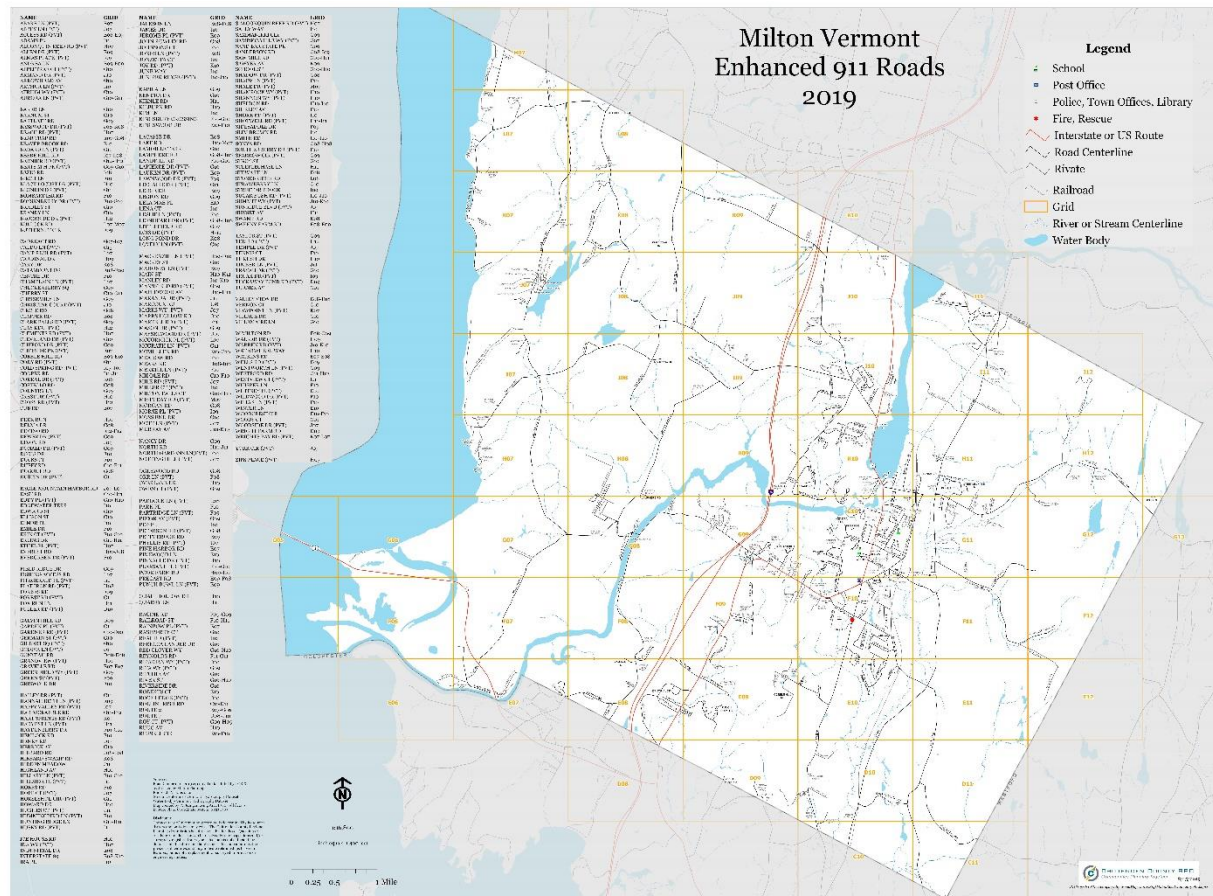


ANNEX 10: TOWN OF MILTON



Chartered: June 8, 1763



Land Area: 60.9 sq. mi.



2020 Population: 10,912



Government Address: 43 Bombardier Road, Milton, Vermont 05468



Households: 4,258



Mitigation Focus: Severe Winter Storm, Flooding, Fluvial Erosion, Human Infectious Disease

This section presents the jurisdictional annex for Town of Milton, which provided the following information for the 2022 update to the *Chittenden County, Vermont Multi-Jurisdictional All-Hazards Mitigation Plan*:

- Jurisdiction Information (Contact Information and Hazard Mitigation Planning Role)
- Jurisdiction Planning Process
- Hazard Event History
- Hazard Risk Ranking
- Community Assets
- Capabilities Assessment
- Resiliency to Hazards

10.1 HAZARD MITIGATION PLAN – POINT OF CONTACT

Type	Primary Point of Contact	Secondary Point of Contact
Name	Michaela Foody	Steve Laroche
Title	Director of Public Safety	Police Chief
Agency	Town of Milton	Town of Milton
Address	43 Bombardier Road	43 Bombardier Road
City, State, Zip	Milton, VT 05468	Milton, VT 05468
Phone	802-893-6655	802-891-8063
Email	mfoody@miltonvt.gov	steve.laroche@vermont.gov

10.2 JURISDICTION PROFILE

- Geographic Region: Champlain Valley
- Persons per household: 2.6
- Persons per Square mile: 211.2
- Median Age: 41.8 years
- Elevations: Near sea level- 121ft

Location

Milton is located in northern Chittenden County, bordered by Franklin County to the north and Grand Isle County to the northwest, across an arm of Lake Champlain. The town includes the community of Milton in the east, as well as the communities of Cozy Corner, West View, Checkerberry Village, and West Milton from east to west across the center of the town. The Lamoille River flows from northeast to southwest across the town, entering Lake Champlain at the town's southwest corner. U.S. Route 2 crosses the east arm of Lake Champlain to Grand Isle from Sand Point, just north of the Lamoille River delta. Sand Bar State Park is located along Route 2.

History

Milton was chartered by Governor Benning Wentworth of New Hampshire on June 8, 1763. In February 1782, the town was first settled by William Irish, Leonard Owen, Amos

Mansfield, Absalom Taylor, and Thomas Dewey. There were approximately 300 settlers living in Milton by 1795. It was necessary to build a new meeting place, as meeting in private homes would no longer suffice. The Town House was built in 1849. In 1878, it was destroyed by a fire. Early settlers in Milton made most of their income from lumber and potash until 1840, when dairy became popular and butter and cheese were sold. Eventually, milk was also shipped to Boston and New York. Milton was home of the Catamount Speedway, which operated until 1988. Many racers who have gone through there went on to NASCAR fame, including Shelburne native Kevin Lepage.

Demographics, Economy, and Governance

Table 10.1: Demographics, Economy, and Governance in Town of Milton¹²

Demographics	Economy	Governance
Population Growth <ul style="list-style-type: none"> 1980: 6,829 1990: 8,404 2000: 9,479 2010: 10,352 2020: 10,723 2030 (Projected): 11,531 	<ul style="list-style-type: none"> Median household income : \$89,167 Per capita income : \$41,706 Median value of owner- occupied housing units: \$262,300 Number of Single Unit Residences: 3,152 Population below poverty level: 4.5% 	<ul style="list-style-type: none"> Select Board Town Manager Town Clerk Treasurer Justices of the Peace
Race and Ethnicity Percentage of population identifying as: <ul style="list-style-type: none"> White: 96.7% Black/African American: 1.6% Native: 0.5% Hispanic/Latino: 0.4% Asian: 0.2% Pacific Islander: 0.0% Two or more races: 0.6% Other: 0.0% 		

¹ [Milton town, Chittenden County, VT - Profile data - Census Reporter](#)

² [U.S. Census Bureau \(2020\). American Community Survey 5-year estimates. Retrieved from Census Reporter Profile page for Milton town, Chittenden County, VT](#)



Figure 10.1: Housing and Employment, Town of Milton³

Built Environment and Community Lifelines

Table 10.2: Number of Community Lifelines and Critical Assets in Town of Milton

³ Chittenden County Regional Planning Commission, October 2021.

SECTOR	Safety and Security	Food, Water, Shelter	Health and Medical	Energy	Communications	Transportation	Hazardous Materials	Education	Cultural/Historical	High Hazard Dams
No. Assets	5	4	7	11	5	3	29	2	8	2

Safety and Security

There is one fire station, one Emergency Medical Service (EMS) facility, one police station and two Emergency Operations Centers, one of which functions as the backup location should an event impact the primary facility. The Town of Milton is the provider of these services to the town's people.

Food, Water, Shelter

There are two water supply and treatment facilities located inside the Town of Milton, along with two temporary shelter facilities. Hannaford's grocery store is the sole grocery store in town and in the greater Milton, Georgia, and South Hero area.

Health and Medical

There is a family practice primary care and a pediatric primary care medical facility. There are two veterinary facilities. There are three pharmacies.

Energy

The energy suppliers to the Town of Milton are Green Mountain Power Corp (GMP) and Vermont Electric Power Company (VELCO). Vermont Gas Company supplies natural gas. Located in town there are two hydroelectric dams operated by GMP, 5 substations, and three solar arrays.

Communications

Most communications and information systems and infrastructure in the United States are privately-owned; however, the Town maintains authority and control over public safety communications for fire, police, and other responding agencies. The local communications providers are the FairPoint Communications, Comcast, Waitsfield/Champlain Valley Telecommunication, and Burlington Telecommunication.

Transportation

The Town of Milton is primarily serviced by US Routes 2 and 7 and Interstate 89. Bus service is provided by Green Mountain Transit via the Milton Commuter Route to Burlington. New England Central Railroad Inc. utilizes railroad tracks through the town for freight transport and maintains one transload facility.

Hazardous Materials

There are 29 hazardous materials facilities or storage sites located in the Town of Milton.

Education

In the Town of Milton there is an elementary and middle school in a shared building and one high school. There are 10 licensed early childhood programs and childcare providers. There are 11 registered home childcare programs.

Recreational, Cultural and Historic Sites and Assets

There is one public attraction/landmark located in the Town of Milton. There are multiple fishing accesses, trails and parks located in town. The Milton Town Forest is 350 acres of woodlands; Bombardier Park offers tennis courts and sports fields; Sandbar State Park is Vermont's most visited day-use park.

Natural Environment

The Town of Milton is surrounded by land cover consisting of tree canopy and grass/shrubs. The lowest elevations within the town are primarily along the rivers and streams.

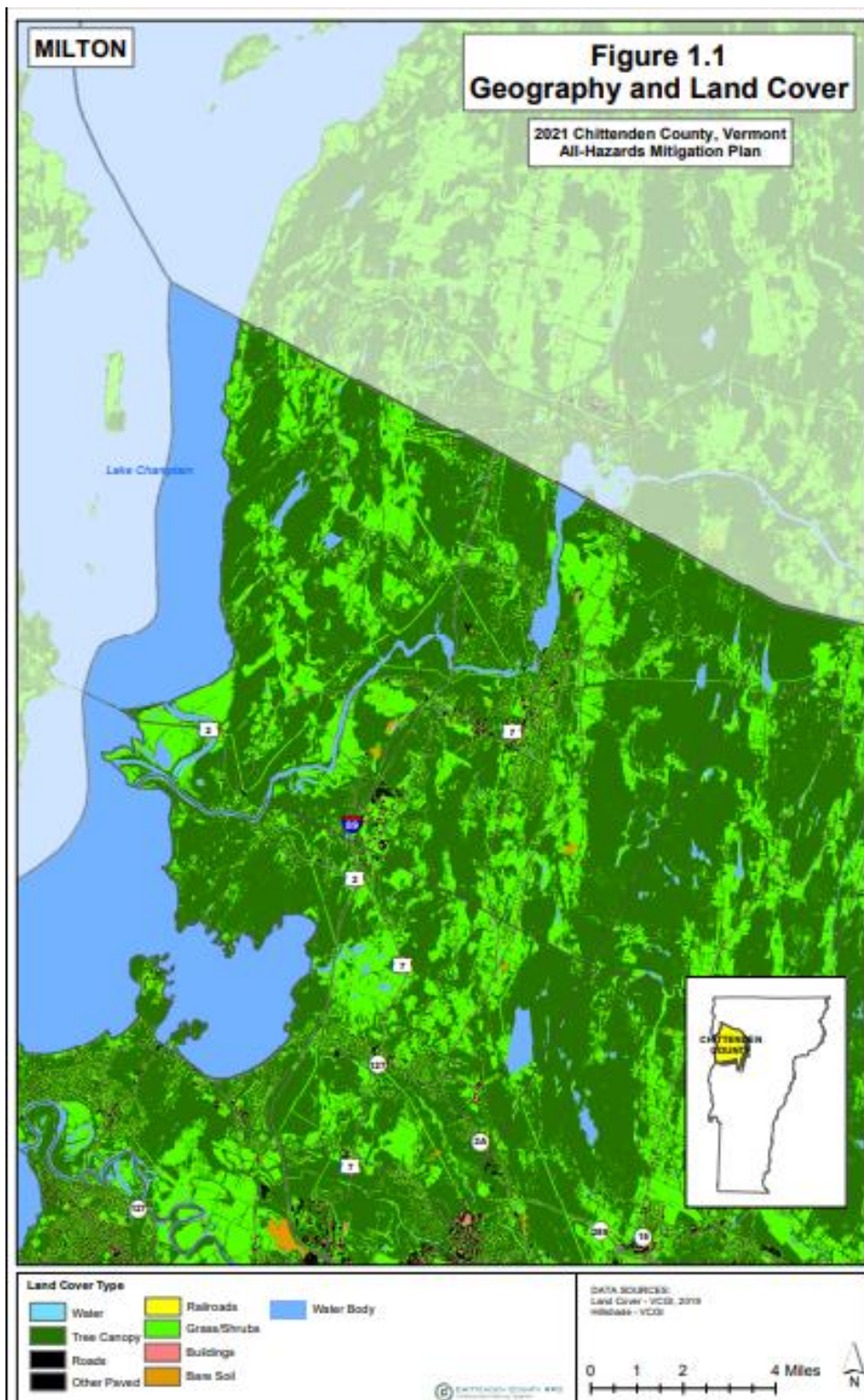


Figure 10.2: Geography and Land Cover, Town of Milton⁴

⁴ Chittenden County Regional Planning Commission, October 2021.

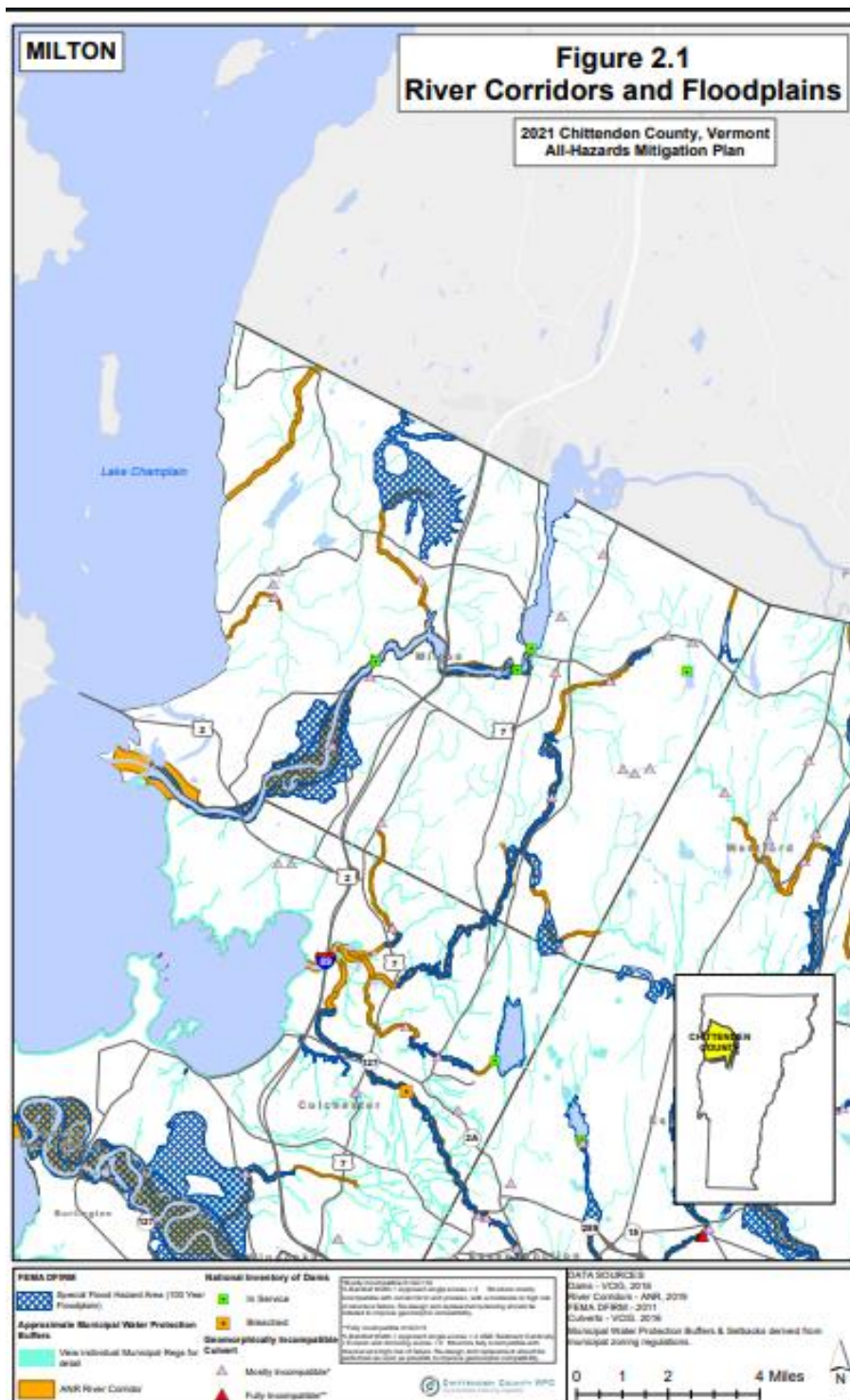


Figure 10.3: River Corridors and Floodplains, Town of Milton⁵

⁵ Chittenden County Regional Planning Commission, October 2021.

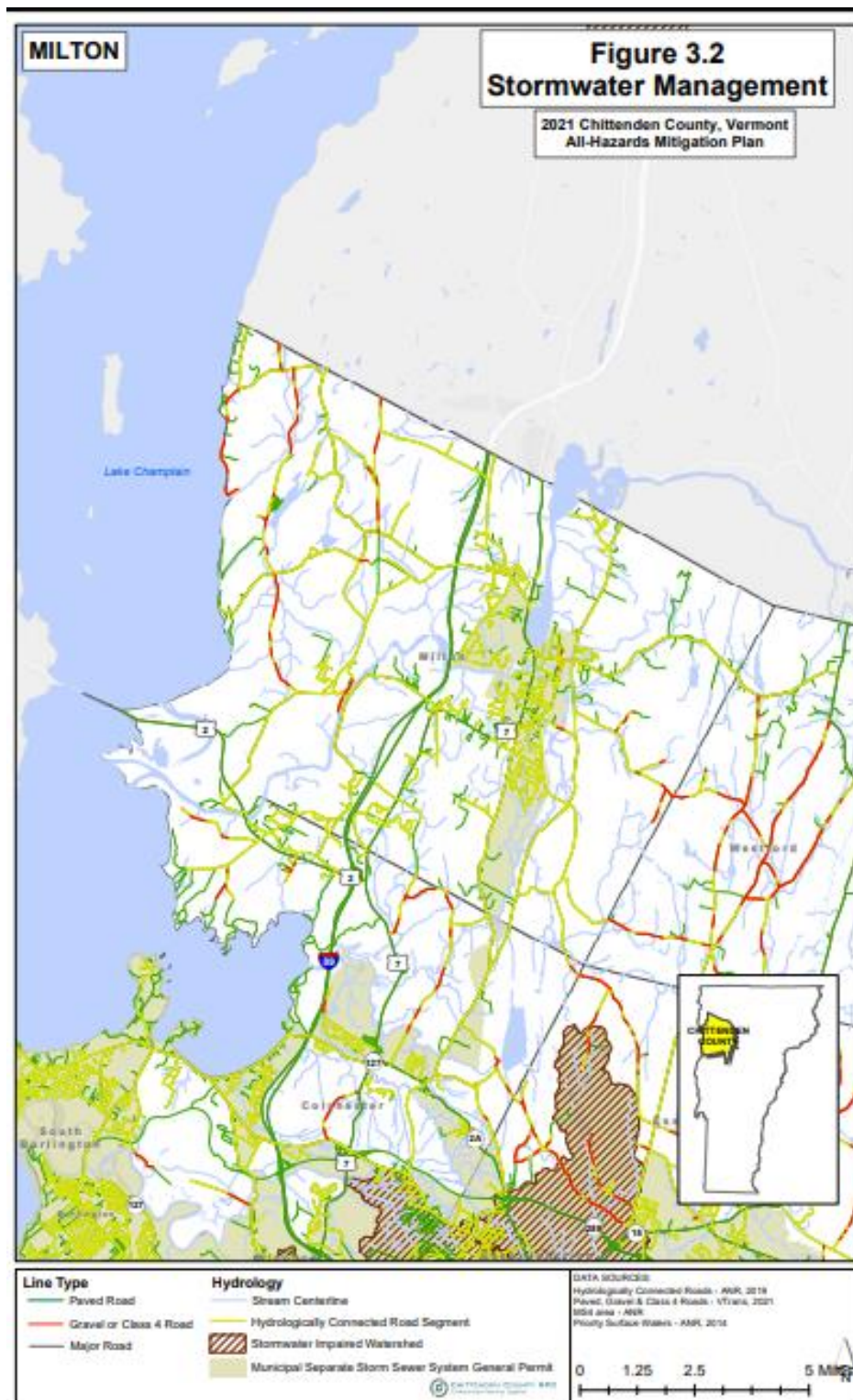


Figure 10.4: Hydrology and Stormwater Management lines, Town of Milton,⁶

Growth and Development Trends

The Town of Milton has experienced minimal growth in the past ten years, and is projected to keep growing at a similar rate in the next ten year period.

⁶ Chittenden County Regional Planning Commission, October 2021.

Table 10.3: Population Trends, 2010-2020⁷

2010	2020	Net Change 2010-2030	% Change 2010- 2030
10,352	10,723	+371	.03%

Table 10.4: Milton Population Projections to 2030⁸

2020	2030	Net Change 2020 -2030	Percent Change 2020-2030
10,723	11,531	808	.07%

Future population growth within the town is primarily dependent on the economic stability and planned development for the county and region which shows no significant change in the near future. The Planning Area concept adopted by the Chittenden County jurisdictions indicates limited areas within the Village land use category which maintains the compact, mixed-use character of a Vermont village and limits density increases.

⁷ U.S. Census Bureau QuickFacts: Vermont. Retrieved at:
<https://www.census.gov/quickfacts/fact/table/chittendencountyvermont,VT/PST045221>

⁸ U.S. Census Bureau QuickFacts: Vermont. Retrieved at:
<https://www.census.gov/quickfacts/fact/table/chittendencountyvermont,VT/PST045221>

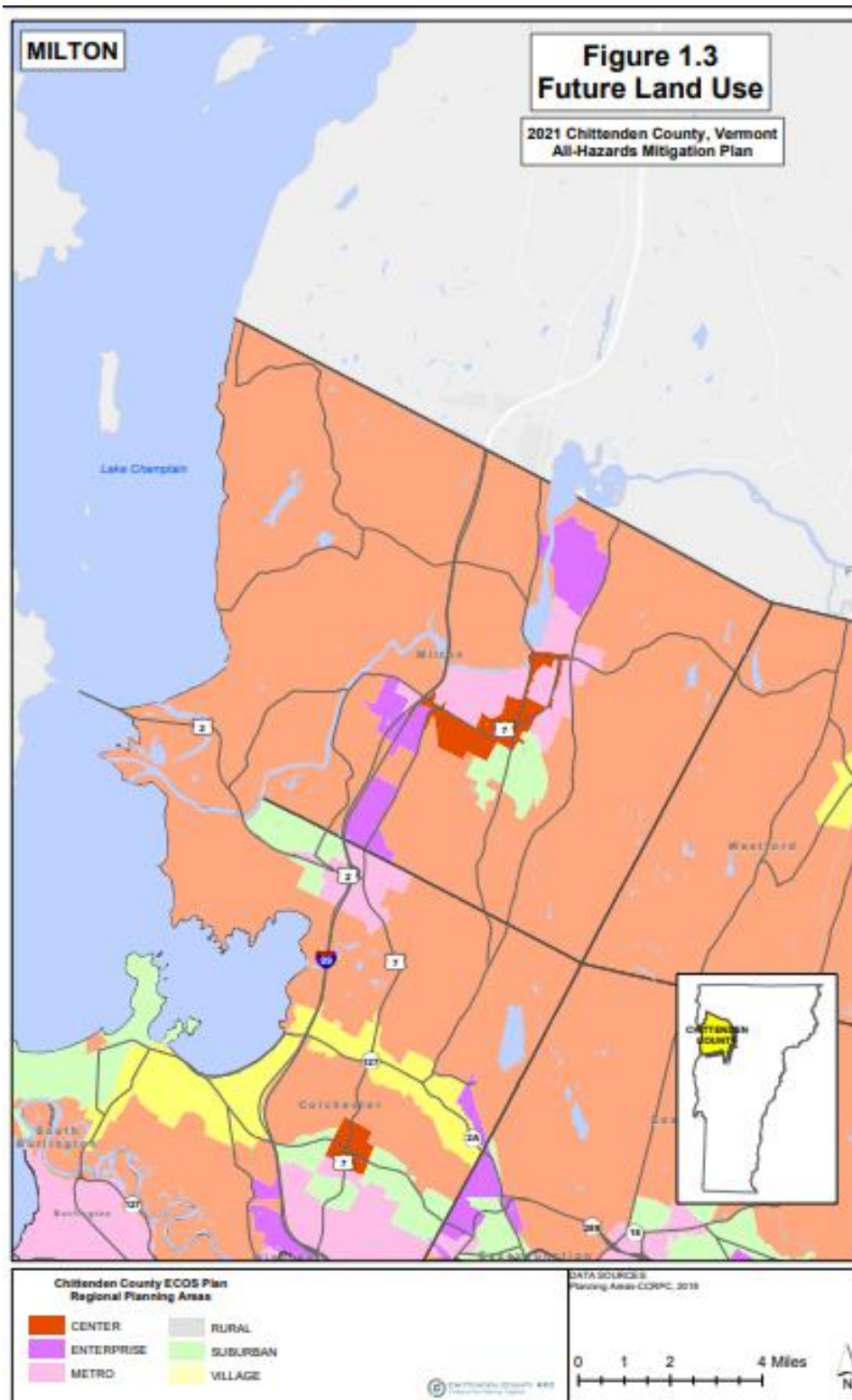


Figure 10.5: Future Land Use, Town of Milton⁹

10.3 JURISDICTION PLANNING PROCESS

⁹ Chittenden County Regional Planning Commission, October 2021.

Table 10.5: Points of Contact for Hazard Mitigation Planning, Town of Milton

Name	Position/Title	Department/Agency
Michaela Foody	Director of Public Safety	Town of Milton
Steve Laroche	Police Chief	Town of Milton
Dan Albrecht	Senior Planner	Chittenden County RPC

The jurisdiction identified its chief hazard mitigation planning responsibility as participating in the planning process and providing data and information through the Chittenden County All Hazards Mitigation Plan Update Committee. The county also identified the following tasks as part of its mitigation planning responsibilities:

<ul style="list-style-type: none"> • Jurisdictional Planning Committee • Planning Group resource/subject matter expert • Hazard risk and vulnerability assessment • Provide technical data and hazard information • Capabilities assessment • Mitigation strategy development 	<ul style="list-style-type: none"> • Sponsor mitigation actions • Review Plan drafts and provide input • Public outreach activities • Implement the Plan • Maintain the Plan
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Public Participation

Several opportunities for public involvement were provided during the planning process, including a Public Hazard Survey and access to the draft plan for review and input.

The Public Hazard Survey was released through a web link posted on the Chittenden County Regional Planning Commission's (CCRPC) "Front Porch" e-newsletter.

In addition to the survey, the public was offered the opportunity to review and provide input to the Draft 2022 Plan update. Notification of the Draft Plan release was made through the same county web link. Documentation of the public survey and draft plan review is included in [Attachment 3](#) of this annex.

10.4 JURISDICTION-SPECIFIC HAZARD EVENT HISTORY

The Town of Milton has been included in thirteen Federal Disaster or Emergency Declarations since 1990, all but two as a result of severe storms or flooding.

Table 10.6: Federal Disaster and Emergency Declarations (1990-2021), Town of Milton

Declaration	Date	Hazard	Assistance Type
EM 3567	August 2021	Tropical Storm Henri	P(B)
DR-4532	April 2020	Vermont Covid-19 Pandemic	IA, PA(B)
EM-3437	March 2020	Vermont Covid-19	PA(B)
DR-4474	January 2020	Severe Storm and Flooding	-
DR 4232	June 2015	Severe Storm and Flooding	PA (A-G)
DR 4163	January 2014	Severe Winter Storm	PA (A-G)
DR 4140	August 2013	Severe Storms and Flooding	PA (A-G)

DR 4022	September 2011	Tropical Storm Irene	IA, PA(A-G)
DR 1995	June 2011	Severe Storms and Flooding	IA, PA(A-G)
EM 3167	April 2001	Snowstorm	PA(B)
DR 1228	July 1998	Severe Storms and Flooding	IA, PA(A-G)
DR 1101	January 1996	Ice Jams and Flooding	PA(A-G)
DR 875	June 1990	Flooding	PA(A-G)

Table 10.7: Summary of Storm Events in the Town of Milton, 1950-2021

Event Type	Number of incidents	Direct Deaths	Indirect Deaths	Direct Injuries	Indirect Injuries	Property Damage (\$)	Crop Damage (\$)
Cold/Wind Chill	10	0	0	0	0	100,000	0
Extreme Cold/Wind Chill	5	0	0	0	0	0	0
Flash Flood	2	0	0	0	0	15,000	0
Flood	12	0	0	0	0	228,000	0
Frost/Freeze	3	0	0	0	0	0	275,000
Hail	12	0	0	0	0	20,000	20,000
Heat	7	1	0	0	0	0	250,000
Heavy Rain	6	0	0	0	0	50,000	0
Heavy Snow	5	0	0	0	0	247,000	0
High Wind	14	0	0	1	0	1,440,000	0
Ice Storm	1	0	0	0	0	750,000	0
Lakeshore Flood	5	0	0	0	0	5,520,000	0
Lightning	3	0	0	0	0	0	10,000
Strong Wind	30	1	0	0	0	369,000	0
Thunderstorm Wind	26	0	0	0	0	338,000	0
Winter Storm	68	0	0	2	0	1,758,000	10,000
Winter Weather	97	1	3	0	0	951,000	0
Total	306	3	3	51,003	0	\$11,786,000	\$565,000

Table 10.8: Significant Hazard Events Identified by Town of Milton, 2017-2021¹⁰

Date	Hazard	Event and Description
October 10, 2020	Lightning	Lightning was the determined as the cause of a 4-acre wildfire on Arrowhead Mountain.

¹⁰ NOAA, National Centers for Environmental Information, Storm Events Database, January 1, 2017, to May 31, 2021.

Date	Hazard	Event and Description
May 29, 2020	Thunderstorm Wind	Trees down on utility lines in Milton.
July 30, 2019	Thunderstorm Wind	Several tree branches and a few trees downed by thunderstorm winds in Milton.

High Hazards of Concern to the Jurisdiction

The Town of Milton indicated that Severe Winter Storms, Flooding and Fluvial Erosion were the highest natural hazards of concern for the jurisdiction. These hazards are fully profiled in [Section 4, Base Plan](#); however, further information was provided by the town in relation to the following hazards. Since the 2017 plan was completed, the Epidemic previously listed as a Societal Hazard has been changed to Human Infectious Disease and is now considered a natural hazard instead of a societal hazard.

Severe Winter Storm

Severe winter storms are not formally analyzed or mapped for the Town due to the random nature of where such damage occurs; however, these events do occur with some frequency and are addressed in [Section 4.8, Base Plan](#).

Dam/Levee Failure

In the Town of Milton there are five dams listed. Three of them are low hazard classification and two are high hazard classification.

Table 10.9: Dams in Town of Milton, as of May 2021¹¹

Name	Impoundment Capacity (acre-feet)	Use	Owner	Hazard Class
Peterson Dam	2,840	Hydroelectric Power	GMP	High
Milton Pond	150	Water supply	Town of Milton	Low
Milton Dam	93	Hydroelectric Power	GMP	Low
Clark Falls	10,000	Hydroelectric Power	GMP	High
Long Pond	N/A	N/A	Private	Low

Flood/Flash Flood

According to the Milton Town Plan, certain areas have been designated flood hazard areas, based upon 100-year floodplain data. Primary areas within the floodplain include land along the banks of Lake Champlain, the Lamoille River, the Lamoille delta, Mallett's Creek, other small creeks, and wetlands along Murray Avenue and Duffy Road. A simple GIS

¹¹ [Army Corps of Engineers, National Inventory of Dams, 2021.](#)

intersection analysis reveals that portions of town roads are located within the 100-year floodplain, as are culverts, bridges, and utility poles. Unfortunately, this level of analysis does not take into account the fluvial geomorphology (volume, velocity, direction, etc.) nor, more importantly, does it factor in the elevation of the road relative to flood elevation. Analysis also reveals farmland located within the floodplain. However, without an accurate fluvial geomorphology assessment at each location it is not currently possible to predict how many cubic yards of productive soils would be a net loss during a flood event.

Lakeshore erosion due to wave action and land development is creating cliffs along several areas on Lake Champlain, particularly on Eagle Mountain Harbor Road. Property owners have responded by installing retaining walls, which tends to shift erosion to adjacent shoreline areas. Town officials are also concerned about damage to town roads along the shoreline, particularly Eagle Mountain Harbor Road.

Fluvial Erosion

Some level of geomorphic assessment has been completed for some of the streams that run through Milton and Fluvial Erosion Hazard areas have been identified notably Allen (Petty) Brook and Mallett's Creek and the Lamoille River.

Severe Rainstorm

Damage to roads, culverts, and bridges from thunderstorm events has been assumed in the past to be caused by overflowing of nearby streams, rivers, or lakes. More recent analysis has shown that this damage is caused by intense, localized thunderstorms which cause excessive and rapid water flows on and over paved and gravel roads, roadside ditches, driveway culverts, stormwater systems, etc. In many cases, damaged infrastructure is located outside of formally mapped floodplains, Fluvial Erosion hazard Areas (FEHA) or River Corridors (RC). Some of the most vulnerable infrastructure is road culverts. The impacts from previous hazard events include general road repairs, debris removal and cleanup, and increased contractual costs for snow removal. Decrease flooding hazards to town roads through upgrades to low-flow or failed culverts



Figure 10.6: Town of Milton 100-Year Flood Scenario¹²

Non-Natural Hazards

The Town of Milton identified the following information related to technological and societal hazards.

¹² Chittenden County Regional Planning Commission, October 2021.

Table 10.10: Technological and Societal Hazards of Concern to the Town of Milton

Hazard	Risk/Vulnerability Issue
Major Transportation Incident	A large accident or road closure on one of the three heavily trafficked artery roads in Milton could be costly to the Town and county businesses due to the expense of emergency equipment and personnel time, as well as travel access restriction to businesses and workplaces.
Hazardous Materials Incident	Significant industrial development, and hazardous materials are transported through the town center on the railroad, raising the risk of a hazardous materials incident.
Power Loss	Milton is vulnerable to Power Loss because the population is dispersed and repairing utility infrastructure in rural areas can take more time.
Economic Recession	Husky Injection Molding System is the largest single employer in Milton; loss of this employer would significantly affect the employees, related businesses, and the town's tax base.

10.5 HAZARD RISK RANKING

After developing hazard profiles, the Town of Milton Planning Committee conducted a two-step quantitative risk assessment for each hazard that considered population vulnerability, geographic extent/location, probability of future occurrences, and potential impacts and consequences. The numerical scores for each category were totaled to obtain an **Overall Risk Score**, which is summarized as one of these risk and vulnerability classifications:

- **Low:** Minimal potential probability and impact. Minimal or no property damage or loss of life expected.
- **Medium:** Moderate probability and potential impact; moderate threat level to the general population and/or the built environment. The potential damage is more isolated and less costly than a widespread disaster.
- **High:** Significant probability and widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past, causing significant impact.

The two-step hazard risk ranking methodology is detailed in **Section 4, Base Plan**. The Hazard Risk Ranking scores for the Town of Milton are provided in **Attachment 2** of this annex.

The **Overall Risk Score** for each hazard served as the basis for determining whether a vulnerability assessment should be conducted. Natural hazard profiles are presented within the hazard sub-sections in **Section 5, Base Plan**, and local detail is provided in the Jurisdiction Annexes. Non-natural hazard profiles are presented in **Volume II** of this Plan.

Table 10.11: Hazard Risk Ranking Summary Natural Hazards, Town of Milton

Hazard	Sum - Impact/ Consequence Score	Probability	Total Risk Rating (Impact/ Consequences <i>x</i> Probability)	Hazard Ranking
Severe Rainstorm	8	5	40	High
Severe Winter Storm	8	5	40	High
Flood	7	4	28	Medium
Fluvial Erosion	6	4	24	Medium
Human Infectious Disease	8	3	24	Medium
Wildfire	4	4	16	Low
Extreme Temperature	3	4	12	Low
Dam/Levee Failure	10	1	10	Low
Invasive Species	2	4	8	Low

Table 10.12: Hazard Risk Ranking Summary Technological Hazards, Town of Milton

Hazard	Total Probability Score	Overall Risk Score	Total Consequence Score	Hazard Ranking
Power Loss	6	5	30	Medium
Major Transportation Incident	7	4	28	Medium
Hazardous Materials Incident	6	4	24	Medium
Multi-structure Fire	5	4	20	Medium
Water Supply Loss	4	4	16	Low
Telecommunications Failure	4	4	16	Low
Water Pollution (algal bloom, etc.)	4	4	16	Low
Sewer Service Loss	5	3	15	Low
Natural Gas Service Loss	4	3	12	Low
Other Fuel Service Loss	4	3	12	Low

Table 10.13: Hazard Risk Ranking Societal Hazards, Town of Milton

Hazard	Total Probability Score	Overall Risk Score	Total Consequence Score	Hazard Ranking
Crime	6	5	30	Medium
Economic Recession	6	4	24	Medium
Key Employer Loss	5	4	20	Medium
Civil Disturbance	4	2	8	Low
Terrorism	7	1	7	Low

10.6 VULNERABILITY ASSESSMENT

The methodology for calculating loss estimates presented in this annex is the same as that described in [Section 4, Base Plan](#). Quantitative loss estimates are provided when available. Qualitative measurement considers hazard data and characteristics, including the potential impact and consequences based on past occurrences. Accompanying the data is a discussion of community assets potentially at risk during a hazard event.

Typical vulnerabilities from common hazards consist primarily of:

- Damage to public infrastructure especially roads and culverts
- Temporary closures of roads and bridges including from debris
- Temporary loss of power and/or telecommunications
- Temporary isolation of vulnerable individuals such as the elderly or those in poverty

More specifically, these vulnerabilities typically occur in association with the hazards profiled in [Section 4, Base Plan](#).

Table 10.14: Typical Vulnerabilities of Natural Hazards of Highest Concern, Town of Milton

Hazard	Typical Vulnerabilities	Potential Cascading Vulnerabilities
Extreme Temperatures	<ul style="list-style-type: none"> • Damage to public infrastructure • Loss of water service 	<ul style="list-style-type: none"> • Budget impacts due to needed repairs
Flooding	<ul style="list-style-type: none"> • Temporary closures of roads and bridges including from debris • Temporary loss of power and/or telecommunications • Temporary isolation of vulnerable individuals • Damage to public infrastructure 	<ul style="list-style-type: none"> • Budget impacts from road/bridge closures and repairs to public infrastructure • Damages to individuals' properties and businesses
Fluvial Erosion	<ul style="list-style-type: none"> • Temporary closures of roads and bridges including from debris • Temporary loss of power and/or telecommunications • Temporary isolation of vulnerable individuals • Damage to public infrastructure 	<ul style="list-style-type: none"> • Budget impacts from road/bridge closures and repairs to public infrastructure • Damages to individuals' properties and businesses
Human Infectious Disease	<ul style="list-style-type: none"> • Temporary closures of schools, businesses, places of assembly • Increased demand on medical services 	<ul style="list-style-type: none"> • If an epidemic is widespread and long-lasting, societal impact could be severe
Severe Storm/ Rainstorm	<ul style="list-style-type: none"> • Temporary closure of roads and bridges including from debris • Temporary loss of power and/or telecommunications • Temporary isolation of vulnerable individuals • Damage to public infrastructure 	<ul style="list-style-type: none"> • Budget impacts from road/bridge closures and repairs to public infrastructure • Damages to individuals' properties and businesses
Severe Winter Storm	<ul style="list-style-type: none"> • Temporary closures of roads and bridges including from debris • Temporary loss of power and/or telecommunications • Temporary isolation of vulnerable individuals 	<ul style="list-style-type: none"> • Budget impacts from debris cleanup

Wildfire	<ul style="list-style-type: none"> • Damage to private property • Damage to recreation and tourism locations 	<ul style="list-style-type: none"> • Budget impacts from firefighter labor and equipment • Economic impacts if damage to recreation/ tourism locations
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Relative to the county as a whole, the Town of Milton has a higher vulnerability to the following natural hazards:

- Severe Rainstorms and Fluvial Erosion as it has some gravel roads and older culverts.
- Flooding due to its proximity to Lake Champlain and the Lamoille River (although the latter is mitigated by several dams).

Vulnerabilities with regards to **Technological Hazards** are harder to project as these incidents occur with less frequency and less predictability.

Table 10.15: Typical Vulnerabilities of Technological Hazards of Highest Concern, Town of Milton

Hazard	Typical Vulnerabilities	Potential Cascading Vulnerabilities
Gas Service Loss	<ul style="list-style-type: none"> • Temporary loss of service • Temporary impacts to vulnerable individuals 	<ul style="list-style-type: none"> • If extensive loss, potential budget impacts to service providers
Hazardous Materials Incident	<ul style="list-style-type: none"> • Temporary closures of roads and bridges during cleanup 	<ul style="list-style-type: none"> • If large event, potential high cleanup costs • Injuries to persons
Major Transportation Incident	<ul style="list-style-type: none"> • Temporary closures of transportation infrastructure • Injuries, deaths 	<ul style="list-style-type: none"> • If major event, potential long-term closure of infrastructure
Power Loss	<ul style="list-style-type: none"> • Temporary loss of electrical service • Temporary impacts to vulnerable individuals • Damage to public infrastructure 	<ul style="list-style-type: none"> • If extended event, damage to perishable goods or business income • If extensive loss, potential budget impacts to service providers
Other Fuel Service Loss	<ul style="list-style-type: none"> • Temporary loss of service • Temporary impacts to vulnerable individuals 	<ul style="list-style-type: none"> • If extensive loss, potential budget impacts to service providers
Sewer Service Loss	<ul style="list-style-type: none"> • Temporary loss of service • Temporary impacts to vulnerable individuals 	<ul style="list-style-type: none"> • If extensive loss, potential budget impacts to service providers
Telecommunications Failure	<ul style="list-style-type: none"> • Temporary loss of service • Temporary impacts to vulnerable individuals 	<ul style="list-style-type: none"> • If extensive loss, potential budget impacts to service providers
Water Service Loss	<ul style="list-style-type: none"> • Temporary loss of service • Temporary impacts to vulnerable individuals 	<ul style="list-style-type: none"> • If extended loss, potential budget impacts to service providers

Hazard	Typical Vulnerabilities	Potential Cascading Vulnerabilities
Water Pollution	<ul style="list-style-type: none"> Ongoing budgetary impacts due to permit requirements 	<ul style="list-style-type: none"> If repeat events, impacts to tourism-based businesses

Relative to the County as a whole, the Town of Milton has a slightly higher vulnerability to the following technological hazards:

- Major Transportation Incident due to the transit of a railroad line and Interstate 89 through the Town.
- Water Pollution due to its designation as an MS4 permitted town.

With regards to **Societal Hazards**, vulnerabilities are typically more dispersed among individuals and societal sectors compared to the natural environment and to technology which is fixed.

Table 10.16: Typical Vulnerabilities of Societal Hazards of Highest Concern, Town of Milton

Hazard	Typical Vulnerabilities	Potential Cascading Vulnerabilities
Civil Disturbance	<ul style="list-style-type: none"> Injuries to persons Damage to public and private property 	<ul style="list-style-type: none"> Budget impacts to police services depending upon severity of event Deaths
Crime	<ul style="list-style-type: none"> Increased demands on police services and social services 	<ul style="list-style-type: none"> Injuries Deaths
Economic Recession	<ul style="list-style-type: none"> Loss of economic activity Increased demands on social services Some loss of tax revenue 	<ul style="list-style-type: none"> Effects increased if event if of extended duration
Key Employer Loss	<ul style="list-style-type: none"> Loss of economic activity Loss of portion of tax base Increased demands on social services 	<ul style="list-style-type: none"> Effects increased if employer if of significant size
Terrorism	<ul style="list-style-type: none"> Injuries to persons Damage to public and private property 	<ul style="list-style-type: none"> Budget impacts to police services depending upon severity of event Deaths

Relative to the County as a whole, there is insufficient data to conclude whether the Town is more vulnerable to one of the Societal Hazards noted above.

The Town *MJAHMP* Planning Committee noted the following as critical assets to the jurisdiction:

- People – The health, safety and welfare of the Town officials, staff, and volunteers, including members of the Highway, Water, Fire, Rescue, and Police Departments, as well as the general public.
- Roads and bridges for safe travel that meet MRGP and Town Highway standards

- Municipal buildings (including contents such as land records, vehicles, equipment, books, etc., that are in the Town Office, Town Garage, Fire Station, Library and Town Hall) and grounds (including the Recreation Field, Community Forest, and access to State Forest Land.)

Population

The Centers for Disease Control and Prevention's (CDC) **Social Vulnerability Index (SVI)** is a tool that can be used to identify specific vulnerable populations.¹³ The CDC SVI depicts the vulnerability of communities at census tract level, by county, into fifteen census-derived factors grouped into four themes—socioeconomic status, household composition/disability, race/ethnicity/language, and housing type/transportation. Social vulnerability refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills.

Based on the Overall SVI for Chittenden County, the Town of Milton is in an area of lowest vulnerability.

Table 10.17: Vulnerable Population in the Town of Milton, by Age Group

Category	Population
Children Under 18	6.7%
Population age 65+	13.4%
Disabled Population	11.1%
Population Below Poverty Level	3.1%

Built Environment

Although a vulnerability analysis was conducted utilizing the Hazus modeling scenarios, it was conducted at the county level and no additional Hazus data is available for specific jurisdictions.

The statistical overview of roads in the Town of Milton, shows the range of road types within the town, from highways to unpaved roads. The different road types have different hazard vulnerabilities. Unpaved roads are more vulnerable to being washed out in a flood or heavy storm, while traffic incidents are more likely to occur on large, arterial roads. Municipal highways, bridges and dams are well mapped in Chittenden County. The state divides municipal (town) highways into three classes (described in **Section 4, Base Plan**) for purpose of highway maintenance and state aid.

Table 10.18: High Crash Road Sections 2010-2014 Data, Town of Milton

			Severity Index
Route	System	Mileage	(\$/Accident/1.)

¹³ The Centers for Disease Control and Prevention's Social Vulnerability Index is presented in Section 4, Hazard Identification and Risk Assessment, Base Plan.

Middle Road, Milton, Railroad Street, Milton	Urban Collector (u)	2.960-3.020	\$16,448
Middle Road, Milton, Railroad Street, Milton	Urban Collector (u)	2.960-3.020	\$27,048

Table 10.19: Highway Mileage by Class, Town of Milton^{14 15}

Class 1	Class 2	Class 3	Class 4	State Hwy	Fed Hwy	Interstate	Total 1, 2, 3, State Hwy
	40.05	85.44	4.92	14.306		6.601	139.796

Table 10.20: Highway Mileage by Surface Type, Town of Milton¹⁶

Paved	Gravel	Soil or Graded	Unimproved	Impassable	Unknown	Total
108	8	5		3	1	125
Total Known	Total Unpaved	% Paved	% Unpaved			
124	16	86.4	12.8			

Table 10.21: Hazardous Materials and Petroleum Storage Sites, Town of Milton¹⁷

Hazardous Materials and Petroleum Products Storage and/or use locations	
Amerigas	44 Kienle Rd
Comcast of CT/GA/MA/NH/NY/NC/VA/VT, LLC-67 West Milton Road	67 West Milton Road
Fairpoint Milton Co (FPT-VT474507)	6 Cherry St
Fairpoint Milton Garage (FPT-VT474506)	131 Catamount Dr
GMP Clark Falls Station	16 Howard Dr
GMP Milton Generating station	85 Ritchie Ave
GMP Peterson Station	197 West Milton Rd
Hood Distribution-McQuesten Group	67 Catamount Drive
Husky Injection Molding Systems Inc	288 North Road
Kenneth R Adams, Inc	18 Adams Park
Middle Road Market	69 Middle Road
Milton Amerigas	44 Kienle Rd

¹⁴ Vermont Agency of Transportation, Vermont General Highway Map: Town of Milton, 2020.

¹⁵ Vermont Agency of Transportation, Vermont General Highway Map: Urban Compact of Milton, 2020.

¹⁶ Vermont Agency of Transportation, Vermont Highway Surface: Public Highways, 2021.

¹⁷ Chittenden County Regional Planning Commission, 2014

Milton Compression Facility (NG Advantage)	121 Gonyeau Road
Milton Hannafors #8304	209 Route 7 South
Premier Coach	946 Route 7 South
RCC-Georgia MTN-USID 102894	Ted Road
RCC- Milton	72 West Milton Road
Rowley Fuels Office & Truck Garage	789 Rte 7 South
Rowley Fuels Propane Inc	11 Checkerberry Square
Rowley Fuels Terminal Inc	8 River Street
S.B Collins Inc- (Redwood Mobil)- Milton	250 Route 7
S.B Collins Inc- (Midtown Mobil)-Milton	Route 7 Midtown Plaza
Simons Milton	6 River St
Student Transportation of America- Milton	19 Precast Road
Terry Hill Transport Inc	59 Catamount Drive
Tri-Angle Metal Fab	103 Gonyeau Road
Velco Sandbar Substation	586 Bear Trap Road
Verizon Wireless Georgia 2 VT (ID:19600583)	15 Joy Rd
Verizon Wireless Milton (VT52614)	30 Ted Road

Table 10.22: Culverts with a Geomorphic Compatibility Rating of “Mostly Incompatible” or “Incompatible”, Town of Milton

Bankfull Width	Compatibility Score	Town	Location	GIS Road Name	Stream Name
36.36	6	Milton	.85 Mi S Mars Hollow Rd	Duffy Rd	Unnamed
18.10	7	Milton	At Cadreact Farm	Caderact Rd	Trout Brook
19.09	7	Milton	.1 Mi W Cadreact Rd	Everest Rd	Unnamed
20.67	7	Milton	Jct. W/ Hardscrabble Rd	Devino Rd	Unnamed
50.00	8	Milton	.3 Mi W of East Rd		Malletts Creek
45.00	8	Milton	.1 Mi S Westford Rd	Forest Rd (PVT)	Malletts Creek
28.57	8	Milton	Driveway #333 off Hardscrabble Rd		Unnamed
32.78	9	Milton	Sweeny Farm Road Crossing	Sweeny Farm Rd	Allen (Petty) Brook
29.07	9	Milton	.3 Miles South Lake Road	Sanderson Rd	Streeter Brook
28.00	9	Milton	Jct. W/ Ted Rd	Westford Rd	Unnamed
19.61	9	Milton	At entry gate to Peterson Rd	W Milton Rd	Unnamed trib to Lamoille
26.32	9	Milton	.25 Mi S Everest Rd	Cadreact Rd	Trout Brook

47.83	9	Milton	Forest Road Crossing	Forest Rd (PVT)	Malletts Creek Main Stem
22.14	9	Milton	Just DS Willow Farm Driveway		Unnamed
29.23	9	Milton	.5 Miles N Main St		Unnamed
36.47	9	Milton	.2 Miles S Main St		Unnamed
48.61	10	Milton	.9 Miles South Bear Trap R	W Milton Rd	Unnamed
26.67	10	Milton	.5 Mi S Everest	Cadreact Rd	Unnamed
48.00	10	Milton	Driveway #431 off Westford Rd		Unnamed
41.33	10	Milton	.1 Mile S Cooper Rd		Unnamed

Figures 10.7 illustrates the historical development pattern of the town, including the proximity to the 100-year floodplain, River Corridors and River Streams. Analysis of this pattern indicates that most residential and non-residential development is clustered in valleys or low-lying areas; however, they are not typically located in Special Flood Hazard Areas (SFHAs) or River Corridors.

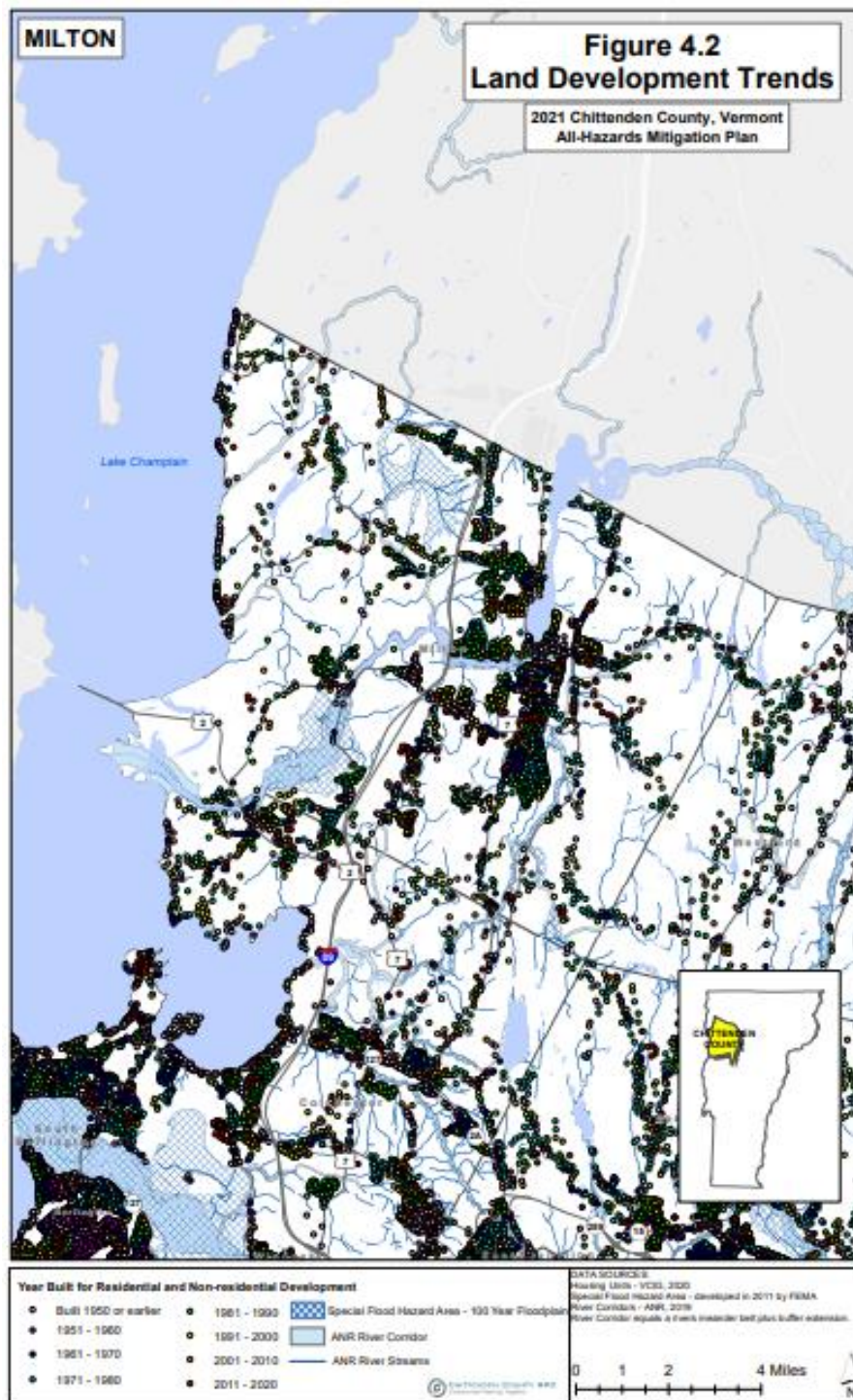


Figure 10.7: Historic Land Development, Town of Milton- 1950-2020¹⁸

¹⁸ Chittenden County Regional Planning Commission, October 2021.

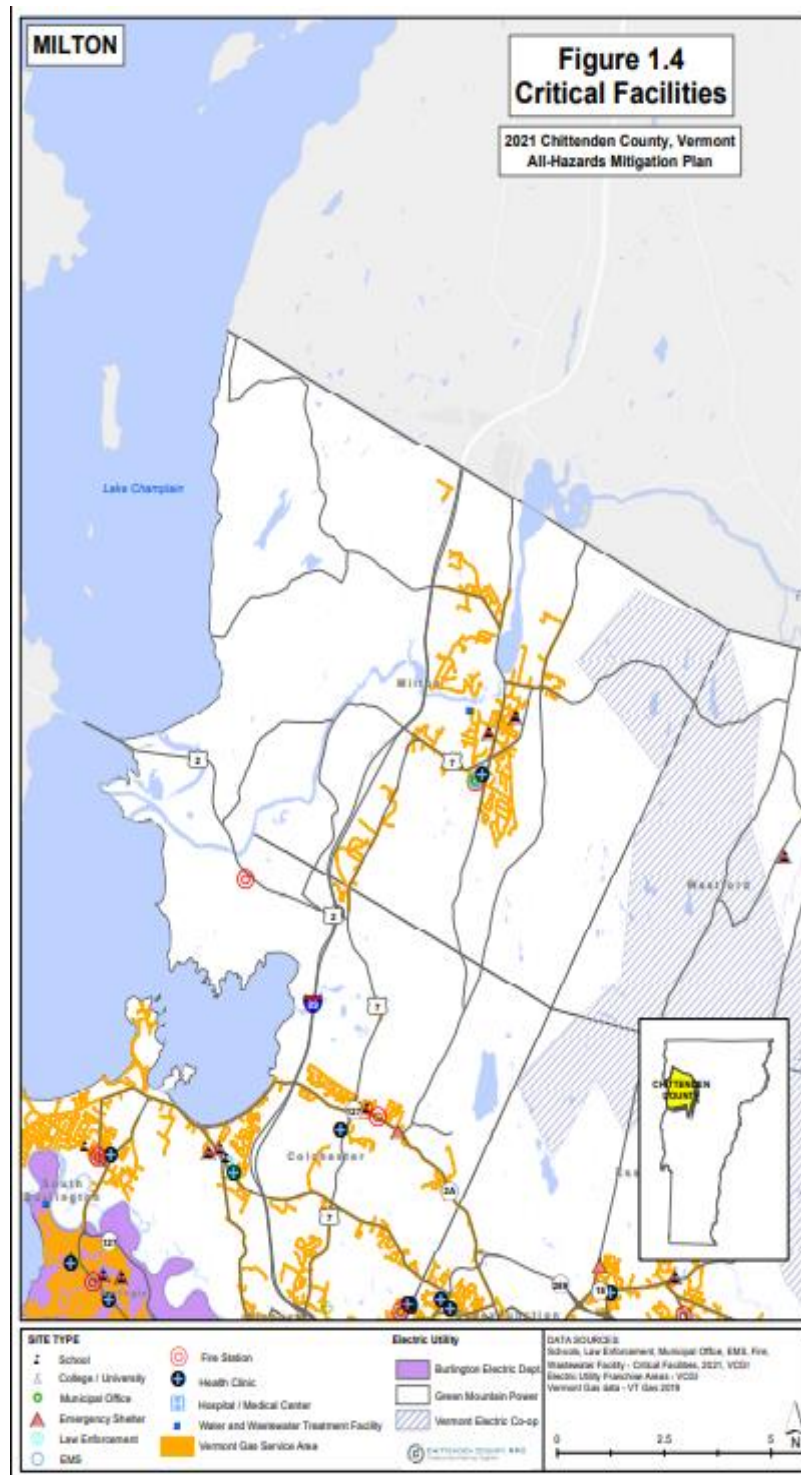


Figure 10.8: Critical Facilities, Town of Milton¹⁹

Critical Facilities

US Route 2 and 7 both travel through the 100-year floodplain: Route 2 through the sandbar crossing Lake Champlain and the Lamoille River outlet, and Route 7 along the Arrowhead Lake causeway. Vermont Gas has a network of underground gas pipelines through town in

¹⁹ Chittenden County Regional Planning Commission, October 2021.

the southern area of Lake Arrowhead and along developments in the Lamoille River area between Route 7 and Interstate 89, which overlap with the 100-year floodplain. The New England Central Railroad crosses the 100-year floodplain just north of 739 East Road. The 500-year floodplain crosses Interstate 89 at approximately mile marker 103.5.

Table 10.23: Critical Facilities Exposed to FEMA Floodplains, Town of Milton

Total Facilities	In 100-year Floodplain	In 500-year Floodplain
5	4	1

Historical/Cultural Assets

Three recreation parks are located in the 100-year floodplain: Sandbar State Park, River Street Park, and the Lamoille River Walk.

Table 10.24: Cultural and Historic Properties Exposed to FEMA Floodplains, Town of Milton

Total Facilities	In 100-year Floodplain	In 500-year Floodplain
3	3	0

10.7 CAPABILITY ASSESSMENT

Capabilities Assessment Summary Ranking and Gap Analysis

Planning and Regulatory

Table 10.25: Summary of Planning Regulatory Capabilities, Town of Milton

Comprehensive/Master Plan	1
Capital Improvements Plan	1
Economic Development Plan	3
Impact fees for new development	1
Local Emergency Operations Plan	1
Continuity of Operations Plan	1
Transportation Plan	3
Stormwater Management Plan	1
Community Wildfire Protection Plan	1
Building Code	1
Building Code Effectiveness Grading Schedule (BCEGS) Score	0
Fire Department ISO rating	4
Site Plan review requirements	1
Zoning ordinance	1
Subdivision ordinance	1

Floodplain ordinance	1
Natural hazard specific ordinance	1
Flood insurance rate maps	1
Acquisition of land for open space and public recreation uses	1
Other	2
Total	27

In addition to the plans and regulations noted in Table 10.25 the Town identified the following areas for enhancement of its planning and regulatory capabilities and their benefits in addressing hazard mitigation:

- Update inadequate and out of date Hazmat Ordinance to reflect state laws and address the storage of hazardous materials, disposal requirements, and repercussions for unlawful storage and containment.
- Improve continuity of operations with cross training on critical operational tasks within and across municipal departments, including positions within the Emergency Operations Center.

Administrative and Technical Capabilities

Table 10.26: Summary of Administrative and Technical Capabilities, Town of Milton

Planner(s) or engineer(s) with knowledge of land development and land management	1
Engineer/professionals trained in construction practices related to buildings and/or infrastructure	3
Planners/ Engineer(s) with an understanding of natural and/or manmade hazards	4
Floodplain manager Mutual Aid Compacts	1
Surveyor(s) Building Inspection	2
Staff with education or expertise to assess the community's vulnerability to hazards	4
Emergency Manager	1
Personnel skilled in GIS and/or HAZUS	1
Scientist familiar with hazards of the community	2
Grant Writer(s)	0
Warning systems or services (automated callout, sirens, etc.)	0
Total	19

The Town of Milton has moderate administrative and technical capabilities and has identified the following areas for improvement:

- Incorporate additional departments in GIS and online accessible records. This mitigates the loss of critical and historical records in the event of a disaster at the

municipal building. This also allows other departments and the community to have access to broader data that may contribute to more effective coordination and indirect integration into mitigation planning.

- Upgrade/integrate warning systems for all water/waste water pump stations for automated callout for faster response to potential water or wastewater system failure.

Fiscal Capability

Table 10.27: Summary of Fiscal Capabilities, Town of Milton

Capital improvements project funding	1
Authority to levy taxes for specific purposes	1
Fees for water, sewer, gas, or electric services	1
Impact fees for new development	1
Stormwater utility fee	1
Incur debt through general obligation bonds and/or special tax bonds	1
Incur debt through private activities	0
Community Development Block Grant (CDBG)	1
Other Federal funding programs, Historical Preservation	1
State funding programs	1
Public/Private partnership funding sources	1
Total	9

The Town of Milton has moderate fiscal capabilities and has identified the following areas for improvement:

- Continued long term planning within the Capital Improvement Plan with a focus on seeking out funding sources in advance of projects starting.

Program/Organization Capabilities

Table 10.28: Summary of Program/Organization Capabilities, Town of Milton

Civic groups serving special community needs	8
Ongoing public education or information program	9
Natural disaster or safety related school programs	2
StormReady certification	0
Firewise Communities certification	0
Public-private partnership initiatives addressing disaster-related issues	0
Other	1
Total	20

The Town of Milton has significant program or organizational capabilities that currently support hazard mitigation; however, it has identified the following areas for improvement:

- Pursue StormReady Certification.
- Pursue Firewise Communities Certification.
- Engage in more direct outreach to the community with public safety information. Specifically, non-event initiatives such as visiting vulnerable populations, social media campaigns, and business owner engagement.
- Incorporate school based natural disaster education with the intention of creating an information pipeline from student to parent education.
- Encourage VTAlerts subscribers and CARES registrations for emergency communication.

NATIONAL FLOOD INSURANCE PROGRAM CONTINUED COMPLIANCE

Milton has participated in NFIP regular program since 1978.²⁰ The last Community Assistance Contract (CAC) was conducted on April 6, 2016, with no outstanding deficiencies. There are (21) NFIP policies with total insurance coverage of \$5,977,500; and there are two **repetitive loss properties** reported. The Town does not participate in the voluntary Community Rating System (CRS).

Repetitive Loss Properties By Type

Community Name	County Name	Mitigated	Occupancy ¹
MILTON, TOWN OF	CHITTENDEN COUNTY	NO	SINGLE FMLY
MILTON, TOWN OF	CHITTENDEN COUNTY	NO	2-4 FAMILY

Although program participation is not a hazard mitigation action to be included in the mitigation strategy per se, the Town will continue to participate in NFIP and enforce the Town's Floodplain Management regulations. The Town Zoning Administrator and the Town's Development Review Board (DRB) monitor compliance with the National Flood Insurance Program. The Development Review Board (DRB) reviews and adjudicates applications for development within the floodplain including any proposed new construction in the Special Flood Hazard Area (SFHA), which is highly regulated. The Town also works with Vermont Department of Environmental Conservation (DEC) to respond to any local requests for Floodplain identification including questions about mapping. Additionally, the Town will continue to:

- Identifying the purpose of the floodplain regulation(s), as well as current and proposed ways to reduce flood losses.
- Serving as a mechanism for identifying flood hazard areas and related flood mapping issues.
- Oversees permit requirements for current and projected development projects.
- Inspect all development for continued compliance with city code.
- Applies development standards for flood-prone areas that minimize personal injury and property damage; and maintains documentation and risk analyses required for projects developed in these areas.
- Assist residents in obtaining information on flood hazards, flood maps, flood insurance and proper mitigation measures.

²⁰ National Flood Insurance Program, Community Status Report, September 2021

In an effort to meet NFIP requirements, Huntington will make updates and revisions to Floodplain Management regulations as it deems necessary. These updates and revisions may be prompted by changes in local demographics; shifts in land use; trends such as the frequency and intensity of flood events; and other factors that may warrant municipal action. The Town will also continue to incorporate into future planning documents, including HMP updates, changes to the locations and designations of mapped floodplains.

Table 10.29: National Flood Insurance Program Status, Town of Milton²¹

Current Eff. Map Date	Number of Policies	Total Premiums (in dollars)	Total Coverage (in dollars)	Total Number of Claims Since 1978	Value of Claims Paid Since 1978 (in dollars)	Number of Repetitive Loss Properties
07/18/2011	14	25,618	3,067,900	22	296,971	2

Table 10.30: NFIP Status, as of September 14, 2021

NFIP Topic	Source of Information	Comments
Insurance Summary		
How many NFIP policies are in the community? What is the total premium and coverage?	FEMA NFIP HUDEX Report	14 NFIP policies Total premiums: \$25,618 Total Coverage: \$3,067,900
How many claims have been paid in the community? What is the total amount of paid claims? How many of the claims were for substantial damage?	FEMA NFIP HUDEX Report	22 claims Total amount of paid claims: \$298,553
How many structures are exposed to flood risk within the community?	FEMA National Flood Hazard GIS	Approx. 13
Describe any areas of flood risk with limited NFIP policy coverage		Unknown
Staff Resources		
Is the Community FPA or NFIP Coordinator certified?	VT DEC	Yes
Is floodplain management an auxiliary function?	VT DEC	VT Dept of Environmental Conservation (DEC) Regional Floodplain Manager
Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)	VT DEC	The Floodplain Management section of the VT Rivers Program works with FEMA to oversee the NFIP in VT
What are the barriers to running an effective NFIP program in the community, if any?		N/A
Compliance History		
Is the community in good standing with NFIP?	Community records	Yes

²¹ National Flood Insurance Program, Policy and Data Loss (HUDEX) Report, March 31, 2022.

NFIP Topic	Source of Information	Comments
Are there any outstanding compliance issues (i.e., current violations)?	Community records	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?		Unknown

Support for Municipal Capabilities

It should be noted that the Chittenden County Regional Planning Commission (RPC) provides multiple support services to the municipalities that assist in filling planning and regulatory, administrative and technical, and education and outreach capabilities. In addition, the RPC assists municipalities with identifying and managing funding opportunities through grants and other sources.

Table 10.31: Capability Assessment Summary Ranking for Town of Milton

Planning and Regulatory	Administrative and Technical	Financial	Education and Outreach
Medium	Medium	Medium	High

New Hazard Risk Challenges or Obstacles to be Monitored in the Next Planning Cycle

- The risk of cyber related incidents on Critical Infrastructure and Key Resource sites
- Climate change
- Increases in the number of excessive rainfall events that impact new areas with flood

10.8 MITIGATION ACTIONS

Changes in Priorities

Milton has experienced moderate increase in population growth; however, it continues to be concerned about the availability of affordable housing and increase demand on existing infrastructure (road system). The town's priorities have not changed since the last plan update and continues to make progress on mitigation actions.

Goals and Objectives

The Town of Milton adopted the five regional goals defined in Section 6, Mitigation Strategy. In addition, the following vision statement from the 2018 Town of Milton Comprehensive Plan was assumed during the mitigation strategy development process for this Plan update:

“Enhance the quality of life in Milton by developing a greater sense of community and promoting greater citizen participation in the affairs of the town. New growth must recognize, integrate and enhance traditional settlement patterns. Milton's sense of community must include protecting the quality of the environment, promoting the vitality of the local economy, and improving education.”

Status of Previous Actions

The Town of Milton reviewed its Mitigation Actions described in the 2017 *MHAHMP* annually and noted the status for 2017-2020 as documented in Table 10.32.

Table 10.32: Status of Previous Mitigation Actions

Action Date	Action #	Title of project	Hazard(s)	2022 Status Update
2011	2011-1	Develop strategies to mitigate impacts of runoff such as excessive flow, sediment load and excessive phosphorus discharge	SR, FE, WP, SWS	See 2017-1. Continue and integrated as part of Mitigation Action 4-Stormwater Management.
2011	2011-2	Assess the vulnerability and operational capability of municipal bridges/culverts and if necessary, develop designs and budgets for retrofit or replacement	F, SR, SWS, WP	See 2017-2. Continue and integrated as part of Mitigation Action 4-Stormwater Management.
2011	2011-3	Upgrade culverts and ditching along roads to mitigate against repeated damages from stormwater or spring snowmelt	SR, FE, WP, SWS	See 2017-1. Continue and integrated as part of Mitigation Action 5-Stormwater Management.
2011	2011-4	Undertake erosion or landslide mitigation projects where roads regularly incur damage from adjacent rivers/streams and hillsides	FE, SR, SWS, WP	See 2017-2. Continue and integrated as part of Mitigation Action 4-Stormwater Management.
2017	2017-1	Upgrade stormwater systems	F, SR, SWS, WP	<p>Catch basin cleaning and street sweeping (approx.):</p> <ul style="list-style-type: none"> - Miles of road swept: 41 - Catch basins cleaned: 89 - Catch basins repaired: 10 - Feet of storm pipe replaced: 749 <p>Land development proposals analyzed for compliance with applicable town regulations concerning stormwater controls, which were updated in 2017:</p> <ul style="list-style-type: none"> - Subdivision plans reviewed: 28 - Site plans reviewed: 41 - Site plan amendments: 25 - Waivers, variances, or appeals: 10 <p>Phosphorus Control Plan: In partnership with the CCRPC and the aid of a consultant, the Town completed a Stormwater Master Plan in 2019 and a Phosphorus Control Plan in 2021. Continue and integrated as part of Mitigation Action 4-Stormwater Management.</p>
2017	2017-2	Upgrade transportation infrastructure	SR, FE, WP, SWS	<p>Culvert upgrade, replacement, or cleaning projects: 41+</p> <p>Drainage improvement projects:</p>

				<ul style="list-style-type: none"> - Ditching: 56,233 feet - Berm removal: 5,231 feet - Outfall/ditch cleaning projects: 11 - New check dam projects: 2 Continue and integrated as part of Mitigation Action 5-Transportation Management.
Acronym Key:	Flood: F			
	Fluvial Erosion: FE			
	Severe Rainstorm: SR			
	Severe Winter Storm: SWS			
	Water Pollution: WP			

Additionally, as part of previous planning period (2017-2022) activities with the assistance of the CCRPC each of the participating municipalities integrated were appropriate the mitigation actions outlined in the previous plan into their current Town’s plan. A similar process will be implemented as part of plan integration activities during the 2022-2027 planning period.

Figure 10.9 depicts the locations of previous FEMA Public Assistance Projects in the Town of Milton, demonstrating recovery and mitigation activities including debris removal and

recreational or other site impacts.

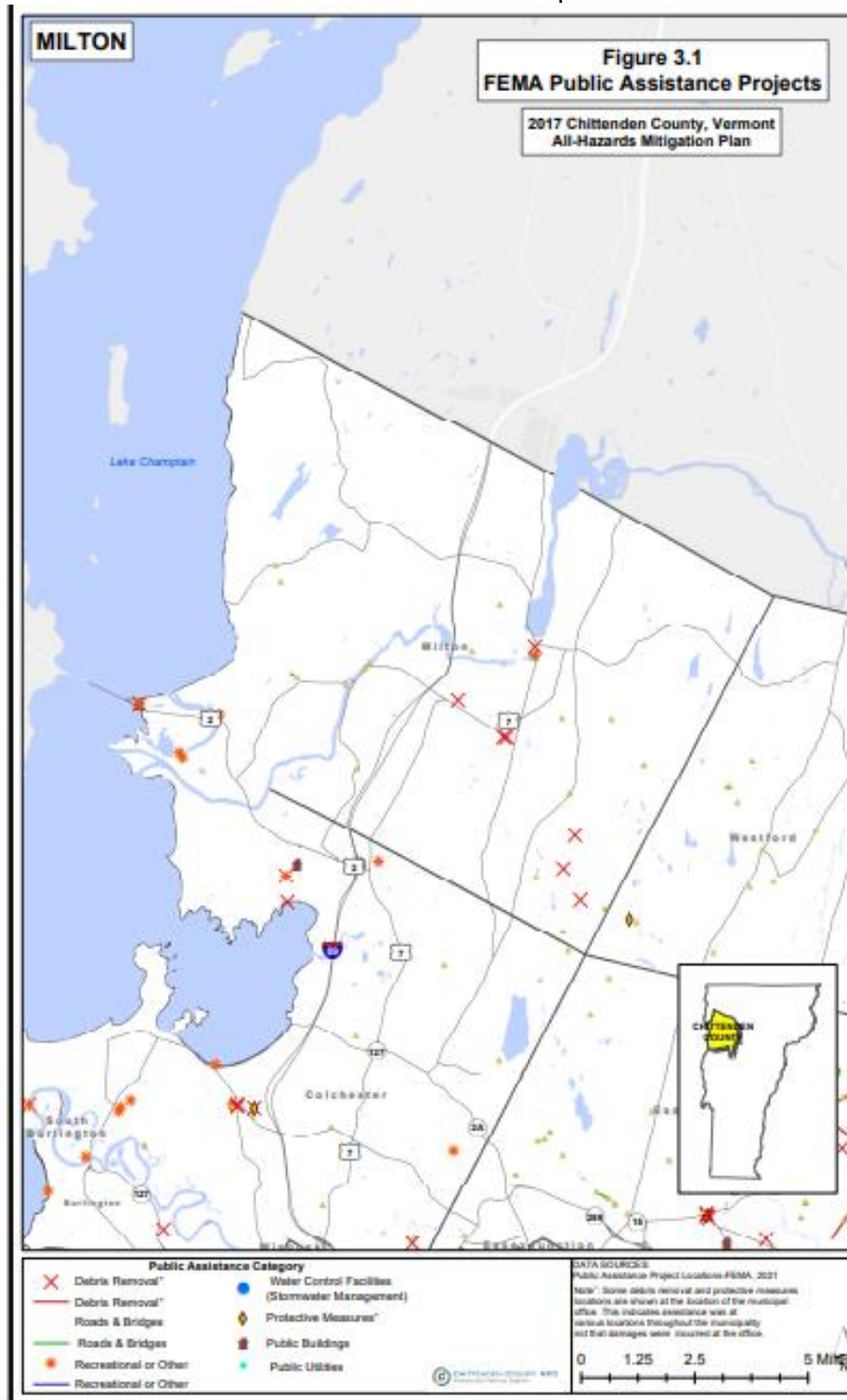


Figure 10.9: Previous FEMA Public Assistance Projects, Town of Milton²²

New Mitigation Actions

The Town of Milton identified three new actions that were prioritized based on the Mitigation Action Ranking System described in [Section 6, Base Plan](#). Table 10.33 presents three

²² Chittenden County Regional Planning Commission, 2021.

new mitigation actions combined with the two previous actions carried forward to this plan and prioritized based on the criteria defined in [Section 6, Base Plan](#).

Table 10.33: 2022 Prioritized Mitigation Actions, Town of Milton

Action #	Proposed Action	Agency/ Departments	Risk Reduction Benefit	Hazard(s) Addressed	Est. Cost	Funding Source	2021 Status	Ranking
2022-1	Update inadequate and out of date Hazmat Ordinance to reflect state laws and address the storage of hazardous materials, disposal requirements, and repercussions for unlawful storage and containment.	Public Safety Department	Prevention of hazardous materials incidents.	Hazardous Materials Incident, Water Pollution	none	General Fund	2022-2027 NEW	High
2022-2	Annually engage in events, online media, and distribute awareness materials to educate citizens about hazards and how to mitigate them.	Public Safety Department, Fire Department, Rescue Department, Police Department	Education and Awareness Programs. Safety/life property protection. Prevention for multiple potential environmental emergencies. Informs citizens about how to avoid becoming casualties in various emergencies.	Wildfire, Hazardous Materials Incident, Crime, Human Infectious Disease, Severe Rainstorm, Severe Winter Storm, Flooding	>\$5,000 per year	General Fund, Education Grants	2022-2027 NEW	High

2022-3	Retrofit all new and existing critical facilities to withstand the impacts of identified hazards		Addresses damage to new/existing public infrastructure and buildings. Mitigates temporary road and bridge closure and budgetary impacts	Flooding, Severe Rainstorm, Severe Winter Storm, Water Pollution	Unknown	General Fund Budget HMA	2022-2027 NEW	
Action #	Proposed Action	Agency/ Departments	Risk Reduction Benefit	Hazard(s) Addressed	Est. Cost	Funding Source	2021 Status	Ranking
2022-4	Upgrade stormwater systems through catch basin cleaning and street sweeping.	Public Works Department	Catch basin cleaning & street sweeping removes materials and pollutants which would otherwise cause damages to the ecosystem, to municipal infrastructure and result in the municipality not achieving compliance with its MS-4 permit which in turn would force the municipality to spend more money on personnel, equipment and projects to meet compliance.	Flooding, Severe Rainstorm, Severe Winter Storm, Water Pollution	Unknown	General Fund Budget	2022-2027 Cont'd	Med.

2022-5	Upgrade transportation infrastructure through culvert upgrades and drainage improvement projects.	Public Works Department	Addresses damage to new/existing public infrastructure and buildings; Mitigates temporary road and bridge closure and budgetary impacts	Severe Rainstorm, Fluvial Erosion and Water Pollution	Unknown	FEMA or other hazard mitigation grants; FHWA grants; VTrans grants; Municipal Operating and Capital budgets if sufficient	2022-2027 Cont'd	Med.
Action #	Proposed Action	Agency/ Departments	Risk Reduction Benefit	Hazard(s) Addressed	Est. Cost	Funding Source	2021 Status	Ranking
2022-6	Pursue StormReady and Firewise Certifications	Public Safety Department	Education and awareness programs to mitigate effects of storms, situational awareness, and fire safety.	Wildfire, Severe Rainstorm, Severe Winter Storm, Flooding, Fluvial Erosion	Minimal	General Fund Budget	2022-2027 NEW	Med.
Action #	Proposed Action	Agency/ Departments	Risk Reduction Benefit	Hazard(s) Addressed	Est. Cost	Funding Source	2021 Status	Ranking
2022-7	Retrofit flood-prone structures to include repetitive loss structures	, Town Highway Foreman	Addresses damage to new/existing public and private infrastructure and buildings;	Flood, Fluvial Erosion, Severe Winter Storm Severe Rainstorm	High: \$100,000 or greater	State VANR Grants, HMA, Municipal funds	2022-2027 New	High

Action Plan for Implementation and Integration

The Town of Milton identified several existing plans or planning processes that can serve to integrate hazard mitigation during the 2022-2027 planning cycle. The town will incorporate the mitigation actions outlined in this plan into the town plan during the next plan update process in 2026. The town plan update will be led by the Planning Commission, who will review this plan and determine those mitigation actions/strategies/goals that should be included in the town plan.

Table 10.34: Action Plan for Implementation and Integration, Town of Milton

Existing Plan or Procedure	Description of How Mitigation will be Incorporated or Integrated
Integrate goals into local Comprehensive Plan	Continue to coordinate with Planning and Zoning and other applicable departments to incorporate current and emerging risks and actions into planning efforts.
Review/update land development regulations for consistency with mitigation goals	Continue coordination with Planning and Zoning regarding future land use projects.
Review/update building/zoning codes for consistency with mitigation goal	Work with Planning and Zoning regarding county zoning ordinances and consistency with mitigation goals.
Maintain regulatory requirements of floodplain management program (NFIP)	Support Floodplain Manager who is responsible for floodplain management.
Enhance floodplain management through Community Rating System (CRS)	Work with Floodplain Manager and Public Works on reviews of floodplain management and mapping.
Review/Update economic development plan and policies for consistency with mitigation goals	Work with the local Economic Development Authority to ensure consistency in plans.
Continue public engagement in mitigation planning	Continue to promote awareness of hazards and incorporate public feedback into planning processes.
Identify opportunities for mitigation education and outreach	Identify opportunities to conduct community outreach to promote the importance of mitigation projects.
Review/update stormwater plans and procedures for consistency with mitigation goals	Work with Public Works and Road Department to discuss plans and procedures on a more frequent basis.
Maintain ongoing enforcement of existing policies	Support municipal Departments with any applicable enforcement policies.
Monitor funding opportunities	Office of Emergency Management will continue to monitor funding sources and coordinate with Departments on projects that support mitigation actions.
Incorporate goals and objectives into day-to-day government functions	Municipal Departments will incorporate the concept of mitigation into day-to-day government functions, including continual monitoring of the action items identified in the 2022 update.
Incorporate goals into day-to-day development policies, reviews & priorities	Continue work with Planning and Zoning to incorporate mitigation into day-to-day activities.

10.9 ANNEX MAINTENANCE PROCEDURES

The method and schedule for maintaining, evaluating, and updating the MJAHMP is described in [Section 7, Base Plan](#). The Town of Milton will maintain its participation in the Hazard Mitigation Plan Review and Update Committee (AHMPUC) throughout the planning cycle, consistent with its role and responsibilities. The Town of Milton has designated the Director of Public Safety as lead responsible for all Plan Maintenance related activities.

Table 10.35: Plan Maintenance Responsibilities for the *Chittenden County, Vermont* Multi-Jurisdictional All-Hazards Mitigation Plan, Base Plan, Town of Milton

Monitoring the Plan	<ul style="list-style-type: none"> • Participate in the monitoring process as requested by the CCRPC staff • Assist in collecting and analyzing data • Assist in disseminating reports to stakeholders and the public • Maintain records and documentation of all jurisdictional monitoring activities • Promote the mitigation planning process with the public and solicit public input.
Evaluating the Plan	<ul style="list-style-type: none"> • Participate in the evaluation process as requested by the CCRPC staff • Assist in collecting and analyzing data • Assist in disseminating reports to stakeholders and the public • Maintain records and documentation of all jurisdictional monitoring activities • Promote the mitigation planning process with the public and solicit public input
Updating the Plan	<ul style="list-style-type: none"> • Represent the jurisdiction and participate in the planning cycle, including plan review, revision, and update process • Collect and report data to the Update Coordinator • Maintain records and documentation of all jurisdictional plan review and revision activities • Promote the mitigation planning process with stakeholders and the public and solicit public input

Revisions to the Jurisdiction Annex

The municipalities of Chittenden County will coordinate with the CCRPC for changes or updates to its jurisdictional annexes. Local participating jurisdictions have the authority to approve/adopt changes to their own Action Plans for Implementation without approval from the CCRPC or the Committee; however, the Committee and CCRPC should be advised of all changes as a courtesy and in consideration of potential changes or modifications to the regional *MJAHMP* that may conflict with the proposed annex changes. The CCRPC will be responsible for verifying that the proposed change will not affect the jurisdiction's compliance with current State and Federal mitigation planning requirements.

Municipalities may make administrative changes or updates to their mitigation actions and Action Plans for Implementation in their jurisdiction annexes at any time in coordination with the CCRPC staff.

A municipality may choose not to re-adopt the updated *MJAHMP* and its respective jurisdiction annex; however, it should be stated that the jurisdiction will no longer be eligible for FEMA hazard mitigation grants. A municipality may choose to develop, adopt, and submit its own Local All-Hazards Mitigation Plan to FEMA Region I, consistent with the requirements of the Disaster Mitigation Act of 2000 and regulations contained in 44 CFR Part 201.6 in order to maintain eligibility.

The relative strength and depth of this method and schedule for monitoring and evaluating the plan is contingent upon funding from Emergency Management Planning grants, Hazard Mitigation Assistance grants, or similar sources. Adherence to the monitoring, evaluation, and update process schedule will ensure that the Plan is kept current throughout its five-year cycle.

Table 10.36: Jurisdiction Annex Maintenance Procedure, Town of Milton

Activity	Procedure and schedule	Outcome
Monitoring the Annex	<ol style="list-style-type: none"> 1. Schedule the annual plan review with jurisdiction planning team. 2. Review the status of all mitigation actions, using the <i>Mitigation Action Implementation Worksheet</i> (Section 7, Attachment B, Base Plan). 	Produce an annual report that includes the following: <ul style="list-style-type: none"> • Status update of all mitigation actions • Summary of any changes in hazard risk or vulnerabilities and capabilities • Summary of activities conducted for the Action Plan for Implementation and Integration
Evaluating the Annex	<ol style="list-style-type: none"> 1. Schedule the annual plan evaluation with jurisdiction planning team. 2. Evaluate the current hazard risks and vulnerabilities, and hazard mitigation capabilities using the <i>Planning Considerations Worksheet</i>, (Section 7, Attachment C, Base Plan). 	Submit the annual report to the <i>MJAHMP</i> HMPRUC Point of Contact
Updating the Annex	<ol style="list-style-type: none"> 1. Coordinate with the HMPRUC to identify the method and schedule for the five-year update of the <i>MJAHMP</i>. 2. Participate in the planning process. 3. Provide input related to the plan components. 4. Following FEMA designation of Approvable Pending Adoption (APA), adopt the updated plan. 	Adoption of the FEMA-approved plan every five years will maintain the jurisdiction's eligibility for federal post-disaster funding.

10.10 ANNEX ADOPTION

The Town of Milton Jurisdiction Annex will be adopted by the municipality's governing body concurrently with the *2022 Chittenden County Multi-Jurisdictional All-Hazards Mitigation Plan*.

Following adoption, a copy of the Adoption Resolution will be maintained in this annex as [Attachment A](#), and a copy will be forwarded to Vermont Emergency Management (VEM) to submit to FEMA for final approval of the plan. The plan will expire five years (minus one day) from the date of FEMA's final approval letter.

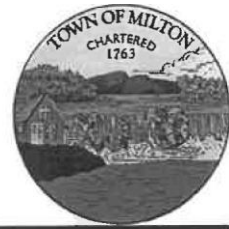
10.11 ATTACHMENTS

ATTACHMENT 1: Adoption Resolution

ATTACHMENT 2: Planning Worksheets and Documentation

ATTACHMENT 3: Documentation of Public Participation

ATTACHMENT 4: Mitigation Actions



RESOLUTION

Town of Milton Selectboard

CERTIFICATE OF ADOPTION

Chittenden County, Vermont Multi-Jurisdictional Hazard Mitigation Plan

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

WHEREAS, the Town of Milton has developed and received conditional approval from Vermont Emergency Management (VEM) for its 2022 Chittenden County, Vermont Multi-Jurisdictional Hazard Mitigation Plan (Plan) under the requirements of 44 CFR 201.6; and

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

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

WHEREAS, adoption of this Plan will make the Town of Milton eligible for funding to alleviate the impacts of future hazards;

NOW THEREFORE BE IT RESOLVED by the Town of Milton Selectboard:


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


Dated this 3rd of October, 2022 at Milton, Vermont.

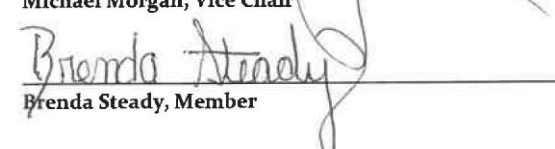
MILTON SELECTBOARD


Darren Adams, Chair


John FitzGerald, Clerk


Chris Taylor, Member


Michael Morgan, Vice Chair


Brenda Steady, Member

Filed with the Milton Town Clerk's Office this 4th day of October, 2022

Attest: Sammy ^{ud\$QJkQ4} [Signature], Asst.

ATTACHMENT 2: Planning Worksheets and Documentation

Natural Hazards Estimation Risk Matrix										
Milton		Dam/Levee Failure	Extreme Temperatures	Flooding	Fluvial Erosion	Human Infectious Disease	Invasive Species	Severe Rainstorm	Severe Winter Storm	Wildfire
Area Impacted										
Key:	0= No developed area impacted									
	1= Less than 25% of developed area impacted		1	1	1		0			1
	2= Less than 50% of developed area impacted	2								
	3= Less than 75% of developed area impacted					3				
	4= Over 75% of developed area impacted							4	4	
Consequences										
Health & Safety Consequences										
Key:	0= No health and safety impact						0			0
	1= Few injuries or illnesses		1	1	1			1	1	
	2= Few fatalities or illnesses	2								
	3= Numerous fatalities						3			
Property Damage										
Key:	0= No property damage					0				
	1= Few properties destroyed or damaged		1				1	1	1	1
	2= Few destroyed but many damaged	2		2	2					
	3= Few damaged and many destroyed									
	4= Many properties destroyed and damaged									
Environmental Damage										
Key:	0= Little or no environmental damage		0			0	0			
	1= Resources damaged with short-term recovery			1	1			1	1	1

	2= Resources damaged with long-term recovery	2								
	3= Resources destroyed beyond recovery									
Economic Disruption										
Key:	0= No economic impact	0								
	1= Low direct and/or indirect costs			1		1	1	1	1	
	2= High direct and low indirect costs	2		2		2				
	3= Low direct and high indirect costs									
	4= High direct and high indirect costs									
Sum of Area & Consequences Scores		10	3	7	6	8	2	8	8	4
Probability of Occurrence										
Key:	1= Unknown but rare occurrence	1								
	2= Unknown but anticipate an occurrence									
	3= 100 years or less occurrence					3				
	4= 25 years or less occurrence		4	4	4		4			4
	5= Once a year or more occurrence							5	5	
Total Risk Rating										
	Total Risk Rating=	10	12	28	24	24	8	40	40	16
	Sum of Area & Consequences Scores									
	x Probability of Occurrence									
Low =		Hazard Risk Level 0-18								
Medium =		Hazard Risk Level 19-37								
High =		Hazard Risk Level 38-60								

Technological Hazards												
Milton		Hazardous Materials Incident	Major Transportation Incident	Multi-Structure Fire	Natural Gas Service Loss	Other Fuel Service Loss	Pollution (algal bloom, etc.)	Power Loss	Sewer Service Loss	Telecommunications Failure	Water Pollution	Water Supply Loss
Area Impacted												
Key:	0= No developed area impacted						0				0	
	1= Less than 25% of developed area impacted	1	1	1	1				1			
	2= Less than 50% of developed area impacted					2		2		2		2
	3= Less than 75% of developed area impacted											
	4= Over 75% of developed area impacted											
Consequences												
Health & Safety Consequences												
Key:	0= No health and safety impact					0			0			
	1= Few injuries or illnesses	1		1	1		1	1		1	1	1
	2= Few fatalities or illnesses		2									
	3= Numerous fatalities											
Property Damage												
Key:	0= No property damage				0	0	0		0	0	0	0
	1= Few properties destroyed or damaged	1	1	1				1				
	2= Few destroyed but many damaged											
	3= Few damaged and many destroyed											
	4= Many properties destroyed and damaged											
Environmental Damage												
Key:	0= Little or no environmental damage			0	0	0		0		0		0
	1= Resources damaged with short-term recovery	1	1				1				1	
	2= Resources damaged with long-term recovery							2				
	3= Resources destroyed beyond recovery											
Economic Disruption												
Key:	0= No economic impact											
	1= Low direct and/or indirect costs									1		1

	2= High direct and low indirect costs	2	2	2	2	2	2	2	2	2	2	
	3= Low direct and high indirect costs											
	4= High direct and high indirect costs											
Sum of Area & Consequences Scores		6	7	5	4	4	4	6	5	4	4	4
Probability of Occurrence												
Key:	1= Unknown but rare occurrence											
	2= Unknown but anticipate an occurrence											
	3= 100 years or less occurrence				3	3			3			
	4= 25 years or less occurrence	4	4	4			4			4	4	4
	5= Once a year or more occurrence							5				
Total Risk Rating												
	Total Risk Rating=	24	28	20	12	12	16	30	15	16	16	16
	Sum of Area & Consequences Scores											
	x Probability of Occurrence											
Low =	Hazard Risk Level 0-18											
Medium =	Hazard Risk Level 19-37											
High =	Hazard Risk Level 38-60											

Societal Hazards							
Milton		Civil Disturbance	Crime	Economic Recession	Epidemic	Key Employer Loss	Terrorism
Area Impacted							
Key:	0= No developed area impacted						
	1= Less than 25% of developed area impacted	1	1				1
	2= Less than 50% of developed area impacted					2	
	3= Less than 75% of developed area impacted			3	3		
	4= Over 75% of developed area impacted						
Consequences							
Health & Safety Consequences							
Key:	0= No health and safety impact			0		0	
	1= Few injuries or illnesses	1	1				

	2= Few fatalities or illnesses				2		2
	3= Numerous fatalities						
Property Damage							
Key:	0= No property damage			0	0	0	
	1= Few properties destroyed or damaged	1	1				
	2= Few destroyed but many damaged						2
	3= Few damaged and many destroyed						
	4= Many properties destroyed and damaged						
Environmental Damage							
Key:	0= Little or no environmental damage	0	0	0	0	0	0
	1= Resources damaged with short-term recovery						
	2= Resources damaged with long-term recovery						
	3= Resources destroyed beyond recovery						
Economic Disruption							
Key:	0= No economic impact						
	1= Low direct and/or indirect costs	1	1				
	2= High direct and low indirect costs						2
	3= Low direct and high indirect costs						
	4= High direct and high indirect costs			3	3	3	
Sum of Area & Consequences Scores		4	6	6	8	5	7
Probability of Occurrence							
Key:	1= Unknown but rare occurrence						1
	2= Unknown but anticipate an occurrence	2					
	3= 100 years or less occurrence				3		
	4= 25 years or less occurrence			4		4	
	5= Once a year or more occurrence		5				
Total Risk Rating							
	Total Risk Rating=	8	30	24	24	20	7
	Sum of Area & Consequences Scores						
	x Probability of Occurrence						
Low =	Hazard Risk Level 0-18						
Medium =	Hazard Risk Level 19-37						
High =	Hazard Risk Level 38-60						

WORKSHEET: CAPABILITY ASSESSMENT

Planning and Regulatory: Finance Director, Planning Director, Public Works Director, Public Safety Director, Zoning Administrator

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Please indicate which of the following your jurisdiction has in place.

Plans	<ul style="list-style-type: none"> • Yes or No? • Year 	<ul style="list-style-type: none"> • Does the plan address hazards? • Does the plan identify projects to include in the mitigation strategy? • Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan	Town of Milton Comprehensive Plan (Last Updated February 2013)	<p>The plan addresses natural hazards in fluvial hazard areas and floodplains, as well as lakeshore erosion.</p> <p>Mapped Fluvial Erosion areas within Town and are used to decide new investments in the Capital Budget (larger culverts, etc.) in order to reduce impacts of fluvial erosion on town infrastructure.</p> <p>The Plan identified drainage issues on Village Drive and Mackey Street among other Town right-of-way areas.</p> <p>Lakeshore erosion was identified as due to wave action and land development along several areas of Lake Champlain, particularly Eagle Mountain Harbor Road.</p> <p>Under General Land Use and Development Pattern Goals, there is Goal 8.4: Make residents aware of mapped Fluvial Erosion Hazard areas and Stream Setbacks and consider establishing a riparian buffer ordinance if mapping indicates a need.</p>
Capital Improvements Plan	Capital Improvement Plan updated annually as part of budget process	Yes, all categories are identified and evaluated annually for all departments within Town government including water/wastewater
Economic Development Plan	<p>Economic Development Strategy Assessment and Recommendations (2008)</p> <p>Milton Facilities Study (2015)</p> <p>Sidewalk Replacement and Maintenance Program (2004)</p>	These documents do not address natural hazards, technological hazards, or societal hazards. These plans do not identify projects that can be used to mitigate these hazards.

Impact fees for new development	Impact Fees updated annually as part of CIP and budget process	Yes as they are directly tied to and calculated from the capital improvement plan
Local Emergency Operations Plan	Local Emergency Operations Plan (updated annually)	Identifies personnel, procedures, and resources (equipment, mutual aid, outside agencies) in the event of an emergency, specifically one causing the opening of an Emergency Operations Center.
Continuity of Operations Plan	Updated annually with LEOP	Identifies individuals to assume tasks of others in the event of an emergency and that person is unavailable. Issue noted: lack of cross training on responsibilities within a small staff, including responsibilities for an EOC activation.
Transportation Plan	Milton Town Core Transportation Plan (2008) Milton Town Core Trip Generation Study (2007) Route 7 and Transportation Study (January 2008)	These documents do not address natural hazards, technological hazards, or societal hazards. The plans do not identify projects that can be used to mitigate these hazards.
Stormwater Management Plan	Stormwater Management Plan (updated 2019)	Addresses illicit discharges through Milton's Illicit discharge and stormwater connection Ordinance.
Community Wildfire Protection Plan	Burn Permit	Prevents burning of hazardous materials, requires adequate extinguishment method, and minimum distance from structures. Permits not issued during high risk weather. Issue noted: no requirements for distance from other brush/woodland.
Other special plans (e.g., brownfields redevelopment, disaster recovery, Local Waterfront Redevelopment Plan, climate change adaptation, etc.)	Hazmat Ordinance (1993) Wastewater Treatment Plant Emergency Operations Plan	Inadequate and out of date. Generators at most pump station sites. Evaluating tying all pump stations into our SCADA system at the WWTF.
Building Code, Permitting, and Inspection	Yes or No?	Are codes adequately enforced?
Building Code		State Fire Safety conducts fire and building inspections and code enforcement. Town Health Officer enforces safety requirements for rental housing and potential public health issues.
Building Code Effectiveness Grading Schedule (BCEGS) Score		
Fire Department ISO rating		
Site Plan review requirements	Yes	Site Plans reviewed by a Technical Advisory Committee consisting of representatives from Town departments (public works, public safety, planning/zoning, and recreation). Approval is through the Development Review Board. Plans are ensured to meet Town zoning regulations, Comprehensive Plan, and other strategic plans.

Land Use Planning and Ordinances	Yes or No?	<ul style="list-style-type: none"> Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?
Zoning ordinance / Subdivision ordinance	Unified Development Regulation (updated 2021)	<p>The UDR constitute the Town's zoning and subdivision regulations. Goal of UDR is to "provide for orderly community growth; protect public health, safety and welfare; ensure that proposed development will be adequately and efficiently served by necessary services, facilities and infrastructure; maintain a rate, scale and pattern of development that will not exceed the town's ability to provide necessary public services, facilities and infrastructure; allow for balanced housing and economic development that meets the needs of the community and region; protect environmental quality and conserve natural, agricultural, scenic and historic resources; and promote approaches to land use and development that are consistent with smart growth principles as defined in these regulations."</p> <p>Adequately enforced through Zoning Administrator enforcement and reviewed by the Planning Commission.</p>
Floodplain ordinance	None specifically	UDR addresses land development in floodplain.
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	Burn Permit	See Wildfire Protection section
Flood insurance rate maps	FEMA	
Acquisition of land for open space and public recreation uses	Unified Development Regulations (June 2021)	<p>The UDR reduces hazard impacts through the following means:</p> <ul style="list-style-type: none"> -The Flood Hazard Overlay District which locates the special flood hazard area and restricts types of development allowed and establishes acceptable land development for both within the floodway and outside the floodway areas -Defines flood hazard and earth movement hazard areas as unbuildable lot areas which are subtracted from density calculations -The use of any material other than uncontaminated soil for fill is prohibited unless the proposed fill will be subject to state permitting -Salvage yards must be found not to contribute to water or air pollution to the extent that it presents a hazard to public health and safety as determined by a Level 1 Site Assessment and site inspection by a certified engineer who is qualified to conduct hazardous waste surveys -For mini-warehouses or self-storage facilities, storage of hazardous materials, waste, industrial solid waste, medical waste, municipal solid waste, septage or waste oil is prohibited -As part of our Performance Standards toxic or hazardous substances or wastes must not be released into the environment <p>The ordinance is adequately administered and enforced.</p> <p>The Unified Development Regulations do not address societal hazards.</p>
How can these capabilities be expanded and improved to reduce risk?		
<ul style="list-style-type: none"> - Update Hazmat Ordinance - Improve continuity of operations with cross training on critical operational tasks 		

Administrative and Technical: Public Works Director, Public Safety Director

Identify whether your community has the following administrative and technical capabilities. These include staff and their skills and tools that can be used for mitigation planning and to implement specific mitigation actions. If your jurisdiction does not have local staff resources, please indicate if these are available through agreement with other entities, or at the county level to provide the services or technical assistance.

Staff/Personnel Resources	Have Capability Y/N	Department/ Agency and Position	Effective Coordination?	Adequate Staffing?	Integrated into Mitigation Planning?
A. Planner(s) or engineer(s) with knowledge of land development and land management practices	Y	Planning Director	Y	Y	Y
B. Engineer/professionals trained in construction practices related to buildings and/or infrastructure	Y	DPW Director and Engineer, Highway Superintendent	Y	Y	Y
C. Planners/Engineer(s) with an understanding of natural and/or manmade hazards	Y	DPW Director and Engineer, Planning Director, and Public Safety Director	Y	Y	Y
D. Floodplain manager	N				
E. Surveyor(s)	N				
F. Staff with education or expertise to assess the community's vulnerability to hazards	Y	Planning Director, Public Safety Director	Y	Y	Y
G. Personnel skilled in GIS and/or HAZUS	Y	DPW Engineer	Y	Y	N
H. Scientist familiar with hazards of the community	Y	DPW Engineer, Public Works Director	Y	Y	Y
I. Emergency manager	Y	Public Safety Director	Y	Y	Y
J. Grant writer(s)	N				
k. Warning systems or services (automated callout, sirens, etc.)	N				
How can these capabilities be expanded and improved to reduce risk?					
<ul style="list-style-type: none"> - Upgraded/integrated warning systems on pump stations 					

Financial: Finance Director

Identify whether your jurisdiction has access to or is eligible to use the following funding resources for hazard mitigation.

Funding Resource	Access/ Eligibility (Y/N)	Has the funding resource been used in the past and for what type of activities/	Could the resource be used to fund future mitigation actions?
Capital improvements project funding	Y	Yes, annual funding from various sources including general fund allocation	Yes
Authority to levy taxes for specific purposes	Y	Yes, with Selectboard and voter authorization. Has been used to fund various reserves for fire/rescue, recreation and roads/sidewalks.	Yes
Fees for water, sewer, gas or electric services	Y	Yes, we operate two separate enterprise funds for water and wastewater which both include reserves and fees for capital/infrastructure.	Yes
Impact fees for new development	Y	Yes, part of annual process to fund capital improvement plan.	Yes
Storm water utility fee	Y	Has not been used and would require both Selectboard and voter approval.	n/a
Incur debt through general obligation bonds and/or special tax bonds	Y	Yes, mostly for water/wastewater system improvements/expansion.	No
Incur debt through private activities	N	n/a	n/a
Community Development Block Grant	Y	The Town has received CDBG funding in the past in the form of grants.	No
Other federal funding programs	Y	The Town has received federal funding from FEMA for various events over the years.	No
State funding programs	Y	The Town regularly receives State funding for roads/bridges/recreation/other infrastructure/water/wastewater projects.	No
Public/Private partnership funding sources	Y	The Town could apply for various grant/loan opportunities upon approval by the Selectboard.	n/a
How can these capabilities be expanded and improved to reduce risk?			
Continued long term planning within the CIP with a focus on seeking out funding sources in advance of projects starting.			

Education and Outreach: Public Safety Director

Identify education and outreach programs and methods already in place that could be used to implement mitigation activities and communicate hazard-related information.

Program/Organization	Yes/No	Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	yes	Conservation Commission Development Review Board Economic Development Commission Planning Commission Police Advisory Committee Recreation Commission Milton Community Youth Coalition
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education, household recycling, etc.)	yes	Fire Dept: Student and Public Fire Safety Education - Fire Dept Open House, school visits for Fire Safety Week Rescue Dept: Community Health Preparedness - Health and Safety Fair, CPR Classes Police Dept: Community Outreach, Emergency Preparedness, Safety Resources - National Night Out, Bike Rodeo, Car Seat Fitting, Health and Safety Fair, Student Resource Officer (ALICE, Fire Drills, Driver's Ed, Community Outreach) Conservation Commission: Green Up Day
Natural disaster or safety related school programs	yes	See above
StormReady certification	no	
Firewise Communities certification	no	
Public-private partnership initiatives addressing disaster-related issues	no	
Other		HeartSafe Community
How can these capabilities be expanded and improved to reduce risk?		
<ul style="list-style-type: none"> - Pursue StormReady Certification - Pursue Firewise Communities Certification - More direct outreach for public safety information (non-event initiatives) - - vulnerable populations visits, business owner engagement - School based natural disaster education - - preparing for weather emergencies, pipeline to parent education - Bolster VTAlerts subscribers and CARES registrations - Use Town website and social media to push emergency messages and as an educational resource 		

Prioritization Worksheet

Project Description			Project Benefits									
A	B	C	1	2	3	4	5	7	8	9	Ranking	
Project #	Mitigation Action	Hazard/ Project Type*	Protect Life, Safety, & Property	Funding is Available	Matching Funds Available	Strong BCA	Environmental Benefits	Technically feasible	Short- term or Long- term	TOTAL SCORE		
2022-2	Engage in events, online media, and distribute awareness materials to educate citizens about hazards and how to mitigate them.	EAP	1	4	4	0	4	4	4	21	H	
2022-3	Pursue StormReady and Firewise Certifications	EAP	2	3	0	0	4	2	2	13	M	
2022-1	Update inadequate and out of date Hazmat Ordinance to reflect state laws and address the storage of hazardous materials, disposal requirements, and repercussions for unlawful storage and containment.	LPR	1	4	4	4	4	4	4	25	H	
2017-1	Upgrade stormwater systems through catch basin cleaning And street sweeping	SIP	2	3	0	4	3	4	2	18	M	
2017-2	Upgrade transportation infrastructure through culvert Upgrades and drainage improvement projects	SIP	3	2	0	4	3	4	2	18	M	

ATTACHMENT 3: Documentation of Public Participation

Hazard Mitigation Planning for Chittenden County

Hazard mitigation planning is a process that identifies hazards and their risks to your community. Over the next several months, your community's Hazard Mitigation will be updated.

Read below about how to learn more and participate!

This is your community's plan!	Disasters can happen anytime, anywhere, and any place.
<p>To have value, the plan must represent the current needs and values of your community and be useful for officials, stakeholders, and citizens. Consider the critical importance of mitigation to:</p> <ul style="list-style-type: none"> • Protect public safety and prevent loss of life and injury. • Lessen impact to existing and future development. • Prevent damage to a community's unique cultural, historical, and environmental assets. 	<p>They cause loss of life, damage buildings and infrastructure, and have devastating consequences on a community's economic, social, and environmental well-being.</p> <p>Hazard mitigation planning is a process that identifies hazards and their risks to your community and assesses the vulnerability of people, property, the environment, and the economy to one or more hazards. The end result is a comprehensive mitigation strategy that presents recommended sustained actions to reduce disaster-related damages and minimizes long-term community risk to the hazards.</p> <p>In the June 2021, Chittenden County municipalities initiated a collaborative planning effort to develop the 2022 update of the Chittenden County Multi-Jurisdictional Hazard Mitigation Plan. The benefits derived from the planning process, and the recommended mitigation actions that will ultimately be implemented, will significantly improve community resilience and sustainability.</p>
Take the Survey >>	

Over the next several months staff of [IEM, an international disaster and crisis management firm](#) will be working with emergency management, planning and public works staff of your local municipality to update your municipality's local Hazard Mitigation Plan.

Your knowledge on local hazards is critical to good planning.

Participate in our online survey!

- [Take the survey](#) to provide your opinion on local hazard events and their impact on you, your family, and the community. The survey will be open from October 1 through October 30.
- Contact your local city or town officials to learn how to provide comment on the draft municipal Local Hazard Mitigation Plan to ensure it reflects your experience and concerns.

Questions & Contact	More Information
<p>If you have questions, contact Dan Albrecht, CCRPC Senior Planner at dalbrecht@ccrpcvt.org or 802-861-0133</p> <p>Or</p> <p>Leroy Thompson, IEM Senior Planner at leroy.thompson@iem.com or 850-570-9867</p>	<p>To view the current mitigation plan for your community please visit the CCRPC website.</p> <p>This planning project is funded by a FEMA grant provided through Vermont Emergency Management (VEM). The project is a joint effort between IEM and the Chittenden County Regional Planning Commission (CCRPC) to assist Chittenden County municipalities.</p>

Published

County Hazard Mitigation Plan Survey

Five Sisters – No. 6205 • Emma Vaughn • Communications Manager, Chittenden County Regional Planning Commission

Posted to: Centennial, Downtown, ONE Central, ONE East, ONE West, Appletree Point, Crescent Woods, Ethan Allen, Far North End, Lakewood, Village Green, Birchcliff, Five Sisters, Hill Section, King Maple, Lakeside, Oakledge, Redstone Quarry, South Union, The Addition, Charlotte, Hinesburg, Shelburne, Bay Creek, Clay Point, Colchester Village, Colchester West, Malletts Bay, Milton, Butlers Corner, Countryside, Essex Center, Essex West, Fairview Farms, Five Corners North, Five Corners South, Rural Essex, The Fort, Jericho, Underhill, Westford, Bolton, Huntington, Richmond, Chamberlin, East Terrace, Eastwoods, Kennedy, Mayfair Park, Queen City Park, SWSB, Southeast Quadrant, The Orchards, Brennan Woods, Williston, Winooski **show less**
Oct 4, 2021

Announcement

Hazard mitigation planning is a process that identifies hazards and their risks to your community and assesses the vulnerability of people, property, the environment, and the economy to one or more hazards. The end result is a comprehensive mitigation strategy that presents recommended sustained actions to reduce disaster-related damages and minimizes long-term community risk to the hazards.

In June 2021, Chittenden County municipalities initiated a collaborative planning effort to develop the 2022 update of the Chittenden County Multi-Jurisdictional Hazard Mitigation Plan. The benefits derived from the planning process, and the recommended mitigation actions that will ultimately be implemented, will significantly improve community resilience and sustainability.

Over the next several months staff of IEM, an international disaster and crisis management firm, will be working with emergency management, planning and public works staff of your local municipality to update your municipality's local Hazard Mitigation Plan.

Your knowledge on local hazards is critical to good planning: Participate in our online survey!

- Take the survey: <https://www.surveymonkey.com/r/KLB6RMX> to provide your opinion on local hazard events and their impact on you, your family, and the community. The survey will be open from October 1 through October 30.
- Contact your local city or town officials to learn how to provide comment on the draft municipal Local Hazard Mitigation Plan to ensure it reflects your experience and concerns.

Contact:

Dan Albrecht, CCRPC Senior Planner
dalbrecht@ccrpcvt.org | (802) 391-6809

or

Leroy Thompson, IEM Senior Planner
leroy.thompson@ieminc.com | 850-570-9867

Chittenden County Multi-Jurisdictional Hazard Mitigation Plan website:

<https://www.ccrpcvt.org/our-work/emergency-management/hazard-mitigation-plan/>

Attachment 4: Mitigation Actions

MITIGATION PRIORITIZATION CRITERIA

(S) Social	
Definition	Considerations
The public must support the overall mitigation implementation strategy and specific mitigation actions. The mitigation action is evaluated in terms of community acceptance and impact on the population.	<ul style="list-style-type: none"> • Community acceptance: will the action disrupt housing or cause the relocation of people? Is the action compatible with present and future community values? • Impact on population: will the proposed action adversely affect one segment of the population?
(T) Technical	
Definition	Considerations
It is important to determine if the proposed action is technically feasible, will help to reduce losses in the long term, and has minimal secondary impacts. This category evaluates whether the action is a whole or partial solution, or not a solution at all.	<ul style="list-style-type: none"> • Technical feasibility: how effective is the action in avoiding or reducing future losses? • Long-term solution: does the action solve the problem or only a symptom? • Secondary impacts: will the action create more problems than it solves?
A. Administrative	
Definition	Considerations
This category examines the anticipated staffing, funding, time, and maintenance requirements for the mitigation action to determine if the jurisdiction has the personnel and administrative capabilities to implement the action or whether outside help will be necessary.	<ul style="list-style-type: none"> • Staffing: does the jurisdiction have the capability (staff, technical experts, and training) to implement the action? • Funding allocated: does the jurisdiction have the funding to implement the action or can it readily be obtained? • Time: can the action be accomplished in a timely manner? • Maintenance/Operations: can the community provide the necessary maintenance? It is important to remember that most federal grants will not provide funding for maintenance.
(P) Political	
Definition	Considerations
This category considers the level of political support for the mitigation action.	<ul style="list-style-type: none"> • Political support: is there political support to implement and maintain this action? Have political leaders participated in the planning process so far? • Local champion or proponent: is there a respected community member willing to help see the action to completion? • Public and stakeholder support: is there enough public support to ensure the success of the action? Have all stakeholders been offered an opportunity to participate in the planning process?
(L) Legal	
Definition	Considerations

<p>Whether the jurisdiction has the legal authority to implement the action or whether the jurisdiction must pass new laws or regulations is important in determining how the mitigation action can be best carried out.</p>	<ul style="list-style-type: none"> • Commonwealth authority: does the Commonwealth have authority to implement the action? • Existing local authority: are proper laws, ordinances, and resolutions in place to implement the action? • Potential legal challenge: is there a technical, scientific, or legal basis for the mitigation action (i.e., does the mitigation actions “fit” the hazard setting)? Are there any potential legal consequences? Is the action likely to be challenged by stakeholders who may be negatively affected?
(E) Economic	
Definition	Considerations
<p>Economic considerations must include evaluation of the present economic base and projected growth. Cost-effective mitigation actions that can be funded in current or upcoming budget cycles are more likely to be implemented than actions requiring general obligation bonds or other instruments that would incur long-term debt to a community.</p>	<ul style="list-style-type: none"> • Benefits of action: what financial benefits will the action provide? • Cost of action: does the cost seem reasonable for the size of the problem and the likely benefits? What burden will be placed on the tax base or local economy to implement this action? • Contribution to economic goals: does the action contribute to community economic goals, such as capital improvements or economic development? • Outside funding required: are there currently sources of funding that can be used to implement the action? Should the action be considered “tabled” for implementation until outside sources of funding are available?
(E) Environmental	
Definition	Considerations
<p>The impact on the environment is an important consideration because of public desire for sustainable and environmentally healthy communities. Also, statutory considerations, such as the National Environmental Policy Act (NEPA), need to be kept in mind when using federal funds.</p>	<ul style="list-style-type: none"> • Impact on land/water bodies: how will this action impact land/water? • Impact on endangered species: how will this action impact endangered species? • Impact on hazardous materials and waste sites: how will this action impact hazardous materials and waste sites? • Consistency with community environmental goals: is this action consistent with community environmental goals? • Consistency with federal laws: is the action consistent with federal laws, such as NEPA?

Project Description			Project Benefits								
A	B	C	1	2	3	4	5	7	8	9	
Project #	Mitigation Action	Hazard/Project Type*	Social (S)	Technical (T)	Administrative (A)	Political (P)	Legal (L)	Economic (E)	Environmental (E)	TOTAL SCORE	Priority
2022-1	Update inadequate and out of date Hazmat Ordinance to reflect state laws and address the storage of hazardous materials, disposal requirements, and repercussions for unlawful storage and containment.	LPR	1	4	4	4	4	4	4	25	H
2022-2	Engage in events, online media, and distribute awareness materials to educate citizens about hazards and how to mitigate them.	EAP	1	4	4	0	4	4	4	21	H
2017-1	Upgrade stormwater systems through catch basin cleaning and street sweeping	SIP	2	3	0	4	3	4	2	18	M
2017-2	Upgrade transportation infrastructure through culvert upgrades and drainage improvement projects	SIP	3	2	0	4	3	4	2	18	M
2022-3	Pursue StormReady and Firewise Certifications	EAP	2	3	0	0	4	2	2	13	m