

Rutland Town, Vermont
2025 Local Hazard Mitigation Plan



Photo Credit: Rutland Herald

Vermont Agency of Transportation Works to Clear the US Route 7 and Post Road Intersection
April 2019 (DR4445)

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Table of Contents

1	Introduction.....	1
2	Purpose	1
3	Community Profile	1
4	Planning Process.....	4
	Plan Developers.....	4
	Plan Development Process	4
	Mitigation Strategy Update – Changes Since 2019.....	6
5	Hazard Identification and Risk Assessment.....	8
	Local Vulnerabilities and Risk Assessment	8
	Highest Risk Hazard Profiles	10
	Vulnerability Summary.....	20
6	Hazard Mitigation Strategy	21
	Mitigation Goal.....	21
	Community Capabilities.....	22
	Administrative & Technical	22
	Planning & Regulatory	22
	Financial.....	23
	Outreach & Education	23
	National Flood Insurance Program Compliance.....	24
	State Incentives for Flood Mitigation.....	24
	Mitigation Action Identification	25
	Local Plans & Regulations Examples	25
	Structure & Infrastructure Project Examples	25
	Natural Systems Protection Examples.....	26
	Outreach & Education Program Examples	26
	Mitigation Action Evaluation.....	26
	Mitigation Action Plan for Implementation	26
	Integrating Into Existing Plans and Procedures	37
7	Plan Maintenance	38
	Annual Evaluation and Monitoring	38
	5-Year Updates	41
	Table 1: Power Outage Summary.....	4
	Table 2: Plan Development Process.....	4
	Table 3: Existing Plans, Studies, Reports & Technical Information.....	5
	Table 4: Community Hazard Risk Assessment	9
	Table 5: Mitigation Action Evaluation	27
	Table 6: Mitigation Action Plan.....	29
	Table 7: Mitigation Action Status.....	39
	Appendix A: Certificate of Adoption.....	A-1
	Appendix B: Mitigation Actions from the 2019 Plan	A-2
	Appendix C: Public Engagement Summary.....	A-4

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 advance mitigation investment to reduce risks posed by natural hazards and to increase the Town of Rutland's resilience to natural hazard impacts.

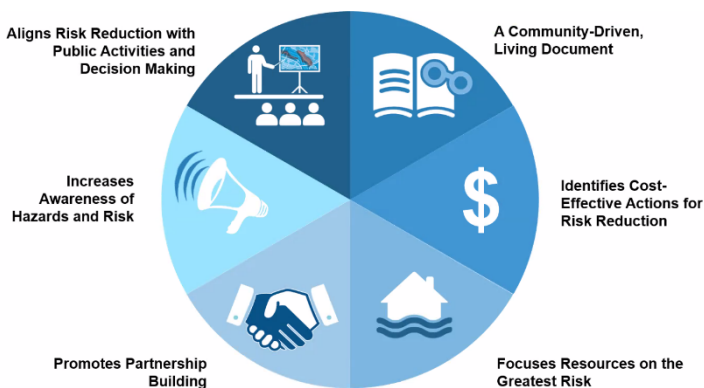
Hazard Mitigation is any sustained policy or action that reduces or eliminates long-term risk to people and property from the effects of natural hazards. All levels of government have come to recognize that it is less expensive to prevent disasters than to repeatedly repair damage after a disaster has struck. While hazards themselves cannot be eliminated, it is possible to identify what the local hazards are, where their impacts may be most severe, and what actions and policies can be implemented to reduce the severity of their impacts.

This Plan recognizes that many hazards are interrelated and can cause cascading effects. Communities should therefore take a holistic approach to mitigation and integrate its principles and practices throughout government operations.

2 PURPOSE

The purpose of this Plan is to identify all natural hazards facing the Town of Rutland, rank them according to local vulnerabilities, and develop strategies to reduce the risks posed by these 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:

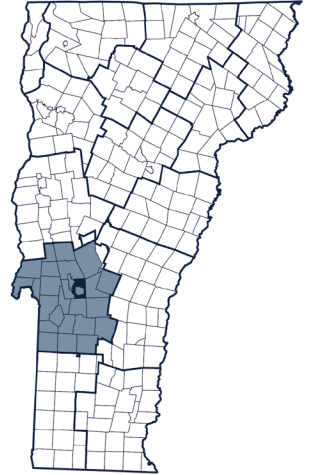


Source: FEMA LHMP Skill Share Workshop 2021

Furthermore, the Town seeks to be in accordance with the strategies, goals, and objectives of the 2023 State Hazard Mitigation Plan.

3 COMMUNITY PROFILE

Land Use and Development Patterns Rutland Town is the fourth largest community in Rutland County, located at its center between the Green and Taconic Mountains. Rutland Town has a unique shape, rectangular with a donut hole in the middle that is Rutland City. Chartered in 1761, the Town was later divided to create the towns of Proctor, West Rutland, and Rutland City.



While the boundaries of Rutland Town and Rutland City are largely imperceptible to the average person, Rutland Town's development pattern is much more diverse than Rutland City proper. Land use varies here from active farm and grazing land to compact and more rural residential development to large industrial and commercial uses.

Residential development is densest in the eastern and northern sides of Town. Large industrial uses are clustered along Business Route 4 as well as in the vicinity of Quality Lane. These are major manufacturing and employment centers of regional importance. Both areas are near major rail freight lines. The Town is one of the few towns in Rutland County to have major commercial development in the form of large chain stores, located primarily along US Route 4 East and US Route 7 South. Agricultural land is concentrated within the northern part of the Town.

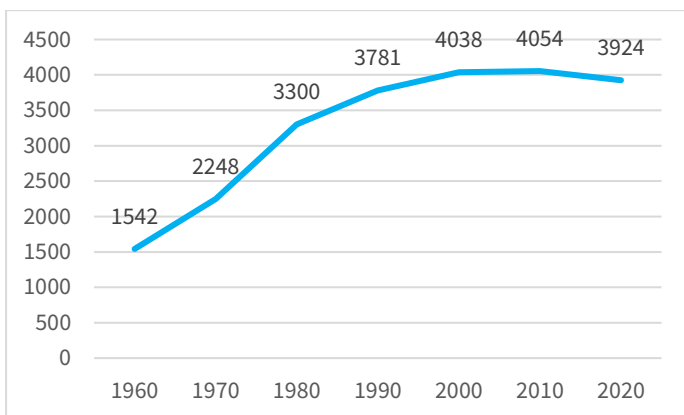
A hydroelectric dam, operated by Green Mountain Power, is in Center Rutland and another is at the Mill Village site.

The Town has several recreational facilities within its borders which include outdoor sports fields, basketball courts, a playground at the elementary school, and a pool serving a variety of groups.

Rutland Town is bordered to the north by Pittsford, to the west by Proctor and West Rutland, to the south by Clarendon, to the east by Mendon, and within its center by Rutland City. The Town Office is located at the town center just east of the VT Route 3 and Business Route 4 intersection.

Land Features Aside from the relatively flat lands in the northern part of Town, Rutland Town has rolling hills, with steep forested ridgelines surrounding its edges. Elevations range from a low of around 480 feet along Business Route 4 in Center Rutland to over 1,400 feet at the high points in the southeast side of Town, with the northern part of the municipality mostly around 700 feet in elevation. The ridgelines and higher elevation areas are largely undeveloped. Because of their shallow soils and steep slopes, the ecosystems at higher elevations tend to be fragile and susceptible to damage.

Demographics and Growth Potential The 2020 Decennial U.S. Census shows a population of 3,924 and 1,702 housing units. After a period of steady growth in the second half of the twentieth century, the population has stabilized at around 4,000 people since 2000.



Between 2010 and 2020, the median age of Rutland Town residents rose slightly from 50.9 to 52.4; higher than the Vermont median age of 42.9. The population over 65 is 31.4%, compared to 20.6% in Vermont and 16% in the country. 10% of the population is considered disabled.

The population density of the Town is 202 people per square mile compared to an overall state density of 68.

The Town has a low number of seasonal or vacation homes compared to Rutland County as a whole, with only 3% of houses owned out of state. While most residential structures are single-family homes, Rutland Town also has a substantial amount of multi-family housing. There are no registered mobile home parks in Rutland Town.

Post-pandemic, the Town has seen a noticeable uptick in the number of homeless with several known encampments in the southern part of Town.

Rutland Town expects growth in the southern part of town, with the planned conversion of the former Diamond Run Mall to a Walmart Supercenter. This site could also see a new hotel and additional retail. This is only one of the commercial properties in the town poised for development.

Precipitation and Water Features Average annual precipitation is 43.0 inches of rain, with July being the wettest month. The average annual snowfall is 77.8 inches, with January being the snowiest month. Rutland Town has about 137 precipitation days per year. Projections from the University of California San Diego predict that by 2044, under scenarios of both intermediate and extreme greenhouse gas emissions, Rutland Town will see 0-1 days of extreme precipitation per year.

Several waterways flow through Rutland Town, including Mendon Brook, East Creek, Tenney Brook, Mussey Brook, Clarendon River, and Otter Creek – one of Vermont's major rivers stretching approximately 90 miles in length before draining into Lake Champlain.

The Rutland City Reservoir, Upper Eddy Pond, and parts of Muddy and Patch Ponds lie within the Town.

According to the Agency of Natural Resources, $\pm 8\%$ of the Town's land area (974.5 acres) is Class II Wetlands. These play an important function in water absorption and holding capacity that reduces the hazards of flooding and replenishes groundwater supplies.

Average Temperatures July is the hottest month of the year in Rutland Town, with an average daytime temperature of 80.2°F. There are 3.1 days annually when the high temperature is over 90°F. The coldest month of the year is January, with an average nighttime temperature of just 7.1°F. There are 172.0 days annually when nighttime low temperatures fall below freezing.

Projections from the Vermont Agency of Natural Resources predict that by 2044, under scenarios with both intermediate and extreme greenhouse gas emissions, Rutland Town will see 0-20 days above 90°F and 120-140 days below 32°F each year.

The Vermont Climate Action Office reports that the period from 2010-2020 was the warmest decade on record; if this trend continues, Rutland Town will likely exceed 1.5 annual days of temperatures above 90°F.

Drinking Water and Sanitary Sewer The Town does not have a single traditional water system or service area that is provided water service by the municipality. Instead, several smaller Fire Districts/Water Corporations provide water service to discrete areas in the Town. Most of these rely on a groundwater well; some are connected to the Rutland City distribution system and purchase water as a consecutive system. Town water service along US Route 7 South is the result of an inter-municipal agreement with Rutland City. Town water service along US Route 4 is the result of an inter-municipal agreement with West Rutland. Those not served by a Fire District or public system, obtain water on-site using wells or springs.

The Town provides wastewater collection (pumped and conventional gravity) to areas in the north, south, and west. Treatment of collected wastewater takes place at the Rutland City sewage treatment plant. Most residents use on-site soil-based systems.

Transportation Rutland Town is ± 19.4 square miles in size with Route 4 (including portions of Business Route 4, the Route 4 bypass, and Route 4 East) and Route 7 forming the major roadways through Town.

While personal vehicles are the primary form of transportation used in Rutland Town, residents also benefit from the presence of public transportation provided by Marble Valley Regional Transit District.

The Rutland Town Highway Department maintains 48.9 municipal road miles, including 15.1 Class 2 miles, 32.1 Class 3 miles, and 1.7 Class 4 miles. 97% are paved, 1.5% are gravel, and 1.5% are graded earth. In addition, there are 11.0 miles of State highway in Rutland Town, for a total of 59.9 traveled highways, including Class 4 roads.

The Town's 2018 road erosion inventory shows 40% of the 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.

The Town's 2024 structures inventory (short structures and culverts) shows Rutland Town has 9 short structures (bridges with 6'-20' span). The Town also has 727 culverts in the municipal road right-of-way. All culverts were inspected in 2022 by the RRPC. Of these, 100 culverts are classified as being in "poor" or "critical" condition and should be considered for replacement and/or upgrade in accordance with Town Road and Bridge Standards.

According to VTrans, there are 2 town-owned long structures or bridges with >20' span – B5 and B9. Long structures are inspected every two years by VTrans through the Town Highway Bridge Program. B5 was last inspected in 2022 and B9 in 2023.

The local road network is maintained by a 4-person municipal highway department, whose garage is located on Northwood Park Road.

Electric Utility Distribution System Electric service to approximately 2,198 accounts is provided by Green Mountain Power via ten primary circuits. Average annual outage statistics between 2019 and 2023 are summarized in **Table 1**.

Table 1: Power Outage Summary

Average Annual (2019-2023)	
Avg # of times a customer was without power in a year	1.46
Avg length of each outage in hours	1.94
# of hours the typical customer was without power	2.84
2023 only	
Avg # of times a customer was without power in a year	1.55
Avg length of each outage in hours	0.52
# of hours the typical customer was without power	0.81

The longest power outage affecting the greatest number of accounts between 2019 and 2023 was 4.5 hours and impacted 218 accounts in 2023. The longest outage between 2019 and 2023 lasted 43.75 hours; it occurred in 2022 and affected 6 accounts.

Public Safety Fire protection is provided by the Rutland Town Fire Department, a 50-member on-call department with two stations – on Business Route 4 and McKinley Avenue. The Department is a member of the Rutland County Mutual Aid Association, allowing for additional assistance from surrounding communities when resources within the Town are maximized.

Law enforcement is provided by the Rutland Town Police Department, which consists of five officers and two constables. Coverage is also available by the State Police as needed.

Emergency medical care, including advanced paramedic services and transport, is provided by the Regional Ambulance. The nearest hospital is the Rutland Regional Medical Center, though specialist/medivac support is available at Dartmouth Hitchcock (54 miles) and the University of Vermont (70 miles).

Emergency Management As per the Town's Local Emergency Management Plan (LEMP), the Town has an appointed Emergency Management Director (EMD). The EMD works with others in town to keep the LEMP up to date and coordinates with nearby towns and non-profit agencies that serve vulnerable populations.

The new Public Safety Building on McKinley Avenue constructed in 2024 houses the Fire Department, Police Department, and local emergency operations center. Rutland Town School is the primary local shelter/cooling station.

4 PLANNING PROCESS

Plan Developers

A local Hazard Mitigation Planning Team participated in updating the Plan. Team members included the Town Administrator/Emergency Management Coordinator (EMC), Emergency Management Director (EMD), and Road Commissioner. It should be noted the Town Administrator and EMD participated in the 2019 plan update.

The RRPC assisted with this Plan update. FEMA Building Resilient Infrastructure and Communities (BRIC) funds supported this process.

Plan Development Process

The 2025 Local Hazard Mitigation Plan is an update to the 2019 single jurisdiction mitigation plan. A summary of the process taken to develop the 2025 update is provided in **Table 2** and **Appendix C**.

Table 2: Plan Development Process

Aug 28, 2024 Planning Team Kick-off Meeting: discussed what an LHMP is; benefits of hazard mitigation planning; current plan status; planning process; and developed public engagement strategy – see **Appendix C**. Planning Team meetings were not open to the public.

Sept–Nov 2024: completed Phase 1 public engagement activities – see **Appendix C**.

Oct 2, 2024 Risk Assessment Workshop: confirmed community profile (Section 3); completed risk assessment and began developing profiles for highest risk natural hazards (Section 5). Subject matter experts attended the Workshop to assist with risk assessments for Invasive Species and Infectious Disease.

Oct 8, 2024 Planning Team Meeting: continued to develop profiles for highest risk natural hazards.

Oct 16, 2024 Planning Team Meeting: finalized Hazard Identification and Risk Assessment (Section 5) with input from Phase 1 engagement. This is a critical milestone in the plan development process, and draft plan was prepared for presentation to Selectboard and first public comment period.

Oct 22, 2024 Draft Plan Presentation: presented to Selectboard to encourage input from local government and the public that could affect the plan's conclusions and better integrate with Town initiatives. Meeting was recorded and available on Town website.

Oct 22-Nov 5, 2024 Draft Plan Public Comment Period: draft Plan posted for first public comment period. Draft Plan discussed at Nov 4, 2024 Selectboard – coincided with close of public comment period. Selectboard authorized proceeding with development of mitigation strategy. Meeting was recorded and available on Town website.

Nov 2024-Feb 2025: completed Phase 2 public engagement activities – see **Appendix C**.

Nov 7, 2024 Planning Team Meeting: discussed comments received on October draft; finalized Hazard Identification and Risk Assessment (Section 5); and began work on hazard mitigation strategy (Section 6).

Nov 21, 2024 Mitigation Action Evaluation Workshop: evaluated broad range of possible actions to address the highest risk natural hazards (Section 6). Subject matter experts attended the Workshop to assist the planning team with action evaluation.

Dec 5, 2024 Planning Team Meeting: developed actions proposed for implementation (Section 6).

Jan 8, 2025 Planning Team Meeting: finalized actions proposed for implementation with input from Phase 2 engagement (Section 6); began work on Plan Maintenance (Section 7) and Changes Since 2019 (Section 4).

Jan 17, 2025: Planning Team finalized the full draft Plan. This is a critical milestone in the plan development process, and draft plan was prepared for presentation to Selectboard and last public comment period.

Jan 28, 2025 Draft Plan Presentation: presented to Selectboard to encourage input from local government and the public. Meeting was recorded and available on Town website.

Jan 28-Feb 11, 2025 Draft Plan Public Comment Period: draft Plan posted for last public comment period. Draft Plan discussed at Feb 11, 2025 Selectboard meeting with opportunity for public comments – coincided with close of last public comment period. Meeting was recorded and available on Town website.

Feb 11, 2025 Approval to Submit for APA: Selectboard granted approval to submit the draft plan 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

2024 Local Emergency Management Plan Used to identify local organizations that support vulnerable populations to ensure they are invited to participate in the plan update.

2024 Structures Inventory (culverts and short structures) Referenced for risk profile in Section 5 and mitigation actions for floods in Section 6.

2023 State of Vermont Hazard Mitigation Plan Referenced for risk assessment and profiles in Section 5.

2023 State of Vermont Municipal Vulnerability Indicators Tool Referenced for precipitation and temperature projections in Section 3 and risk assessment and profiles in Section 5.

2023 FEMA Local Mitigation Planning Handbook Used to ensure plan meets the Federal mitigation planning requirements, including those for addressing climate change.

2023 FEMA Hazard Mitigation Assistance Program Policy Guide Used to ensure plan meets the Federal mitigation planning requirements, including those for addressing climate change.

2023 FEMA NFIP Insurance Reports Used to determine how many structures are insured and number and type of repetitive loss properties in Section 5 and describe NFIP compliance in Section 6. Note: The Town requested a breakdown of repetitive loss non-residential property types from FEMA Region 1; however, this breakdown was not available, so the repetitive loss property types are reported in Section 5 as Single Family Residential, Other Residential, or Non-Residential.

2023-2019 Green Mountain Power Outage Data Used for Table 1 in Section 3.

2021 Vermont Climate Assessment Referenced for flood risk profile in Section 5.

2020 United States Census Report Used for Demographics and Growth Potential information in Section 3.

2019 Otter Creek Tactical Basin Plan Referenced for risk profile in Section 5 and mitigation actions for floods in Section 6.

2019 Rutland Town Municipal Plan Referenced for Mitigation Strategy Updates – Changes Since 2019 Plan in Section 4 and Community Capabilities and Integrating into Existing Plans and Procedures in Section 6.

2018 Road Erosion Inventory Referenced for risk profile in Section 5 and mitigation actions for floods in Section 6.

2017 FEMA Region 1 Mitigation Ideas for Natural Hazards Used to develop mitigation actions for extreme winter storms, strong wind, and floods in Section 6.

2016 Moon Brook Flow Restoration Plan Referenced for risk profile in Section 5 and mitigation actions for floods in Section 6.

2013 FEMA Mitigation Ideas Resource for Reducing Risk to Natural Hazards Used to develop mitigation actions for extreme winter storms, strong wind, and floods in Section 6.

2012 Stormwater Infrastructure Mapping Study Referenced for risk profile in Section 5 and mitigation actions for floods in Section 6.

2008 Flood Insurance Study for Rutland County, Vermont Referenced for community profile in Section 3; however, given the age of the document, it provided little in terms of assessing and profiling current flood risk.

VTrans Town Highway Bridge Inspection Reports Referenced for risk profile in Section 5 and mitigation actions for floods in Section 6.

Vermont Statewide Highway Flood Vulnerability and Risk Map Referenced for risk profile in Section 5 and mitigation actions for floods in Section 6.

VTrans Transportation Resilience Planning Tool Referenced for risk profile in Section 5 and mitigation actions for floods in Section 6.

Vermont Dam Inventory (VDI) Referenced for risk profile in Section 5 and mitigation actions for floods in Section 6.

RRPC Local Liaison Reports of Storm Damage Referenced for risk profile in Section 5.

National Oceanic and Atmospheric (NOAA) National Climatic Data Center's Storm Events Database Referenced for risk profile and hazard history in Section 5.

FEMA Disaster Declarations for Vermont Referenced for risk profile and hazard history in Section 5.

GIS Data Layers Incorporated into base mapping to assess and profile hazards, including, but not limited to, FEMA National Flood Hazard Layers and State River Corridor Layers.

OpenFEMA Dataset: Public Assistance Funded Project Summaries for Vermont Regional data for Western Rutland County used for risk profile and hazard history in Section 5.

Vermont Department of Health Referenced for risk profile in Section 5.

Vermont Urban & Community Forestry Program Referenced for risk profile in Section 5.

Mitigation Strategy Update - Changes Since 2019

In 2019, Rutland Town identified the following natural hazards that they believed posed the highest risk to the community:

- Rain/thunderstorms with fluvial erosion, inundation flooding, high winds, and/or hail.
- Winter storms with extreme cold, snow, ice, and high winds.

Rutland Town effectively integrated information from the 2019 Plan into budgets and other plans.

As the Town sought to implement the 2019 mitigation strategy, they looked for opportunities to incorporate information and recommendations from the 2019 Plan into other plans, programs, and procedures. Provided below are some examples.

The Selectboard has worked closely with public works and public safety department heads to incorporate risk information and hazard mitigation goals into annual operating budgets and capital planning for municipal facilities and equipment. This remains an ongoing priority.

The 2019 Plan's mitigation goals and risk information have helped inform the Planning Commission's update of the Town's Subdivision Regulations. Last adopted in 1980, the subdivision regulations require that "land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, **flood or other menace** [emphasis added], and land shall not be subdivided unless proper consideration has been made for drainage, erosion control, water, sewage, and capital improvements such as schools, parks, recreational facilities, transportation facilities and improvements."

To compliment the Town's Subdivision Regulations and Flood Hazard Area Bylaws, the Planning Commission is leading the effort to adopt River Corridor Bylaws. In 2019, the adoption of river corridor bylaws was not selected for implementation because it lacked political support. Consideration of them now reflects a change in the political climate over the last five years.

In 2018, Rutland Town completed its first road erosion inventory as required by the Municipal Roads General Permit (MRGP). The MRGP is required by the Vermont Clean Water Act and is intended to protect water quality by reducing stormwater-related erosion from municipal roads.

The Town has made significant progress in bringing its roads and drainage systems up to basic maintenance standards, as prescribed by the MRGP. Several infrastructure actions in the 2019 Plan were implemented under the MRGP as these improvements not only protect water quality but also make the roads more resilient to flash flooding.

Rutland Town made significant progress in completing other mitigation actions identified in the 2019 Plan – see **Appendix B**. They have much to be proud of. One noteworthy accomplishment is the Town's continued focus on backup power at critical facilities. The new Public Safety Building on McKinley Avenue is equipped with backup power, which also provides backup power to a nearby wastewater pump station.

Installation of an upgraded generator with automatic transfer switch at the Town Garage was completed in 2024. Prior to this, the garage was equipped with a 1960s vintage generator with manual transfer switch. The day after the new generator was installed there was a power outage and the transfer switch worked flawlessly. The old generator has been mounted on a trailer for use at the transfer station.

Mitigation actions taken by Rutland Town since 2019 have made the community more prepared and less vulnerable to future natural hazard impacts.

Since 2019, Rutland Town has not experienced significant changes in development. The Town has issued 8 land subdivision permits for residential uses. Without zoning, the Town relies on informational building permits to require landowners verify that development is not occurring in a FEMA mapped zone or an impaired waterway.

Based on these informational permits, no residential or commercial development has occurred in hazard-prone areas.

Recent commercial activity in Rutland Town has mostly been the redevelopment of an active parcel. Future commercial redevelopment is expected in the southern part of town, with the planned conversion of the former Diamond Run Mall to a Walmart Supercenter.

To accommodate additional commercial growth, the Town recently extended municipal drinking water on Randbury Road. They are also reviewing existing sanitary sewer capacity to plan for upgrades, if needed to expand capacity.

Future residential growth is anticipated given the State-wide housing shortage and regional housing target for hundreds of units in the coming decades.

A combination of the Town Plan and local land use controls guide development in Rutland Town. As a result, changes in land use and development since 2019 have not made the community more vulnerable to natural hazards. Furthermore, the Town feels that these controls are also sufficient to limit future development in hazard-prone areas.

As described in the Community Profile above, the population has stabilized around 4,000 people since 2000. While the number of residents has remained consistent, the Town has seen some shift in key demographics – age and homelessness. The median age of residents rose to 52.4 years, with 31.4% of the population over 65. Following the COVID-19 pandemic, the Town has seen an increase in the number of homeless. These demographic changes have increased the Town's vulnerability to natural hazards.

Since 2019, the acceleration of climate change has been increasing the frequency, duration, and intensity of storms, floods, fires, and extreme temperatures in Vermont. Local communities are feeling the impacts of climate change now, and these multi-hazard trends are expected to continue to increase in severity over the next century¹.

¹ FEMA Hazard Mitigation Assistance Program and Policy Guide, March 23, 2023

As a result, Rutland Town considered the effects of future conditions, like climate change, on the type, location, and range of intensities of identified hazards when conducting the risk assessment and selecting mitigation actions for the 2025 Plan.

Changes in population demographics and weather patterns are the primary drivers for a shift in the Town's mitigation priorities in 2025.

Due to an increase in the frequency and intensity of weather events, Extreme Cold, Snow, Ice; Strong Wind; and Floods were again ranked as the community's highest risk natural hazards in 2025.

In 2019, Wind and Hail were assessed and profiled together as a hazard likely to occur in Rutland Town with minor potential impacts on community assets. In 2025, Strong Wind and Hail were assessed separately. As stated above, Strong Wind again ranked as one of the community's highest risk natural hazards; however, Hail did not. While hail may be a likely natural hazard in Rutland Town, its potential impact is thought to be negligible. Therefore, Hail was not profiled in the 2025 Plan.

New to the list of highest risk hazards is Extreme Heat, due to an increase in the probability of occurrence and its potential impact on people, especially the elderly and homeless, as compared to 2019.

Finally, to better address the needs of Rutland Town's vulnerable populations, when ranking an action's implementation priority in 2025, those that directly benefit a vulnerable population were ranked first priority – see **Table 6**.

In this Plan, natural hazards are defined as:

- Geological hazards including landslides and earthquakes.
- Environmental and climatic hazards including flooding, wind, hail, snow and ice storms, extreme temperatures, drought, wildfire, and invasive species.
- Biological hazards including infectious disease that can become epidemics or pandemics.

5 HAZARD IDENTIFICATION AND RISK ASSESSMENT

Local Vulnerabilities and Risk Assessment

The Planning Team completed a risk assessment for a broad range of natural hazards, consistent with those in the 2023 State Hazard Mitigation Plan.

Hazards were ranked based on 1) probability of occurrence and 2) potential impact on community assets – people, infrastructure, the environment, and local economy. The assessment considered the effects of future conditions, like climate change, on the type, location, and range of intensities of identified hazards.

The ranking process is presented in **Table 4** and reflects the **highest risk hazards** the Town believes it is most vulnerable to. Highest risk hazards are those with a higher probability of occurrence and/or more severe or extensive impacts on community assets.

A summary of the risk assessment, including input from Phase 1 engagement activities, is provided here:

	Risk Score	Phase 1 Engagement Input
Extreme Cold, Snow, Ice	11.0	67% of survey respondents experienced extreme cold, snow, ice events; 20% of popup participants are concerned about extreme winter storms
Strong Wind	8.25	100% of survey respondents experienced strong wind events; 27% of popup participants are concerned about strong wind; voted #2 of top 3 hazards most likely to occur in the next 5 years
Inundation Floods	8.00	67% of survey respondents experienced inundation floods; 28% of popup participants are concerned about floods; voted #3 of top 3 hazards most likely to occur in the next 5 years
Extreme Heat	6.75	50% of survey respondents experienced extreme heat; 7% of popup participants are concerned about extreme heat
Flash Floods/ Fluvial Erosion	6.00	83% of survey respondents experienced flash flooding; voted #1 of top 3 hazards most likely to occur in the next 5 years

Table 4: Community Hazard Risk Assessment

Hazards	Probability	Potential Impact					Risk Score
		People 	Infrastructure 	Environment 	Economy 	Average	
Extreme Cold/Snow/Ice	4	4	3	2	2	2.75	11.00
Strong Wind	3	3	3	3	2	2.75	8.25
Inundation Floods	4	2	2	2	2	2.00	8.00
Extreme Heat	3	4	2	2	1	2.25	6.75
Flash Floods/ Fluvial Erosion	3	2	2	2	2	2.00	6.00
Invasives	4	2	2	1	2	1.75	7.00
Infectious Disease	4	2	1	1	2	1.50	6.00
Drought	3	1	2	2	1	1.50	4.50
Hail	3	1	1	1	1	1.00	3.00
Earthquake	1	1	1	1	1	1.00	1.00
Landslide	1	1	1	1	1	1.00	1.00
Wildfire	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

Infectious Disease and Invasive Species

This Plan must assess the risk of all hazards identified in the 2023 State Hazard Mitigation Plan, including infectious disease and invasive species. These hazards are of a unique and diverse nature. While their probability of occurrence in Rutland Town may be high, potential impacts will be highly dependent on the specific infectious agent or invasive species.

For infectious disease, the team assumed an epidemic level of spread. They concluded the Vermont Department of Health, located in nearby Rutland City, is better equipped to mitigate any outbreaks, so considered it a lower-risk hazard for the municipality.

For invasive species, the team focused on a specific forest pest of high concern in the county, the Emerald Ash Borer (EAB). The Town has a low number of Ash trees. Therefore, they concluded that even though the probability of infestation may be high, the negligible to minor impacts do not justify mitigation. So, considered invasives a lower-risk hazard.

Given the diverse nature of these hazards, they cannot be fully explored in this Plan. Readers should look to the Vermont Department of Health for more information on significant infectious disease outbreaks, such as epidemics and pandemics, and the Vermont Agency of Natural Resources for more information on invasive species, including terrestrial invasives, forest pests, and aquatic invasives.

Each of the **highest risk hazards** are profiled in this section. Lower risk hazards do not justify mitigation due to a lower probability of occurrence and/or negligible impacts and are not profiled in this Plan. See the State Hazard Mitigation Plan for information on lower risk hazards.

Survey Respondents Said....

Natural hazard impacts they are concerned about:

- #1 Damage or loss of roads, bridges, public utilities
- #2 Loss of life or injuries
- #3 Damage to schools and other public properties
- #4 Loss or damage to agricultural operations
- #5 Business closure or loss

Highest Risk Hazard Profiles



Extreme Cold, Snow, and Ice events typically occur between the months of December and March in the Rutland Region. They can include snow, sleet, freezing rain, or a mix of these wintry forms of precipitation. Events can also be associated with Strong Wind or Floods, increasing the potential hazard impacts.

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

From 2001 to 2010, Rutland County experienced \$2.27 million in property damage and \$100,000 in crop damage from winter storms, including Disaster Declarations DR3167 in 2001 and DR1698 in 2007.

From 2011 to July 2024, the County experienced \$2.73 million in damage, with \$300,000 in property damage due to a 10" – 20" heavy, wet snowfall across the county on December 9, 2014 (DR4207) and \$1 million in crop damage due to a hard freeze in May 2023 (S5470).

20% of popup participants are concerned about extreme winter storms. Winter weather impacts of greatest concern are freezing rain and ice. During longer storm events, power outages pose a potentially significant risk to residents in Rutland Town.



67% of survey respondents have experienced extreme cold, snow, ice events. Winter storms create a higher risk of car accidents and extreme cold poses a higher risk of hypothermia and frostbite, especially if extreme temperatures coincide with power outages, which can cut off heat and communication services. Extreme winter storms can put vulnerable populations at even greater risk, especially the homeless and those relying on electric-powered medical devices.

Rutland Town's development patterns are auto-centric with most of its shopping and commercial properties not within walking distance of its population centers. Therefore, if people are not prepared before an extreme weather event, they are more likely to venture out in potentially unsafe road conditions.

The homeless are particularly vulnerable to extreme cold. There are several established homeless encampments in the southern part of Town – along the railroad corridor between the Route 4 Bypass and Randbury Road; behind Spartan Arena; and off the end of Park Street.

The Town does not have a system for monitoring the needs of vulnerable populations before or during an extreme winter storm. It provides aid, if requested, and can stand up a temporary warming shelter at the Fire Station in Center Rutland, if needed.

See the Strong Wind profile below for more information about the Town's vulnerability to power outages.



A leading cause of death and injury during winter storms is from car accidents. To lessen roadway impacts, the Town maintains a fleet of four plow trucks, a sidewalk plow, and loader. To supplement municipal forces, it also retains a contractor with three plow trucks.

As shown on the following map, there are several roads that can experience widely different weather conditions due to changes in elevation – it can be raining in one section of the road at a lower elevation and snowing in another section of the same road at a higher elevation. These land features can make road maintenance during severe winter storms challenging.

There are no roads prone to significant drifting. Roads adjacent to critical facilities (fire station, public safety building, town office, elementary school) remain accessible.

Overhead utility lines that are covered in ice or wet snow accumulation pose the greatest infrastructure risk.



Rutland Town is home to both VELCO and Green Mountain Power headquarters, as well as several transmission line corridors and electric substations (e.g., Post Road).



The primary environmental concern is tree damage. Trees provide many environmental services and benefits, including stormwater management, improved air quality, carbon storage, shade, wildlife habitat, noise reduction, and aesthetic value.

Rutland Town's vulnerability lies with roadside trees falling in the road and/or on utility lines due to the weight of ice or wet snow accumulation. The resulting impacts include loss of the trees, utility disruptions, and road debris that requires clearing.



Given the Town's varied land uses, the greatest economic risk is to local businesses in the short term. Potential impacts include school and daycare closures, employee and customer inaccessibility, commute delays, and frozen pipes. The current perception is that even in severe weather conditions, people are not likely to shelter in place and go about their daily routines.

Extreme Cold, Snow, and Ice Hazard History

These are the most up to date significant events impacting Rutland Town. All damages are to property unless otherwise noted. Rutland County Disaster Declarations are in **bold**.

5/18/2023: S5470 record low in the 20s: \$1,025,000 regional crop damage

2/3/2022: 8-12" snow mixed with freezing rain: \$50,000 regional damage

1/16/2021: 5-15" wet snow: \$50,000 regional damage

2/7/2020: 5-10" snow; 1/5" ice: \$15,000 regional damage

3/22/2019: 4-12" wet snow: \$15,000 regional damage

11/26/2018: 4-8" wet snow: \$25,000 regional damage

1/13/2018: ½" freezing rain/sleet: \$5,000 regional damage

2/1-2/2015: Record cold month with 15-20+ days below zero and 10" snow: \$10,000 regional damage

1/7/2015: 0-10 degrees with wind of 15-30 mph creating wind chills colder than 20-30 below zero: no reported local damage

12/9/2014: DR4207 10-20" snow: \$10,500 local damage; \$200,000 regional damage

3/12/2014: 8-24" snow: \$20,000 regional damage

3/6/2011: 6-12" snow, ¼" ice: \$10,000 regional damage

2/23/2010: 6-30" snow: \$200,000 regional damage

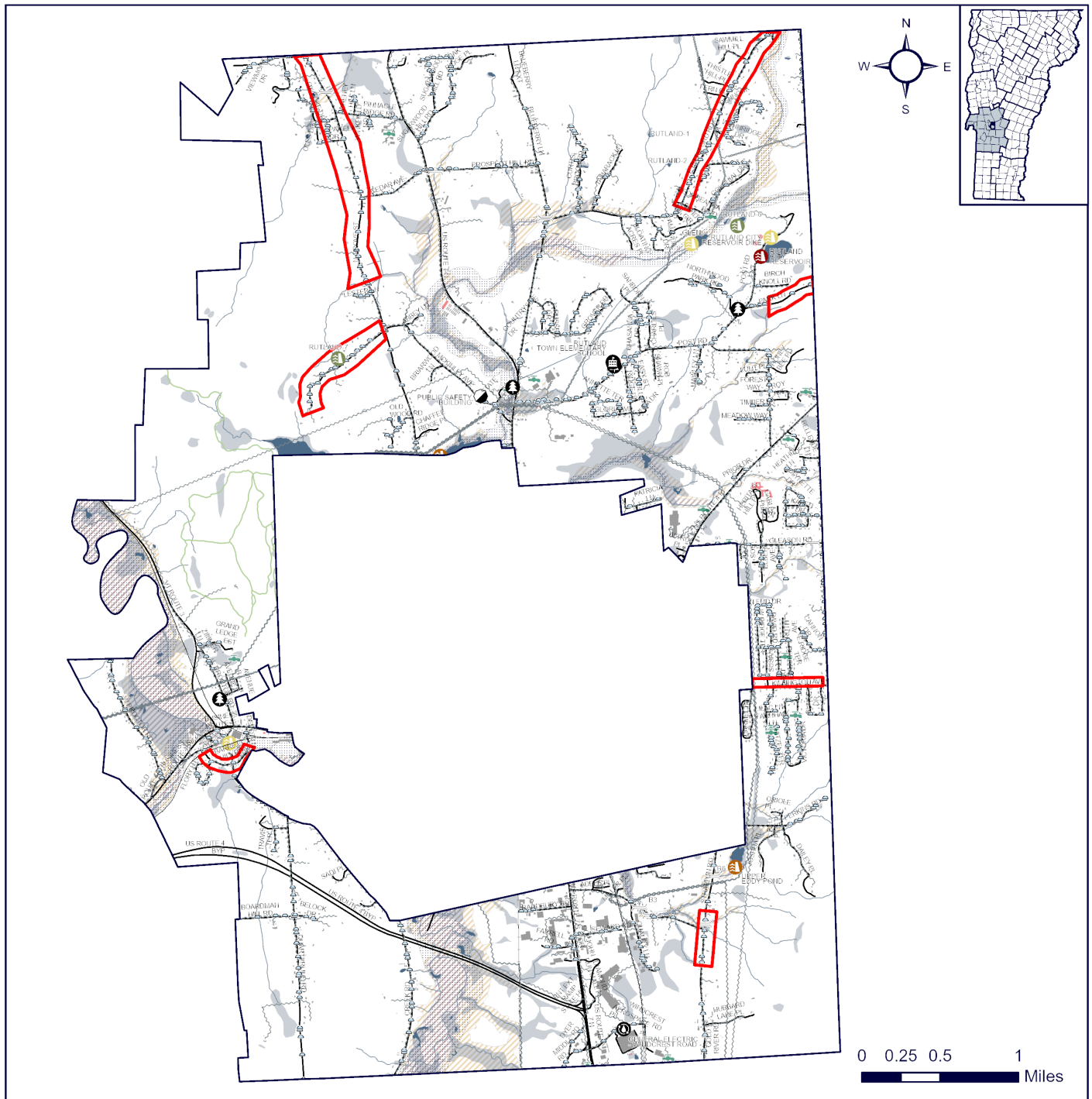
12/11/2008: 5-9" snow/glaze ice: \$25,000 regional damage

2/14/2007: 15-35" snow and 0-10 degrees with wind of 15-25 mph creating windchills colder than 10 below zero; \$75,000 regional damage

10/25/2005: 8-18" snow; \$100,000 regional damage

3/5/2001: DR3167 20-30" snow: \$10,000 local damage; \$100,000 regional damage

RUTLAND TOWN - EXTREME WINTER STORM RISKS



- | | | | |
|-----------------------------|-----------------------------------|------------------------------|-----------------------------|
| Designated Downtown/Village | Lakes & Ponds | Public Water Sources | Emergency Operation Centers |
| Critical Asset | Rivers & Streams | Waste Water Facilities | School |
| Buildings | Wetlands | Dams | Firehouse |
| Roads | River Corridors | High Hazard Potential | Parks |
| Bridges | FEMA Floodplain | Significant Hazard Potential | Hospitals |
| Culverts | FEMA Floodplain | Low Hazard Potential | |
| Power Lines | FEMA Floodway | Minimal Hazard Potential | |
| Rail Lines | Extreme Winter Storm Risks | | |
| Trails | Area of Concern | | |

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Strong Wind, as defined by FEMA's National Risk Index, is damaging wind that exceeds 58 mph. It can occur alone, such as during straight-line wind events, or can accompany other natural hazards, including thunder and/or extreme winter storms.

From 2001 to 2010, Rutland County experienced nearly \$7.9 million in property damage, with the most significant damage from an April 16, 2007 event totaling \$4.5 million.

From 2011 to July 2024, wind events resulted in just under \$3.5 million in property damage in Rutland County, with \$802,000 in 2017 and \$548,000 in 2022.

Strong wind is possible here; 100% of survey respondents have experienced a strong wind event. Rutland Town is susceptible to high directional winds town wide. Many storms with high winds result in downed trees as well as damaged phone and power lines, buildings, and other property.



27% of popup participants are concerned about strong wind. While the Town is susceptible to high directional winds town-wide, the east and northeast sections of town are most vulnerable due to topography. Strong wind poses a threat to lives, property, and vital utilities primarily because of flying debris or downed trees and power lines.

As noted in this Plan's Community Profile, the longest power outage between 2019 and 2023 lasted for 43.75 hours; it occurred in 2022 and affected 6 accounts. The longest power outage affecting the greatest number of accounts during this same time was in 2023 – it lasted for 4.5 hours and affected 10% of accounts.

Loss of power during periods of extreme cold or heat can make sheltering in place challenging. Also, when there is a power outage, those that rely on a private well are also without water. Without a back-up supply of power, people need to be prepared to withstand potentially several days without power or seek alternative accommodations.



Downed trees within the road right-of-way are the root cause of many power outages. Roads that pass through dense wooded areas are prone to downed trees, which can lead to fallen utility lines – power and telecommunications.



Downed utility lines can cause power outages and disrupt communications, which are crucial in times of crisis. Telecommunications are needed for warning systems before a disaster, as well as for response during and recovery after.

During a disaster, municipal response is managed by the local Emergency Operations Center (EOC) at the Public Safety Building on McKinley Avenue: this includes all communications from phone calls to internet browsing and 2-way radio.

Rutland Town has made significant improvements to withstand power outages. Generators or generator hook-ups have been installed at all critical facilities: public safety building, fire station in Center Rutland, the school, town office, town garage, and wastewater pump station on Post Road.

Several small Fire Districts/Water Corporations have a back-up source of power or redundant source – Grandview Acres Water Corporation, Rutland Town Fire District 5, Rutland Town Fire District 6, and Rutland Town Fire District 1.

As of 2019, Rutland Town Fire District 4 has installed a power switch gear and quick connection at their booster pump station but does not have a permanent standby generator with supplemental fuel supply.

Rutland Town Mendon Fire District 2 and Rutland Town Fire District 4 do not currently have a back-up power source. The status of others is currently unknown – Colonial Estates Water Corporation, Rutland Town Fire District 11, and Rutland Town Fire District 8.

In addition to utility disruptions, downed trees can damage buildings and block road access. When downed trees become entangled in utility lines the process for clearing the debris from the roadway becomes more complicated and can take longer to restore access.



Like extreme winter storms, the primary environmental impact of concern is tree damage.



Like extreme winter storms, strong wind events with associated power outages and debris in the roadway can have a short-term impact on the local economy due to business closures, employee and customer inaccessibility, and commute delays.

Strong Wind Hazard History

These are the most up to date significant events impacting Rutland Town. All damages are to property unless otherwise noted. Rutland County Disaster Declarations are in **bold**.

4/3/2024: 52 mph wind: \$50,000 regional damage
 2/28/2024: 41 mph wind: \$25,000 regional damage
 1/10/2024: 50 mph wind: \$50,000 regional damage
 12/11/2021: 40 mph wind: \$25,000 regional damage
 3/1/2021: 46 mph wind: \$35,000 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: 56 mph wind: \$50,000 regional damage
 10/30/2017: 40 mph wind: \$100,000 regional damage
 10/28/2015: 40 mph wind: \$50,000 regional damage
 6/23/2013: 60 mph wind: \$30,000 regional damage
 12/21/2012: 61 mph wind: \$50,000 regional damage
 6/8-9/2011: 50-55 mph wind: \$20,000 regional damage
 12/1/2010: 56 mph wind: \$250,000 regional damage
 7/21/2010: 55 mph wind: \$50,000 regional damage
 2/26/2010: 50 mph wind: \$50,000 regional damage
 8/25/2007: 60 mph wind: \$600,000 regional damage
4/15-16/2007: DR1698 “Nor’icane” 3” snow and rain, 60-80 mph wind: \$41,300 local damage (\$29,400 Town / \$2,400 Fire District #1 / \$9,500 Rutland Town School); \$1 mil regional damage



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 without power, heat, or communication or they may be unable to reach their homes. Long-term collateral dangers include disease outbreaks, loss of livestock, 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 2023 State Hazard Mitigation Plan and 2021 Vermont Climate Assessment, the most common recurring hazard event impacting Vermont communities is flooding. There are two types of flooding: inundation and flash flooding. Inundation is when water rises onto low lying land. Flash flooding is a sudden, violent flood which often entails stream bank erosion (fluvial erosion).

While inundation-related flood loss can be a significant component of flood disasters, the more common mode of damage in Vermont is fluvial erosion, often associated with physical adjustment of stream channel dimensions and location during flood events. These dynamic and often 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.

“Damage from high flows is the single most costly type of disaster in Vermont, primarily due to the erosive power of water. Many roads and culverts conflict with the room needed by streams and rivers.”
2021 Vermont Climate Assessment

Several major flood events have affected Rutland County in recent years, resulting in multiple Disaster Declarations. From 2001 to 2010, the County experienced roughly \$2.6 million in property damage due to flood events. The worst flood came in August 2011 from Tropical Storm Irene (DR4022), which dropped 10-11 inches of rain. Irene caused 2 deaths, \$55 million in property damage, and \$2.5 million in crop damage in Rutland County.

Although Irene 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 strong wind typically associated with tropical storms. This caused most streams and rivers to flood in addition to widespread and severe fluvial erosion. Rutland Town experienced approximately \$18,900 in FEMA Public Assistance-funded damage during Irene.

From 2012 to July 2024, Rutland County experienced approximately \$4 million in property damage and four Disaster Declarations: \$2 million in July 2017 (DR4330); \$1 million in April 2019 (DR4445); \$500,000 in July 2023 (DR4720); and \$50,000 in July 2024 (DR4762).

In Rutland Town, while floods are a risk they tend to result in isolated impacts with moderate to severe damages. 28% of popup participants are concerned about floods.

Rutland Town is vulnerable to inundation flooding along sections of Otter Creek, Clarendon River, and East Creek.



Photo Credit: Rutland Herald

Unlike inundation floods, flash floods can occur any time the area has heavy rain. Flash floods are inherently sudden and unpredictable and can impact areas located outside of designated floodplains, also known as River Corridors. Areas of flood concern are shown on the following map.



67% of survey respondents have experienced inundation flooding, while 83% have experienced flash flooding.

According to the National Weather Service, floods kill more people than any other weather-related hazard. Most flood-related deaths occur while driving a vehicle into flood waters. Rutland Town has experience with motorists ignoring road closures and driving through flood waters. During the July 2023 flood, it was obvious that motorists had driven through a road closure on VT Route 3 and one stranded motorist required rescue.

For those sheltering in place, the greatest risk beyond the floodwaters themselves is their ability to isolate. The rapid and erosive destruction of nearby infrastructure may render flooded areas inaccessible. The result is people becoming trapped and requiring swift water rescues or critical assets such as medical services becoming unavailable.

Vulnerable populations, especially those with limited range of motion, face the greatest risk of isolation from life-supporting services. Areas of concern for the Town where these populations are clustered include the Cortina Inn² off Cop John Road and homeless encampments in the southern part of Town along Otter Creek – along the railroad corridor between the Route 4 Bypass and Randbury Road and off the end of Park Street.

With inundation flooding, there are cascading impacts involving infectious disease. Mosquitos, for example, breed in standing water and when their population increases, so does the risk of diseases they transmit – such as West Nile Virus and Eastern equine encephalitis (EEE).

77 buildings (3% of structures) are in the Special Flood Hazard Area; residential and commercial properties, recreation facilities, and utilities.

According to FEMA, 1% of properties have flood insurance. These policies cover \$781,000 in value.

There is one repetitive loss non-residential property.

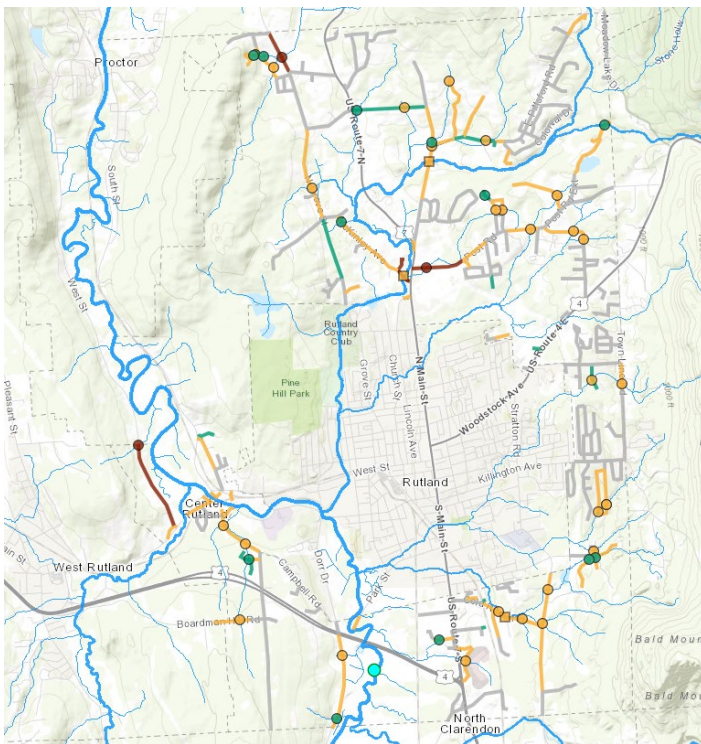
² The Cortina Inn is one of the hotels around the State sheltering the homeless.



A wide range of infrastructure assets are at risk from flooding in Rutland Town. One commercial property is in the FEMA-mapped floodway and a mix of homes, commercial properties, wastewater pump stations (Town and Fire District 1), hydroelectric facilities, recreation facilities, roads, culverts, bridges, and dams are in the FEMA floodplain.

Outside of FEMA Special Flood Hazard Areas, there are an additional 30 buildings in State-mapped River Corridors – homes, commercial properties, a railroad museum, state highway garage, state police barracks, and state department of motor vehicles.

The Town's outfall and road erosion inventories and VTrans Transportation Resiliency Planning Tool (TRPT) were also used to identify locations and assets at risk. Road segments that exhibit high flood risk according to the TRPT include N Grove St, McKinley Ave and Post Rd at the US Route 7 intersection, and W Proctor Rd.



VTrans TRPT Flood Risk Results for Rutland Town

The Town identified other locations as having a moderate flood risk based on past experience: Curtis Brook Rd, Tamarak Ln, Post Rd, Victoria Dr, Hitzel Terrace, Joshua Pl, Dorr Dr, Boardman Hill, Quarterline Rd, E Pittsford Rd.

When roads are impacted by flooding, the Town coordinates with the Fire Department and State Dispatch to close roads and set up detours. Road closures can create longer commute times and longer emergency service response times.



Photo Credit: Rutland Herald

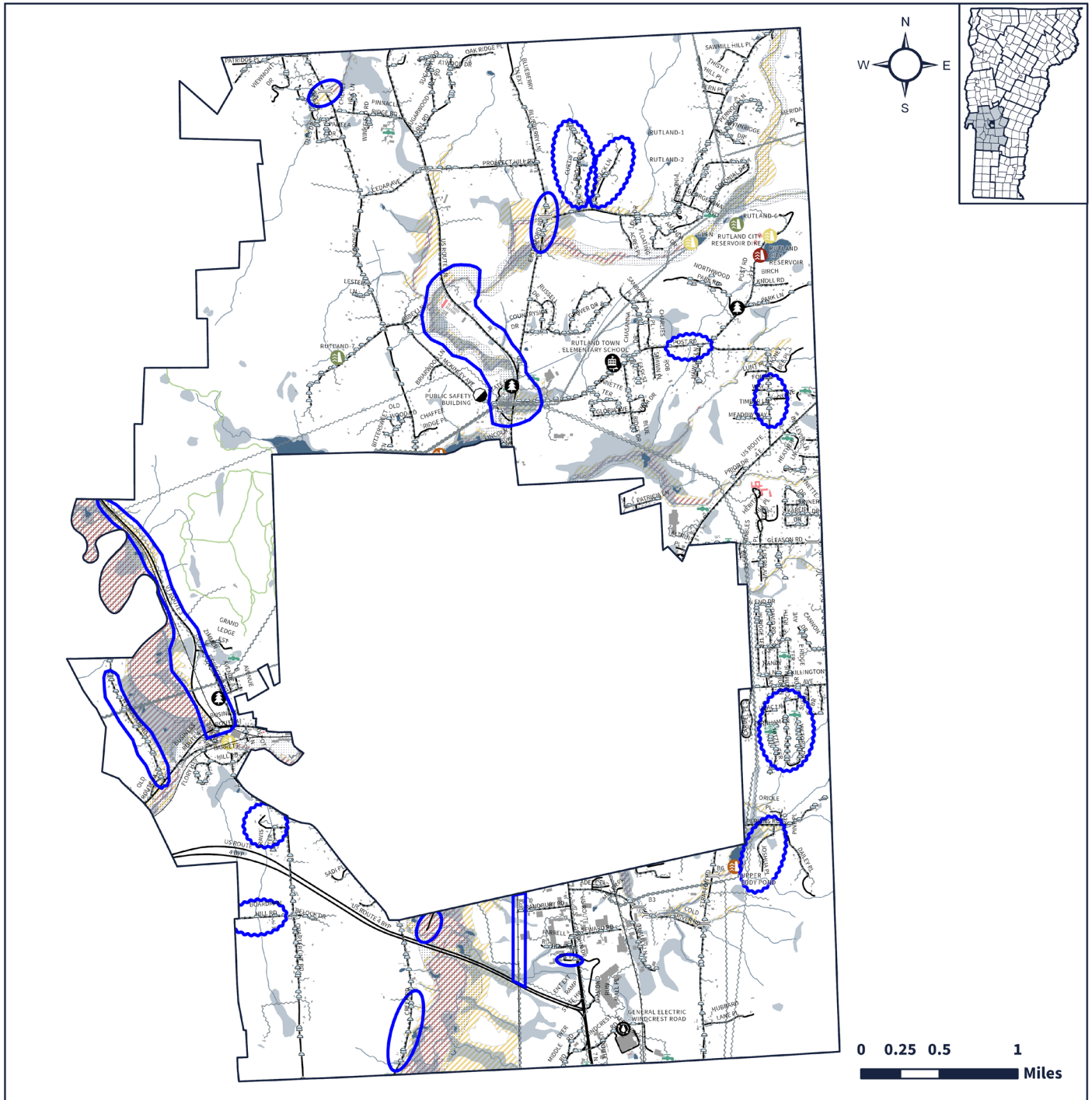
As shown on the following map, these areas are developed with a mix of residential, commercial, and recreation assets.

In addition to stormwater runoff from roads, ice or debris jams and dam failures could result in flash flooding in Rutland Town. While uncommon, debris jams are possible on East Creek at the bridge on McKinley Avenue. There are no known locations vulnerable to ice jams.

There are ten (10) dams in Rutland Town listed in the Vermont Dam Inventory, a database managed by the VT Dam Safety Program:

- 1) Center Rutland Dam on Otter Creek is south of the intersection of Business Route 4 and Route 3. It is owned by OMYA and classified as a low hazard potential dam. Last inspected in 1998, its condition is unknown.
- 2) Glen Dam on East Creek is north of the Town Garage. It is owned by Green Mountain Power and classified as a low hazard potential dam. Last inspected in 2011, its condition is unknown.
- 3) Patch Pond Dam on East Creek is east of Grove Street. It is owned by Green Mountain Power and classified as a significant hazard potential dam. Last inspected in 2011, its condition is unknown.

RUTLAND TOWN - FLOOD RISKS



- | | | | |
|-----------------------------|------------------------------|------------------------------|-----------------------------|
| Designated Downtown/Village | Lakes & Ponds | Public Water Sources | Emergency Operation Centers |
| Critical Asset | Rivers & Streams | Waste Water Facilities | School |
| Buildings | Wetlands | Dams | Firehouse |
| Roads | River Corridors | High Hazard Potential | Parks |
| Bridges | FEMA Floodplain | Significant Hazard Potential | Hospitals |
| Culverts | FEMA Floodplain | Low Hazard Potential | |
| Power Lines | FEMA Floodway | Minimal Hazard Potential | |
| Rail Lines | Flood Area of Concern | | |
| Trails | Flash Flood | | |
| | Inundation Flood | | |

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- 4) Rutland City Reservoir Dam is near the border of Mendon and is owned by the City of Rutland. It is classified as a high hazard potential dam. Last inspected in 2023, its condition is satisfactory.
- 5) Rutland City Reservoir Dike Dam is on the same reservoir and is also owned by the City of Rutland. It is classified as a low hazard potential dam. Last inspected in 2023, its condition is unknown.
- 6) Rutland-1 Dam is east of Tamarack Lane and ownership is unknown. Its hazard potential is unknown. This dam has no record of inspections, and its condition is unknown.
- 7) Rutland-2 Dam is east of Tamarack Lane and ownership is unknown. Its hazard potential classification is unknown. This dam has no record of inspections, and its condition is unknown.
- 8) Rutland-6 Dam is between Rutland City Reservoir and the confluence of East Creek and Mendon Brook and ownership is unknown. It is classified as a minimal hazard potential dam. This dam has no record of inspections, and its condition is unknown.
- 9) Rutland-7 Dam is north of McKinley Avenue and ownership is unknown. It is classified as a minimal hazard potential dam. This dam has no record of inspections, and its condition is unknown.
- 10) Upper Eddy Pond Dam on Mussey Brook is owned privately. It is classified as a significant hazard potential dam. Last inspected in 2023, it is in poor condition.



As mentioned previously, flash floods often entail stream bank or fluvial erosion.

Excessive erosion has a negative impact on water quality and may result in increased turbidity, increased phosphorus transport, or the release of legacy pollutants. The sediment mobilized by fluvial erosion can also contribute to aggradation and dammed streams.

Existing studies helped identify locations and assets at risk from fluvial erosion. These include Stream Geomorphic Assessments (SGAs) and Stormwater Management Plans (SWMPs).

Stream Geomorphic Assessments (SGAs) provide information about the physical condition of streams and factors that influence their stability. Specifically, 2007 East Creek Watershed Phase 2 Stream Geomorphic Assessment, 2009 Otter Creek Watershed Tributaries Phase 1 Stream Geomorphic Assessment, 2009 Upper Otter Creek Phase 2 Stream Geomorphic Assessment, and 2008 Moon Brook Watershed River Corridor Plan. These studies identify priority locations for river corridor protection, planting stream buffers, stabilizing stream banks, removing berms, and removing/replacing human-placed structures (i.e. dams, bridges, culverts).

Stormwater Master Planning (SWMP) involves identifying stormwater, sediment, nutrient, and septic inputs to waterways and designing projects to mitigate those inputs; either eliminating them at the source through green stormwater infrastructure, septic system improvements, back road projects or improving floodplain access within the stream network to increase sediment attenuation.

The 2016 Moon Brook Flow Restoration Plan provides an in-depth analysis of stream conditions and a set of recommendations for best practices and future projects to improve the resilience of this waterway in the event of a flooding event.

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



Flooding events with road closures can have a short-term impact on the local economy due to fewer shopping trips and commuter delays. Longer-term impacts may involve the temporary closure of local businesses. Damages to buildings and electrical systems are often costly and can have a significant impact on business assets.

Floods Hazard History

These are the most up to date significant events impacting Rutland Town. All damages are to property unless otherwise noted. Rutland County Disaster Declarations are in **bold**.

7/11/2023: DR4720 2" rain: \$5,000 Fire District #1 damage; \$1.6 mil regional damage

4/15/2019: DR4445 1-2" rain with significant snow melt: \$9,500 local damage; \$1 mil regional damage

7/1/2017: DR4330 3-4" rain the previous 3-4 days with flash flooding on 7/1/17: \$1.9 mil regional damage

6/25-7/11/2013: DR4140 heavy rain over multiple days: \$420,000 regional damage

8/28/2011: DR4022 Tropical Storm Irene with ±5" rain: \$18,900 local damage; \$55 mill regional damage

10/1/2010: 4-5" rain: \$40,000 regional damage

8/21/2009: 1"+ rain: \$100,000 regional damage

6/14/2008: 3-5" rain: \$2 mil regional damage

4/13/2002: 1-3" rain plus snowmelt: \$30,000 regional damage

12/16/2000: DR1358 2-4" rain: \$13,000 local damage; \$100,000 regional damage

7/16/2000: DR1336 heavy rain: \$200,000 regional damage



Vermont Department of Health data indicates state residents experience heat-related illnesses at around 87°F.

While everyone is affected by hot weather, the risk of heat illness is greater for vulnerable populations, outdoor workers, urban residents, and the homeless. Other at-risk indicators include living alone, having limited transportation options, and lacking access to air conditioning or other cooling options.

The Town's homeless and those sheltering in state-funded hotels are especially at risk to extreme heat impacts.



The materials used in transportation infrastructure exhibit a limited range of heat tolerance. Asphalt can melt and crack upon cooling, while concrete can buckle if there's limited room for the slab to expand. Thermal expansion can swell bridge connections and induce their collapse, and railway tracks can experience buckling, the sagging of overhead lines, and the bending of rails.

Many properties in Rutland Town rely on drilled wells, so access to potable water may be hindered by increased rates of evapotranspiration.



A gradually warming climate will increase soil drying rates, contributing to drought-like conditions. These can increase the potential for brush fires. Brush fire probability depends on local weather conditions (lightning, drought, extreme heat); outdoor activities (camping, debris burning); and the amount of "fuel" present in the environment. While Rutland Town has not experienced a notable brush fire in recent years, its neighbor Proctor has.

Conversely, warmer air can hold more water vapor, which can in turn influence the frequency and magnitude of extreme precipitation events.



Higher temperatures, especially if accompanied by drought, can have a significant impact on crops and other agricultural operations. While there are a few remaining active farms in Rutland Town, extreme heat impacts on this and other sectors of the local economy are perceived to be negligible.



Extreme Heat is an emerging concern for communities acclimated to a cooler environment. Extreme heat events involve a combination of significantly high temperatures and high humidities. Multiple extreme heat event days in a row, during which the maximum temperature meets or exceeds 90°F, are known as heatwaves. Vermont's "heat season" typically lasts from May to September.

From 2001-2010, Rutland County experienced one heatwave, which occurred in August 2006. From 2011-July 2024, Rutland County experienced five heatwaves, four of which occurred during the Vermont heat season. The fifth, which occurred in March 2012, resulted in \$650,000 in damage to the regional maple sugaring industry.

Extreme temperatures have and are expected to continue to impact Rutland Town. 50% of survey respondents have experienced extreme heat events; 17% believe one will occur in the next five years.

Extreme Heat Hazard History

These are the most up to date significant events impacting Rutland Town. All damages are to property unless otherwise noted. Rutland County Disaster Declarations are in **bold**.

- 7/20/2020: 95°F temps with an excessive heat index of 95-100°F for four days; no reported damages
- 6/23/2020: 90°F temps with an excessive heat index of 95-100°F for six days; no reported damages
- 7/6/2018: 90°F temps with an excessive heat index of 95-110°F for six days; no reported damages
- 3/22/2012: 70 and 80°F temps, with maximums 30-40°F above normal for four days; \$650,000 regional damage to maple sugaring industry
- 7/21/2011: 90°F temps with an excessive heat index of 100-108°F for four days; no reported damages
- 8/1-8/2/2006: 90°F temps with an excessive heat index of 100-105°F; no reported damages

Vulnerability Summary



Extreme Cold, Snow, and Ice

Vulnerable Assets people (especially vulnerable populations and homeless); highway infrastructure; power lines; telecommunications systems; trees; building plumbing; local businesses

Location Town-wide; N Grove St, McKinley Ave, E Pittsford Rd, Park Ln, Killington Ave, Stratton Rd, Cold River Rd, Barrett Hill Rd

Extent 15-20+ days below zero; up to 35" snow; ½" freezing rain/sleet; ¼" ice

Past Occurrence \$10,500 local property damage; \$200,000 regional property damage; \$1,025,000 regional crop damage

Future Probability Highly Likely, >75% probability in a year



Strong Wind

Vulnerable Assets people (especially vulnerable populations and homeless); buildings; highway infrastructure; power lines; telecommunications systems; trees; local businesses

Location Town-wide; east and northeast sections of town most vulnerable due to topography

Extent 60-80 mph wind

Past Occurrence \$41,300 local property damage; \$1,000,000 regional property damage

Future Probability Likely, at least 1 chance in next 10 years



Floods

Vulnerable Assets people (especially vulnerable populations and homeless); residential dwellings; commercial properties; recreation facilities; highway infrastructure; wastewater pump stations (Town and Fire District #1); hydroelectric facilities; dams; rivers and streams; local businesses

Location *Inundation Floods:* along Otter Creek, Clarendon River, and East Creek – N Grove St, US Route 7 at Post Rd, E Pittsford Rd, Holiday Dr, railroad corridor between Route 4 bypass and Randbury Rd, Park St, Dorr Dr, W Proctor Rd, Business Route 4, VT Route 3, E Proctor Rd

Flash Floods: Curtis Brook Rd, Tamarack Ln, Post Rd, Victoria Dr, Hitzel Terr, Joshua Pl, Boardman Hill Rd, Quarterline Rd,

Fluvial Erosion: East Creek Bridges B5 and B9

Extent ±5" rain; extent data for fluvial erosion is unavailable

Past Occurrence \$18,900 local property damage; \$55,000,000 regional property damage

Future Probability *Inundation Floods:* Highly Likely, >75% probability in a year

Flash Floods/Fluvial Erosion: Likely, at least 1 chance in next 10 years



Extreme Heat

Vulnerable Assets people (especially vulnerable populations and homeless); highway infrastructure; drilled wells; crops/agricultural products

Location Town-wide

Extent up to 95°F temps and heat indices up to 110°F

Past Occurrence \$650,000 regional damage to maple sugaring industry

Future Probability Likely, at least 1 chance in next 10 years

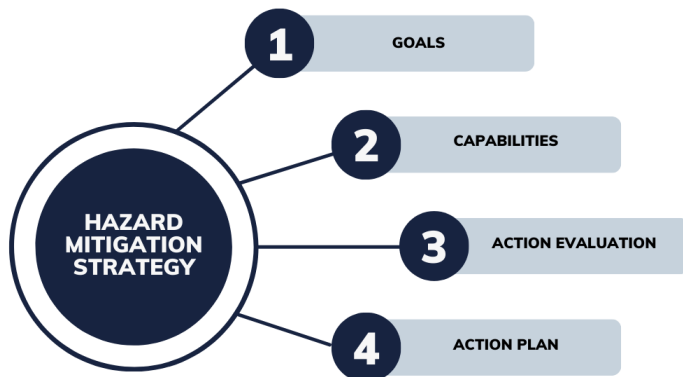


The Hazard Identification and Risk Assessment is the foundation for the Mitigation Strategy.

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 – the core of the mitigation plan.

The mitigation strategy has four main components: goals, community capabilities, action evaluation, and an action plan with the most appropriate activities for the Town to undertake to reduce future risk from potential hazards.



Mitigation Goal

The community's mitigation goal, which was supported by 100% of survey respondents, is to:

Increase Rutland Town's resilience to natural hazards by advancing mitigation investments. These investments will ultimately reduce or avoid long-term risks to:

- ***People,***
- ***Homes and neighborhoods,***
- ***The local economy,***
- ***Cultural and historic resources,***
- ***Ecosystems and natural resources, and***
- ***Community Lifelines such as transportation, energy, and communications.***

See results in **Appendix C** for which assets engagement respondents thought were most important to protect against potential future extreme weather impacts.

Community Lifelines

Community Lifelines enable the continuous operation of critical government and business functions and are essential to human health and safety or economic security. The goal of the lifeline concept is to focus response efforts on stabilizing or re-establishing these most fundamental services during and after a disaster. Mitigating lifelines should reduce cascading impacts across government and business functions and lessen system-wide damage.

Community Lifelines are organized into seven categories:



1. Law Enforcement
2. Fire Service
3. Search & Rescue
4. Government Service
5. Community Safety



1. Food
2. Water
3. Shelter
4. Agriculture



1. Medical Care
2. Public Health
3. Patient Movement
4. Medical Supply Chain
5. Fatality Management



1. Power Grid
2. Fuel



1. Infrastructure
2. Responder Communications
3. Alerts, Warnings, & Messages
4. Finance
5. 911 & Dispatch



1. Highway/Road/Motor Vehicle
2. Mass Transit
3. Railway
4. Aviation
5. Maritime



1. Facilities HAZMAT, Pollutants, Contaminants

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. Rutland Town's mitigation capabilities that reduce hazard impacts or that could be used to implement hazard mitigation activities are listed below.

Administrative & Technical This capability refers to the Town's staff and their skills and tools that can be used for mitigation planning and to implement actions. In addition to the Emergency Management Director, other municipal staff that can be used for mitigation planning and to implement specific mitigation actions include: a full-time town administrator, full-time town clerk/treasurer, 2 full-time town clerk/treasurer assistants, full-time Road Commissioner with 3 full-time Highway Department employees.

In addition to paid staff, there is a 5-member Selectboard, 9-member Planning Commission, Town Health Officer, Tree Warden, and Fire Warden.

To augment local resources, the Town has formal mutual aid agreements for emergency response – fire and public works. 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 available through the State ANR for floodplain bylaw administration and VTrans for hydraulic analyses.

Strengths core staff are trained on hazards and mitigation

- core staff are trained in emergency management and understand its role in hazard mitigation
- coordination between local departments is effective
- strong working relationship with State ANR and VTrans
- significant progress made to improve maintenance programs to reduce risk associated with stormwater management

Areas for Improvement none currently

Planning & Regulatory These 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.

The Town does not have any local building codes.

Vermont has adopted statewide codes for commercial building fire safety and energy standards. The energy code also applies to residential buildings. Codes enforced by Vermont's Division of Fire Safety are the 2015 National Fire Protection Association (NFPA) 1 Fire Code; 2015 NFPA 101 Life Safety Code; the 2015 International Building Code (IBC); 2017 NFPA 70 National Electrical Code; 2021 International Code Council (ICC) International Plumbing Code; and the 2015 National Board Inspection Code from the National Board of Boiler and Pressure Vessel Inspectors.

Town Plan

Description: A framework and guide for how future growth and development should proceed.

Relationship to Natural Hazard Mitigation Planning: Includes goals and policies related to flood resilience and land use.

Highway Department Capital Improvement Plan

Description: Comprehensive plan for equipment replacement and infrastructure projects.

Relationship to Natural Hazard Mitigation Planning: Equipment replacement planning strengthens Town's ability to maintain adequate road and debris clearing capabilities and infrastructure improvements are designed to minimize or eliminate flood impacts on town roads.

Road Erosion and Structures Inventories

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

Relationship to Natural Hazard Mitigation Planning: Improvements are designed to minimize or eliminate flood impacts on municipal roads.

Stormwater Infrastructure Mapping Study

Description: Developed up to date municipal drainage system maps and established locations for BMP stormwater retrofit sites.

Relationship to Natural Hazard Mitigation Planning: Identified several structural projects to improve stormwater drainage system capacity.

Moon Brook and Tenney Brook-East Creek Stormwater Management Plans

Description: Identify stormwater inputs and develop prioritized projects to mitigate stormwater water quality problems.

Relationship to Natural Hazard Mitigation Planning: Projects accomplish multiple goals-water quality and mitigation.

Local Emergency Management Plan

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.

Road and Bridge Standards

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 travel safety, minimize damage to road infrastructure during flood events, and enhance water quality protections.

Fire Department ISO Rating

Description: The Rutland Town Fire Department's ISO Rating is 05/5Y. This rating is a score from 1 to 10 that indicates how well-protected the community is by the local fire department.

Relationship to Natural Hazard Mitigation Planning: Everyone wants to keep family, home, and business safe from fires. The ISO rating is a measure of the effectiveness of a community's fire services.

Public Utility Ordinances and Regulations

Description: Water, Sewer, Stormwater ordinances establish minimum standards for design, construction, installation, control, and operation of the utilities.

Relationship to Natural Hazard Mitigation Planning: Adopted standards that reduce risk and make the utilities more resilient.

Flood Hazard Area (FHA) Regulations

Description: Apply to all areas in Rutland Town identified as areas of special flood hazard.

Relationship to Natural Hazard Mitigation Planning: Ensures the design and construction of development in flood and other hazard areas are accomplished in a manner that minimizes or eliminates the potential for flood loss or damage to life and property.

Subdivision Regulations

Description: provide for orderly community growth.

Relationship to Natural Hazard Mitigation Planning: Establish minimum requirements so that subdivided land can be used safely for building purposes without danger to health or peril from fire, flood, or other menace.

Strengths existing ordinances, regulations, and standards are adequately administered and enforced • stormwater master planning • elements of hazard mitigation are included in other local plans

Areas for Improvement protect river corridors from new encroachment (River Corridor Bylaws) • continuity of operations planning • develop internal guidelines with town clerk/treasurer to align with FEMA Public Assistance reporting requirements

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

Rutland Town's 2024-2025 town budget is \$3,658,385, with \$1,086,969 to fund the Highway Department. In addition to property tax revenues, the Town collects a 1% local options tax and O&M fees for water and sewer services.

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 maximizing grant opportunities available through VTrans for transportation infrastructure projects • every municipal department has a depreciation fund with a replacement schedule

Areas for Improvement explore other mitigation grant sources (e.g., FEMA and VEM)

Outreach & Education Rutland Town has several outreach and education opportunities that could be used to implement mitigation activities and communicate hazard-related information:

- Rutland Town Seniors
- Town website, Front Porch Forum, Facebook
- Joint town/elementary school community newsletter – The Circle

Strengths programs/organizations are already in place in the community • strong social media presence • active physical and digital bi-monthly community newsletter.

Areas for Improvement none currently

National Flood Insurance Program Compliance The Town joined the National Flood Insurance Program (NFIP) in 1978. The effective date of the current Flood Insurance Rate Map and Flood Insurance Study is August 28, 2008. The Administrative Officer enforces NFIP compliance through permit review requirements in its Flood Hazard Area regulations.

Rutland Town's regulations outline detailed minimum standards for development in flood hazard areas defined as FEMA Special Flood Hazard Areas and Floodway Areas. The regulations also require administering Substantial Improvement and Substantial Damage (SI/SD) requirements in accordance with FEMA P-758 SI/SD Desk Reference, May 2010. SI/SD is reviewed by the Rutland Town Administrative Officer/Board of Adjustment and regulated by the Rutland Town Special Flood Hazard Area Regulations. See below for a summarized description of articles demonstrating NFIP compliance:

- Section V of the regulations requires any substantial improvement to any existing structure to receive conditional use approval from the Town Board of Adjustment before the Administrative Officer may issue a permit.
- The Board reviews the standards outlined in Section VI which meet or exceed NFIP requirements.
- Article VIII outlines procedures for applying, referrals, properly filing and maintaining records, permit validity, hearings, decisions, and appeals.
- Article IX outlines procedures for enforcement if a violation exists and establishes the duty of the Administrative Officer to enforce the provisions of the regulations.
- Article X defines substantial improvement and substantial damage the same as found in 44 CFR Part 59; as noted in federal code: "substantial improvement" includes structures which have incurred 'substantial damage', regardless of the actual repair work performed.'

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

- 1) Prepare, distribute, or make available NFIP insurance explanatory pamphlets or booklets at the Town Office.

- 2) Participate in NFIP training offered by the State and/or FEMA.
- 3) Work with ANR Regional Floodplain Manager to address the administering of the NFIP following a major storm.

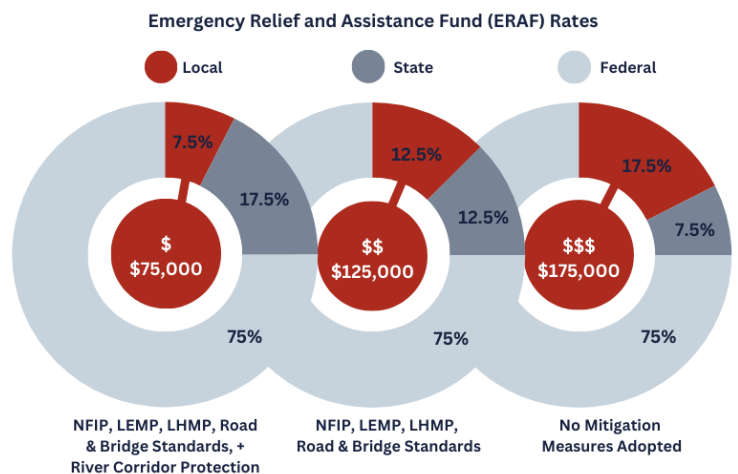
State Incentives for Flood Mitigation Vermont's Emergency Relief Assistance Funding (ERAF) provides state funding to match FEMA Public Assistance after federally declared disasters. Eligible public costs are generally reimbursed by FEMA at 75% with a 7.5% State match. The State will increase its match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

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

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

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

Rutland Town will retain their 12.5% ERAF rate with adoption of the 2025 Local Hazard Mitigation Plan. To increase their ERAF rate to 17.5% the Town would have to adopt River Corridor Bylaws.



In the event of a \$1,000,000 recovery project, the dollar value shown would be the municipality's responsibility.

Mitigation Action Identification

The Hazard Mitigation Planning Team discussed the mitigation strategy, reviewed projects from the 2019 Plan, and identified possible new actions from the following categories for each of the highest risk natural hazards identified in Section 5.



Local Plans & Regulations These actions include government authorities, policies, or codes that influence the way land and buildings are developed and built.



Structure & 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.



Natural Systems Protection These actions help minimize damage and losses and preserve or restore the functions of natural systems.



Outreach & Education Programs These actions inform and educate the public about hazards and potential ways to mitigate them. Although this type of action reduces risk less directly than structure projects or regulation, it is an important foundation. Greater awareness is more likely to lead to community support for direct actions.

Local Plans & Regulations Examples

Integrate Mitigation into Capital Improvement Programs: Incorporate risk assessment and hazard mitigation principles into capital planning.

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.

Improve Flood Resilience with a Flood Study: The aim of a flood study is to define existing flood behavior for a particular catchment, river, or creek. The study helps inform building, land use planning, community awareness and disaster management.

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-related flooding.

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.

Structure & Infrastructure Project Examples

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.

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

Improve Stormwater Drainage Capacity: Minimize 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 infrastructure losses and protect critical facilities from flooding 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.

Natural Systems Protection Examples

Protect and Restore Natural Flood Mitigation Features: Natural conditions can provide floodplain protection, riparian buffers, groundwater infiltration, and other ecosystem services that mitigate flooding. Preserving such functionality is not only important for the ecosystem but also for protecting public safety and infrastructure. Examples include 1) adding riparian buffers; 2) stabilizing stream banks; 3) removing berms; 4) minimizing impervious area development; 5) restore floodplain; and 6) restore incision areas.

Outreach & Education Program Examples

Educate Residents about Extreme Temperatures: The impacts of extreme temperatures (cold and hot) on public health can be lessened if residents know how to prepare and protect themselves.

Educate Residents about Flood Insurance: Flood insurance is available to anyone living in Rutland Town as the municipality participates in the National Flood Insurance Program (NFIP). Residents can better protect their assets from flood damage if they are insured and know what steps to take to provide their homes when flooding is predicted.

Mitigation Action Evaluation

As described in **Appendix C**, the Planning Team invited several subject matter experts with local knowledge to participate in a mitigation action evaluation workshop.

For each mitigation action, workshop participants evaluated its potential benefits and/or likelihood of successful implementation. Actions were evaluated against a 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 Plan for Implementation

After careful evaluation, the Planning Team agreed on a list of actions that support the mitigation goals of this Plan and 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.

A community survey was used to seek public reaction to the proposed mitigation goal and actions. 100% of respondents agreed with the mitigation goal and there was wide support for the proposed actions – see **Appendix C**.

For proposed actions, the Planning Team then 1) assigned a responsible party to lead the completion of each action; 2) identified potential funding; 3) defined a timeframe for implementation; and 4) ranked each action's priority (first, second).

Natural hazards pose a unique threat to the Town's vulnerable populations. Data has shown that underserved and marginalized populations tend to live in at-risk hazard-prone areas or in homes with substandard construction. The data also suggests that this segment of the community is less likely to fully recover after a disaster.³ When ranking an action's priority, those that directly benefit a vulnerable population were ranked first priority.

Proposed actions also ranked first priority if they 1) represented routine activities critical to Rutland Town's ability to limit the impacts of natural hazards, or 2) addressed an ongoing need that would provide significant benefit to the Town if pursued sooner rather than later. The action plan is presented in **Table 6**.

³ FEMA Hazard Mitigation Assistance Program and Policy Guide, March 23, 2023

Table 5: Mitigation Action Evaluation

Mitigation Action	Life Safety	Prop Protect	Tech	Political	Admin	Other Obj	Benefit Score	Est Cost	C/B
Local Plans & Regulations									
Recommended for Implementation									
Integrate Mitigation into Capital Improvement Programs and Planning*	1	1	1	1	1	1	6	1	Y
Plan for and Maintain Adequate Road and Debris Clearing Capabilities	1	1	1	1	1	1	6	1	Y
Update Road Erosion and Culvert Inventories	1	1	1	1	1	1	6	1	Y
Inspect Town Short-Structures and Review VTrans Bridge Inspection Reports for Town Long-Structures and Plan for Repairs to Prevent Flood-related Impacts like Scour	1	1	1	1	1	1	6	1	Y
Plan for Road Right-of-Way Vegetation Management	1	1	1	1	0	1	5	1	Y
Adopt River Corridor Bylaws	1	1	1	0	1	1	5	1	Y
Update Personnel Policy to Recommend Vaccinations for Municipal Employees*	1	0	1	1	1	1	5	1	Y
Improve Extreme Heat Resilience with Hot Weather Response LEMP Annex	1	0	1	1	0	1	4	1	Y
Conduct Flood Risk Analysis for Impacted Assets in Center Rutland	1	1	1	1	-1	1	4	1	Y
Improve Stormwater Management by Completing a Stormwater Master Plan*	0	0	1	1	-1	1	2	1	Y
Not Recommended for Implementation									
Update Subdivision Regulations to Require New Development to Bury Power Lines	1	1	1	-1	1	1	4	1	Y
Improve Flood Resilience with a Flood Study	1	1	1	1	-1	1	4	2	N
Adopt Local Building Codes for Structural Wind and Snow Loads	Not evaluated because the Town relies on statewide codes – see page 22 for additional information.								
Develop Mutual Aid Agreement to Administer NFIP SI/SD Requirements	Not evaluated because the ANR Regional Floodplain Manager will provide the necessary support to administer these requirements.								
Structure & Infrastructure Projects									
Recommended for Implementation									
Protect Power Lines and Roads by Inspecting and Removing Hazardous Trees in Road ROW	1	1	1	1	1	1	6	1	Y
Routinely Clean and Repair Stormwater Infrastructure	1	1	1	1	1	1	6	1	Y
Stabilize Outfalls	1	1	1	1	1	1	6	1	Y
Install/Re-establish Roadside Ditches	1	1	1	1	1	1	6	1	Y
Routinely Clear Debris from Support Bracing Underneath Low-Lying Bridges – B9	1	1	1	1	1	1	6	1	Y
Increase Dimension of Drainage Culverts in Flood-Prone Areas	1	1	1	1	1	1	6	1-3	Y
Floodproof Critical Facilities	1	1	1	1	1	1	6	3	Y
Install Back-up Generators or Quick Connect Wiring at Critical Facilities	1	1	1	0	1	1	5	2	Y
Increase Drainage/Absorption Capacities with Green Stormwater Management Practices – see Moon Brook Flow Restoration Plan	0	1	1	1	1	1	5	2	Y
Remove Existing Structures from Flood-Prone Areas	1	1	1	0	0	1	4	1	Y

Mitigation Action	Life Safety	Prop Protect	Tech	Political	Admin	Other Obj	Benefit Score	Est Cost	C/B
Not Recommended for Implementation									
Elevate Roads Above Base Flood Elevation to Maintain Dry Access	1	1	1	0	1	1	5	3	N
Bury Power Lines	1	1	1	1	-1	1	4	3	N
Retrofit Critical Facilities to Current Structural Wind and Snow Loads	Not evaluated because there are no critical facilities that require retrofitting.								
Anchor Roof-Mounted Mechanical Equipment on Critical Facilities	Not evaluated because there are no critical facilities with roof-mounted mechanical equipment.								
Insulate Shallow Buried Utility Mains/Services	Not evaluated because there are no shallow buried municipal utility lines that require insulating.								
Use Snow Fence on Critical Roads Prone to Drifting	Not evaluated because there are no critical roads prone to snow drifting.								
Natural Systems Protection									
Recommended for Implementation									
Establish Vegetative Buffers in Riparian Areas	1	1	1	1	0	1	5	1	Y
Develop Sediment Management Plan for East Creek	1	1	1	1	0	1	5	2	Y
Remove Significant Hazard Potential Dams	1	1	1	0	-1	1	3	3	Y
Not Recommended for Implementation									
Remove Berms and/or Accumulated Debris from Stream to Restore Flood Capacity	Not evaluated because there are no known locations requiring berm removal and a plan for managing debris will be covered by a separate action – Develop Sediment Management Plan for East Creek.								
Restore Floodplain	Not evaluated as this type of action is already being implemented under the Town’s State MS4 Stormwater Permit.								
Stabilize Stream Banks	Not evaluated as there are no known locations requiring these actions. The Town will monitor this and implement projects, as needed.								
Restore Incision Areas									
Outreach & Education Programs									
Recommended for Implementation									
How to Prepare for Extreme Temperatures – Cold and Hot	1	1	1	1	1	1	6	1	Y
Keep the Ditches Clean Campaign	1	1	1	1	1	1	6	1	Y
National Flood Insurance Program (NFIP)	1	1	1	1	1	1	6	1	Y
MS4 Compliance Required Outreach/Reporting	1	1	1	1	1	1	6	1	Y

*These actions are not included in Table 6 but rather are listed as examples of how the actions in this Plan will be incorporated into other plans and procedures – see page 37.

Table 5 Evaluation Criteria

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

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

Technical – Is the 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, benefit a vulnerable population, 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: Mitigation Action Plan

Plan for and Maintain Adequate Road and Debris Clearing Capabilities: A leading cause of death and injury during winter storms is from automobile 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 (highway garage and equipment), and an appropriate number of staff and/or contracted services needed to maintain the transportation network in Rutland Town.

ADDRESSED HAZARDS	COMMUNITY LIFELINES TARGETED	LEAD PARTY
 Extreme Cold, Snow, and Ice Primary Hazard	 Safety & Security	Selectboard
 Strong Wind	 Transportation Primary Lifeline	FUNDING SOURCES Town Budget
TYPE OF PROJECT	Area of Impact Town-wide; ±50 mile road network	PARTNERSHIPS Road Commissioner
 Local Plans & Regulations		PROJECT TIMEFRAME Oct-Dec Annually PRIORITY = FIRST

Update Road Erosion (REI) and Culvert Inventories: These inventories were completed in 2018 and 2022, respectively, and serve as the basis for asset management. Inventories should be kept up-to-date annually, with a full reassessment every 5 years.

ADDRESSED HAZARDS	COMMUNITY LIFELINES TARGETED	LEAD PARTY
 Floods	 Safety & Security	Road Commissioner
TYPE OF PROJECT	 Transportation Primary Lifeline	FUNDING SOURCES VTrans
 Local Plans & Regulations	Area of Impact Town-wide; ±50 mile road network and 727 culverts	PARTNERSHIPS - Rutland RPC - ANR Municipal Roads Program
		PROJECT TIMEFRAME Both Updates 2027 construction season PRIORITY = SECOND

Plan for Bridge Repairs: Town bridges are vulnerable to flooding. The Town will inspect short structures and review long structure VTrans inspection reports to plan for flood-related bridge repairs such as scour and channel maintenance as needed based on the inspection results.

ADDRESSED HAZARDS	COMMUNITY LIFELINES TARGETED	LEAD PARTY
 Floods	 Safety & Security	Road Commissioner
TYPE OF PROJECT	 Transportation Primary Lifeline	FUNDING SOURCES VTrans
 Local Plans & Regulations	Area of Impact 9 Short Structures: B1 Gleason Rd; B2 N Grove St; B3 Cold River Rd; B4 Stratton Rd; B5 Cold River Rd; B6 Stratton Rd; B7 and B8 Prospect Hill Rd; Bx Town Line Rd 2 Long Structures: B5 E Pittsford Rd; B9 McKinley Ave	PARTNERSHIPS VTrans District 3
		PROJECT TIMEFRAME Short Inspections 2026 and 2027 construction seasons Long Inspections Review 2025 construction season PRIORITY = SECOND

Road Right-of-Way (ROW) Vegetation Management Plan: Hazard trees in the ROW can contribute to power and communication outages as well as debris in the roadway during winter storms and wind events. To increase roadside resilience, Rutland Town will develop a plan to 1) identify community priorities and 2) define actions for site-specific tree and roadside vegetation management.

ADDRESSED HAZARDS

Extreme Cold, Snow, and Ice
Primary Hazard



Strong Wind

TYPE OF PROJECT

Local Plans & Regulations

COMMUNITY LIFELINES TARGETED

Energy
Primary Lifeline



Communications



Transportation

Area of Impact

Town-wide; ±50 mile road network

LEAD PARTY

Road Commissioner

FUNDING SOURCES

- Town Budget

PARTNERSHIPS

- Tree Warden
- VT Urban & Community Forestry
- VT Dept of Forests, Parks, & Rec

PROJECT TIMEFRAME

2028 construction season

PRIORITY = SECOND

Adopt River Corridor Bylaws: River Corridor Bylaws can be used in conjunction with Flood Hazard Area Regulations to manage development in areas prone to flood impacts.

ADDRESSED HAZARDS

Floods

TYPE OF PROJECT

Local Plans & Regulations

COMMUNITY LIFELINES TARGETED

Safety & Security



Transportation
Primary Lifeline



Food, Water, Shelter

Area of Impact

Town-wide

LEAD PARTY

Planning Commission

FUNDING SOURCES

- Town Budget

PARTNERSHIPS

- Rutland RPC

PROJECT TIMEFRAME

In development; consider for adoption by 2027

PRIORITY = SECOND

Improve Extreme Heat Resilience with Hot Weather Response LEMP Annex: To supplement the Town's general sheltering plan outlined in the local emergency management plan, the Town will prepare an annex that focuses on sheltering procedures for hot weather to better support hot weather resilience in the community.

ADDRESSED HAZARDS

Extreme Heat

TYPE OF PROJECT

Local Plans & Regulations

COMMUNITY LIFELINES TARGETED

Safety & Security

Area of Impact

Town-wide

LEAD PARTY

Emergency Management Director

FUNDING SOURCES

- Town Budget

PARTNERSHIPS

- Rutland RPC
- Vermont Department of Health

PROJECT TIMEFRAME

Develop in 2025 for adoption in May 2026

PRIORITY = FIRST

Conduct Flood Risk Analysis for Impacted Assets: A flood risk analysis is a detailed evaluation of the potential for flooding in a specific area. It involves assessing the probability of flooding occurring combined with the potential damage it could cause. A flood risk analysis is proposed for the area along Otter Creek in Center Rutland to help inform potential mitigation strategies for this flood-prone area.

ADDRESSED HAZARDS**Floods****TYPE OF PROJECT**Local Plans &
Regulations**COMMUNITY LIFELINES TARGETED****Safety & Security****Transportation**
Primary Lifeline**Food, Water, Shelter****Area of Impact**

Center Rutland

LEAD PARTY

Selectboard

FUNDING SOURCES

- Town Budget

PARTNERSHIPS

- ANR Floodplain Manager
- ANR River Engineer

PROJECT TIMEFRAME

Jan 2026 – Oct 2026

PRIORITY = FIRST

Remove Hazard Trees in Road ROW: Rutland Town 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**Extreme Cold, Snow,
and Ice**
Primary Hazard**Strong Wind****TYPE OF PROJECT**Structure &
Infrastructure**COMMUNITY LIFELINES TARGETED****Energy**
Primary Lifeline**Communications****Transportation****Area of Impact**

Town-wide; ±50 mile road network

LEAD PARTY

Road Commissioner

FUNDING SOURCES

- Town budget

PARTNERSHIPS

- Tree Warden
- Green Mountain Power

PROJECT TIMEFRAME

See ROW Vegetation Management Plan

PRIORITY = FIRST

Routinely Clean and Repair Stormwater Infrastructure: Regular maintenance is one of the most effective ways to mitigate the impacts of floods. Routine cleaning and repairs of catch basins, ditches, and culverts will be done according to the Highway Department's maintenance schedule, the Municipal Roads General Permit (MRGP), and MS4 Permit.

ADDRESSED HAZARDS**Floods****TYPE OF PROJECT**Structure &
Infrastructure**COMMUNITY LIFELINES TARGETED****Safety & Security****Transportation**
Primary Lifeline**Area of Impact**Town-wide; ±50 mile road network
and 727 culverts**LEAD PARTY**

Road Commissioner

FUNDING SOURCES

- Town Budget

PARTNERSHIPS

- ANR Stormwater Program

PROJECT TIMEFRAMESee Highway Department's Maintenance
Schedule, MRGP, MS4**PRIORITY = FIRST**

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. Rutland Town has identified the following locations where culvert outlet stabilization is needed.

ADDRESSED HAZARDS**Floods****TYPE OF PROJECT**Structure &
Infrastructure**COMMUNITY LIFELINES TARGETED****Safety & Security****Transportation**
Primary Lifeline**Area of Impact**

- 1) Lester Ln
- 2) Old Falls Rd
- 3) Cold River Rd
- 4) Post Rd

LEAD PARTY

Road Commissioner

FUNDING SOURCES

- VTrans

PARTNERSHIPS

- ANR Municipal Roads Program

PROJECT TIMEFRAME

- 1) 2025 construction season
- 2) 2030 construction season
- 3) 2026 construction season
- 4) 2027 construction season

PRIORITY = SECOND

Install/Re-work Roadside Ditches: Properly installed and stabilized roadside ditches are critical to protect the integrity of the road. As of December 2024, Rutland Town has 2 road segments (1 segment = 328 ft) with ditches that must be improved to current municipal road standards.

ADDRESSED HAZARDS**Floods****TYPE OF PROJECT**Structure &
Infrastructure**COMMUNITY LIFELINES TARGETED****Safety & Security****Transportation**
Primary Lifeline**Area of Impact**

See MRGP Road Erosion Inventory for non-compliant road segments

LEAD PARTY

Road Commissioner

FUNDING SOURCES

- VTrans

PARTNERSHIPS

- ANR Municipal Roads Program

PROJECT TIMEFRAME

See MRGP Improvement Schedule

PRIORITY = SECOND

Routinely Clear Debris from Low-Lying Bridge Support Bracing: Regular maintenance will help structures continue to function properly and not create a hazard during a flood. Rutland Town has identified one (1) low-lying bridge.

ADDRESSED HAZARDS**Floods****TYPE OF PROJECT**Structure &
Infrastructure**COMMUNITY LIFELINES TARGETED****Safety & Security****Transportation**
Primary Lifeline**Area of Impact**

B9 on McKinley Avenue

LEAD PARTY

Road Commissioner

FUNDING SOURCES

- Town Budget

PARTNERSHIPS

- ANR River Engineer

PROJECT TIMEFRAME

As needed

PRIORITY = FIRST

Adequately Size Culverts in Flood-Prone Areas: Undersized culverts can lead to road washouts and floods. Rutland Town has identified the following location where upsized culverts are needed.

ADDRESSED HAZARDS**Floods****TYPE OF PROJECT**Structure &
Infrastructure**COMMUNITY LIFELINES TARGETED****Safety & Security****Transportation**
Primary Lifeline**Area of Impact**

Elbern Ave

LEAD PARTY

Road Commissioner

FUNDING SOURCES

- VTrans
- FEMA/VEM Hazard Mitigation

PARTNERSHIPS

- ANR Municipal Roads Program
- ANR River Engineer
- VTrans District 3

PROJECT TIMEFRAME

Design Jan-Dec 2025

Construction Apr-Oct 2026

PRIORITY = SECOND

Floodproof Critical Facilities: There are two wastewater pump stations in flood-prone areas that require floodproofing. The McKinley Avenue station is owned by the Town. The Route 3 station is owned by Fire District #1 and is included in this Plan in the event the District would like to partner with the Town to complete this action.

ADDRESSED HAZARDS**Floods****TYPE OF PROJECT**Structure &
Infrastructure**COMMUNITY LIFELINES TARGETED****Safety & Security****Food, Water, Shelter**
Primary Lifeline**Area of Impact**

- 1) McKinley Avenue WW Pump Station
- 2) Route 3 WW Pump Station

LEAD PARTY

Selectboard

FUNDING SOURCES

- FEMA/VEM Hazard Mitigation
- State Revolving Loan Fund

PARTNERSHIPS

- Fire District #1

PROJECT TIMEFRAME (McKINLEY AVE)

Design/Permits 2028-2029

Construction 2030

PRIORITY = FIRST

Install Back-up Power at Critical Facilities: Generators (standby or portable) are emergency equipment that provide a secondary source of power to a facility. While all town-owned critical facilities have been equipped with back-up power, there are several fire districts and/or water corporations in Rutland Town that lack back-up power for their water/sewer public utilities. The Town is including these public utilities in this Plan in the event they would like to partner with the Town to complete this action.

ADDRESSED HAZARDS**All Hazards****TYPE OF PROJECT**Structure &
Infrastructure**COMMUNITY LIFELINES TARGETED****Energy**
Primary Lifeline**Food, Water, Shelter****Area of Impact**Utility service areas for Fire Districts 2, 4, 8, 11
and Colonial Estates Water Corporation**LEAD PARTY**

Selectboard

FUNDING SOURCES

- FEMA/VEM Hazard Mitigation
- State Revolving Loan Fund

PARTNERSHIPS

- Fire Districts 2, 4, 8, 11
- Colonial Estates Water Corporation

PROJECT TIMEFRAME

At the discretion of the above Partners

PRIORITY = SECOND

Install Green Stormwater Management Practices: Green infrastructure uses vegetation, soils, and other elements and practices to restore some of the natural processes required to manage stormwater. The 2016 Moon Brook Flow Restoration Plan has identified projects.

ADDRESSED HAZARDS**Floods****TYPE OF PROJECT**Structure &
Infrastructure**COMMUNITY LIFELINES TARGETED****Safety & Security****Transportation**
Primary Lifeline**Area of Impact**

Moon Brook Watershed

LEAD PARTY

Selectboard

FUNDING SOURCES

- Town Budget

PARTNERSHIPS

- Watershed Consulting

PROJECT TIMEFRAME

See MS4 Permit

PRIORITY = FIRST

Remove Structures from Flood-Prone Areas: Removing structures from flood-prone areas to minimize future flood losses by acquiring and demolishing or relocating structures from voluntary property owners and preserving the land is a highly recommended long-term flood mitigation measure. There is one repetitive loss non-residential property in Rutland Town. There are 77 buildings in the FEMA-mapped Special Flood Hazard Areas, with 1 building in the floodway. Rutland Town will conduct outreach to property owners most at risk to determine interest in a property buyout.

ADDRESSED HAZARDS**Floods****TYPE OF PROJECT**Structure &
Infrastructure**COMMUNITY LIFELINES TARGETED****Safety & Security****Food, Water, Shelter**
Primary Lifeline**Area of Impact**

77 buildings in Special Flood Hazard Areas

LEAD PARTY

Planning Commission

FUNDING SOURCES

- FEMA/VEM Hazard Mitigation

PARTNERSHIPS

- Vermont Emergency Management

PROJECT TIMEFRAME

Jun 2025

PRIORITY = FIRST

Establish Vegetative Buffers: Rutland Town will work with project partners to evaluate the feasibility of implementing vegetative buffer projects as recommended in previous stream geomorphic assessments and stormwater master planning.

ADDRESSED HAZARDS**Floods****TYPE OF PROJECT**Natural Systems
Protection**COMMUNITY LIFELINES TARGETED****Safety & Security****Transportation**
Primary Lifeline**Area of Impact**

East Creek Watershed
Upper Otter Creek Watershed
Otter Creek Watershed Tributaries
Moon Brook Watershed
Tenney Brook

LEAD PARTY

Planning Commission

FUNDING SOURCES

- Rutland NRCD
- FEMA/VEM Hazard Mitigation

PARTNERSHIPS

- Rutland NRCD
- ANR Rivers Program
- VT Youth Conservation Corp

PROJECT TIMEFRAME

Partner Outreach – Jun 2025
Feasibility Evaluation – Jan-Dec 2026
Project Recommendations – Mar 2027

PRIORITY = SECOND

Develop Sediment Management Plan for East Creek: Rutland Town will work with project partners to explore options to restore the flood capacity of East Creek.

ADDRESSED HAZARDS**Floods****TYPE OF PROJECT**Natural Systems
Protection**COMMUNITY LIFELINES TARGETED****Safety & Security****Transportation**
Primary Lifeline**Area of Impact**

East Creek from US Route 7 to Glen Dam

LEAD PARTY

Selectboard

FUNDING SOURCES

- Town Budget

PARTNERSHIPS

- Rutland NRC
- ANR River Engineer

PROJECT TIMEFRAME

Partner Outreach – Jun 2025

Feasibility Evaluation – Jan-Dec 2026

Project Recommendations – Mar 2027

PRIORITY = FIRST

Remove Significant Hazard Potential Dams: The Upper Eddy Pond Dam on Mussey Brook is privately owned and classified as a significant hazard potential dam. Last inspected in 2023, it is in poor condition. The Town will conduct outreach to the property owner to determine interest in removing the dam.

ADDRESSED HAZARDS**Floods****TYPE OF PROJECT**Natural Systems
Protection**COMMUNITY LIFELINES TARGETED****Safety & Security****Transportation**
Primary Lifeline**Area of Impact**

Upper Eddy Pond Dam on Mussey Brook

LEAD PARTY

Selectboard

FUNDING SOURCES

- FEMA/VEM Hazard Mitigation

PARTNERSHIPS

- Rutland NRC
- ANR River Engineer

PROJECT TIMEFRAME

Property Owner Outreach – Jun 2025

PRIORITY = FIRST

Educate the Public about Severe Winter and Extreme Heat-Related Hazards: Rutland Town will undertake education and awareness efforts by publishing information in The Circle community newsletter, Front Porch Forum, and Facebook on ways to prepare for 1) severe winter related hazards (e.g., freezing pipes) and 2) extreme heat related hazards (e.g., heat stroke).

ADDRESSED HAZARDS**Extreme Cold, Snow,
and Ice****Extreme Heat****TYPE OF PROJECT**Outreach & Education
Programs**COMMUNITY LIFELINES TARGETED****Safety & Security**
Primary Lifeline**Area of Impact**

Town-wide

LEAD PARTY

Town Administrator

FUNDING SOURCES

- Town Budget

PARTNERSHIPS

- Ready.gov Tool Kits
- VT Department of Health
- Rutland Town Elementary School

PROJECT TIMEFRAME

Spring and Fall Annually

PRIORITY = SECOND

Educate the Public about Flood-Related Hazards: Rutland Town will undertake education and awareness efforts by publishing information in The Circle community newsletter, Front Porch Forum, and Facebook on 1) the importance of keeping roadside ditches and culvert clear of yard waste and other debris and 2) the availability of flood insurance through the NFIP and how to prepare for/recover from a flood event.

ADDRESSED HAZARDS**Floods****COMMUNITY LIFELINES TARGETED****Safety & Security**
Primary Lifeline**LEAD PARTY**

Town Administrator

FUNDING SOURCES

- Town Budget

PARTNERSHIPS

- FloodSmart.gov Tool Kits
- Rutland Town Elementary School

PROJECT TIMEFRAME

Spring Annually

PRIORITY = SECOND**TYPE OF PROJECT**Outreach & Education
Programs**Area of Impact**

Town-wide

Navigating Table 6

The Mitigation Action Plan includes a series of “mini-project profiles”, one for each action recommended for implementation in **Table 5**. Each profile consists of the following elements:

Mitigation Action Description: A brief description of what will be done to mitigate an issue identified in the hazard profile.

Addressed Hazard: Indicates the type of highest risk hazard the action addresses.

Type of Project: Indicates the project type category to which the action belongs (see page 25).

Community Lifelines Targeted: Indicates which critical government and business functions responsible for preserving human health and safety or economic security will benefit from this action (see page 21).

Area of Impact: Indicates the location where the action will be implemented and the spatial extent of the action’s outcomes. “Town-wide” is used for actions that apply throughout the municipality.

Lead Party: Identifies who is responsible for administering each action.

Funding Sources: Identifies a potential funding source to implement the action. The Town is ultimately responsible for determining the specific funding source to be utilized when the action is implemented.

Partnerships: List individuals, agencies, or resources that may be able to help identify funding sources, complete grant applications, and/or implement the action.

Project Timeframe: Provides the expected schedule for completion based on available time and resources.

Prioritization: Indicates the relative importance of each action based on a set of criteria (see page 26).

Integrating Into Existing Plans and Procedures

For Rutland Town to succeed in reducing long-term risk to natural hazards, the goals, vulnerability information, and mitigation actions in this Plan will be integrated throughout government operations. When activities are connected, they not only reduce risk and increase resilience, but also accomplish other objectives such as environmental protection, economic development, financial stability, and land use planning.

The Town can achieve integration into existing plans and procedures to support risk-informed community planning in the following ways:

- Funding for mitigation actions can be prioritized in capital planning for facilities and equipment as well as in the annual operating budget process. This was a 2019 action and remains a priority.
- To support workplace health and safety for employees, the Town's personnel policy can be updated to recommend vaccinations for municipal employees.
- The mitigation goal and risk information can inform the Planning Commission's current work to update the Town's Subdivision Regulations. These regulations support the goal of mitigating risks to public safety from floods.
- The mitigation goal and risk information can inform the response and recovery procedures outlined in the Local Emergency Management Plan, especially the development of a Hot Weather Response annex.
- The mitigation goal and risk information can help inform the next update of the 2019 Town Plan, in particular its flood resilience and land use policies and actions. These policies and actions support the goal of mitigating risks to public safety, critical infrastructure, historic structures, and municipal investments posed by floods and fluvial erosion.
- Flood-related mitigation actions to increase road resiliency can be implemented under the Municipal Road General Permit to control stormwater discharges from town roads.
- The mitigation goal and flood-related mitigation actions in the Moon Brook watershed can be implemented under the Rutland Town Municipal Separate Storm Sewer System (MS4) General Permit. The MS4 permit and Moon Brook Flow Restoration Plan are designed to control stormwater runoff pollution in the portion of the Moon Brook watershed located in Rutland Town.
- The mitigation goal and risk information can be integrated into the mission of the Rutland Regional Disaster Cooperative (RRDC). This county-wide organization is currently being developed through a joint effort by the RRPC and Vermont Department of Health. The RRDC will serve to coordinate knowledge and resources among the Whole Community to help those affected by the impacts of natural hazards. By strengthening the coordination and sharing of resources, RRDC may play a crucial role in bolstering the administrative and outreach and education capabilities of the municipalities in Rutland County.
- The mitigation goal and risk information can help inform the planning to re-establish a regional dispatch center for emergency services in the Rutland region.

Section 406 – Public Assistance Program

Section 406 mitigation measures are funded under the FEMA Public Assistance Program. 406 funding provides discretionary authority to fund mitigation measures in conjunction with the repair of disaster-damaged facilities, so is limited to declared counties and eligible damaged facilities. Section 406 is applied on the parts of the facility that were damaged by the disaster and the mitigation measures directly reduce the potential of future, similar disaster damages to the facility.

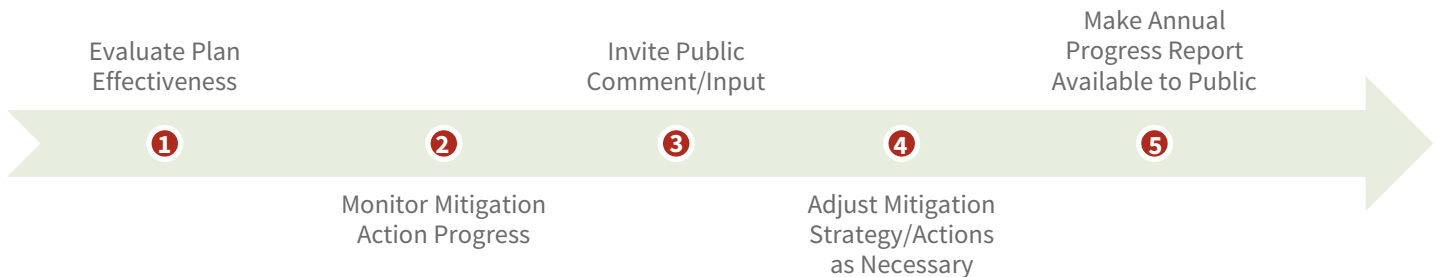
Rutland Town will make every effort to maximize use of future Public Assistance Section 406 Mitigation opportunities when available during federally declared disasters.

7 PLAN MAINTENANCE

This Plan is dynamic. To ensure it remains current and relevant, it should be annually evaluated and monitored and updated every five years, in accordance with FEMA guidelines in effect at the time.

Annual Evaluation and Monitoring

Within 12 months of FEMA Final Approval, the Plan will be annually evaluated and monitored as follows:



1 The Selectboard will evaluate the effectiveness of the Plan in meeting the stated goals as part of the budget development process each fiscal year. Things to consider during this evaluation:

- What disasters has the town (or region) experienced?
- Should the list of highest risk natural hazard impacts be modified?
- Are new data sources, maps, plans, or reports available? If so, what have they revealed, and should the information be incorporated into this plan?
- Has development in the region occurred and could it create or reduce risk?
- Has the town adopted new policies or regulations that could be incorporated into this plan?
- Have elements of this plan been incorporated into new plans, reports, policies, or regulations?
- Are there different or additional community capabilities available for mitigation implementation?

2 Next, the Selectboard will monitor mitigation action progress. Things to consider:

- Is the mitigation strategy being implemented as anticipated?
- Were the cost and timeline estimates accurate?
- Should new mitigation actions be added?
- Should proposed actions be revised or removed?
- Are there new funding sources to consider?

The status (e.g., in progress, complete) of each 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.

3 The Selectboard will seek public comment from the Whole Community on plan implementation. Things to consider:

- Are there any new stakeholders to include?
- What public outreach activities have occurred? At minimum, the Town will publicly post notice of meetings when the plan is being evaluated.
- How can public involvement be improved?

4 Based on input received, the mitigation strategy and/or actions will be modified, if needed.

5 A report (or record in the form of meeting minutes) of the annual evaluation and monitoring will be made available to the public.

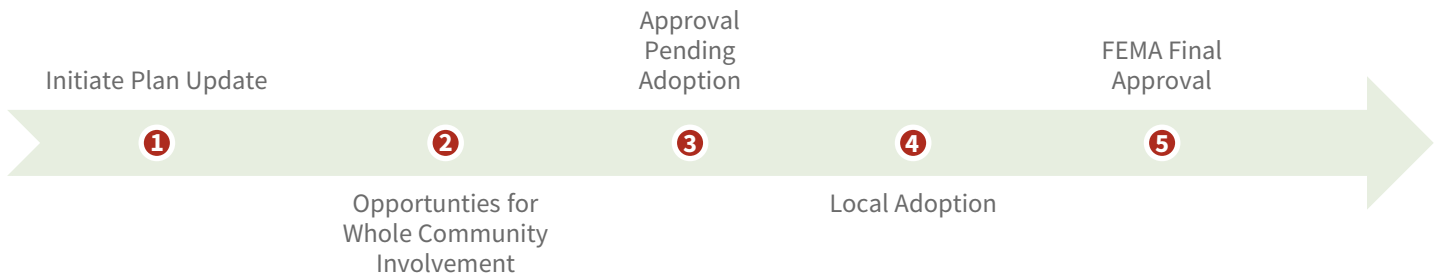
Table 7: Mitigation Action Status

Mitigation Action	2026	2027	2028	2029	2030
Local Plans & Regulations					
Plan for and Maintain Adequate Road and Debris Clearing Capabilities PRIORITY: First LEAD PARTY: Selectboard TIMEFRAME: Oct-Dec Annually					
Update Road Erosion and Culvert Inventories PRIORITY: Second LEAD PARTY: Road Commissioner TIMEFRAME: Both updates 2027 construction season					
Plan for Bridge Repairs PRIORITY: Second LEAD PARTY: Road Commissioner TIMEFRAME: Short Structure Inspections 2026 and 2027; Long Structure Inspection Reviews 2025					
Road Right-of-Way Vegetation Management Plan PRIORITY: Second LEAD PARTY: Road Commissioner TIMEFRAME: 2028					
Adopt River Corridor Bylaws PRIORITY: Second LEAD PARTY: Planning Commission TIMEFRAME: Consider for adoption by 2027					
Improve Extreme Heat Resilience with Hot Weather Response LEMP Annex PRIORITY: First LEAD PARTY: Emergency Management Director TIMEFRAME: Develop in 2025 for adoption May 2026					
Conduct Flood Risk Analysis for Impacted Assets PRIORITY: First LEAD PARTY: Selectboard TIMEFRAME: Jan 2026-Oct 2026					
Structure & Infrastructure Projects					
Remove Hazard Trees in Road Right-of-Way PRIORITY: First LEAD PARTY: Road Commissioner TIMEFRAME: See ROW Vegetation Management Plan					
Routinely Clean and Repair Stormwater Infrastructure PRIORITY: First LEAD PARTY: Road Commissioner TIMEFRAME: See Highway Department Maintenance Schedule, MRGP and MS4 permits					
Stabilize Culvert Outfalls PRIORITY: Second LEAD PARTY: Road Commissioner TIMEFRAME: See Action Summary pg. 32					
Install/Re-establish Roadside Ditches PRIORITY: Second LEAD PARTY: Road Commissioner TIMEFRAME: See MRGP					

Mitigation Action	2026	2027	2028	2029	2030
Routinely Clear Debris from Support Bracing Underneath Low-Lying Bridges – B9 PRIORITY: First LEAD PARTY: Road Commissioner TIMEFRAME: As needed					
Adequately Size Culverts in Flood-Prone Areas PRIORITY: Second LEAD PARTY: Road Commissioner TIMEFRAME: Design 2025; Construct 2026					
Floodproof Critical Facilities PRIORITY: First LEAD PARTY: Selectboard TIMEFRAME: Design 2028-2029; Construct 2030					
Install Back-up Power at Critical Facilities PRIORITY: Second LEAD PARTY: Selectboard TIMEFRAME: See Action Summary pg. 33					
Install Green Stormwater Management Practices in Flood-Prone Areas PRIORITY: First LEAD PARTY: Selectboard TIMEFRAME: See MS4 permit					
Remove Existing Structures from Flood-Prone Areas PRIORITY: First LEAD PARTY: Planning Commission TIMEFRAME: Jun 2025					
Natural Systems Protection					
Establish Vegetative Buffers in Riparian Areas PRIORITY: Second LEAD PARTY: Planning Commission TIMEFRAME: See Action Summary – pg. 34					
Develop Sediment Management Plan for East Creek PRIORITY: First LEAD PARTY: Selectboard TIMEFRAME: See Action Summary pg. 35					
Remove Significant Hazard Potential Dams PRIORITY: First LEAD PARTY: Selectboard TIMEFRAME: Jun 2025					
Outreach & Education Programs					
Educate the Public about Severe Winter and Extreme Heat-Related Hazards PRIORITY: Second LEAD PARTY: Town Administrator TIMEFRAME: Spring and Fall Annually					
Educate the Public about Flood-Related Hazards PRIORITY: Second LEAD PARTY: Town Administrator TIMEFRAME: Spring Annually					

5-Year Updates

This Plan will be updated at a minimum every five (5) years as follows:



- 1 Currently, funding to assist municipalities in paying for planning services to update the Local Hazard Mitigation Plan is available through FEMA's Building Resilient Infrastructure and Communities grant program. If using this grant, Rutland Town's Town Administrator should contact Vermont Emergency Management (VEM) to apply for funding in 2028 – approximately 2 years before the Plan expires. It is assumed that the Town Administrator will serve as the primary point of contact for the Plan update.

Once funding is secured and the grant agreement between the Town and State is in place, the Town Administrator can issue a request for proposals (RFP) to procure planning services in accordance with the grant agreement. The RFP should be issued approximately 14 months before the Plan expires.

Once a consultant is procured, the Plan update can begin with a kick-off meeting including the consultant and local hazard mitigation planning team. The kick-off meeting should be scheduled approximately 12 months before the Plan expires. The Town should allot approximately 8 months for the Plan update process.

- 2 Opportunities for Whole Community involvement throughout the Plan update process need to be factored into the schedule. These opportunities may include a community survey, planning workshop, and public meetings at critical milestones agreed to at the project kick-off meeting.
- 3 Once the local hazard mitigation planning team has prepared a final draft, they can seek authorization from the Selectboard to submit the Plan for VEM/FEMA approval. Plan approval is accomplished in two steps – the first is Approval Pending Adoption. The Town should submit for Approval Pending Adoption approximately 4 months before the Plan expires to allow for time to respond to any review comments received from VEM/FEMA.
- 4 Once the Town receives Approval Pending Adoption, the Selectboard should adopt the Plan as soon as their next regular meeting.
- 5 Once adopted, the Town can submit the Plan for VEM/FEMA Final Approval. The Town should submit for Final Approval approximately 1 month before the Plan expires to ensure there is no gap in coverage between updates. The FEMA Final Approval date starts the clock on the effective dates of the 5-year Plan.

CERTIFICATE OF ADOPTION
Rutland Town, Vermont Selectboard
A Resolution Adopting the Rutland Town, Vermont 2025 Local Hazard Mitigation Plan

WHEREAS the Rutland Town Selectboard recognizes the threat that natural hazards pose to people and property within Rutland Town; and

WHEREAS the Rutland Town Selectboard has prepared a natural hazard mitigation plan, hereby known as the Rutland Town, Vermont 2025 Local Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

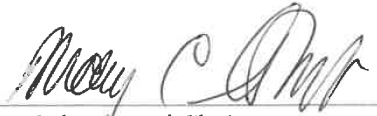
WHEREAS the Rutland Town, Vermont 2025 Local Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in Rutland Town from the impacts of future hazards and disasters; and

WHEREAS adoption by the Rutland Town Selectboard demonstrates its commitment to hazard mitigation and achieving the goals outlined in the Rutland Town, Vermont 2025 Local Hazard Mitigation Plan.

NOW THEREFORE, BE IT RESOLVED BY RUTLAND TOWN, VERMONT, THAT:

Section 1. In accordance with 24 VSA §872, the Rutland Town Selectboard adopts the Rutland Town, Vermont 2025 Local Hazard Mitigation Plan. While content related to Rutland Town may require revisions to meet the plan approval requirements, changes occurring after adoption will not require Rutland Town to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

ADOPTED by a vote of 5 in favor and 0 against, and 0 abstaining, this 23rd day of September 2025.

By:  (signature)
Selectboard Chair

Mary Ashcroft

Selectboard Chair (print name)

ATTEST BY:  (print name)
Joseph Denack

MITIGATION ACTIONS FROM 2019 PLAN

Mitigation Action	Lead Party	Timeframe	2025 Status
Local Plans and Regulations			
Integrate Mitigation into Capital Improvement Programs	Department Heads	Annually, during budget preparation	Remains ongoing priority
Improve Stormwater Management by Adopting a Stormwater Ordinance	Selectboard	Work has already started, adopt by 12/31/2019	Complete
Examine Town Plan and ensure identified hazard areas and needed strategies are addressed	Planning Commission	At next Town Plan update in 2024	Complete
Examine Flood Hazard Area regulations and ensure identified hazard areas are addressed	Planning Commission	2020 - 2021	Remains ongoing priority
Structure and Infrastructure Projects			
Routinely Clean and Repair Stormwater Infrastructure	Highway Department	Annually	Remains ongoing priority
Install Back-up Generators or Quick Connect Wiring at Critical Facilities	Fire Districts Water Corps	2020 - 2025	Incomplete
Increase Drainage/Absorption Capacities with Low Impact Development Practices: (1) See Moon Brook Flow Restoration Plan	Selectboard	See 2016 Moon Brook Flow Restoration Plan	Incomplete
Routinely Clear Debris from Support Bracing Underneath Low-Lying Bridge on Bridge #9	Highway Department	Annually or as needed	Remains ongoing priority
Protect Power Lines by Inspecting and Maintaining Hazardous Trees in Road ROW	Highway Department	Annually or as needed	Remains ongoing priority
Floodproof Critical Facilities: (1) Wastewater pump station on McKinley Avenue remains vulnerable to flooding (2) Wastewater pump station near Route 3	(1) Selectboard (2) Fire District	2020 - 2025	Incomplete
Stabilize Outfalls: (1) North Grove Street (2) Lester Lane (3) Old Falls Road (4) Cold River Road (5) Post Road (6) Timberlane	Highway Department	(1-4) See 2018 CIP (5-6) 2020 - 2025 Work on these culverts will have to be approved by Vermont ANR River Management	(1) Complete (2) Incomplete (3) Incomplete (4) Incomplete (5) Incomplete (6) Complete
Re-establish Roadside Ditches: (1) See 2018 Capital Improvement Plan	Highway Department	See 2018 CIP	Remains ongoing priority
Increase Dimension of Drainage Culverts in Flood-Prone Areas: (1) E Proctor Road (2) Town Line Road	Highway Department	(1) Work will be coordinated with road paving, between 2020 - 2025 (2) One culvert will be engineered in 2019 with planned replacement in 2020; other cross drainage culverts will be coordinated with road paving to be done between 2021 - 2025	(1) Complete (2) Complete

Mitigation Action	Lead Party	Timeframe	2025 Status
Natural Systems Protection			
Because the Town is unaware of any potential projects, they will collaborate with the Rutland Natural Resource Conservation District and Rutland Regional Planning Commission on the Otter Creek Tactical Basin Plan Update to identify potential projects	Planning Commission	Work has already started, complete Basin Plan update by 12/31/19	Complete – there were no projects flagged in Rutland Town
Education and Awareness Programs			
Educate Property Owners about Freezing Pipes	Selectboard	Annually	Remains ongoing priority

PUBLIC ENGAGEMENT SUMMARY

Community Engagement Strategy

During the kickoff meeting, the Rutland Town Planning Team came to a consensus on a 2-phase Community Engagement Strategy – see **Appendix Table 1** on page A-7. This Strategy was designed to ensure that underserved and socially vulnerable populations had an opportunity for equitable involvement throughout the entirety of the plan development process (i.e., from kickoff to final draft).

This Strategy also ensured the involvement of the Whole Community. For the purposes of this plan, the Whole Community is comprised of 1) local and regional agencies involved in hazard mitigation; 2) entities with authority to regulate development; 3) neighboring towns; 4) representatives of business, schools/academia, and other private organizations that sustain community lifelines; and 5) representatives of nonprofit organizations, including those that work directly with or provide support to vulnerable populations.

A Goal Statement was developed to guide the planning team's public outreach throughout the planning process:

Rutland Town will:

- ***Notify the Whole Community about the plan update at the kickoff, mid-point draft, and final draft;***
- ***Solicit feedback from the Whole Community about the frequency and impacts of various natural hazards, and strategies and mitigation methods that should be prioritized; and***
- ***Integrate from the Whole Community perspectives and information about hazard impacts and likelihoods, and priorities for potential mitigation actions.***

Phase 1 Engagement Activities

Kick-off To notify the Whole Community of the Plan Update, the Town conducted a robust advertising campaign. A landing page was created to provide a dedicated online source for all information related to the planning process and opportunities for community engagement. The landing page url: tinyurl.com/RutlandTownLHMP25

Physical flyers were posted at the Town Office and online notices were posted on the Town Facebook page, Front Porch Forum, RRPC website, and RRPC Facebook page.

Project communications were sent to the following segments of the Whole Community:

- 1) Hazard Mitigation Agencies: DEC Western VT Floodplain Manager, Rutland Natural Resources Conservation District, South Lake Champlain CWSP, VDH Emergency Preparedness Specialist, VTrans District 3 Projects Manager
- 2) Authorities Regulating Development: Rutland Town Selectboard and Planning Commission Chairs
- 3) Neighboring Municipalities: Selectboard Chair, Planning Commission Chair, Town Manager/Mayor, Town Clerk, and EMD for Towns of Pittsford, Proctor, West Rutland, Clarendon, Mendon, Chittenden, Shrewsbury, and Rutland City.
- 4) Business, Schools, Private Organizations: Chamber and Economic Development of Rutland Region, Greater Rutland County Supervisory Union, Rutland Town Elementary School, Solid Waste Alliance Communities
- 5) Non-profit Organizations: ARC Rutland, Bayada Home Health, Bayada Home Care, Bennington-Rutland Opportunity Council, Continuum of Care, Housing Trust of Rutland County, Marble Valley Regional Transit District, Rutland County Pride, Rutland County Restorative Justice Center, Rutland Mental Health Services, Rutland Regional Medical Center, Southwestern Vermont Council on Aging, Turning Point Center, United Way of Rutland County, Vermont Association for the Blind and Visually Impaired, Vermont Center for Independent Living, Vermont Free and Referral Clinics, Visiting Nurses Association and Hospice of the Southwest Region.

Copies of example kick-off engagement materials are included below.

No inquiries or comments were received from Town officials, the public, or Whole Community partners in response to project kick-off notices.

Gather Data & Assess Risk To inform the Hazard Identification and Risk Assessment section of the plan, the Town employed five (5) engagement methods: survey, workshop, pop-ups, presentation to the Selectboard at a public meeting, and public comment period.

A survey was administered online and was open from Sept 5-Sept 30, 2024. Notice of the survey was included in plan kick-off communications. **A total of 6 surveys were received.** A summary of the survey results is provided below.

The Town conducted a workshop on Oct 2, 2024 with the planning team and two subject matter experts to complete the community hazard risk assessment. Ginger Nickerson, from Vermont Urban and Community Forestry, and Eric Pulver, the Emergency Preparedness Specialist with the Vermont Department of Health attended the workshop to assist with the risk assessments for Invasive Species and Infectious Disease. Results of the risk assessment are presented in **Table 4** in the Plan.

The Town conducted a “pop-up” event at the Rutland Town Transfer Station on Saturday, Sept 14, 2024. By “meeting people where they are”, the Town collected additional input from demographics that may not have otherwise been engaged. At the pop-up, people placed dot stickers on the natural hazards of most concern and vulnerable assets. A summary of pop-up feedback is provided below.

Online notices of the public presentation at the Oct 22, 2024 Rutland Town Selectboard meeting were posted on the Town Facebook Page, Front Porch Forum, RRPC Website, and RRPC Facebook page.

The draft Plan was presented at the Oct 22, 2024 Selectboard meeting to encourage input from the local government and public on the Hazard Identification and Risk Assessment results. Input at this milestone is critical as feedback could affect the plan’s conclusions and ensure that it integrates with other Town initiatives. The meeting was recorded and is available on the Town website.

The draft Plan was posted for a 2-week public comment period from Oct 22-Nov 5, 2024. It was available on the landing page and at the Town Office.

An article ran in the Oct 25, 2024 edition of the Rutland Herald regarding the public comment period. Notice of the comment period was also posted on the Town’s Facebook page, Front Porch Forum, RRPC Website and Facebook page. The draft plan and notice of the comment period were direct emailed to all five segments of the Whole Community. Notices included instructions to email comments to the Rutland Regional Planning Commission or attend the Nov 4, 2024 Selectboard meeting to share input. Review of the draft Plan by the Selectboard and public concluded on Nov 5, 2024.

The Selectboard discussed their comments on the draft plan at their regular meeting on Nov 4, 2024. A summary of their comments is provided here:

- The high percentage (31.4%) of elderly people is introduced in the Demographics and Growth Potential and then referenced in the hazard profiles. Ensure mitigation actions take into account the needs of this segment of the population.
- Given the number of residents that rely on private wells and on-site septic systems, ensure mitigation actions consider what happens during flood events if on-site septic systems fail and wells are contaminated.
- The number of respondents from the Phase 1 engagement activities should be more prominent.
- To address flooding on the flat section of E Pittsford Road, including Bridge B5, consider a sediment management plan for East Creek from US Route 7 to Glen Dam.
- Agree with other flood areas of concern identified by the planning team in Center Rutland and McKinley Avenue. Bridge B9 on McKinley Avenue is a choke point on East Creek. Discussed how flooding at the US Route 7/McKinley Ave/Post Rd intersections could limit access to the Public Safety Building on McKinley Avenue. Consider mutual aid agreements to ensure no disruption in emergency services is access to the Public Safety Building is flood-compromised.

Additional input received during the public comment period is summarized on page A-16.

Phase 2 Engagement Activities

Develop Mitigation Strategy To inform the Mitigation Strategy section of the plan, the Town employed two (2) engagement methods: workshop and survey.

The Town conducted a workshop on Nov 21, 2024 with the planning team and four (4) subject matter experts to complete the mitigation action evaluation:

- Josh Carvajal – ANR River Engineer
- Kyle Medash – ANR Floodplain Manager
- Eric Pulver – VDH Emergency Preparedness Specialist
- Barbara Noyes Pulling – Rutland Town Planning Commission Chair

Results of the mitigation action evaluation are presented in **Table 5** in the Plan.

A survey to seek public reaction to the proposed mitigation goal and actions was administered online and was open from Dec 9 – Dec 31, 2024. Notice of the survey was provided via social media and direct email to segments of the Whole Community listed above in Phase 1. **A total of 12 surveys were received.** A summary of the survey results is provided below.

Finalize Draft Plan To help finalize the draft, the Plan was presented to the Selectboard at a public meeting and posted for a final public comment period. Online notices of the public presentation at the Jan 28, 2025 Rutland Town Selectboard meeting were posted on the landing page, Town Facebook Page, Front Porch Forum, RRPC Website, and RRPC Facebook page.

The final draft Plan was presented at the Jan 28, 2025 Selectboard meeting to encourage input from the local government and public on the mitigation strategy and final draft plan. Input at this milestone is critical as it is the last opportunity to weigh in on the plan contents before submittal for Approval Pending Adoption. The meeting was recorded and is available on the Town website.

The final draft Plan was posted for a 2-week public comment period from Jan 28 – Feb 11, 2025. It was available on the landing page and at the Town Office.

Notice of the comment period was also posted on the Town's Facebook page, Front Porch Forum, RRPC Website and Facebook page. The final draft plan and notice of the comment period were direct emailed to all segments of the Whole Community.

Notices included instructions to email comments to the Rutland Regional Planning Commission or attend the Feb 11, 2025 Selectboard meeting to share input. Review of the final draft Plan by the Selectboard and public concluded on Feb 11, 2025.

The Selectboard discussed their comments on the final draft plan at their regular meeting on Feb 11, 2025. A summary of their comments and resulting draft Plan edits is provided here:

- The Rutland Town Police Department has five (not four) officers. This was corrected on pg. 4.
- The Rutland Town Planning Commission is developing River Corridor Bylaws. The project timeframe for this action on pg. 30 was revised from “adopt by 2027” to “consider for adoption by 2027”.
- The need to re-establish a regional dispatch center for the Rutland Region was added on pg. 37 as another example of how the mitigation goal and risk information from this Plan can be integrated into existing and proposed plans and procedures to support risk-informed community planning.
- The process for Selectboard annual evaluation of the Plan was revised on pg. 38 to specify that the evaluation will occur annually as part of the budget development process for the upcoming fiscal year.
- Table 7: Mitigation Action Status on pg. 39 was expanded to include the action's Priority, Lead Party, and Timeframe to better aid in tracking the action's status on an annual basis.
- The Selectboard discussed some of the reasons why there has been a shift in political will/public support for River Corridor Bylaws between 2019 and 2025. This shift is noted on pg. 6. The discussion did not result in any edits to the draft Plan.

There was no additional input received during the public comment period.

Appendix Table 1. Rutland Town Community Engagement Strategy

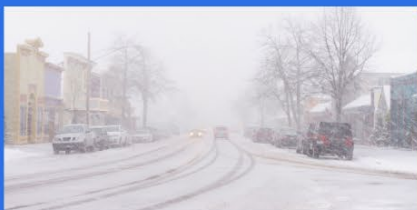
Engagement Phase	Project Milestone	Outreach Method	Purpose	Dates
1	Kick-Off	Landing page, flyers, press release, social media, email blast	Notify (inform the Whole Community of the Plan update)	9/4/2024
	Gather Data & Assess Risk	Survey	Solicit (feedback from Whole Community on potential natural hazard impacts)	9/5/2024 – 9/30/2024
		Workshop	Integrate (evaluate broad range of risks)	10/2/2024
		Pop-up Events	Solicit (see above)	9/14/2024
		Selectboard Presentation	Notify (inform local officials of Plan progress)	10/22/2024
		Public Comment Period	Solicit (feedback from Whole Community on draft Hazard Identification and Risk Assessment)	10/22/2024 – 11/5/2024
2	Develop Mitigation Strategy	Workshop	Integrate (evaluate broad range of mitigation actions)	11/21/2024
		Survey	Solicit (reaction from Whole Community on mitigation strategy and actions)	12/9/2024 – 12/31/2024
	Finalize Draft Plan	Selectboard Presentation	Notify (inform local officials of Plan progress)	1/28/2025
		Public Comment Period	Solicit (feedback from Whole Community on final draft Plan)	1/28/2025 – 2/11/2025

Examples of Phase 1 Engagement Materials

Physical Flyer
Email Blasts
Social Media Postings
Survey with Results
Pop-up Posters with Results
Public Comments

KICK-OFF FLYER

Rutland Town

LOCAL HAZARD
MITIGATION
PLANNING

Plan Purpose

- Increase Awareness
- Focus Resources
- Identify Actions
- Communicate Priorities

The Local Hazard Mitigation Plan outlines our long-term strategy to reduce natural disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage.



Take our online survey to share what natural hazards you are most concerned about.



HELP US

PREPARE FOR
RESILIENCY!

Planning Schedule

- Sept 2024: Plan Update Kick-off ✓
- Sept–Oct 2024: Assess Risks & Identify Hazards ✓
- Nov–Dec 2024: Develop Mitigation Strategy ✓
- Jan–Feb 2025: Finalize Draft Plan ✓
- Mar 2025: Adopt Plan ✓

ACT NOW!

For More Information

tinyurl.com/RutlandTownLHMP25

KICK-OFF EMAIL BLAST



**SURVEY
NOW OPEN**

Accepting Responses through September 30, 2024



LOCAL HAZARD MITIGATION PLAN 2025

For more information visit: tinyurl.com/RutlandTownLHMP25

Help Make Rutland Town More Resilient!

Rutland Town Launching our Hazard Mitigation Planning Process

Every five years, municipalities update their Local Hazard Mitigation Plans, or LHMPs. Ours is due to be updated by March 2025. We do an LHMP for a few reasons:

- It qualifies us for a higher rate of reimbursement for work we do after declared disasters.
- It makes us eligible for a variety of State and Federal grant programs.
- Most importantly, it helps us focus Town time and investments on the hazards that are most likely to occur, and most likely to have economic and public-safety impacts.

The Rutland Regional Planning Commission will guide us through the renewal of our LHMP, thanks to a grant we received from Vermont Emergency Management. The Town's planning team includes: Bill Sweet, Town Administrator and Martin Wasserman, Emergency Management Director.

Throughout the planning process, we have targeted opportunities for community input. As we get the plan update underway in September, we'll be completing a risk assessment and identifying the natural hazards that are of greatest concern. We want to hear from our residents about what natural hazards you are most concerned about! Share your feedback by:

- Look for our informational pop-ups around Town during September.
- Take our online survey: tinyurl.com/RutlandTOWN-lhmp25-survey. The survey will remain open until September 30, 2024.

For more information visit: tinyurl.com/RutlandTownLHMP25

PHASE 1 PUBLIC COMMENT EMAIL BLAST

From: [Steffanie Bourque](#)
To: [Steffanie Bourque](#)
Cc: [Rutland Town Administrator](#); [Marty Wasserman](#)
Subject: Rutland Town Local Hazard Mitigation Plan Update - Seeking Public Comment
Date: Tuesday, October 22, 2024 2:56:38 PM
Attachments: [image001.png](#)

All:

On behalf of Rutland Town, we are notifying key members of the community that the Rutland Town planning team has reached a critical milestone in the Local Hazard Mitigation Plan update process and are seeking public comment on how they have assessed the Town's risk to natural hazards. View the draft plan online at: tinyurl.com/rutlandtownlhmp25 or at the Town Office @ 181 Business Route 4.

The public comment period will close on Tuesday, November 5, 2024. Email all comments to me, Steffanie Bourque, at: sbourque@rutlandrpc.org

We look forward to hearing from you!



STEFFANIE BOURQUE | PROJECT MANAGER

Rutland Regional Planning Commission
[16 Evelyn Street, Second Floor](#)
 PO Box 430 | Rutland, Vermont 05702
 Office: 802-775-0871 x202

From: [Steffanie Bourque](#)
To: [Steffanie Bourque](#)
Cc: [Rutland Town Administrator](#)
Subject: Rutland Town Local Hazard Mitigation Plan Update - Seeking Public Comment
Date: Tuesday, October 22, 2024 2:39:48 PM
Attachments: [image001.png](#)

All:

On behalf of Rutland Town, we are notifying local officials in neighboring towns that the Rutland Town planning team has reached a critical milestone in the Local Hazard Mitigation Plan update process and are seeking public comment on how they have assessed the Town's risk to natural hazards. View the draft plan online at: tinyurl.com/rutlandtownlhmp25 or at the Town Office @ 181 Business Route 4.

The public comment period will close on Tuesday, November 5, 2024. Email all comments to me, Steffanie Bourque, at: sbourque@rutlandrpc.org

We look forward to hearing from you!



STEFFANIE BOURQUE | PROJECT MANAGER

Rutland Regional Planning Commission
[16 Evelyn Street, Second Floor](#)
 PO Box 430 | Rutland, Vermont 05702
 Office: 802-775-0871 x202

PHASE 1 SOCIAL MEDIA POSTINGS

Town of Rutland, Vermont
September 9 at 2:38 PM · 🌐

To Key Partners in the Rutland Town Community and Local Officials in Neighboring Municipalities:

On behalf of Rutland Town, the Regional Planning Commission is providing notice that the Town has kicked off their update to the 2019 Rutland Town Local Hazard Mitigation Plan (LHMP). See below or visit <https://tinyurl.com/RutlandTownLHMP25> for more information, including opportunities for public engagement during the plan development process.

To share your experiences and help inform our assessment of natural hazards, please take a moment to complete our survey here <https://tinyurl.com/RutlandTOWN-lhmp25-survey>.

If you have any questions about the LHMP or planning process, please feel free to contact me: greg@rutlandrpc.org or 802-775-0871 x212.



Rutland Town Launching our Hazard Mitigation Planning Process

Every five years, municipalities update their Local Hazard Mitigation Plans, or LHMPs. Ours is due to be updated by March 2025. We do an LHMP for a few reasons:

- It qualifies us for a higher rate of reimbursement for work we do after declared disasters.
- It makes us eligible for a variety of State and Federal grant programs.
- Most importantly, it helps us focus Town time and investments on the hazards that are most likely to occur, and most likely to have economic and public-safety impacts.

The Rutland Regional Planning Commission will guide us through the renewal of our LHMP, thanks to a grant we received from Vermont Emergency Management. The Town's planning team includes: Bill Sweet, Town Administrator and Martin Wasserman, Emergency Management Director.

Throughout the planning process, we have targeted opportunities for community input. As we get the plan update underway in September, we'll be completing a risk assessment and identifying the natural hazards that are of greatest concern. We want to hear from our residents about what natural hazards you are most concerned about! Share your feedback by:

- Look for our informational pop-ups around Town during September.
- Take our online survey: tinyurl.com/RutlandTOWN-lhmp25-survey. The survey will remain open until September 30, 2024.

For more information visit: tinyurl.com/RutlandTownLHMP25

3 Likes 1 Comment

1/24 4:01 PM (1) Facebook

Town of Rutland, Vermont
October 11 at 9:20 AM · 🌐

Rutland Town has reached the first critical milestone in its Local Hazard Mitigation Plan update! Come to the Selectboard meeting on 10/22/24 to learn more about what the Town has accomplished so far. Stay tuned for more information about how you can submit public comments on the current draft plan. More information on the plan update process is available at: tinyurl.com/rutlandtownlhmp25



2 Likes 1 share

Like Comment Share

Town of Rutland, Vermont
23h · 🌐

Rutland Town Local Hazard Mitigation Plan Update – Seeking Public Comments

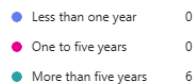
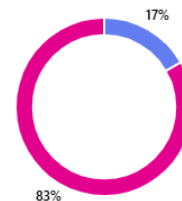
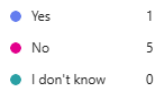
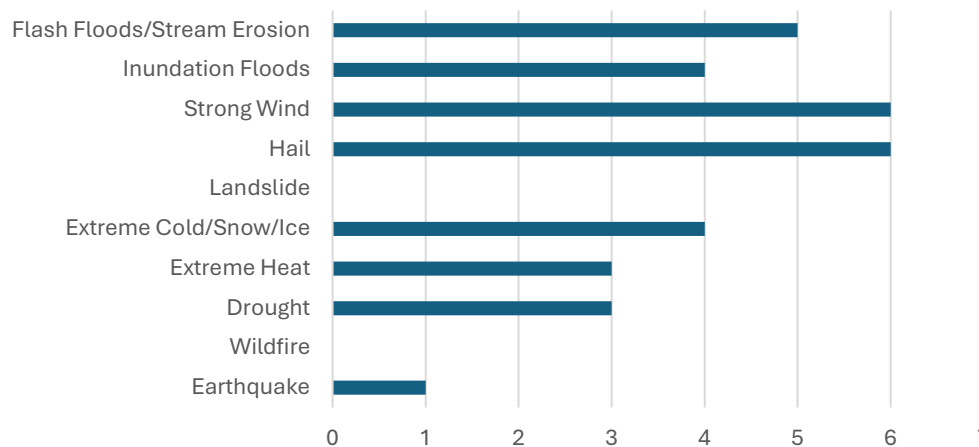
The Rutland Town planning team has reached a critical milestone in the Local Hazard Mitigation plan update process and are seeking public comment on how they have assessed the Town's risk to natural hazards.

View the draft plan online at: tinyurl.com/rutlandtownlhmp25 or at the Town Office at 181 Business Route 4 in Center Rutland.

The public comment period will close on Tuesday, November 5, 2024. Email all comments to Steffanie Bourque at: sbourque@rutlandrpc.org



View the draft plan at Town Hall or online at: tinyurl.com/RUTLANDTOWNLHMP25

PHASE 1 SURVEY RESULTS – 6 SURVEYS SUBMITTED**1. How long have you lived in or owned a business or property in Rutland Town?****2. Is your home or business property located in a FEMA designated floodplain?****3. Which of the following natural hazards have you or some you know experienced while living or doing business in Rutland Town?****4. Of the natural hazards listed in Question 3, what are the top three you think are likely to occur in the next five years?**

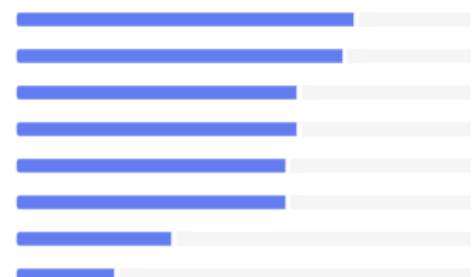
#1 Flash Flood/Fluvial (Stream) Erosion **100%**

#2 Strong Wind **83%**

#3 Inundation Floods, Hail, and Extreme Cold/Snow/Ice **33%**

5. Which potential natural hazard impacts are most concerning to you? Rank from 1 to 8. It would be most concerning to experience damage or loss in regard to...

- 1 Damage or loss of roads, bridges, public utilities (e.g. water, sewer)
- 2 Loss of life or injuries, especially among vulnerable populations
- 3 Damage to schools and other public properties (e.g. parks, buildings)
- 4 Loss or damage to agricultural operations
- 5 Business closure or loss
- 6 Damage to environmental resources (e.g. wetlands, lakes, ponds, rivers, forests)
- 7 Loss of wildlife
- 8 Damage or loss of cultural/historic properties



6. Are you aware of any location(s) in Rutland Town that appear more prone to the impacts of flooding, ice, wind, or wildfires? Describe any past damages or recurring incidents in these areas.

ID ↑	Name	Responses
1	anonymous	Center Rutland, from Otter Creek and Clarendon River , (These streams manifested during Irene)Also xtreams at Mill Village
2	anonymous	The town ditch on Hitzel Terrace flooding over the roadway and impacting the community wells that provide drinking water for 40 families
3	anonymous	East creek from Glen dam to patches dam. Town needs to develop a sediment management plan to maintain stream capacity to minimize flooding and keep the river in its banks
4	anonymous	Low lying roads next to river/streams
5	anonymous	Hurricane Irene

7. List any specific community assets you are concerned about losing because of natural hazard impacts. Examples might include a local business or employer, a community gathering place, or a cultural or historical site.

ID ↑	Name	Responses
1	anonymous	Community wells
2	anonymous	Loosing east Pittsford road in the area of the east creek bridge from the river jumping its banks
3	anonymous	RTS, Northwood
4	anonymous	None: I do not use community assets

8. Anything else related to natural hazard risks or impacts you would like to provide for consideration and incorporation into the Rutland Town Local Hazard Mitigation Plan?

ID ↑	Name	Responses
1	anonymous	We should be looking at Irene as the most recent benchmark.
2	anonymous	Erosion and flooding due to improperly maintained town culverts on Hitzel Terrace
3	anonymous	Bury the utilities whenever possible!
4	anonymous	No

PHASE 1 POP-UP RESULTS

Saturday, September 14: Rutland Town Transfer Station

**RUTLAND TOWN
LOCAL HAZARD MITIGATION PLANNING**

What hazards are of most concern?

DROUGHT	EARTHQUAKE	EXTREME HEAT

Question: What Hazards Are of Most Concern?

Response	Total	%
Drought	4	7%
Earthquake	1	2%
Extreme Heat	4	7%
Extreme Wind	16	27%
Flood	17	28%
Landslide	1	2%
Hail	3	5%
Wildfire	2	3%
Winter Storm	12	20%

Question: What Assets Are Most at Risk?

Response	Total	%
People: Elderly	16	16%
People: Youth	5	5%
People: Disabled	7	7%
People: Homeless	1	1%
Infrastructure: Roads	14	14%
Infrastructure: Buildings	2	2%
Infrastructure: Power Lines	7	7%
Infrastructure: Homes	2	2%
Environment: Trees	7	7%
Environment: Rivers	15	15%
Environment: Wetlands	2	2%
Economy: Closed Businesses	9	9%
Economy: Property Damage	10	10%
Economy: Commuting	0	0%

**RUTLAND TOWN
LOCAL HAZARD MITIGATION PLANNING**

What assets are most at risk?

PEOPLE	INFRASTRUCTURE	ENVIRONMENT	ECONOMY
Elderly	Roads	Trees	Closed Business
Youth	Buildings	Rivers	Property Damage
Disabled	Power Lines	Wetlands	Commuting
Homeless		Home	

PHASE 1 PUBLIC COMMENTS SUMMARY

Comment 1: From my perch, I think that the best thing to do is to go back into history of this subject at least back to the 1927 flood, and even farther for the 100,200, & 500 year events, along with the Noricane (2007) which was much different because of the direction the storm came from. Trees up on the Eastern end of the city in the upper Killington Ave area were cut off at about 15-20feet off the ground. Rutland Town's damage was significant in the Town Line Road area. One of our friends live up there on the Mendon side of the road and power was out for 5 days. Then of course Irene did a terrible number to the area of Pittsfield and Stockbridge.

Other events that I remember:

1938: Major Hurricane covering the whole state (Before I was born but my parents filled me in on it)

1953: Hurricane went up the length of VT into Quebec North of the VT border which is highly unusual, but more than likely will happen again sometime.

Winters of 1963-64 : 1978; and 1979 : An unusual amount of snow in 62-63 caused many town roads to be closed for the remainder of winter around the state due to inability of plows to break through the drifts. great for snowmobiling but beyond that it was horrid. Most of this was North of here, but later on in the late 70's we had back to back snowstorms dumping in excess of two ft in each storm only a couple of days apart. I was a Selectboard member in Royalton then; the only time the V plow for the grader was used in about 20 years, was during these storms and after.

As our society has become more and more mobile, these impediments are noteworthy and will at some point manifest again. In 1973, a major flood hit Windsor, Windham, and some Orange County areas. Ludlow was wiped out causing GE to permanently close the plant there and move the employees and work to Rutland.

Natural disasters are with us for the duration. It is the where and when that makes solving the puzzle difficult. Therefore, keeping track of such things is all important. I feel there are some weaknesses in keeping up with the history of all weather events that create major damage, because they will hit again....and like candid camera maybe when you least expect it. This is a very worthwhile project.

Response 1: The planning team agreed with the opinion that it is important to “keep track” of the history of storm events. Ultimately, the planning team agreed that chronicling events from 2000 to present was sufficient for the purposes of this Plan.

Comment 2: In the plan, is there any follow up for dealing with the one repetitive loss property on p. 14. Did I miss it? Or is it going to be included in the Action Plan?

Response 2: Mitigation actions will be included in Section 6 of the plan, to be developed.

Comment 3: On p. A-3 – No inquiries or comments received from Town officials or Whole Community partners. Is this a placeholder?

Response 3: No, it applies to responses from the initial project kick-off communications. This statement has been revised to make that more clear.

Comment 4: Trading Center and mobile home on Business Route 4 experienced significant flooding impacts during Irene and two subsequent storms. Wonder what is going to happen in this area to mitigate flooding.

Response 4: The planning team agreed with this location as being an area of concern vulnerable to flooding. Possible actions to mitigate this risk will be considered in Section 6 of the plan, to be developed.

Examples of Phase 2 Engagement Materials

Email Blasts
Social Media Postings
Survey with Results

PHASE 2 EMAIL BLASTS – SURVEY AND PUBLIC COMMENT NOTICE

From: [Steffanie Bourque](#)
To: [Steffanie Bourque](#)
Cc: [Rutland Town Administrator; dsears@rutlandtown.com; Marty Wasserman](#)
Subject: Rutland Town LHMP Mitigation Actions Survey - Now Live!
Date: Monday, December 9, 2024 12:40:47 PM
Attachments: [image001.png](#)

Hello, Local Officials in Neighboring Communities.

On behalf of Rutland Town, I am notifying you that the Town has developed draft actions to mitigate the impacts of natural hazards in Rutland Town. They want to hear from the public about the actions being proposed. Provide your feedback by taking their online survey at: tinyurl.com/RutlandTownLHMP25-Survey2 The survey will remain open until December 31, 2024.

For more information on the Rutland Town Local Hazard Mitigation Plan update process, check out: tinyurl.com/RutlandTownLHMP25

Kind regards,
 Steffanie

From: [Steffanie Bourque](#)
To: [Steffanie Bourque](#)
Cc: [Rutland Town Administrator; dsears@rutlandtown.com; Marty Wasserman](#)
Subject: Rutland Town LHMP Mitigation Actions Survey - Now Live!
Date: Monday, December 9, 2024 12:49:37 PM
Attachments: [image001.png](#)

Hello, Community Partners.

On behalf of Rutland Town, I am notifying you that the Town has developed draft actions to mitigate the impacts of natural hazards in Rutland Town. They want to hear from the public about the actions being proposed. Provide your feedback by taking their online survey at: tinyurl.com/RutlandTownLHMP25-Survey2 The survey will remain open until December 31, 2024.

For more information on the Rutland Town Local Hazard Mitigation Plan update process, check out: tinyurl.com/RutlandTownLHMP25

Kind regards,
 Steffanie

From: [Steffanie Bourque](#)
To: [mashcroft@rutlandtown.com; Barbara Noyes Pulling; kclark@rutlandtown.com; RTFireChief@RutlandTown.com; Michael.Carlson@greenmountainpower.com; Dell4@Comcast.net; Ed.Dumas@Vermont.gov; JPFagnant@RutlandTown.com; Joe Denardo](#)
Cc: [Bill Sweet; dsears@rutlandtown.com; Marty Wasserman](#)
Subject: Rutland Town LHMP Mitigation Actions Survey - Now Live!
Date: Monday, December 9, 2024 12:35:00 PM
Attachments: [image001.png](#)

Hello, Rutland Town Local Officials.

On behalf of the local planning team, I am notifying you that the team has developed draft actions to mitigate the impacts of natural hazards in Rutland Town. Let us know what you think of the proposed actions by taking an online survey at: tinyurl.com/RutlandTownLHMP-Survey2 The survey will be open until December 31, 2024. Please share this information with other local officials!

For more information on the Rutland Town Local Hazard Mitigation Plan update process, check out: tinyurl.com/RutlandTownLHMP25

Kind regards,
 Steffanie



STEFFANIE BOURQUE | PROJECT MANAGER

Rutland Regional Planning Commission
 16 Evelyn Street, Second Floor
 PO Box 430 | Rutland, Vermont 05702
 Office: 802-775-0871 x202

From: [Steffanie Bourque](#)
To: [Steffanie Bourque](#)
Subject: Rutland Town Final Draft LHMP Available for Public Comment
Date: Tuesday, January 28, 2025 5:00:59 PM
Attachments: [image001.png](#)

Hello, Community Partners.

On behalf of Rutland Town, I am notifying you that their local planning team has completed their work to update the Town's Local Hazard Mitigation Plan (LHMP). The final draft is being shared now to encourage input from local officials and the public. The comment period is open from January 28-February 11, 2025.

[Click here to download a PDF of the Plan.](#) Email all comments on the final draft to me, Steffanie Bourque at: sbourque@rutlandrpc.org

For more information on the Rutland Town Local Hazard Mitigation Plan update process, check out: tinyurl.com/RutlandTownLHMP25

Kind regards,
 Steffanie

From: [Steffanie Bourque](#)
To: [Steffanie Bourque](#)
Subject: Rutland Town Final Draft LHMP Available for Public Comment
Date: Tuesday, January 28, 2025 5:01:03 PM
Attachments: [image001.png](#)

Hello, Local Officials in Neighboring Communities.

On behalf of Rutland Town, I am notifying you that their local planning team has completed their work to update the Town's Local Hazard Mitigation Plan (LHMP). The final draft is being shared now to encourage input from local officials and the public. The comment period is open from January 28-February 11, 2025.

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For more information on the Rutland Town Local Hazard Mitigation Plan update process, check out: tinyurl.com/RutlandTownLHMP25

Kind regards,
 Steffanie

From: [Steffanie Bourque](#)
To: [Steffanie Bourque](#)
Subject: Rutland Town Final Draft LHMP Available for Public Comment
Date: Tuesday, January 28, 2025 5:01:17 PM
Attachments: [image001.png](#)

All:

The Rutland Town Planning Team (Bill Sweet, Marty Wasserman, and Dave Sears) has completed their work to update the Town's Local Hazard Mitigation Plan (LHMP). The final draft is being shared now to encourage input from local officials and the public. The comment period is open from January 28-February 11, 2025.

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STEFFANIE BOURQUE | PROJECT MANAGER

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 Office: 802-775-0871 x202

PHASE 2 SOCIAL MEDIA POSTINGS

Microsoft Forms MAB SharePoint Site SAM.gov | Home Debarment List | BGS Bicycle & Pedestrian... ANR

Town of Rutland, Vermont

Posts Filters

Town of Rutland, Vermont
22 hours ago · 🌐

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The Town has developed draft actions to mitigate the impacts of natural hazards in Rutland Town. We want to hear from the public about the actions being proposed. Provide your feedback by taking our online survey at: tinyurl.com/RutlandTownLHMP25-Survey2 The survey will remain open until December 31, 2024.

For more information on the Rutland Town Local Hazard Mitigation Plan update process, check out: tinyurl.com/RutlandTownLHMP25

MTSLHMP2024.MY.CANVA.SITE
Rutland Town LHMP25

1 Like 1 share

Write a comment...

Town of Rutland, Vermont
a day ago · 🌐

Attention Rutland Town Seniors!
All Rutland Town seniors are invited to attend a holiday luncheon at our Town School at 1612 Post Road on Tuesday, December 17th.

The school band will play during the meal... See more

Microsoft Forms MAB SharePoint Site SAM.gov | Home Debarment List | BGS Bicycle & Pedestrian... ANR

Rutland Regional Planning Commission
21 hours ago · 🌐

Rutland Town Mitigation Actions Survey – Now Live!

Rutland Town has developed draft actions to mitigate the impacts of natural hazards in the Town. They want to hear from the public about the actions being proposed. Provide your feedback by taking their online survey at: tinyurl.com/RutlandTownLHMP25-Survey2 The survey will remain open until December 31, 2024... See more

ATTENTION!

We've developed mitigation actions!
Did we get it right?

Tell us by taking the Rutland Town Local Hazard Mitigation Planning survey

[TINYURL.COM/RUTLANDTOWNLHMP25-SURVEY2](https://tinyurl.com/RUTLANDTOWNLHMP25-SURVEY2)

1 Like 1 Comment 1 Share

Microsoft Forms MAB SharePoint Site SAM.gov | Home Debarment List | BGS Bicycle & Pedestrian... ANR

Rutland Regional Planning Commission
14m · 🌐

The local planning team has completed their work to update the Rutland Town Local Hazard Mitigation Plan. A full draft of the Plan will be presented to the Selectboard at their meeting on Tuesday, January 28, 2025.

We welcome you to attend the meeting to learn about the work completed and next steps to obtain FEMA approval and adopt the Plan.

For more information on the planning process, visit: tinyurl.com/RutlandTownLHMP25

DRAFT PLAN PRESENTATION

A full DRAFT of the 2025 Rutland Town Local Hazard Mitigation Plan will be presented to the Selectboard.

TUESDAY
January 28, 2025

6:00 PM

Town Office
181 Business Route 4

LOCAL HAZARD MITIGATION PLAN UPDATE

Microsoft Forms MAB SharePoint Site SAM.gov | Home Debarment List | BGS Bicycle & Pedestrian... ANR

Town of Rutland, Vermont
January 29 at 10:24 AM · 🌐

Rutland Town LHMP Available for Public Comment

The Rutland Town planning team has completed their work to update the Town's Local Hazard Mitigation Plan (LHMP). The final draft is being shared now to encourage input for local officials and the public. The comment period is open from January 28 – February 11, 2025... See more

PUBLIC COMMENTS

Seeking public comments on the full DRAFT of the 2025 Rutland Town Local Hazard Mitigation Plan!

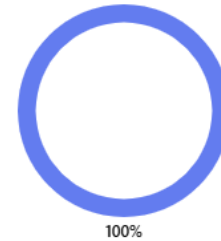
View the draft plan at the Municipal Office or online at: tinyurl.com/RUTLANDTOWNLHMP25

3 Likes 1 Comment 2 Shares

PHASE 2 SURVEY RESULTS – 12 SURVEYS SUBMITTED

1. Evaluate the community's primary mitigation goal: "To increase Rutland Town's resilience to natural hazards by advancing mitigation investments. These investments will ultimately reduce or avoid long-term risks to people; homes and neighborhoods; the local economy; cultural and historic resources; ecosystems and natural resources; and Community Lifelines such as transportation, energy, and communications."

● I AGREE with the direction of the goal statement. 12
 ● I DISAGREE with the direction of the goal statement. 0



2. If you disagree with the goal statement, explain why. Is there something missing we should consider?

No responses submitted.

3. Indicate if you agree or disagree that the following Planning and Regulatory mitigation actions are acceptable and practical for Rutland Town to implement over a five-year period. These actions include plans, policies, or regulations that influence the way land and buildings are developed and built.

● AGREE ● DISAGREE

Plan for and Maintain Adequate Road and Debris Clearing Capabilities

Update Road Erosion and Culvert Inventories

Inspect Town Bridges and Plan for Repairs to Prevent Flood-related Impacts

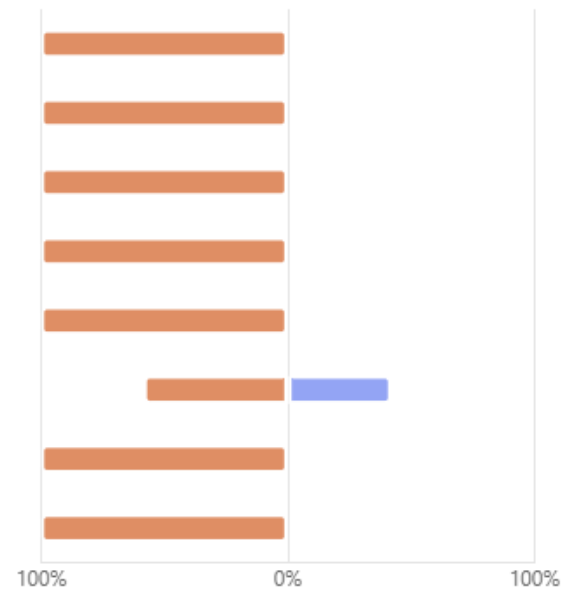
Plan for Road Right-of-Way Vegetation Management

Adopt River Corridor Bylaws

Update Personnel Policy to Recommend Vaccinations for Municipal Employees

Improve Extreme Heat Resilience with Hot Weather Response Plan

Conduct Flood Risk Analysis for Impacted Assets in Center Rutland



4. Is there something missing we should consider?

ID ↑	Name	Responses
1	anonymous	no
2	anonymous	Prepare for support with food during natural disasters
3	anonymous	Is there a text/call blast database to notify residents of specific hazards? A central contact number or management headquarters to share information if unable to call

5. Indicate if you agree or disagree that the following Structure & Infrastructure Project mitigation actions are acceptable and practical for Rutland Town to implement over a five-year period. These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area.

● AGREE ● DISAGREE

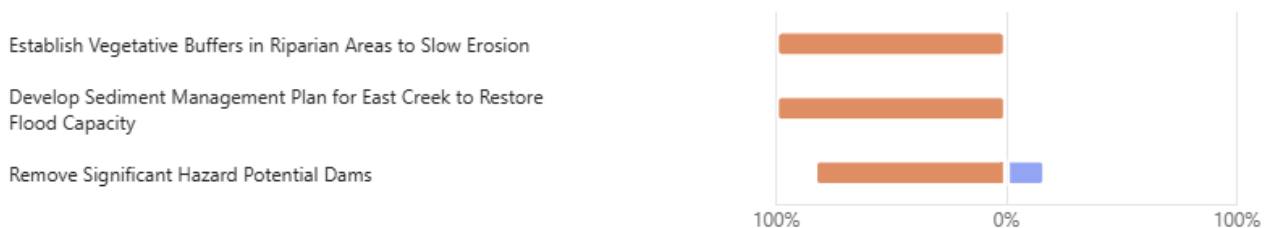


6. Is there something missing we should consider?

ID ↑	Name	Responses
1	anonymous	no
2	anonymous	Emergency food support
3	anonymous	Make sure common sense applied to all plans as these are only yes/no responses
4	anonymous	Within Rutland City primarily, but elsewhere in the Town (and the State), low-lying and watercourse adjacent land and properties should be developed in to recreational facilities; ballfields, playgrounds, picnic areas, walk/bike/jog/ski/snowshoe paths. Roadside ditches need to be rip-rap lined to further prevent undercutting/erosion.

7. Indicate if you agree or disagree that the following Natural Systems Protection mitigation actions are acceptable and practical for Rutland Town to implement over a five-year period. These actions help minimize damage and losses and preserve or restore the functions of natural systems.

● AGREE ● DISAGREE



8. Is there something missing we should consider?

ID ↑	Name	Responses
1	anonymous	no
2	anonymous	Is there a way to read the details of these plans?
3	anonymous	Establish permeable rock/gabion elements in river/stream beds, well upstream of the City, to reduce incoming runoff water velocity

9. Indicate if you agree or disagree that the following Outreach and Education mitigation actions are acceptable and practical for Rutland Town to implement over a five-year period. These actions inform and educate the public about hazards and potential ways to mitigate them.

● AGREE ● DISAGREE



10. Is there something missing we should consider?

ID ↑	Name	Responses
1	anonymous	no
2	anonymous	Have an emergency food plan
3	anonymous	Does Rutland offer cooling centers in extreme heat conditions? Is there a database for people living alone to be able to check in with a paired resident or central volunteer group to make sure elderly or vulnerable people are checked during emergencies if they wish to register?

11. Out of all the mitigation actions presented, which three (3) are the most important for Rutland Town to implement?

ID ↑	Name	Responses
1	anonymous	Flood proof pump stations, Upsize culverts, Keep yard waste out of ditches
2	anonymous	upsized culverts, remove dams, inspect bridges
3	anonymous	flood mitigation
4	anonymous	Clean and repair storm water, inspect bridges and conduct flood risk analysis
5	anonymous	Plan for and Maintain Adequate Road and Debris Clearing Capabilities,
6	anonymous	Extreme weather, flooding, emergency food
7	anonymous	Upsize culverts, road clearing capabilities, remove road hazard trees
8	anonymous	Clear ditches, green water mitigation during rain events, clear debris
9	anonymous	backup power in critical areas
10	anonymous	#4
11	anonymous	Extreme Heat Resilience Plan, Establish vegetative buffers (and rip-rap of banks) to Riparian areas to slow erosion, Remove existing structures from flood-prone areas with buyouts.
12	anonymous	1 Importance of keeping debris and yard waste out of ditches, 2 Educate on Winter preparations 3 With this changing climate Educate on extreme heat