

Town of Canaan, Vermont  
**All-Hazards Mitigation Plan**



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*Prerequisites*

**Certificate of Local Adoption**

**Town of Canaan**

**A Resolution Adopting the All-Hazards Mitigation Plan**

WHEREAS, the Town of Canaan has worked with the Northeastern Vermont Development Association to identify hazards, analyze past and potential future losses due to natural and human-caused disasters, and identify strategies for mitigating future losses; and

WHEREAS, the Canaan All-Hazards Mitigation Plan contains recommendations, potential actions and future projects to mitigate damage from disasters in the Town of Canaan; and

WHEREAS, a meeting was held by the Canaan Selectboard to formally approve and adopt the Canaan All-Hazards Mitigation Plan as an annex to the Northeastern Vermont Development Association's (NVDA) All-Hazards Mitigation Plan.

NOW, THEREFORE BE IT RESOLVED that the Canaan Selectboard adopts The Canaan All-Hazards Mitigation Plan Annex as well as the associated NVDA All-Hazards Mitigation Plan.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Selectboard Chair

\_\_\_\_\_  
Selectboard Member

\_\_\_\_\_  
Selectboard Member

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Selectboard Member

\_\_\_\_\_  
Selectboard Member

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Attested to by Town Clerk

## **Section One - Planning Process**

### **1.1 Introduction and Purpose**

The purpose of this plan is to assist the Town of Canaan to identify all hazards facing the community and identify strategies to begin reducing risks from identified hazards. A Pre-Disaster Mitigation Planning Grant to the Northeastern Vermont Development Association (NVDA) assisted the Town of Canaan in preparing this plan.

The impact of expected, but unpredictable natural and human-causes events can be reduced through community planning. The goal of this plan is to provide all-hazards local mitigation strategies that make the communities in northeastern Vermont more disaster resistant.

Hazard Mitigation is any sustained action that reduces or eliminates long-term risk to people and property from natural and human-caused hazards and their effects. Based on the results of previous efforts, FEMA and state agencies have come to recognize that it is less expensive to prevent disasters than to get caught in a repetitive repair cycle after disaster have struck. This plan recognizes that communities have opportunities to identify mitigation strategies and measures during all of the other phases of Emergency Management — Preparedness, Response, and Recovery. Hazards cannot be eliminated, but it is possible to determine what they are, where they might be most severe and identify local actions that can be taken to reduce the severity of the hazards.

Hazard mitigation strategies and measures alter the hazard by eliminating or reducing the frequency of occurrence, avert the hazard by redirecting the impact by means of a structure or land treatment, adapt the hazard by modifying structures or standards or avoid the hazard by stopping or limiting development and could include projects such as:

- Flood proofing structures
- Tying down propane/fuel tanks in flood prone areas
- Elevating structures
- Identifying high accident locations
- Monitor and protect drinking water supplies
- Enlarge or upgrade culverts and road standards
- Proactive local planning
- Ensuring that critical facilities are safely located
- Providing public information

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## Mitigation Planning Process

The town of Canaan does not currently have a FEMA approved Local Hazard Mitigation Plan. In 2005 a Hazard Mitigation Plan for the town of Canaan was proposed as an adjunct to the multi-jurisdictional All-Hazard Pre-Disaster Mitigation Plan adopted by Northeastern Vermont Development Association under a Pre-Disaster Mitigation Grant. A Pre-Disaster Mitigation Planning Grant to Northeastern Vermont Development Association (NVDA) also assisted the town of Canaan in preparing this plan.

Since, 2005 much has happened to heighten the need for comprehensive, holistic emergency planning at the local level. The Northeast Kingdom was hit hard by sudden rainstorms in April and May, 2011 and again later that year certain areas of the Northeast Kingdom were damaged by Tropical Storm Irene. Damages included personal property to include driveways, roads and bridges in Canaan. The Beecher Falls Fire Station, which is part of Canaan received damage as well. FEMA has now adopted a new "National Mitigation Framework" and in 2012, updated guidance for local hazard mitigation planning. Vermont's ongoing recovery efforts from massive statewide losses from Tropical Storm Irene prompted statutory changes that will affect all Vermont municipalities. The most notable of these changes involves new rules for the Vermont Emergency Relief and Assistance Fund (ERAF). Effective October 2014, the amount of state public assistance that municipalities receive may be reduced from 50% to 30% unless the municipality has implemented the following measures:

1. Adopt a local emergency operation plan
2. Adopt flood hazard regulations that qualify for enrollment in the National Flood Insurance Program
3. Adopt current VTrans Town Road and Bridge Standards
4. Adopt a Local Hazard Mitigation Plan to be submitted for FEMA approval

In accordance with the new FEMA guidelines and the new ERAF requirement, the town of Canaan has developed a stand-alone Local Hazard Mitigation Plan that builds upon and augments previous regional mitigation and planning efforts. The development of this plan has followed a similar process to most community planning efforts, in addition to the Hazard Mitigation protocol established by FEMA. To start a committee was developed to oversee the planning process, public participation, notifying neighboring communities, plan drafting, and finally the mitigation strategy. The planning process included:

**Public Involvement:** The committee oversaw the effort to receive and consider community-wide input from all potential stakeholders, in accordance with Vermont's Open Meeting Laws. Planning and outreach kicked off at a duly warned Select Board meeting on July 9, 2012. Those attending this meeting were members of the Canaan Select Board, members of the Beecher Falls Volunteer Fire Department to include the Fire Chief, Canaan Police Chief, Canaan Emergency Management Director/Coordinator, Canaan Public Works Director, members of the Canaan Planning/Zoning Commission, Canaan Town Clerk, and citizens from Canaan. There were other meetings in 2012 where there was discussion about the Canaan Hazard Mitigation Plan. These were at Select Board meetings which were duly warned to allow for Public Input.

These meetings were on July 23, 2012, October 29, 2012, and November 12, 2012. There was no input from the Public in reference to Canaan's Hazard Mitigation Plan at these meetings. During 2013 and into 2014 there was not much activity in the Hazard Mitigation Plan update for Canaan due to priorities in other areas taken precedence. In July, 2014, efforts began again to begin the process of preparing an updated Hazard Mitigation Plan for the town of Canaan. The Hazard Mitigation Plan was on the Select Board Agenda for July 21, 2014, August 4, 2014, August 8, 2014 and September 15, 2014. These meetings were duly warned to allow for Public Input. There was no discussion from the Public in reference to the plan at these meetings. It was decided at the September 15, 2014 Select Board meeting there would be a survey sent out in the monthly newsletter. There was over 600 mailings of this newsletter to residents of Canaan. The survey was titled, "Community Outreach Forum" from the Canaan Hazard Mitigation Planning Team. The survey had three questions:

1. As a resident, business owner or employee of the Town of Canaan, what are your concerns about emergency events in the town?
2. What do you think the community could plan to be better prepared, both financially and in health and safety for the next emergency event?
3. What other thoughts or concerns do you have about emergencies, hazards, and emergency response in the Town of Canaan?

There were three responses to this survey. The concerns of the citizens who responded were:

Lack of Information about where people would go-transportation, availability of cots, food, medications, taking care of the special needs population. Sheltering Issues to include Animals, communication of the emergency plans.

One of the citizens that responded was appointed to the Planning Committee along with the Canaan Health Officer, and Historical Society President to join the existing members that attended the first planning meeting in July, 2012.

Outreach was done to the neighboring communities through mailings and the Canaan Hazard Mitigation Plan was on the Local Emergency Planning Committee 10 meeting Agenda for February 10, 2015, allowing for input from the Public and neighboring communities in reference to the Canaan Hazard Mitigation Plan. A draft of the plan was also mailed out to neighboring communities.

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## 1.2 About Canaan

2010 Population: 972

Median Housing Value: \$101,240

Essex County

Chartered: February 25, 1782 (Vermont Charter)

Area: 21,174 Acres! 33.08 Square Miles

Coordinates (Geographic Center): 71°34'W 45°00'N

Altitude ASL: 1,042 feet

Population Density (persons per square mile): 32.6

Tax Rate: \$1.700 ('14)

Equalized Value: \$84,100(14)

## 1.3 Community History and Background

Canaan is located in the extreme northeastern corner of Vermont, in the County of Essex. It is bound on the north by the Province of Quebec, Canada; on the east by the Connecticut River and the towns of Clarksville, Stewartstown and Colebrook, New Hampshire; and on the west and south by the towns of Norton, Averill, and Lemington, Vermont. There are two international border crossings, one near Wallace Pond and the other in Beecher Falls.

Canaan had a population of 972 as of the 2010 Census. There are two unincorporated villages in the Town of Canaan. The larger of the two is Canaan. Approximately one mile northeast from the village of Canaan, and on the Canadian border, is the village of Beecher Falls. The majority of land in Canaan is hilly woodland. Open farmland runs along the Connecticut River from the village of Canaan to the southernmost border of the township, from the village of Beecher Falls to the northeast corner of the township, and along Leach Stream from the village of Canaan northwest to the Canadian border. Vermont Route 253 runs north from Canaan Village through the village of Beecher Falls to the Canadian border. Vermont Route 102 begins at Canaan Village and continues south along the Connecticut River to Lemington on the southernmost border. Vermont Route 114 runs west from the village of Canaan to Averill. Wallace Pond, Canaan's only recreational lake, is situated on the Canadian border, with more than half the lake in Canada.

Beecher Falls is the home to Ethan Allen, a large furniture manufacturing plant. The fire station building is owned by Ethan Allen and is located next to the plant. The town owns the equipment. Ambulance service is from Colebrook, New Hampshire, nearly 30 minutes away. The fire department is run by volunteers. There are currently 45 members on the department. Six new members were added in 2014, however five members left after many years of service. The Fire Department responded to 264 emergency calls in 2014. The fire department has 3 engines, 2 tanks, and 1 rescue vehicle. Funding for a new decontamination trailer was secured through Homeland Security funds in 2005. The Fire Department faces some projects that will be expensive in the coming years. The main attack truck, which is a 1989 model, needs to be replaced. The asking price of a new truck is \$400,000. The fire department also needs to replace non compliant and worn out clothing. The cost of this replacement gear is close to \$68,000. The fire department did purchase 20 sets of gear and received them in mid-December 2014. They are looking at ways to raise the remaining money to purchase more gear. The Fire District is comprised of District #1 and #2. Fire District #1 water system improvements are in the design phase and it is anticipated that work will be performed during the summer of 2015 and 2016. The improvements consist of replacing many of the

old small water mains which will now provide fire protection, a new storage tank at an elevation that provide increased pressure, connection to the Beecher Falls water system and a small treatment facility that will remove iron, manganese and other minerals from the water to improve the quality. The connection to the Canaan Fire District #2 system along an area known as "the old rail bed" will provide redundancy for both water systems. This is planned for 2016. The water mains will be replaced on Routes 253, 102, and parts of 114 and Power House Road. The State of Vermont Dept. of Transportation will be repaving all of these roads in 2015 and 2016. A new storage tank will be constructed on the new Town Forest property. The bridge from Beecher Falls to West Stewartstown, NH will be re-constructed during 2015-2016. The engineering firm that is working with New Hampshire on this project will give recommendations to Fire District #2 for replacing or relocating the water main that is attached to the bridge, as well as for funding this project. The storage tank for Fire District #2 is in New Hampshire. The initial plan is to have the water main under the river instead of under or attached to the bridge.

Beecher Falls is part of a Mutual Aid District that includes Canada and New Hampshire towns because of its unique location in the most northeastern part of Vermont. A natural gas pipeline traverses a tiny corner of the Beecher Falls. This pipeline has exploded in the past few years but caused no damage due to its remote location.

## **Section Two Risk Assessment**

### **2.1 Identify Hazards**

Canaan local officials have identified several hazards that are addressed in this Annex. These were identified through interviewing the Selectboard, Road Commissioner and Fire Chief. These individuals have a thorough knowledge of the community through many years of direct involvement in community issues. Reviewing the fire history with the Fire Chief was instrumental in determining the vulnerability of the community.

**Table 2-A Hazard Inventory and Risk Assessment**

Possible Hazard	Likelihood	Impact	Community Vulnerability	Most Vulnerable
Tornado	Low	Low	Low	Structures
Flood	High	High	High	Infrastructure, village area, school
Flash Flood, beaver	High	Medium	Low	Infrastructure. Hall Stream near Ethan Allen every year.
Hazardous Materials	High	High	High	Roads, water supply
Radiological Incident	Low	High	Low	Residents
Structure Fire	High	High	High	Downtown, residences
Power Failure	High	Medium	Medium	Residences, businesses
Winter Storm/Ice	High	Medium	Medium	Residences, businesses
High Wind	High	Medium	Medium	Trees down, loss of power
Aircrash	Low	Low	Low	Site specific
Water Supply Contamination	Low	High	High	Public water supply, rivers. 300 families
Hurricane	Low	Medium	Low	Power lines, residences



Earthquake	Low	Medium	Low	Site specific
Dam Failures	High	High	Very High	Residences, businesses, infrastructure. All of Canaan
Drought	Low	Medium	Low	Water supply
Chemical or Biological Incident	High	High	High	Site specific. 2 border crossings
Highway Incidents	Medium	Medium	Medium	Site specific
Wildfire/Forest Fire	Medium	Medium	Medium	Farms, sugarbushes, residences
Landslide	Low	Medium/ Low	Low	Site specific
School Safety Issues	Low	High	High	Students, teachers, hostage issues
Terrorism	Medium	Medium	Medium	Residents, businesses, local officials. Border crossing

The highest risks to Canaan are: flooding, hazardous materials, structure fire, water supply contamination, dam failures, chemical or biological incident, and school safety issues.

## 2.2 Profiling Hazards

Only those hazards that are considered a HIGH vulnerability in Canaan will be profiled below. While those not being profiled are still important, they are considered a low-to-medium threat to the community where damage would be minimal.

### 2.2.1 Flood History

The Town of Canaan has a history of flooding, however none have been totally devastating. The summer of 2004 saw road damage along Route 102 and in the village area. These sections of road were considered town highways and were repaired through the Vermont Agency of Transportation. See the dam section below for more discussion on threat from flooding from a possible dam breach. Ice jams are frequent along the Connecticut River especially at bridge locations. The spring of 2011 brought more flooding in the village area on town highways as well as to the pumping stations adjacent to the Beecher Falls Fire Station, and to the Fire Station. The pumping stations have been elevated since the storms of 2011.

#### FEMA Declarations and Funding

Town	NFIP	1228 Aug-98	Floyd 1307 Sep-99	1995 May 2011	Total
Canaan	YES	\$20,010	\$5,219	\$95,258.22	120,487.22

### 2.2.2 Hazardous Materials

Most hazardous materials in Canaan are located at the Ethan Allen furniture manufacturing plant in Beecher Falls. This is also where the fire equipment and safety equipment are located. It is always a concern that there may be a hazardous materials incident on the highways in and around Canaan. High accident locations are on Harrison Hill and Route 114. Many of these accidents involve moose during the early evening hours in the summer. Canaan fire responds to incidents in neighboring Norton where there is another border crossing and active railroad crossing. Derailments have occurred in the past at this location.

### 2.2.3 Structure Fire

While there are typically over 200 calls each year, there are very few structure fires. If needed, Colebrook Fire Department responds as part of the Mutual Aid District.

Forest fires are a concern. There is a high potential for forest fires due to lack of logging and dead brush in the forested areas.

### 2.2.4 Water Supply Contamination

Canaan has a municipal water system that is a spring-fed well. The reservoir is covered, and is gravity fed into the distribution system. A new wastewater treatment facility was built in 2014, which has generators. In case of drought, the municipal system will have to use the well with a back-up pump. The springs are in Canada and the water is a chlorinated supply. During the summer of 2015 the town plans to abandon the use of the spring and draw its' water exclusively from the well at

Ethan Allen park. Beecher Falls has a separate water supply from New Hampshire.

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### **2.2.5 Dam Failures**

Above Canaan and part of the Connecticut River system is the Murphy Dam, a large earthen dam of Lake Francis. The Murphy Dam was built approximately 70 years ago and impounds a large expanse of the river. This dam is monitored 24 hours per day and is perhaps the highest risk to the communities of Beecher Falls and Canaan. An inundation plan is on file with the State of New Hampshire, State of Vermont, and all towns below the dam for 81 miles until the Centennial Mill Dam is reached in Gilman, Vt. Should this dam breach, it is estimated that within one hour and 40 minutes, a huge standing wall of water would inundate Beecher Falls and the village of Canaan. The peak flow would be 54 feet above the 100-year flood limit at approximately 2.8 hours after the Murphy Dam breach. The elementary and high schools and emergency facilities would be underwater with catastrophic ramifications. An early warning system of reverse 911, combined with sirens, is needed to address this potential disaster. A second evacuation shelter is needed on higher ground. Presently the warning would be dispatched through Derby and there may be a significant (20 minute) lag time depending on accurate warnings from above the Murphy Dam.

Another much smaller hydroelectric dam is just north of Route 114 called the Power House Dam. This dam poses little threat to Canaan. Both dams are controlled by the New Hampshire Dept. of Public Service and the N.H. Dept. of Environmental Conservation.

### **2.2.6 Chemical or Biological Incident - Border Crossings**

Canaan has two border crossings into Canada. The border security has increased in the past ten years due to increased smuggling to include humans, however the traffic volumes are moderate compared to other border crossings in Vermont. A new Border Patrol Building was built in 2013 just off Route 114. This increases security due to the location and the number of Border Patrol Officers passing through Canaan on their way to and from the office. Wallace Pond, a summer vacation lake, is half in Canada and half in Canaan. Many summer residents boat freely in these international waters.

### **2.2.7 School Safety Issues**

School safety issues are related to the school being located in the flood area. Evacuation will be difficult in high flood situations. The close proximity to the border crossings is also a potential problem if terrorists are involved. Total enrollment is approximately 200 students preK-12. The school has prepared an emergency plan for a variety of potential incidents ranging from bomb scares to drugs to guns. It was noted in the 2005 plan that a generator is needed at the school for backup power, as the school is also used as a Shelter in Emergency situations. A generator has now been installed at the school.

## **23 Vulnerability: Overview**

In terms of vulnerability, Canaan rated these potential hazards below as High or Medium-High threat: flooding, hazardous materials, structure fire, water supply contamination, dam failures, chemical or biological incident, and school safety issues. Mitigation strategies are identified for the highest priority projects in Section Three. Only those hazards that were identified as a high risk to the town were profiled. While other types of hazards may cause smaller problems for the community, they are a lower risk.

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## 2.4 Identifying Structures

It is difficult to estimate the total number of structures in the 100-year limit of the FIRM identified floodplain as those maps do not accurately match up to the E911 maps that are based on the structures' geographical location (latitude and longitude). However, it can be estimated that there are approximately 50 structures in or near the flood areas depicted on the NFIP maps. The most vulnerable area is the historic village area of Canaan. The center of commerce is here, along with its school, higher density historic homes and a bridge to New Hampshire.

## 2.5 Estimating Potential Losses

Future losses should be lessened through mitigation of the repetitively flooded properties, most of which are roads, bridges and culverts. The FIRM maps are not compatible with the GIS maps containing contour, rivers, roads and structures and it is not possible to estimate the amount of potential loss at this time. It is recommended that the NFIP maps be redone using the Vermont Geographic Information System standards based on orthophoto mapping. The Median Housing Value (MHV) for Canaan in 2014 was \$101,240. The Equalized Value for all properties in Canaan in 2014 was \$84,100,000. The past FEMA damages amounted to \$25,229 over 16 years so the damage is not expected to be large unless the Murphy Dam was to breach. Under this scenario, the entire Connecticut River valley would be devastated with total loss of property and life. This would include Beecher Falls and the village area plus surrounding properties.

## 2.6 Analyzing Development Trends

The total population has decreased from 1107 to 972 between 2003 and 2010. The Town of Canaan has adopted a local plan and zoning regulations to guard against future development in inappropriate locations such as flood prone areas. Canaan is a member of the National Flood Insurance Program (NFIP). Canaan is not a rapidly developing community and is not expected to have a rapid influx of new development in the near future. All development strategies are carefully reviewed by the Zoning or Development Review Board. All buildings being improved in or near frequently flooded areas are required to elevate or provide additional mitigation measures.

### *Section Three Mitigation Strategy*

Hazard Mitigation Strategies and Measures **avoid** the hazard by stopping or limiting new exposures in known hazard areas, **alter** the hazard by eliminating or reducing the frequency of occurrence, **avert** the hazard by redirecting the impact by means of a structure or land treatment, **adapt** to the hazard by modifying structures or standards and could include tools or projects such as:

**Town Plan** - this document contains goals and objectives for community growth, health, safety and welfare for public and private interests.

**Zoning Status** — This is a snapshot of the current zoning tools in effect. Note the progress listed above for some communities.

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NFIP — National Flood Hazard Insurance Program — These are the communities that are members of the NFIP program.

**Flood Regulations** — Some communities have adopted Flood Regulations but may not be a member of the NFIP program.

**C & S = Highway Codes and Standards** — Most all Vermont communities have adopted the Vermont Transportation Agencies recommended Highway Codes and Standards. This is perhaps the one most beneficial mitigation program in Vermont and the NVDA region. By adopting these codes, all maintenance and new construction on roads, highways, bridges and culverts must be enhanced to meet the new standards to withstand large flood events.

**VTRC** — Canaan does not have a Vermont Red Cross Shelter Pre-Agreement. When a Pre-Agreement is in effect, local representatives are trained to open a shelter if needed. This will allow for a more efficient use of the VT Red Cross if and when needed.

**Local Emergency Operation Plan (LEOP)** — Canaan has updated the LEOP as of March, 2015.

**Emergency Training** - Fire and rescue personnel continue to participate in training offered for its volunteers, particularly with the equipment upgrades through the Dept. of Homeland Security. The Police Department also continues to participate in mandatory training courses as well as other courses offered through the Vermont Criminal Justice Training Council and the Department of Homeland Security.

Table 3-A Development Tools

Town	Town Plan Zoning	NF1P Flood Regs	Codes&Standards	VT Red Cross Shelter
Canaan	YES	YES	YES	YES

### 3.1 Regional Hazard Mitigation Goals

Reduce the loss of life and injury resulting from all hazards.

Mitigate financial losses incurred by municipal, residential, industrial, agricultural and commercial establishments due to disasters.

Reduce the damage to public infrastructure resulting from all hazards.

Recognize the connections between land use, storm-water road design and maintenance and the effects from disasters.

Ensure that mitigation measures are compatible with the natural features of community rivers, streams and other surface waters; historic resources; character of neighborhoods; and the capacity of the community to implement them.

Encourage all-hazard mitigation planning as a part of the municipal planning process.

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### **3.2 Community Preparedness Goals**

Overall, Canaan is working to decrease its risk to flooding, water supply contamination and hazardous material incidents through proactive planning, policies and mitigation actions. Other lesser risks are being addressed through the same procedures and policies.

Review this plan with essential town government.

Review and study the need for additional capacity and capability in the Fire Department to minimize the impact of a HAZMAT incident.

Ensure that all emergency response and management personnel receive HAZMAT Awareness training as a minimum.

### **3.3 Existing Hazard Mitigation Programs**

Canaan has been proactive in planning its future as well as protecting its citizens from potential disasters. The fire department is well trained although there is a fear of less members due to a declining volunteer population. The school is their shelter but it is located in the flood plain. The shelter has been certified by the Vermont Red Cross since the 2005 Local Hazard Mitigation Plan. Canaan is located in such an area that is remote and has several high hazard potentials that could impact the community.

#### **3.3.1 Emergency Management Planning**

Canaan has recently updated their Local Emergency Operations Plan. They have representatives that regularly attend the Local Emergency Planning Committee (LEPC) 10 meetings quarterly in Derby. The fire department has upgraded its equipment through Homeland Security funds, including communication equipment.

#### **3.3.2 Codes and Standards**

Canaan has adopted the recommended Highway Codes and Standards that require regular upgrades on bridges, highways, ditching and culverts to avoid flood damage. A number of culverts have already been upgraded.

#### **3.3.3 Local Planning and Zoning, NFIP**

Canaan has adopted a Town Plan and Zoning. They are a member of the National Flood Insurance Program. All new development must be reviewed by the Zoning Board of Adjustment. Permit requests range from 20 to 60 in any given year. Most are for subdivisions, renovations and existing building modifications. All development in or near the identified flood areas must conform to zoning standards.

#### **3.3.5 Protection of Municipal Water System**

Canaan checks its water system daily as required by State regulations. The system is locked to protect against vandalism or unwanted substances.

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### **3.3.6 Public Awareness about Murphy Dam**

Local officials have all materials and emergency plans regarding the Murphy Dam. They are well informed as to the potential danger of the dam, even though the dam is monitored 24 each day. A public meeting was held by the NH dam officials in the fall of 2004 to discuss emergency procedures.

### **3.3.6 Protection of Town Records**

The Town office has a vault to protect public records from damage or theft/vandalism.

### **3.3.7 School Drills**

The K-12 Canaan School practices regular evacuation drills and lock clown drills.

## **Preparedness Tools**

### **Public Awareness, Training, Education**

Conduct Emergency Drills involving all elements of the community to practice procedures associated with a simulated varies incidents.  
Use this plan for Hazard Identification and Mapping.

### **Public Protection**

Designate shelters.  
Emergency communications and information systems (NOAA weather receivers, Emergency Alert System (EAS)) are at the Command Center.  
Update Hazard Vulnerability Assessments as needed.  
Review and modify evacuation and sheltering plans based on the results of drills and exercises or procedures implemented in an actual incident.  
American Red Cross chapter may be contacted to assist with community education programs.  
Maintain current Rapid Response Plans and the Emergency Management Operations Plans.  
Regularly scheduled maintenance programs are ongoing (culvert survey & replacement, ditching along roadways, cutting vegetation to allow visibility at intersections).  
The town is proactive in preparing for potential disasters.  
Emergency Response and Management Staff attending professional training sessions.  
The EOC facility has a generator.  
Backup power is available for water and sewer needs.

### **Financial and Tax Incentives.**

Use State and Federal funding for mitigation projects and activities.

### **Hazard Control and Protective Works.**

Utilize regular maintenance programs (culvert survey & replacement, ditching along roadways, cutting vegetation to allow visibility at intersections).  
Dam repairs have been identified and addressed.



**Insurance Programs.**

Participate in NFIP.

**Land Use Planning/Management: Flood.**

Canaan has a municipal plan and local zoning. They have established Flood Hazard Areas through the NFIP.

**Protection/Retrofit of Infrastructure and Critical Facilities.**

A map of Critical Facilities is attached.

Auxiliary power for the fire station & school (shelter) is needed.

**Science and Technology.**

Install river gauges for stream/river flow.

Provide early warning system for emergency situations.

**Analysis of Mitigation Actions****Priority Actions:**

Local officials in Canaan have identified several mitigation actions to be included in the Hazard Mitigation Plan. Table 3-B, Implementation Strategy contains these actions, along with the responsible agency, the funding source, and implementation timeframe.

The Canaan local officials have prioritized the actions using the STAPLE+E criteria, a planning tool used to evaluate alternative actions. The following table explains the STAPLE+E criteria.

S — Social	Mitigation actions are acceptable to the community if they do not adversely affect a particular segment of the population, do not cause relocation of lower income people, and if they are compatible with the community's social and cultural views.
T — Technical	Mitigation actions are technically most effective if they provide long-term reduction of losses and have minimal secondary adverse impacts.
A — Administrative	Mitigation actions are easier to implement if the jurisdiction has the necessary staffing and funding.
P — Political	Mitigation actions can truly be successful if all stakeholders have been offered an opportunity to participate in the planning process and if there is public support for the action.
L — Legal	It is critical that the jurisdiction or implementing agency have the legal authority to implement and enforce a mitigation action.
E — Economic	Budget constraints can significantly deter the implementation of mitigation actions. Hence, it is important to evaluate whether an action is cost-effective, as determined by a cost benefit review, and possible to fund.
E — Environmental	Sustainable mitigation actions that do not have an adverse

effect on the environment, that comply with Federal, State, and local environmental regulations, and that are consistent with the community's environmental goals, have mitigation benefits while being environmentally sound.

### 3.4 Implementation of Mitigation Actions

Flooding and the potential for hazardous material incidents are the two main threats to Canaan. Local officials are proactive in preparing for the hazards for which they are most vulnerable. Their highest priority concern is the health safety and welfare of the local citizens and businesses. The Fire Department has several concerns that center around a catastrophic flood event with the Connecticut River and the potential for an incident involving illegal movement across the Canadian border, involving polluting of the Canaan Water supply.

The mitigation action determined to have the highest priority was the most cost effective alternative to the potential loss of life. Readiness and timeliness of project was also important. The early warning system is consistent with the community's social and cultural values.

Potential hazardous material incidents are caused mainly by highway features combined with areas that typically flood. These areas are Vermont State highways, which are the responsibility of the Vermont Agency of Transportation, and are being evaluated by their engineers in conjunction with local officials.

The evaluating of these criteria is largely based on best available information and best judgment, as many of the projects are not fully scoped out at this time. The actions are listed in the Table 3-B in order of importance, cost effectiveness and feasibility to the community.

**Table 3-A Mitigation Projects by Priori**

Project/Priority	Mitigation Action	Who is Responsible	Time Frame and Potential Funding	Initial Implementation Steps
Reverse 911 or Siren HIGH	Will provide an early warning system for flooding.	Fire Chief and Selectboard	ASAP pending funding, FEMA—FMA, HMGP	Seek cost of implementation, public education.
Generators with hookups HIGH	Backup power for the school and emergency operations center.	Fire Chief and Selectboard	Done	Done
New Fire Station HIGH	Canaan does not own its own building. If Ethan Allen goes out of business, the building goes too.	Fire Chief, Selectboard	2015-2020, local resources, FEMA, USDA Rural Development loan/grant.	Discuss options between town and Ethan Allen.
Training for new volunteers HIGH	Need new volunteers to take place of retiring older volunteers	Fire Chief	2015-2020— Fire Grant training,	Schedule training and recruit volunteers.

## **Section Four .Plan Maintenance Process**

### **4.1 Initial Approval Process**

In addition to public involvement in the initial development of the plan, opportunities for public comment will include a warned adoption to review the plan prior to final adoption. The fire chief has been instrumental in participating in the review of the document with the local officials.

After local review and comment, the draft local annex is presented to the State Hazard Mitigation Committee through the State Hazard Mitigation Officer (SHMO) for review and comment. The SHMO will issue a recommendation for forwarding the plan to the FEMA Region I. After receipt of comments from FEMA Region I staff, final changes will be made and the resulting document adopted by the Canaan Selectboard. The final plan will be returned to FEMA Region I for formal approval.

### **4.2 Routine Plan Maintenance**

The Hazard Mitigation Plan is dynamic and changing. To ensure that the plan remains current it is important that it be updated periodically. The plan shall be updated every five years, pending ongoing financial resources, in accordance with the following procedure:

- 4.2.1 The Canaan Selectboard will either act as the review committee or appoint a review committee.
- 4.2.2 The committee will discuss the process to determine if the evaluation criteria is still appropriate or modifications or additions are needed to the mitigation strategies based on changing conditions since the last update occurred. Data needs will be reviewed, data sources identified and responsibility for collecting information will be assigned to members.
- 4.2.3 A draft report will be prepared based on the evaluation criteria and in conformance with the FEMA Region I Local Hazard Mitigation Plan review tool document.
- 4.2.4 The Selectboard will have the opportunity to review the draft report.  
Consensus will be reached on changes to the draft.
- 4.2.5 Changes will be incorporated into the document.
- 4.2.6 The plan will be reviewed by the Vermont Department Emergency Management/Homeland Security (SHMO) staff and then FEMA Region I staff.
- 4.2.7 DEMHS and FEMA comments will be incorporated into the plan.
- 4.2.8 The Selectboard will warn the plan for approval at its regular meeting.

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4.2.9 The Selectboard will incorporate any community comments into the plan.

4.2.10 The Selectboard will finalize and adopt the plan and distribute to interested persons.

#### **4.3 Programs, Initiatives and Project Review**

Although the plan will be reviewed, pending ongoing financial resources, in its entirety every five years, the town may review and update its programs, initiatives and projects more often based on the above procedure as changing needs and priorities arise.

#### **4.4 Post-Disaster Review Procedures**

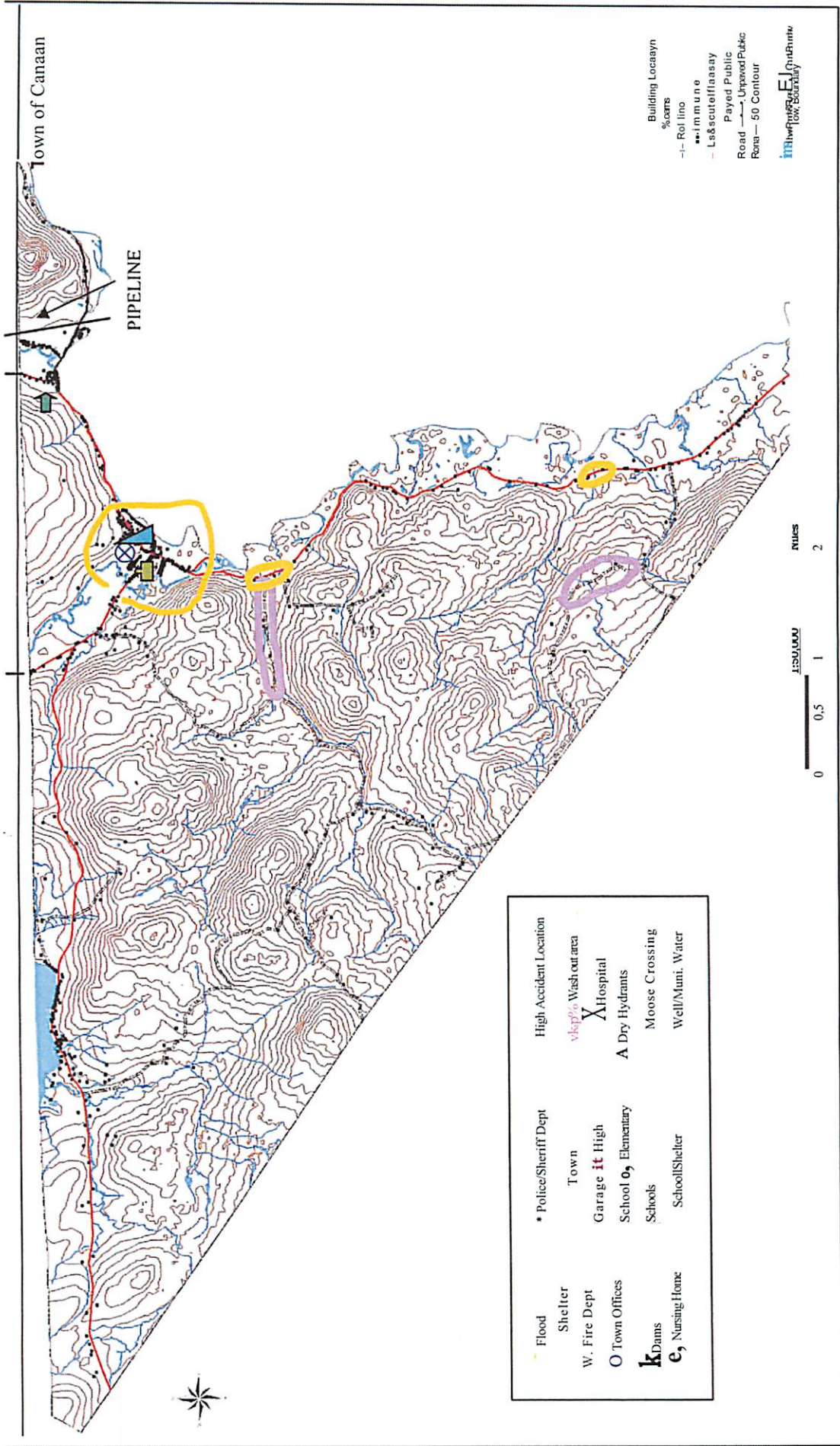
Should a declared disaster occur, a special review will occur in accordance with the following procedures:

1. Within six (6) months of a declared emergency event, the town will initiate a post-disaster review and assessment.
2. This post-disaster review and assessment will document the facts of the event and assess whether existing Hazard Modification Plans effectively addressed the hazard.
3. A draft report After Action Report of the assessment will be distributed to the Review/ Update Committee.
4. A meeting of the committee will be convened by the Selectboard to make a determination whether the plan needs to be amended. If the committee determines that NO modification of the plan is needed. Then the report is distributed to interested parties.
5. If the committee determines that modification of the plan IS needed, then the committee drafts an amended plan based on the recommendations and forwards it to the Selectboard for public input.
6. The Selectboard adopts the amended plan.

### ***Section Five .Maps***

Tab a - Critical Facilities and Local Areas of Concern Map

BORDER CROSSING  
BORDER MURPHY CROSSING DAM



- Flood Shelter
- W. Fire Dept
- O Town Offices
- k** Dams
- e**, Nursing Home
- Police/Sheriff Dept
- Town
- Garage **it** High
- School **o**, Elementary
- Schools
- School/Shelter
- High Accident Location
- Wash out area
- Hospital
- A Dry Hydrants
- Moose Crossing
- Well/Muni. Water

Building Location  
% cars  
- - - Roll line  
••• Immune  
- - - L&S contour  
Payed Public  
Road - - - Unpayed Public  
Rena - 50 Contour  
INW  
LOW BOUNDARY

0 0.5 1 2  
MILES



- |                        |          |
|------------------------|----------|
| 1. Here:               | 2. 6.7   |
|                        | %        |
| 3. Vermont:            | 4. 6.8   |
|                        | %        |
| 5. Adult obesity rate: | 6.       |
| 7. Here:               | 8. 25.1  |
| 9. Vermont:            | 10. 22.3 |

Low-income preschool obesity rate:  
 Essex County: 11.3%  
 State: 13.3%

**Agriculture in Essex County:**

Average size of farms: 202 acres  
 Average value of agricultural products sold per farm: \$69,283  
 Average value of crops sold per acre for harvested cropland: \$142.38  
 The value of livestock, poultry, and their products as a percentage of the total market value of agricultural products sold: 85.73%  
 Average total farm production expenses per farm: \$60,880  
 Harvested cropland as a percentage of land in farms: 34.31%  
 Average market value of all machinery and equipment per farm: \$52,340  
 The percentage of farms operated by a family or individual: 91.84%  
 Average age of principal farm operators: 55 years  
 Average number of cattle and calves per 100 acres of all land in farms: 21.03  
 Milk cows as a percentage of all cattle and calves: 54.29%

**Tornado activity:**

Essex County historical area-adjusted tornado activity is significantly below Vermont state average. It is 10.9 times below overall U.S. average,

**Earthquake activity:**

Essex County-area historical earthquake activity is below Vermont state average. It is 89% smaller than the overall U.S. average.

On 4/20/2002 at 10:50:47, a magnitude 5.2 (5.2 MB, 4.2 MS, 5.2 MW, 5.0 MW, Depth: 6.8 mi, Class: Moderate, Intensity: VI - VII) earthquake occurred 98.5 miles away from the county center  
 On 1/19/1982 at 00:14:42, a magnitude 4.7 (4.5 MB, 4.7 MD, 4.5 LG, Class: Light, Intensity: IV - V) earthquake occurred 84.8 miles away from the county center  
 On 6/16/1995 at 12:13:11, a magnitude 3.8 (3.8 LG, Depth: 3.1 mi, Class: Light, Intensity: II - III) earthquake occurred 31.2 miles away from the county center  
 On 4/20/2002 at 11:04:42, a magnitude 4.1 (4.1 LG, 3.7 ML, Depth: 3.1 mi) earthquake occurred 97.1 miles away from Essex County center  
 On 8/21/1996 at 07:54:14, a magnitude 3.8 (3.8 LG, 3.6 LG, Depth: 6.2 mi) earthquake occurred 41.9 miles away from the county center  
 On 1/17/2000 at 08:16:20, a magnitude 3.6 (3.6 LG, 3.4 LG, Depth: 10.1 mi) earthquake occurred 65.1 miles away from the county center  
*Magnitude types: regional Lg-wave magnitude (LG), body-wave magnitude (MB), duration magnitude (MD), local magnitude (ML), surface-wave magnitude (MS), moment magnitude (MW)*

**Most recent natural disasters:**

Vermont Severe Storms and Flooding, Incident Period: July 21, 2008 to August 12, 2008, Major Disaster (Presidential) Declared (DR-1790): September 12, 2008, FEMA Id: FEMA-DR-1790, Natural disaster type: Storm, Flood  
 Vermont Severe Storms and Flooding, Incident Period: April 15, 2007 to April 21, 2007, Major Disaster (Presidential) Declared (DR-1698): May 4, 2007, FEMA Id: FEMA-DR-1698, Natural disaster type: Storm, Flood  
 Vermont Severe Storms and Flooding, Incident Period: June 5, 2002 to June 13, 2002, Major Disaster (Presidential) Declared (DR-1428): July 12, 2002, FEMA Id: FEMA-DR-1428, Natural disaster type: Storm, Flood  
 Vermont Tropical Storm Floyd, Incident Period: September 16, 1999 to September 21, 1999, Major Disaster (Presidential) Declared (DR-1307): November 10, 1999, FEMA Id: FEMA-DR-1307, Natural disaster type: Tropical Storm  
 Vermont Severe Storms and Flooding, Incident Period: June 17, 1998 to August 17, 1998, Major Disaster (Presidential) Declared (DR-1228): June 30, 1998, FEMA Id: FEMA-DR-1228, Natural disaster type: Storm, Flood  
 Vermont Heavy Rain, Flooding, Incident Period: August 4, 1995 to August 6, 1995, Major Disaster (Presidential) Declared (DR-1063): August 16, 1995, FEMA Id: FEMA-DR-1063, Natural disaster type: Flood, Heavy Rain  
 Vermont SEVERE STORMS, FLOODING, Incident Period: August 4, 1989 to August 5, 1989, Major Disaster (Presidential) Declared (DR-840): September 11, 1989, FEMA Id: FEMA-DR-840, Natural disaster type: Storm, Flood  
 Vermont SEVERE STORMS, FLOODING, LANDSLIDES, Incident Period: July 6, 1973, Major Disaster (Presidential) Declared (DR-397): July 6, 1973, FEMA Id: FEMA-DR-397, Natural disaster type: Storm, Landslide, Flood

The number of natural disasters in Essex County (8) is smaller than the US average (12).  
 Major Disasters (Presidential) Declared: 8

## Section 4

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Ice accretion from freezing rain greater than about 1/3 inch approaches levels to begin to weigh down trees and trigger outages

NWS criteria is for an accretion of greater than 1/4 of an inch

Special weather events will be given priority with at least three days lead time, including:

Major Nor'easters

Any organized wind storms

Major tropical cyclones or their counterparts

Tornadoes

Thunderstorms of more than just isolated coverage

**Table 4-11**  
**Winter Storm Events<sup>10</sup>**

Property Damage (Adjusted for inflation)	Crop Damage (Adjusted for inflation)	Begin Date	End Date	Jurisdiction Impacted	Fatalities	Injuries
\$1,040,000.00	\$-	2/23/2010	2/24/2010	Windsor	0	0
\$260,000.00	\$-	2/23/2010	2/25/2010	Orange	0	0
\$260,000.00	\$-	2/23/2010	2/25/2010	Washington	0	0
\$237,192.99	\$-	2/14/2007	2/14/2007	Addison	0	0
\$237,192.99	\$-	2/14/2007	2/14/2007	Caledonia	0	0
\$237,192.99	\$-	2/14/2007	2/14/2007	Chittenden	0	0
\$237,192.99	\$-	2/14/2007	2/14/2007	Essex	0	0
\$237,192.99	\$-	2/14/2007	2/14/2007	Franklin	0	0
\$237,192.99	\$-	2/14/2007	2/14/2007	Grand Isle	0	0
\$237,192.99	\$-	2/14/2007	2/14/2007	Lamoille	0	0
\$237,192.99	\$-	2/14/2007	2/14/2007	Orange	0	0
\$237,192.99	\$-	2/14/2007	2/14/2007	Orleans	0	0
\$237,192.99	\$-	2/14/2007	2/14/2007	Rutland	0	0

<sup>9</sup> Spatial Hazard Events and Losses Database for the United States, [http://webra.cas.sc.edu/hvriapps/sheldus\\_setup/sheldus\\_results.aspx](http://webra.cas.sc.edu/hvriapps/sheldus_setup/sheldus_results.aspx)

<sup>10</sup> Explanation of Storm Data can be found in appendix A

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Section 4

Property Damage (Adjusted for inflation)	Crop Damage (Adjusted for inflation)	Begin Date	End Date	Jurisdiction Impacted	Fatalities	Injuries
\$49,523.81	5-	1/4/2003	1/4/2003	Washington	0	
\$49,523.81	5-	4/4/2003	4/5/2003	Windsor	0	
\$46,222.22	\$-	2/10/2005	2/10/2005	Grand Isle	0	
\$46,222.22	\$-	2/10/2005	2/10/2005	Franklin	0	
\$46,222.22	\$-	2/10/2005	2/10/2005	Chittenden	0	
\$46,222.22	\$-	2/10/2005	2/10/2005	Addison	0	
\$46,222.22	\$-	12/9/2005	12/9/2005	Windsor	0	
\$45,084.18	\$-	12/11/2008	12/12/2008	Addison	0	
\$45,084.18	\$-	12/11/2008	12/12/2008	Caledonia	0	
\$45,084.18	\$-	12/11/2008	12/12/2008	Chittenden	0	
\$45,084.18	5-	12/11/2008	12/12/2008	Essex	0	
\$45,084.18	\$-	12/11/2008	12/12/2008	Franklin	0	
\$45,084.18	5-	12/11/2008	12/12/2008	Grand Isle	0	
\$45,084.18	5-	12/11/2008	12/12/2008	Lamoille	0	
\$45,084.18	\$-	12/11/2008	12/12/2008	Orange	0	
\$45,084.18	\$-	12/11/2008	12/12/2008	Orleans	0	
\$45,084.18	5-	12/11/2008	12/12/2008	Rutland	0	
\$45,084.18	5-	12/11/2008	12/12/2008	Washington	0	
\$45,084.18	\$-	12/11/2008	12/12/2008	Windsor	0	
\$37,142.86	5-	12/6/2003	12/7/2003	Chittenden	0	
\$37,142.86	5-	12/6/2003	12/7/2003	Franklin	0	
\$37,142.86	\$-	12/15/2003	12/15/2003	Franklin	0	
\$37,142.86	5-	12/6/2003	12/7/2003	Grand Isle	0	
\$37,142.86	\$-	12/15/2003	12/15/2003	Grand Isle	0	
\$37,142.86	5-	12/14/2003	12/15/2003	Lamoille	0	
\$37,142.86	\$-	12/15/2003	12/15/2003	Orange	0	
\$37,142.86	\$-	12/6/2003	12/7/2003	Rutland	0	



## Section 4

Property Damage (Adjusted for inflation)	Crop Damage (Adjusted for inflation)	Begin Date	End Date	Jurisdiction impacted	Fatalities	Injuries
\$26,000.00	5-	1/26/2005	1/26/2005	Windsor		
\$25,422.22	5-	2/10/2005	2/10/2005	Orleans		
\$25,422.22	\$-	2/10/2005	2/10/2005	Essex		
\$25,422.22	\$-	2/10/2005	2/10/2005	Lamoille		
\$25,422.22	\$-	2/10/2005	2/10/2005	Caledonia		
\$25,422.22	\$-	2/10/2005	2/10/2005	Washington		
\$25,060.24	5-	3/26/2002	3/27/2002	Orange		
\$ -	5208,000.00	5/11/2010	5/13/2010	Chittenden		
\$ -	\$104,000.00	5/11/2010	5/13/2010	Addison		
\$ -	\$104,000.00	5/11/2010	5/13/2010	Rutland		
\$ -	\$52,000.00	5/11/2010	5/13/2010	Grand Isle		
\$ -	\$52,000.00	5/11/2010	5/13/2010	Franklin		
\$ -	\$52,000.00	5/11/2010	5/13/2010	Windsor		

There are no standard loss estimation models or methodologies for the winter storm hazards. Potential losses from winter storms are, in most cases, indirect and therefore difficult to quantify.<sup>11</sup> The table below illustrates the impact of winter storms occurring between January 1, 2006 and September 31, 2012.

**Table 4-12**  
**Impact of Winter Storms Occurring Between January 1, 2006 and September 31, 2012**

Type	Total Events	Deaths	Property Damage	Crop Damage
Heavy Snow	57		\$2.650 million	
Cold/Wind Chill	31			
Strong Wind	184		52.092 million	
Winter Storm	505		\$7.545 million	\$145,000
Winter Weather	573		\$2.467 million	

<sup>11</sup> [http://www.nyc.gov/html/oem/downloads/pdf/hazard\\_mitigation/section\\_31\\_winter\\_weather\\_hazard\\_analysis.pdf](http://www.nyc.gov/html/oem/downloads/pdf/hazard_mitigation/section_31_winter_weather_hazard_analysis.pdf)

## **Vermont – Severe Storms and Flooding FEMA-1995-DR**

### ***Declared June 15, 2011***

On May 27, 2011, Governor Peter Shumlin requested a major disaster declaration due to severe storms and flooding during the period April 23 to May 9, 2011. The Governor requested a declaration for Individual Assistance for nine counties, Public Assistance for ten counties, and Hazard Mitigation statewide. The Governor further requested direct Federal assistance. During the period of May 18 to June 3, 2011, joint Federal, State, and local Preliminary Damage Assessments (PDAs) were conducted in the requested counties and are summarized below. PDAs estimate damages immediately after an event and are considered, along with several other factors, in determining whether a disaster is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local governments, and that Federal assistance is necessary.<sup>1</sup>

On June 15, 2011, President Obama declared that a major disaster exists in the State of Vermont. This declaration made Individual Assistance requested by the Governor available to affected individuals and households in Addison, Chittenden, Essex, Franklin, Grand Isle, Lamoille, and Orleans Counties. This declaration also made Public Assistance requested by the Governor available to State and eligible local governments and certain private nonprofit organizations on a cost-sharing basis for emergency work and the repair or replacement of facilities damaged by the in Addison, Chittenden, Essex, Franklin, Grand Isle, Lamoille, and Orleans Counties. Direct Federal assistance was also authorized. Finally, this declaration made Hazard Mitigation Grant Program assistance requested by the Governor available for hazard mitigation measures statewide.<sup>2</sup>

### **Summary of Damage Assessment Information Used in Determining Whether to Declare a Major Disaster**

#### **Individual Assistance**

- Total Number of Residences Impacted:<sup>3</sup> 817
 

Destroyed -	24
Major Damage -	123
Minor Damage -	227
Affected -	443
- Percentage of insured residences:<sup>4</sup> 5%
- Percentage of low income households:<sup>5</sup> 26%
- Percentage of elderly households:<sup>6</sup> 14%
- Total Individual Assistance cost estimate: \$ 5,433,350

#### **Public Assistance**

- Primary Impact: Damage to roads and bridges

- Total Public Assistance cost estimate: \$3,297,502
- Statewide per capita impact:<sup>7</sup> \$5.42
- Statewide per capita impact indicator:<sup>8</sup> \$1.30
- Countywide per capita impact: Addison County (\$5.76), Caledonia County (\$26.72), Chittenden County (\$3.93), Essex County (\$12.46), Franklin County (\$5.25), Grand Isle County (\$94.25), Lamoille County (\$47.46), Orleans County (\$16.84), Washington County (\$11.62), and Windham County (\$4.44)
- Countywide per capita impact indicator:<sup>9</sup> \$3.27

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<sup>1</sup> The preliminary damage assessment (PDA) process is a mechanism used to determine the impact and magnitude of damage and resulting needs of individuals, businesses, public sector, and community as a whole. Information collected is used by the State as a basis for the Governor's request for a major disaster or emergency declaration, and by the President in determining a response to the Governor's request (44 CFR § 206.33).

<sup>2</sup> When a Governor's request for major disaster assistance under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (Stafford Act) is under review, a number of primary factors are considered to determine whether assistance is warranted. These factors are outlined in FEMA's regulations (44 CFR § 206.48). The President has ultimate discretion and decision making authority to declare major disasters and emergencies under the Stafford Act (42 U.S.C. § 5170 and § 5191).

<sup>3</sup> Degree of damage to impacted residences:

- Destroyed – total loss of structure, structure is not economically feasible to repair, or complete failure to major structural components (e.g., collapse of basement walls/foundation, walls or roof);
- Major Damage – substantial failure to structural elements of residence (e.g., walls, floors, foundation), or damage that will take more than 30 days to repair;
- Minor Damage – home is damaged and uninhabitable, but may be made habitable in short period of time with repairs; and
- Affected – some damage to the structure and contents, but still habitable.

<sup>4</sup> By law, Federal disaster assistance cannot duplicate insurance coverage (44 CFR § 206.48(b)(5)).

<sup>5</sup> Special populations, such as low-income, the elderly, or the unemployed may indicate a greater need for assistance (44 CFR § 206.48(b)(3)).

<sup>6</sup> Ibid (44 CFR § 206.48(b)(3)).

<sup>7</sup> Based on State population in the 2000 Census.

<sup>8</sup> Statewide Per Capita Impact Indicator for FY11, *Federal Register*, October 1, 2010.

<sup>9</sup> Countywide Per Capita Impact Indicator for FY11, *Federal Register*, October 1, 2010.



[Disaster Declarations](#)

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[Vermont Severe Winter Storm](#)

*12/09/2014 to 12/12/2014*

Major Disaster Declaration declared on 02/03/2015

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[Vermont Severe Storms and Flooding](#)

*04/15/2014 to 04/18/2014*

Major Disaster Declaration declared on 06/11/2014

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[Vermont Severe Winter Storms](#)

*12/20/2013 to 12/27/2013*

Major Disaster Declaration declared on 01/29/2014

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[Vermont Severe Storms and Flooding](#)

*06/25/2013 to 07/11/2013*

Major Disaster Declaration declared on 08/02/2013

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[Vermont Severe Storms and Flooding](#)

*05/22/2013 to 05/26/2013*

Major Disaster Declaration declared on 06/13/2013

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[View all Declarations for Vermont](#)

Vermont

**Payment Tracking - Payments**  
**Disaster: FEMA 1995-DR-VT**  
**Disaster Period: April 23 to May 9, 2011**  
**Declaration: 6/15/2011**

Applicant: Canaan, Town of

Default ERAF %: 15.00

MSA: FE0347

Approved MLA: \$47,629.36

EA: 19950506

County: Essex

PAID: 009-11800-00

**Summary**

PW	Cat	Deadline	Complete	Project Amount	Total Eligible For Payment	Fed Share	Fed Share Paid	Fed Share Balance	ERAF Share Eligible	ERAF Paid	ERAF Balance	Total Paid	Local Match
Judd													
122 (0)	C		Yes	\$2,233.50	\$2,010.16	\$1,675.13	\$1,675.13	\$0.00	\$335.03	\$335.03	\$0.00	\$2,010.16	\$223.34
Fund													
146 (0)	C		Yes	\$5,687.15	\$5,118.43	\$4,265.36	\$4,265.36	\$0.00	\$853.07	\$853.07	\$0.00	\$5,118.43	\$568.72
Breault													
155 (0)	C		Yes	\$5,176.64	\$4,658.98	\$3,882.48	\$3,882.48	\$0.00	\$776.50	\$776.50	\$0.00	\$4,658.98	\$517.66
Dubeau													
170 (0)	C		Yes	\$3,161.31	\$2,845.18	\$2,370.98	\$2,370.98	\$0.00	\$474.20	\$474.20	\$0.00	\$2,845.18	\$316.13
Kemp													
204 (0)	C		Yes	\$14,869.63	\$13,382.66	\$11,152.22	\$11,152.22	\$0.00	\$2,230.44	\$2,230.44	\$0.00	\$13,382.66	\$1,486.97
Penn													
320 (0)	C		No	\$10,793.85	\$9,714.47	\$8,095.39	\$8,095.39	\$0.00	\$1,619.08	\$1,619.08	\$0.00	\$9,714.47	\$1,079.38

Summary

PW	Cat	Deadline	Complete	Project Amount	Total Eligible For Payment	Fed Share	Fed Share Paid	Fed Share Balance	ERAF Share Eligible	ERAF Paid	ERAF Balance	Total Paid	Local Match
Water													
329 (0)	F		No	\$10,999.42	\$9,899.48	\$8,249.57	\$8,249.57	\$0.00	\$1,649.91	\$1,649.91	\$0.00	\$9,899.48	\$1,099.94
<b>Total:</b>				\$52,921.50	\$47,629.36	\$39,691.13	\$39,691.13	\$0.00	\$7,938.23	\$7,938.23	\$0.00	\$47,629.36	\$5,292.14

Payment 1

PW	Cat	Payment Date	Complete	Project Amount	Total Eligible For Payment	Fed Share	Fed Share Paid	Fed Share Balance	ERAF Share Eligible	ERAF Paid	ERAF Balance	Total Paid	Local Match
122 (0)	C		Yes	\$2,233.50	\$2,010.16	\$1,675.13	\$1,675.13	\$0.00	\$335.03	\$0.00	\$335.03	\$1,675.13	\$223.34
146 (0)	C		Yes	\$5,687.15	\$5,118.43	\$4,265.36	\$4,265.36	\$0.00	\$853.07	\$0.00	\$853.07	\$4,265.36	\$568.72
155 (0)	C		Yes	\$5,176.64	\$4,658.98	\$3,882.48	\$3,882.48	\$0.00	\$776.50	\$0.00	\$776.50	\$3,882.48	\$517.66
170 (0)	C		Yes	\$3,161.31	\$2,845.18	\$2,370.98	\$2,370.98	\$0.00	\$474.20	\$0.00	\$474.20	\$2,370.98	\$316.13
204 (0)	C		No	\$14,869.63	\$13,382.66	\$11,152.22	\$11,152.22	\$0.00	\$2,230.44	\$0.00	\$2,230.44	\$11,152.22	\$1,486.97
320 (0)	C		No	\$10,793.85	\$9,714.47	\$8,095.39	\$8,095.39	\$0.00	\$1,619.08	\$0.00	\$1,619.08	\$8,095.39	\$1,079.38
329 (0)	F		No	\$10,999.42	\$9,899.48	\$8,249.57	\$8,249.57	\$0.00	\$1,649.91	\$0.00	\$1,649.91	\$8,249.57	\$1,099.94
<b>Total:</b>				\$52,921.50	\$47,629.36	\$39,691.13	\$39,691.13	\$0.00	\$7,938.23	\$0.00	\$7,938.23	\$39,691.13	\$5,292.14

Payment 2

PW	Cat	Payment Date	Complete	Project Amount	Total Eligible For Payment	Fed Share	Fed Share Paid	Fed Share Balance	ERAF Share Eligible	ERAF Paid	ERAF Balance	Total Paid	Local Match
122 (0)	C	10/15/2012	Yes	\$2,233.50	\$2,010.16	\$1,675.13	\$0.00	\$0.00	\$335.03	\$335.03	\$0.00	\$335.03	\$223.34
146 (0)	C	10/15/2012	Yes	\$5,687.15	\$5,118.43	\$4,265.36	\$0.00	\$0.00	\$853.07	\$853.07	\$0.00	\$853.07	\$568.72
155 (0)	C	10/15/2012	Yes	\$5,176.64	\$4,658.98	\$3,882.48	\$0.00	\$0.00	\$776.50	\$776.50	\$0.00	\$776.50	\$517.66
170 (0)	C	10/15/2012	Yes	\$3,161.31	\$2,845.18	\$2,370.98	\$0.00	\$0.00	\$474.20	\$474.20	\$0.00	\$474.20	\$316.13
<b>Total:</b>				\$16,258.60	\$14,632.75	\$12,193.95	\$0.00	\$0.00	\$2,438.80	\$2,438.80	\$0.00	\$2,438.80	\$1,625.85

Payment 3

PW	Cat	Payment Date	Complete	Project Amount	Total Eligible For Payment	Fed Share	Fed Share Paid	Fed Share Balance	ERAF Share Eligible	ERAF Paid	ERAF Balance	Total Paid	Local Match
204 (0)	C	12/7/2012	No	\$14,869.63	\$13,382.66	\$11,152.22	\$0.00	\$0.00	\$2,230.44	\$2,230.44	\$0.00	\$2,230.44	\$1,486.97
320 (0)	C	12/7/2012	No	\$10,793.85	\$9,714.47	\$8,095.39	\$0.00	\$0.00	\$1,619.08	\$1,619.08	\$0.00	\$1,619.08	\$1,079.38
329 (0)	F	12/7/2012	No	\$10,999.42	\$9,899.48	\$8,249.57	\$0.00	\$0.00	\$1,649.91	\$1,649.91	\$0.00	\$1,649.91	\$1,099.94
<b>Total:</b>				\$36,662.90	\$32,996.61	\$27,497.18	\$0.00	\$0.00	\$5,499.43	\$5,499.43	\$0.00	\$5,499.43	\$3,666.29