death and injury during winter storms is from auto accidents so it is important to plan for and maintain adequate road and debris clearing capabilities. This includes capital planning and annual funding to support the facilities (garage and equipment) and appropriate number of staff needed to maintain the transportation network in Mendon.

ADDRESSED HAZARDS

 **Winter Storm**
Primary Hazard

 **High Wind**

Lead Party

Selectboard

Type of Project

Local Plans and Regulations

COMMUNITY LIFELINES TARGETED

 **Safety & Security**

 **Transportation**
Primary Lifeline

Area of Impact

Town-wide; ±30-mile road network
Town Garage, 157 Park Lane

FUNDING SOURCES

- Local funding

PARTNERSHIPS

- Road Commissioner
- Town Administrator

BENEFIT SCORE = 6

PROJECT TIMELINE

To coincide with preparing annual Town budget each Oct

Update Road Erosion and Culvert Inventories: These inventories were completed in 2017 and 2020 and serve as the basis for asset management and should be kept up-to-date annually, with a full re-assessment every 5 years.

ADDRESSED HAZARDS

 **Flooding**

Lead Party

Road Commissioner

Type of Project

Local Plans and Regulations

COMMUNITY LIFELINES TARGETED

 **Safety & Security**

 **Transportation**
Primary Lifeline

Area of Impact

Town-wide; ±22 miles of hydrologically connected roads and ±306 culverts

FUNDING SOURCES

- Local funding
- VTrans Grant Programs

PARTNERSHIPS

- Rutland RPC
- Town Administrator

BENEFIT SCORE = 6

PROJECT TIMELINE

2024 and 2025 construction seasons

Plan for Bridge Repairs: Eleven (11) town bridges are vulnerable to flash flooding and/or fluvial erosion; 8 of these are town long structures inspected by VTrans. The Town will implement a **Bridge Inspection Program** to ensure the VTrans inspection reports for all town long structures will be reviewed and used to plan for needed flood-related bridge repairs such as scour, as needed.

ADDRESSED HAZARDS**Flooding****Lead Party**

Town Administrator

Type of Project

Local Plans and Regulations

COMMUNITY LIFELINES TARGETED**Safety & Security****Transportation**

Primary Lifeline

Area of ImpactMeadowlake Dr, Medway Rd,
Wheelerville Rd**FUNDING SOURCES**

- Local funding
- VTrans Structures Program

PARTNERSHIPS

- VTrans
- Road Commissioner

BENEFIT SCORE = 6**PROJECT TIMELINE**

Review VTrans Reports Oct 2023
Develop Plan(s), if needed Oct 2023
and annually thereafter

Develop a Road Right-of-Way (ROW) Vegetation Management Plan: Hazard trees in the road ROW can contribute to power and communication outages as well as debris in the roadway during wind events and winter storms. This hazard is exacerbated by the possibility of an Emerald Ash Borer infestation. To increase roadside resilience, Mendon will develop a plan to identify 1) community priorities and 2) plan of action for site-specific tree and roadside forest management.

ADDRESSED HAZARDS**High Wind**

Primary Hazard

**Winter Storm****Invasive Species****Lead Party**

Town Administrator

Type of Project

Local Plans and Regulations

COMMUNITY LIFELINES TARGETED**Energy**

Primary Lifeline

**Transportation****Communications****Area of Impact**

Town-wide

FUNDING SOURCES

- Local funding

PARTNERSHIPS

- Vermont Urban & Community Forestry Program (UCF)
- VT Dept of Forests, Parks, Recreation
- UVM Extension
- USDA Forest Service

BENEFIT SCORE = 4**PROJECT TIMELINE**

Partner Outreach Jan 2025
Complete Plan by Jul 2025

Routinely Clean and Repair Stormwater Infrastructure: Regular maintenance is one of the most effective ways to mitigate the impacts of flooding. Routine cleaning and repairs of catch basins, ditches, and culverts will be done according to the Highway Department's maintenance schedule and the Municipal Roads General Permit (MRGP).

ADDRESSED HAZARDS**Flooding****Lead Party**

Road Commissioner

Type of Project

Structure and Infrastructure

COMMUNITY LIFELINES TARGETED**Safety & Security****Transportation**

Primary Lifeline

Area of ImpactTown-wide; ±30-mile road network, and
±306 culverts**FUNDING SOURCES**

- Local funding

PARTNERSHIPS

- None

BENEFIT SCORE = 6**PROJECT TIMELINE**

See Highway Department's
Maintenance Schedule and MRGP

Install/Re-work Roadside Ditches: Properly installed and stabilized roadside ditches are critical to protect the integrity of the road. Although Mendon has an extensive network of ditches, there are 59 road segments (328 ft) with ditches that must be improved to current municipal Road Standards. Of these, 5 are high or very high priority, 28 are moderate, and 26 are low priority.

ADDRESSED HAZARDS**Flooding****Lead Party**

Road Commissioner

Type of Project

Structure and Infrastructure

COMMUNITY LIFELINES TARGETED**Safety & Security****Transportation**
Primary Lifeline**Area of Impact**

Barker Rd, Heather Ln, Journeys End, Medway Rd, Meadowlake Dr, Merry Maple Dr, Notch Rd, Orchard Rd, Overbrook Dr, Ridge Rd, Round Robin Rd, Sherwood Dr, Wheelerville

FUNDING SOURCES

- Local funding
- VTrans Grant Programs

PARTNERSHIPS

- VTrans

BENEFIT SCORE = 6**PROJECT TIMELINE**2025 construction season – all high/very high priorities
By 2036 – all remaining moderate and low priorities

Stabilize Culvert Outfalls: Erosion at culvert outlets is common and can cause structural failure with serious downstream consequences. Properly stabilized outfalls protect channel bank stability and reduce erosion. Mendon has identified the following locations where culvert outlet stabilization is needed.

ADDRESSED HAZARDS**Flooding****Lead Party**

Road Commissioner

Type of Project

Structure and Infrastructure

COMMUNITY LIFELINES TARGETED**Safety & Security****Transportation**
Primary Lifeline**Area of Impact**

- 1) Journeys End and Wheelerville
- 2) Others as required by MRGP

FUNDING SOURCES

- Local funding
- VTrans Grant Programs
- FEMA/VEM Mitigation Grant

PARTNERSHIPS

- VTrans
- ANR Stream Engineer
- US Army Corps of Engineers

BENEFIT SCORE = 6**PROJECT TIMELINE**

- 1) 2027 construction season
- 2) See MRGP

Remove Hazard Trees in Road Right-of-Way (ROW): Hazard trees in the road ROW can contribute to power and communication outages as well as debris in the roadway during wind events and winter storms. This hazard is exacerbated by the possibility of an Emerald Ash Borer infestation. Mendon will remove hazard trees within their road ROW and/or request removal by Green Mountain Power if also within the power line ROW in accordance with their Road ROW Vegetation Management Plan.

ADDRESSED HAZARDS**High Wind**
Primary Hazard**Winter Storm****Invasive Species****Lead Party**

Road Commissioner

Type of Project

Structure and Infrastructure

COMMUNITY LIFELINES TARGETED**Energy**
Primary Lifeline**Transportation****Communications****Area of Impact**

Town-wide

FUNDING SOURCES

- Local funding

PARTNERSHIPS

- Tree Warden
- Green Mountain Power

BENEFIT SCORE = 6**PROJECT TIMELINE**

See Road ROW Vegetation Management Plan

Install Back-up Power at Critical Facilities: Generators (standby or portable) are emergency equipment that provide a secondary source of power to a facility. Mendon has identified two (2) critical facilities, which serve as local EOCs and alternate shelters, needing back-up power. This action was recommended for implementation in 2017 and remains a priority to address.

ADDRESSED HAZARDS

All Hazards
Including Extreme Cold

Lead Party

Town Administrator

Type of Project

Structure and Infrastructure

COMMUNITY LIFELINES TARGETED

Energy
Primary Lifeline



Food, Water, Shelter

Area of Impact

- 1) Town Office
(primary EOC/alternate shelter)
- 2) Town Garage
(alternate EOC/alternate shelter)

FUNDING SOURCES

- Local funding
- FEMA/VEM Mitigation Grant

PARTNERSHIPS

- Selectboard

BENEFIT SCORE = 6

PROJECT TIMELINE

- 1) 2023 construction season
- 2) 2024 construction season

Adequately Size Drainage and Perennial Stream Culverts in Flood-Prone Areas: Undersized culverts can lead to road washouts and flooding. Mendon has identified several locations where upsized culverts are needed (or may be needed).

ADDRESSED HAZARDS

Flooding

Lead Party

Road Commissioner

Type of Project

Structure and Infrastructure

COMMUNITY LIFELINES TARGETED

Safety & Security



Transportation
Primary Lifeline

Area of Impact

- 1) Journeys End C22-01; Notch Rd C2-17, C2-36; Wheelerville C7-67, C7-65, C7-20, C7-28, C7-29
- 2) Wheelerville C7-62, C7-63, C7-26
- 3) Wheelerville Rd C7-37 and C7-38
- 4) Wheelerville Rd C7-66 and C7-63
- 5) Wheelerville Rd C7-46
- 6) Others as required by MRGP

FUNDING SOURCES

- Local funding
- VTrans Grant Programs
- FEMA/VEM Mitigation Grant

PARTNERSHIPS

- VTrans
- ANR Stream Engineer
- US Army Corps of Engineers

BENEFIT SCORE = 6

PROJECT TIMELINE

- 1) 2023 construction season
- 2) 2024 construction season
- 3) 2025 construction season
- 4) 2026 construction season
- 5) 2027 construction season
- 6) See MRGP

Remove Accumulated Debris to Restore Flood Capacity: Meadowlake Dr, Medway Rd, and Wheelerville Rd are vulnerable to flooding because the carrying capacity of Mendon Brook has been reduced by significant deposition and woody debris accumulating in the stream channel. Mendon will work with project partners to explore options to restore the flood capacity of the stream channel. This action was recommended for implementation in 2017 and remains a priority to address.

ADDRESSED HAZARDS

Flooding

Lead Party

Selectboard

Type of Project

Natural Systems Protection

COMMUNITY LIFELINES TARGETED

Safety & Security
Primary Lifeline



Transportation

Area of Impact

Mendon Brook Watershed

FUNDING SOURCES

- Local funding
- VANR Water Quality Grants
- FEMA/VEM Mitigation Grant

PARTNERSHIPS

- ANR Stream Engineer
- US Army Corps of Engineers
- Rutland NRC
- Private Property Owners

BENEFIT SCORE = 5

PROJECT TIMELINE

Outreach to Partners by Oct 2024

Keep the Ditches Clean Campaign: Mendon will undertake education and awareness efforts by discussing this matter at Town Meeting and publishing information in the Town website, community social media sites, and the annual Town Report on the importance of keeping the municipal ditches free of yard waste and other debris.

ADDRESSED HAZARDS



Flooding

Lead Party

Town Administrator

Type of Project

Education and Awareness

COMMUNITY LIFELINES



Safety & Security



Transportation
Primary Lifeline

Area of Impact

Town-wide

FUNDING SOURCES

- Local funding

PARTNERSHIPS

- Road Commissioner
- Ready.gov

BENEFIT SCORE = 2

PROJECT TIMELINE

Jan 2023

Process for Incorporating Plan Requirements into Other Planning Mechanisms

For Mendon to succeed in reducing long-term risks, the information and recommendations of the Local Hazard Mitigation Plan should be integrated throughout government operations.

The following are specific examples of how information and recommendations from the 2017 Plan update were incorporated into other plans, programs, and procedures:

- Mendon Stormwater Master Plan, begun in 2022
- Mendon Town Plan, adopted in 2022
- Local Emergency Management Plan, including a Vulnerable Populations Communication Protocol, adopted in 2022
- Local Road and Bridge Standards, adopted in 2022
- Culvert Inventory, completed in 2020
- Road Erosion Inventory, completed in 2017

The following are specific examples of how the Town will incorporate the 2022 Plan update into other plans, programs, and procedures:

- The Selectboard will incorporate risk assessment and hazard mitigation goals into capital planning efforts and improvement programs.
- Mendon has received a Transportation Alternatives Grant from VTrans for a scoping study of safety issues on the US Route 4 corridor as it passes through Mendon, e.g., bicycle and pedestrian safety. An engineering firm will be retained to work with the Town on those needs and any other safety issues that are identified, e.g., fallen tree hazards or winter storm issues. The scoping study is proposed to be completed in 2024.
- The Planning Commission will integrate the hazard mitigation goals for disaster resiliency, including NFIP compliance, into the goals and objectives of the next updates to the Town Plan and Land Use Bylaws.

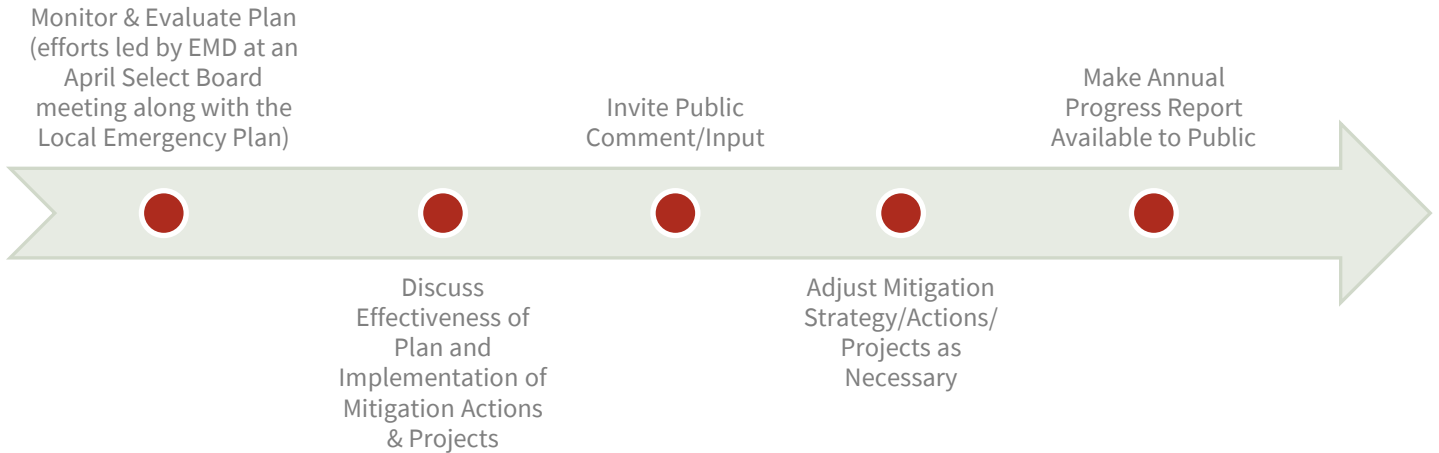
- The Road Commissioner will implement several mitigation infrastructure projects (e.g., upsize perennial and drainage culverts in flood-prone areas, install/re-work roadside ditches) through existing plans (2017 Road Erosion Inventory and Report for hydrologically connected road segments and forthcoming Stormwater Master Plan which should be completed in 2024 and utilized to priorities projects).
- The Town Administrator (or an appointed committee) will work with the Rutland Natural Resources Conservation District to identify opportunities to collaborate on implementing natural resources protection projects that meet the goals of this Plan.
- The Town Administrator will work with the Town Clerk to provide NFIP information materials at the Town Office and on the Town's website – including promotion of flood insurance, public safety information, and development regulations.
- The Selectboard and Planning Commission will encourage the Zoning Administrator to participate in regular NFIP-related trainings.

7 PLAN MAINTENANCE

This Plan is dynamic. To ensure the Plan remains current and relevant, it is important it be monitored, evaluated, and updated periodically.

Monitoring and Evaluation

This Plan will be monitored and evaluated annually starting in 2024 in accordance with the following process:



The status (e.g., in progress, complete) of each mitigation action should be recorded in **Table 7**. If the status is “in progress” note whether the action is on schedule. If not, describe any problems, delays, or adverse conditions that will impair the ability to complete the action.

Updating

This Plan will be updated at a minimum every five (5) years in accordance with the following process:

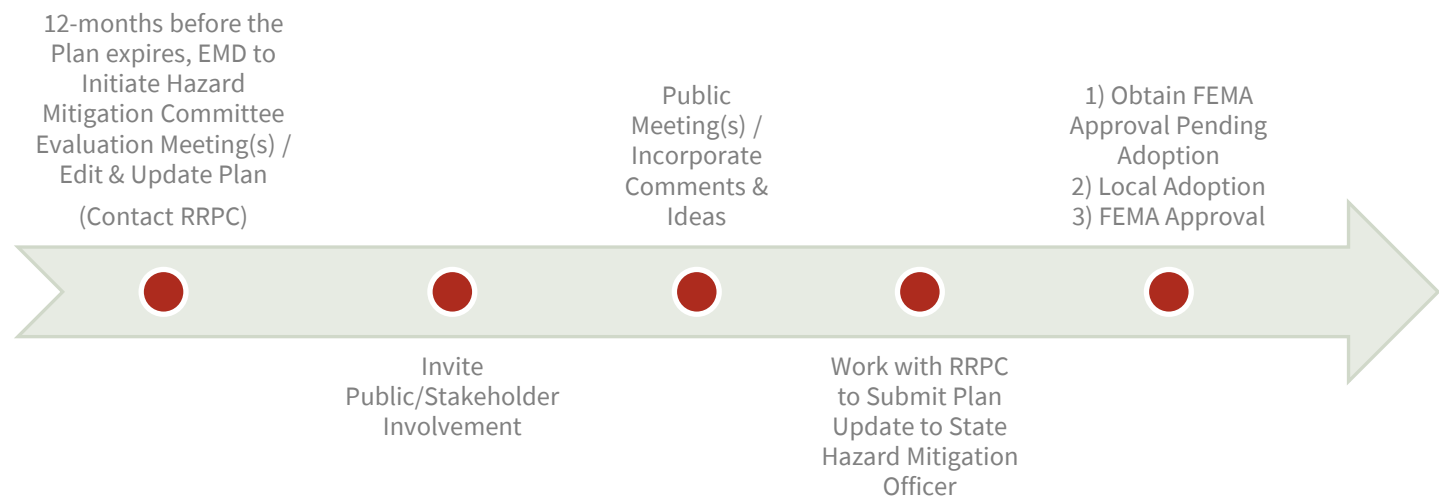


Table 7: Mitigation Action Status

Mitigation Action	2024	2025	2026	2027	2028
Local Plans and Regulations					
Plan for and Maintain Adequate Road and Debris Clearing Capabilities					
Update Road Erosion and Culvert Inventories					
Plan for Bridge Repairs					
Develop a Road Right-of-Way (ROW) Vegetation Management Plan					
Structure and Infrastructure Projects					
Routinely Clean and Repair Stormwater Infrastructure					
Install/Re-work Roadside Ditches					
Stabilize Culvert Outfalls					
Remove Hazard Trees in Road Right-of-Way (ROW)					
Install Back-up Power at Critical Facilities					
Adequately Size Drainage and Perennial Stream Culverts in Flood-Prone Areas					
Natural Systems Protection					
Remove Accumulated Debris to Restore Flood Capacity					
Education and Awareness Programs					
Keep the Ditches Clean Campaign					

CERTIFICATE OF ADOPTION
TOWN OF Mendon, Vermont Select Board
A RESOLUTION ADOPTING THE Mendon, Vermont 2022 Local Hazard Mitigation Plan

WHEREAS, the Town of Mendon has historically experienced severe damage from natural hazards and it continues to be vulnerable to the effects of the hazards profiled in the **Mendon, Vermont 2022 Local Hazard Mitigation Plan**, which result in loss of property and life, economic hardship, and threats to public health and safety; and

WHEREAS, the Town of Mendon has developed and received conditional approval from the Federal Emergency Management Agency (FEMA) for its **Mendon, Vermont 2022 Local Hazard Mitigation Plan (Plan)** under the requirements of 44 CFR 201.6; and

WHEREAS, the **Plan** specifically addresses hazard mitigation strategies, and Plan maintenance procedures for the Town of Mendon; and

WHEREAS, the **Plan** recommends several hazard mitigation actions (projects) that will provide mitigation for specific natural hazards that impact the Town of Mendon with the effect of protecting people and property from loss associated with those hazards; and

WHEREAS, adoption of this **Plan** will make the Town of Mendon eligible for funding to alleviate the impacts of future hazards; now therefore be it

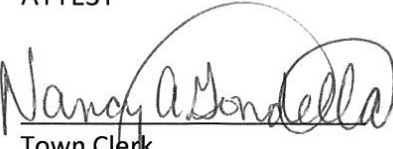
RESOLVED by Town of Mendon Select Board:

1. The **Mendon, Vermont 2022 Local Hazard Mitigation Plan** is hereby adopted as an official plan of the Town of Mendon;
2. The respective officials identified in the mitigation action plan of the **Plan** are hereby directed to pursue implementation of the recommended actions assigned to them;
3. Future revisions and **Plan** maintenance required by 44 CFR 201.6 and FEMA are hereby adopted as part of this resolution for a period of five (5) years from the date of this resolution; and
4. An annual report on the process of the implementation elements of the Plan will be presented to the Select Board by the Emergency Management Director or Coordinator.

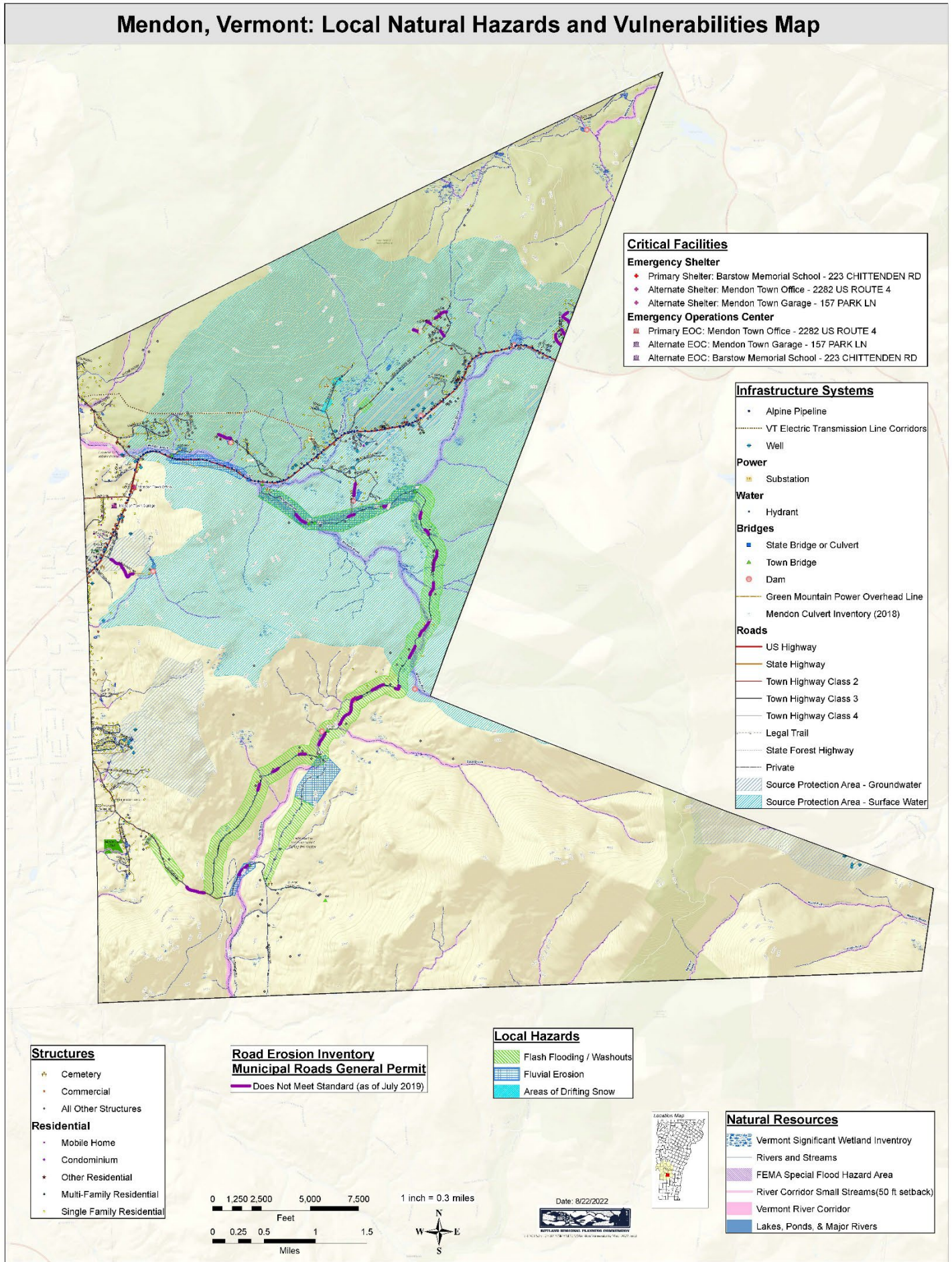
IN WITNESS WHEREOF, the undersigned have affixed their signature and the corporate seal of the Town of Mendon this 13th day of February 2023.


Select Board Chair

ATTEST


Town Clerk

Mendon, Vermont: Local Natural Hazards and Vulnerabilities Map



MITIGATION ACTIONS FROM 2017 PLAN

Vulnerability: Flooding of Bridges and Low Lying Areas

- 1) **Mendon Brook Stream Bank Stabilization.** Because the upgrade will significantly increase the culvert's ability to handle storm flows and decrease the likelihood of infrastructure failure/collapse, the upgrade will create a more resilient infrastructure, thereby improving long-term flood resilience.

Who: Select Board, Road Commissioner, Town Administrator, Director of Public Safety **When:** 2017-2021

How: VTrans Structures Grant, HMGP **Priority:** High

2022 Status: Complete – a section of Mendon Brook streambank on Wheelerville Road has been stabilized.

- 2) **Woody Debris Removal.** Mendon brook experienced significant erosion in TS Irene, and the woody debris left behind from the storm has raised concern about the brook's future ability to handle storm flows. Creating and implementing an ecologically sound plan for the woody debris in Mendon Brook will allow the stream to handle storm flows and decrease the likelihood of future stream bank erosion, flooding, and infrastructure failure/collapse.

Who: Select Board, ANR **When:** May 2016-September 2018 **How:** HMGP **Priority:** High

2022 Status: Incomplete – remains a priority. Woody debris removal in the Wheelerville Road area continues to be an ongoing issue. The highway crew removes debris when it comes into our road right-of-way. Most debris is not on town property and due to cost and permitting, there is little the town can do.

- 3) **Revise Zoning to Ensure New Development will not be Vulnerable to Flooding or Erosion.** This includes adopting State River Corridor Protection Language

Who: Planning Commission, Select Board **When:** 2018-2019 **How:** HMGP **Priority:** High

2022 Status: Incomplete – no longer a priority.

- 4) **Elevate Wheelerville Road.** Approximately 3-4 miles of Wheelerville Road were washed away in Tropical Storm Irene. Elevating the road will help prevent another washout of the road in a flooding event.

Who: Select Board, Road Commissioner, VTRANS, Town Administrator **When:** 2021-2023 **How:** HMGP **Priority:** Low

2022 Status: Complete - It was determined that elevating sections of Wheelerville Road would cause blockage of storm water flow. Bridges and culverts are installed higher than the road to allow storm water to flow over the road should infrastructure become blocked with debris.

Vulnerability: Power Outages to Homes and Critical Facilities

- 1) **Generator for the Town Office.** At present, the town does not have an Emergency Operations Center, and the town needs an EOC in the event of a flooding or power outage incident. Having an EOC will allow the Town to provide shelter and electricity (and all the accommodations that come with electricity) to vulnerable residents and anyone else in need. To create an EOC, the town would need a generator in one of its critical facilities. At present, the critical facility in which it would make the most sense to place a generator is the town office.

Who: Select Board, Town Administrator, Public Safety Director **When:** 2018-2020 **How:** HMGP **Priority:** High

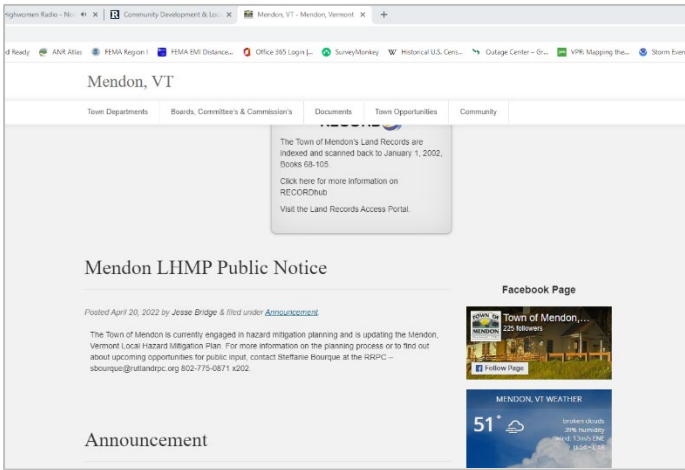
2022 Status: Incomplete – remains a priority.

- 2) **Generator for Secondary Shelter.** The Town is working with the United Methodist Church to make the church a secondary shelter. Having a secondary shelter will increase the Town's ability to provide shelter and electricity (and all the accommodations that come with electricity) to vulnerable residents and anyone else in need in the event of a flood or power outage.

Who: Select Board, Town Administrator, Public Safety Director **When:** 2021-2023 **How:** HMGP **Priority:** Medium

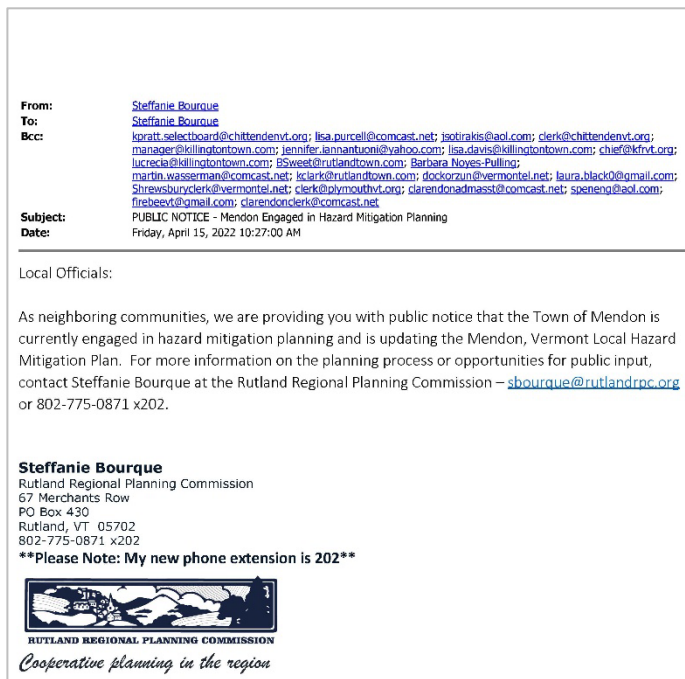
2022 Status: Incomplete – no longer a priority.

SUMMARY OF PUBLIC COMMENTS ON DRAFT PLAN



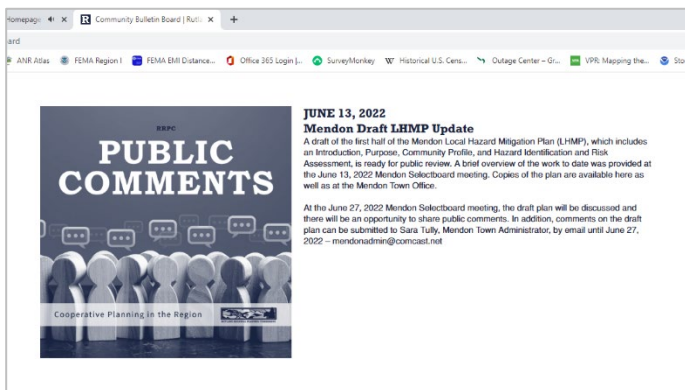
Example plan update kick-off public notice from Mendon Town website posted April 20, 2022.

No inquiries received regarding kick-off notice.



Email to local officials in neighboring communities announcing LHMP update kick-off – dated April 15, 2022. Similar email sent to Key Partners.

No inquiries received from neighboring communities or Key Partners.



Example notice of draft plan available for public comment from Rutland Regional Planning Commission website, including link to draft plan, posted on June 13, 2022.

See below for comments received from local official in neighboring community.

From: [Steffanie Bourque](#)
To: [McGuire, Nancy - NRCS-CD, Rutland, VT](#); [Medash, Kyle](#); [Spiegelman, Abigail](#); [Brian Sanderson](#); [christopher.matrack@usda.gov](#); [isa.thornton@vermont.gov](#); [Jim Rotondo](#)
Cc: [mendoadmin@comcast.net](#)
Subject: Mendon Draft LHMP Available for Public Comment
Date: Tuesday, June 14, 2022 1:42:00 PM
Attachments: [Mendon Draft LHMP 06-13-22.pdf](#)

Hello, Key Partners.

A draft of the first half of the Mendon Local Hazard Mitigation Plan (LHMP), which includes an Introduction, Purpose, Community Profile, and Hazard Identification and Risk Assessment, is ready for public review. The attached draft and a brief overview of the work to date was presented at the June 13, 2022 Mendon Selectboard meeting.

At the June 27, 2022 Mendon Selectboard meeting, the draft plan will be discussed and there will be an opportunity to share public comments. In addition, comments on the draft plan can be submitted to Sara Tully, Town Administrator, by email until June 27, 2022 – [mendoadmin@comcast.net](mailto:mendonadmin@comcast.net)

We look forward to any comments you may have on the Town's vulnerabilities to flooding, severe winter storms, and high wind events.

Kind regards,
 Steffanie

Email to Key Partners seeking comments on draft plan, specifically Town vulnerabilities to highest risk natural hazards presented in Section 5 of the plan – dated June 14, 2022. Similar email sent to local officials in neighboring communities.

Comments received from Chittenden Emergency Management Director, June 15, 2022:

a. *Beaver Pond is listed as a local dam. Thought that had been drained and allowed to fill in with vegetation. **This is correct and the plan was revised accordingly.***

- b. *Consider stressing Chittenden and Mendon's collaborative relationship around sheltering and our partnership with Barstow Memorial School. **Noted this collaborative relationship in the Section 6, Community Capabilities, Administrative and Technical.***
- c. *Consider including information about Mendon giving Chittenden access to the portion of Wildcat Road located in Mendon as Chittenden's primary evacuation route in case of a Chittenden Reservoir failure. A formal agreement between the municipalities is pending. **The Planning Team considered this an emergency response measure, not mitigation. Therefore, this matter is not addressed in this plan.***

Mendon, VT

Departments | Boards, Committees & Commission's | Documents | Town Opportunities | Community | Pay Your Bill Online

COMMUNITY CENTER PROJECT

Mendon Final Draft LHMP

Posted October 24, 2022 by Jesse Bridge & filed under Announcement.

The Local Hazard Mitigation Plan dated 11/7/22 will be presented and reviewed at the Planning Commission Meeting on November 7, 2022. This meeting will kick off a final public comment period that will extend to November 28, 2022. Public comments will be reviewed at the Selectboard Meeting on November 28, 2022 and a final draft will be prepared for adoption by the Selectboard and submitted to Vermont Emergency Management in December.

[Mendon-Draft-LHMP-11-07-22](#) [Download](#)

Example notice of final draft plan available for public comment from Mendon Town website, including link to draft plan, posted on October 24, 2022.

No comments received from local officials or the public.

From: [Steffanie Bourque](#)
To: [McGuire, Nancy - NRCS-CD, Rutland, VT](#); [Medash, Kyle](#); [Spiegelman, Abigail](#); [Brian Sanderson](#); [christopher.matrack@usda.gov](#); [isa.thornton@vermont.gov](#); [Jim Rotondo](#)
Cc: [mendoadmin@comcast.net](#); [Barbara Noyes-Pulling](#)
Subject: Mendon LHMP Update - Final Draft Available for Public Comment
Date: Monday, November 7, 2022 11:43:00 AM
Attachments: [Mendon Draft LHMP 11-07-22.pdf](#); [imsae001.png](#)

Hello, Key Partners.

The Town of Mendon has completed an update to the Mendon Local Hazard Mitigation Plan and will present their work at the November 7, 2022 Planning Commission meeting to local officials and the public. The Plan is available here and at the Town Office for public review and comment through November 28, 2022. On November 28, the Mendon Selectboard will hold a public comment session at the beginning of their regular meeting to discuss the draft Plan and receive public comments. In addition, comments on the draft Plan can be submitted to Sara Tully, Town Administrator, by email until November 28, 2022 – [mendoadmin@comcast.net](mailto:mendonadmin@comcast.net)

We look forward to any comments!

Kind regards,
 Steffanie

Email to Key Partners seeking comments on final draft plan – dated November 7, 2022. Similar email sent to local officials in neighboring communities.

No comments received from Key Partners or neighboring communities.