

# Town of Wheelock

## All Hazards Mitigation Plan



Town of Wheelock  
P.O. Box 1328  
Lyndonville, VT 05851

*August 6, 2005*

*Prepared in conjunction with Marc Brown, Local Emergency Manager  
in Wheelock and with the  
Northeastern Vermont Development Association  
program for All Hazards Pre-Disaster Mitigation*

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This Plan is not eligible for FEMA approval unless Wheelock becomes a member of the National Flood Insurance Program.

## Certificate of Local Adoption

### Town of Wheelock

#### A Resolution Adopting the All Hazards Pre-Disaster Mitigation Plan

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

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

NOW, THEREFORE BE IT RESOLVED that the Wheelock Selectboard adopts Annex \_\_ and the associated NVDA All Hazards Pre-Disaster Mitigation Plan.

\_\_\_\_\_  
Date

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

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

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

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

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

\_\_\_\_\_  
Attested to by Town Clerk

## Section One - Planning Process

### 1.1 Introduction and Purpose

This Annex, when used with the appropriate sections of the basic NVDA All-Hazards Plan, is an All-Hazards Mitigation Plan for the Town of Wheelock. The purpose of this plan is to assist the Town of Wheelock 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 Wheelock 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

The purpose of the Town of Wheelock pre-disaster mitigation plan is to minimize future hazards and correct reoccurring problems. In doing so, we can save lives, property and money. The plan allows the town to see problem areas through risk analysis and mitigation planning. Results may take time to come up with a realistic plan of correction for some problems. But with joint efforts, communication information and supplemental grants it can be done.

The purpose for pre-disaster mitigation is not to change the towns' operations or tax burden of our citizens, but to merely create a safer environment for our residents to live in. Nature and human error make up a large scale of disasters. This plan will help minimize these hazards.

## **1.2 About Wheelock**

Caledonia County  
Chartered: June 14, 1785 (Vermont Charter)  
Area: 25,613 Acres / 40.02 Square Miles  
Coordinates (Geographic Center): 72°05'W 44°35'N  
Altitude ASL: 790 feet  
Population (US Census, 2000): 621  
Population Density (persons per square mile): 15.5  
Tax Rate: \$2.057 ('03)  
Equalized Value: \$29,662,539 ('03)

## **1.3 Community Background and History**

The Town of Wheelock has 1.56 miles of Interstate 91, 2.84 miles of state highways consisting of Routes 122 and 16, and 28.76 miles of Class 3 roads. Class 4 roads are gravel and dirt and not required to be maintained at the same levels as the higher class roads. There are also many miles of rivers and streams that flow through the vast areas. Many residents live in somewhat remote areas while others live in the small village area.

There are three areas that make up the Town of Wheelock. Wheelock Village is located in the northern area next to I-91. This part of town borders Lyndonville, Sutton and Sheffield. This part of town is the lowest elevation.

South Wheelock is located more southeast of the Village, and borders the Towns of Lyndonville, North Danville, Stannard and Sheffield. Stannard Mountain is located in this part of town and is the highest elevation.

West Wheelock is located northwest of the village and is the most remote of the areas. This part of town has high and low elevations and borders the Towns of Glover, Greensboro, Stannard and Sheffield.

The Town of Wheelock has many high and low elevations, along with large forest and wetland areas. Interstate 91 and Route 122 are high traffic areas and transport large amounts of hazardous materials to and from Canada. There is very little industry, mostly agricultural and forestry. Most dwellings are single-family residents, family farms and town buildings. There is one small store with gas pumps and a few homes have municipal water.

There is a local land use plan in place, but there are no local zoning or building permits required to develop property in Wheelock.

The fire department operates in conjunction with Sheffield, which makes up the Sheffield/Wheelock Fire Department. There are three stations between the two towns with largest in Sheffield. Wheelock is adding a second bay onto the So. Wheelock Fire Station with an estimated cost of \$12,000 - \$15,000.

The Village of Wheelock is very close to I91 and local responders and officials are worried about potential HAZMAT incidents. The full-time St. Johnsbury fire and rescue department would be used for any decontamination incidents as they are part of mutual aid district. A high accident

location (HAL) exists on Route 122 for a ¼ mile stretch above the portion of Route 122 that is along the river. The trees on Stannard Mountain were hit by ice storm of 1998. The town does not have a history of ice jams. One small Class 3 road washes out regularly.

The Wheelock Town Hall is the evacuation site and Emergency Operations Center (EOC) for local residents. A generator is needed as there are none in town. Students in Wheelock go to the Millers Run USD #37 School in Sheffield with a combined population of 162 students. This school is also the main shelter in Sheffield but is also used for Wheelock. A large portable generator is needed to run the school.

There is a small school for 12-15 students in So. Wheelock. There are small 2-3 child day care centers. Fire department checks on elderly especially during power outages. The Fire Chief has a checklist for populations in need in the event of an evacuation, severe weather or massive power outage. Evacuation routes are Route 122 and Town Road 1 east and west.

### **Critical Facilities in Wheelock**

Children Day Care	Angela I Bora
Dams	Chandler Pond
Electric Utility	Central Vermont Public Service
Electric Utility	Vermont Electric Coop (VEC)
Electric Utility	Village of Lyndonville Electric
Electric Utility	Washington Electric Coop (WEC)
Emergency Shelter	Wheelock Town Office
Emergency Shelter	Sheffield Fire Station
Interstate Highway	Interstate - 91
State Highway	Route 122
State Highway	Route 16
Underground Tank (UST)	Wheelock Village Store
Water Supply	Wheelock FD 1

## **Section Two - Risk Assessment**

### **2.1 Identify Hazards**

Meeting Date: 1/30/04

Meeting Attendees: Marc Brown

The Local Emergency Management Coordinator identified several hazards that are likely in Wheelock. This individual has a thorough knowledge of the town through many years of direct involvement in community issues and the volunteer fire department.

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

<b>Possible Hazard</b>	<b>Likelihood</b>	<b>Impact</b>	<b>Community Vulnerability</b>	<b>Most Vulnerable</b>
<b>Tornado</b>	Low	Low	Low	Structures
<b>Flood</b>	Medium	Medium	Medium	Rte. 122, dirt roads
<b>Flash Flood</b>	Medium	Medium	Medium	Rte. 122, dirt roads
<b>Hazardous Materials</b>	Medium	Medium	Med/High	Roads, I91 & 122
<b>Radiological Incident</b>	Low	Low	Low	Residents, if near village
<b>Structure Fire</b>	Medium	Medium	Medium	Village, Rte. 122, residences
<b>Power Failure</b>	Med/High	Med/High	Low/Med	Residences, several towns, several days
<b>Winter Storm/Ice</b>	Med/High	Medium	Low/Med	Residences
<b>High Wind</b>	High	Medium	Low/Med	Trees down, loss of power
<b>Aircrash</b>	Low	Low	Low – High	Site specific (air flight path)
<b>Water Supply Contamination</b>	Low	Low	Low	Community system
<b>Hurricane</b>	Low	Low	Low	Power lines, residences
<b>Earthquake</b>	Low	Low	Low	Site specific
<b>Dam Failures</b>	Low	Medium	Low	Residences, businesses, infrastructure
<b>Drought</b>	Medium	Medium	Medium	Water supply/Fire service
<b>Chemical or Biological Incident</b>	Low	High	Low – High	Site specific
<b>Highway Incidents</b>	Medium	Med/High	Medium	Site specific. I91 & 122
<b>Wildfire/Forest Fire</b>	Low/Med	Medium	Low/Med	Farms, forest
<b>Landslide</b>	Low	Low	Low	Site specific
<b>School Safety Issues</b>	Low	High	High	Students, teachers, hostage issues - Sheffield school
<b>Terrorism</b>	Low	High	High	I91, H2O supply

**2.2 Profiling Hazards**

Only those hazards that are considered to be of the greatest vulnerability or likelihood in Wheelock will be profiled below. While those not being profiled are still important, they are considered a lower threat to the community where damage would be minimal and unlikely.

### **2.2.1 Fire**

Major fires that require disaster operations are very rare. There are very few multi-unit dwellings and no large industrial buildings. Forest fires are our biggest threat. With large forest areas and no roads into them, fires do escalate before we get into some areas. Multiple mutual aid departments and new lightweight water packs have improved response time, but more will be done. Wheelock will be looking for grant money to purchase a used forest fire vehicle or possibly find a surplus vehicle. The fire warden is active and has strict rules. Wheelock has had minimal drought conditions in the past and expects it will not be a problem in the future. Wheelock has gotten permission from many private pond owners to use their ponds for water sources if needed. Large equipment contractors are on call for the town if firebreaks or roads are needed. Wheelock does not have any dry hydrants.

South Wheelock has a pumper with 1,000 gallons and a tanker holds 1,800. Wheelock just purchased a used tanker that that holds 2,000 gallons, and that is located at west village town garage. Sheffield has 3 bays and holds 2 pumpers. Wildland fires are hazards and are caused by lightening and carelessness. There were eight volunteer fire department personnel for 7 hours on the backside of Stannard Mountain in W. Wheelock this past summer. The So. Wheelock fire station is not heated.

Wheelock has new lightweight packs, 3,000' of hose with 1" nozzles and wands.

### **2.2.2 Hazardous Materials**

Hazardous materials pose a risk to a large area of the town. Next to the forest fire, this could be the largest disaster Wheelock could face. It could affect a number of towns in the area because of the materials that are being transported. I-91 runs within a few hundred yards of the town and the area is susceptible to high winds and heavy rain and snow. Accidents are common and quite often involve commercial trucks.

Route 122 also has large amounts of hazardous materials traveling on it. The road has sharp curves and runs along the riverbank.

We have one store in Wheelock which has gas pumps. It is located in the middle of the village.

There are no superfund sites in the Town of Wheelock.

The Wheelock Fire Department trains in HAZMAT operations and keeps their response plans up-to-date.

### **2.2.3 Flooding**

Flooding is rare but does pose a threat to some buildings and roads. Because of some low areas, we do build roads up as we can. Possible flood locations are watched during flood warnings. A few rivers have been banked with large rocks to reduce the chance of erosion. Rivers and streams are watched for ice jams when weather is warm. If needed, a contractor will be brought in to break the ice. These operations will continue along with new strategies as needed.

Wheelock had received FEMA Disaster Declaration funds due to flooding in August 1998 and again in 2004 for a total of \$76,834 in damages. There is no history of individual repetitive damage in the community.

Aug-98	Sep-04	Total
\$ 49,737	\$ 27,097	\$ 76,834

Wheelock is looking into the National Flood Insurance Program and will be planning to be enrolled sometime in 2005. Flood areas designated on the FIRM maps are along Route 16 on the western edge of town and along Route 122 in the northern section of town. Both roads are state highways.

#### **2.2.4 Washouts**

Dirt road washouts are common in the entire area. Culvert washouts are much less since some new culverts have been installed. The road crew will continue to keep the culverts cleaned out. Because of the many remote areas, road washouts have caused citizens to become stranded. Deeper ditching and better gravel has helped but because of the steep roads and many streams, it continues to be a problem.

Road access permits will continue to be reviewed to assure proper size culverts are being installed.

#### **2.2.5 Severe Weather**

High winds, large snowstorms, heavy rains and thick ice storms are common in Wheelock. With high elevations and residents living in remote areas, this could be a very serious problem. With very cold winters and frequent power outages, we watch closely what the weather is going to do.

Wheelock officials have started talks with local utility companies and are currently discussing some ideas. One is to cut wider utility lines in the larger tree areas; another is to replace some of the older lines and poles. This will not get done quickly because it will be very costly and we will need to propose the cutting idea to land owners. Funding is sought to offset some of the cost. The power companies serving Wheelock are Lyndon Electric and Washington Electric.

Impassable roads are rare but do happen on occasion. Widening of some roads will make road maintenance quicker and more efficient.

Lightning strikes are common because of the high terrain and large amounts of ledge. Fires are the biggest threat from lightning.

#### **2.2.6 Terrorism**

The Town of Wheelock is a very small town, but as we have learned, no town is 100% terror free. The privately owned village water supply is very small and is located in the woods. There is a lock on it and it is checked for vandalism and water quality as regulations require. There is very little that terrorists would find in Wheelock. Even so, the Wheelock Emergency Manager is very active with other emergency organizations in preparing for a terrorist attack.

Although a plane crash is unheard of in Wheelock, some surrounding towns have had incidents and the threat is always there. The high mountains and in-flight refueling path for the US Airforce training programs makes it a threat more than some places.

#### **2.2.7 Plane Crash**

In the event of an airliner crash, we would not have the means of handling such an incident. Although our fire and EMS units have a great incident command system, we would require all resources available.

**2.3 Vulnerability: Overview**

In terms of vulnerability, Wheelock rated flooding, hazardous materials incidents, structure and forest fires as its greatest potential threats. Mitigation strategies are identified for the highest priority projects in Section Three. Only those hazards that were identified as likely risks to the town were profiled. While other types of hazards may cause smaller problems for the community, they are a lower risk.

***Summary of likely hazards that affect Wheelock in priority order.***

<b>Hazard</b>	<b>How Identified</b>	<b>Why Identified</b>
<b>Fire and Structure Fires</b>	Local officials/responders Emergency Manager	Large forest area, many residents burn wood.
<b>Hazardous Material Incidents</b>	Officials/emergency response teams Public concern	Hazardous materials on the I91 and Rte. 122. Winter driving conditions. Moose can be a problem.
<b>Flood/Flash Flood</b>	One past FEMA declarations Emergency Manager Flooding in unexpected areas	Wheelock is hit occasionally with flooding / flash flooding. Road damage is a problem.
<b>Severe Weather</b>	Emergency Manager	Roads blocked, hazardous driving. Power outages.
<b>Terrorism</b> <i>Wheelock is prepared for an incident but the probability is low.</i>	Proximity to Canada and international transportation routes.	Communities along borders and main transportation corridors may experience an unintentional terrorist impact but probability is low.

**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 10 structures in or near the flood areas depicted on the NFIP maps.

**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 Wheelock in 2003 was \$64,643. The Equalized Value for all properties in Wheelock in 2003 was \$29,662,539. If one percent (1%) of all properties in Wheelock were damaged, the value would be assessed at \$29,662.

**2.6 Analyzing Development Trends**

Wheelock experience an estimated decrease of seven persons or 1.1% from 2000 – 2003. Wheelock is not a member of the National Flood Insurance Program (NFIP). They do not have any zoning in place to guide future development.

**Population Increase 2000 to 2003**

Town	Estimated Pop 2003	Census Pop 2000	Decrease
Wheelock	614	621	-1.1%

**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.
- **NFIP** – National Flood Hazard Insurance Program
- **Flood Regulations** – Some communities have adopted Flood Regulations but may not be a member of the NFIP program.
- **Subdivision Regulations** – Communities that have adopted Subdivision Regulations.
- **Codes and S = Codes and Standards** – These 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.
- **Culvert Inventory** – These communities have had their culverts inventoried for size and effectiveness by Lyndon State College under contract to NVDA.
- **VRC** - Vermont Red Cross does not have a Shelter Pre-Agreement with the community. If a Pre-Agreement was in effect it will allow for a more efficient use of the VT Red Cross if and when needed.

**Table 3-A Current Wheelock Tools in Effect**

Town	Town Plan	Zoning	NFIP	Flood Regs	Subdivision	Codes &Standards	Culvert Inv.	VT Red Cross
Wheelock	YES	N	N*	N	N	YES	N	N

\* Interested in joining the NFIP.

Two new large culverts were installed recently through the Vermont Local Roads Program. A repeater radio was purchased to enhance radio communications. Wheelock has 5 channels on their emergency radios.

### 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.

### 3.2 Community Preparedness Goals

Overall, Wheelock is working to decrease its risk to flooding, hazardous material incidents and forest fires through proactive planning, policies and mitigation actions. Other lesser risks are being addresses 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.
- #1 Become a member of the National Flood Insurance Program - Wheelock never joined when Federal Insurance Rate Maps (FIRM) were completed on 11/15/75
- Educate the public in liability of construction in flood zones
- Continue to work on riverbanks that pose threats
- Continue to build roads up in low-lying areas
- Continue to upgrade ditching along roads
- Continue to add more gravel to roads
- Continue to rebuild bridges and culverts stronger and larger
- Install dry hydrants with grant money
- Work with utility companies to widen utility lines and upgrade as necessary
- Continue getting the public involved in Community Emergency Response Team (CERT) program
- Continue to offer a free smoke detector program
- Add to the existing South Wheelock Fire Station
- Store sandbags
- Pre-agreement with the Vermont Red Cross is in the works
- Continue to secure fire-fighting equipment as grants become available. Wheelock has recently received \$10,000 for radio equipment through Homeland Security Funds.

Contact for resources needed is Marc Brown, Local Emergency Management Director, (802) 626-3361 (w) or (802) 626-7244 (h).

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

Wheelock 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 declining volunteer population. The shelter has not been certified by the Vermont Red Cross but local officials are interested in doing so.

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

Wheelock has recently updated their Rapid Response Plan. The fire department has actively sought funds for upgrading their response equipment through recent Homeland Security grants.

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

Wheelock 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**

Wheelock does have a town plan but no zoning. They are not a member of the National Flood Insurance Program. All development in or near the identified flood areas must conform to zoning standards.

#### **3.3.4 Protection of Town Records**

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

### **3.4 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 attend professional training sessions.

**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).

**Insurance Programs.**

- Participate in NFIP.

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

- Wheelock does not have a municipal plan or local zoning. They have not established Flood Hazard Areas through the NFIP.

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

- A map of Critical Facilities is attached.

**3.5 Analysis of Mitigation Actions**

Local officials in Wheelock 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 Wheelock 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.
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### 3.6 Implementation of Mitigation Actions

Flooding, the potential for hazardous material incidents, structure and forest fires are the main threats to Wheelock. 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 mitigation action determined to have the highest priority was the most cost effective alternative to the community. Readiness and timeliness of project was also important.

The evaluating of the STAPLEE criteria is takes into consideration the best available information, any engineering evaluations, and best judgment. The action listed in Table 3-B is important to community, cost effective and feasibility to the community.

**Table 3-B Mitigation Projects by Priority**

Project/Priority	Mitigation Action	Who is Responsible	Time Frame and Potential Funding	Initial Implementation Steps
Consider becoming a member if the National Flood Insurance Program (NFIP) HIGH	Will provide insurance protection for residents and businesses.	The Selectboard	2005/6 – No funds needed	Contact NVDA for assistance to begin the flood hazard planning process. 802-748-5181.
Two generators for emergency shelters – one at school and one at Emergency Operations Center.	Will provide back-up power at shelter and EOC. Needed due to frequent power outages.	Selectboard and local emergency management coordinator.	2005/6 – Homeland Security Grants, HMPG, EMPG	Contact Vermont Emergency Management for grant information. 800-347-0488
Need a used four-wheel drive with pump and small tank for forest fire access	Will provide access to difficult terrain when forest fires break out.	Fire Chief/LEMC	2005/6 – Homeland Security Grants, Fire Grants	Seek appropriate grant source and apply for funds.
Red Cross Pre-Agreement	Will help with setting up shelters quickly and efficiently.	Selectboard and local emergency management coordinator.	2005/6 – No funds needed	Contact Vermont Red Cross - 800 - 660-9130
GIS mapping of NFIP areas	Identify flood areas with vulnerable structures consistent with Vermont GIS mapping effort.	Northeastern Vermont Development Association	2006/7 – FEMA FMA funds, HMGP or EMPG funds	Coordinated statewide NFIP mapping effort for all towns.

## 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 Wheelock 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 Wheelock 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 Crosswalk 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 Vermont Emergency Management (SHMO) staff and then FEMA Region I staff.
- 4.2.7 VEM and FEMA comments will be incorporated into the plan.
- 4.2.8 The Selectboard will warn the plan for approval at its regular meeting.
- 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 by local officials, 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. These updates will most likely depend whether or not there have been significant events or political changes that would trigger the need for new mitigation measures. To ensure that the plan remains current and relevant, it is important that it be updated periodically. The plan should be updated every five years in accordance with the following procedure and based on ongoing support for mitigation planning from FEMA:

- a. The Town of Wheelock will consider formal incorporation of this Local All-Hazard Mitigation Plan into the municipal comprehensive plan as described in 24 VSA, Section 4403(5), as well as incorporation of proposed new mitigation actions into the municipality's long-term planning process.

- b. NVDA will continue to provide assistance with land use planning, zoning, NFIP adoption, and Bridge and Culvert studies. NVDA will maintain and Emergency Planning component to its array of technical assistance available to local communities.
- c. Wheelock will review the draft update and submit a copy to VEM and FEMA when required.
- d. Input from local officials and community members will be incorporated into the All Hazards Plan.
- e. Communities needing assistance in applying for HMGP funds or PDM-C funds are encouraged to seek assistance from the NVDA staff.

#### **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



