

Town of Plainfield, NH

Hazard Mitigation Plan



Final Draft

August 2009

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SECTION I: INTRODUCTION

BACKGROUND

The New Hampshire Homeland Security and Emergency Management (NHHSEM) has a goal for all communities within the State of New Hampshire to establish local hazard mitigation plans as a means to reduce future losses from natural or man-made hazard events before they occur. In 2008, the Town of Plainfield received an Emergency Management Planning Grant and hired Hubbard Consulting LLC to update the 2005 Plan.

PURPOSE

The *Plainfield Hazard Mitigation Plan* serves as a strategic planning tool for use by the Town of Plainfield in its efforts to reduce future losses from natural and/or man-made hazard events before they occur. This *Plan* does *not* constitute a section of the Master Plan.

AUTHORITY

This Hazard Mitigation Plan was prepared in accordance with the Disaster Mitigation Act of 2000 (DMA), Section 322, Mitigation Planning. Accordingly, this Hazard Mitigation Plan will be referred to as the “Plan”.

SCOPE OF THE PLAN

The scope of the *Plainfield Hazard Mitigation Plan* includes the identification of natural and human caused hazards affecting the Town, as identified by the Plainfield Hazard Mitigation Committee. The hazards were reviewed under the following categories as outlined in the State of New Hampshire Hazard Mitigation Plan:

- I. Flooding (Including hurricanes, 100-year floodplain events, debris-impacted infrastructure, erosion, mudslides, rapid snow pack melt, river ice jams, dam breach and/or failure)
- II. Wind (Including hurricanes, tornadoes, “Nor’easters,” downbursts and lightning)
- III. Fire (Including forest fires and issues such as isolated homes and residential areas)Ice & Snow Events (Including heavy snow storms, ice storms, and “Nor’easters,”)
- IV. Seismic (Including landslides and other geologic hazards related to seismic activity)
- V. Other Events (Including hazardous materials events and terrorism)

METHODOLOGY

In 2005, the Plainfield Hazard Mitigation Committee in conjunction with the UVLSRPC, developed the content of the *Plainfield Hazard Mitigation Plan* by following the process. The Committee held a total of four meetings beginning in October 2004 and ending in February 2005. *All meetings were posted at the Town Office and open to the general public.* The following are dates of meetings that were vital to the development of this Plan:

- ❖ October 26, 2004
- ❖ November 23, 2004
- ❖ December 21, 2004
- ❖ February 15, 2005

In 2009, Hubbard Consulting LLC was contracted to coordinate and develop the Update of the 2005 Plan. During the 2009 Update, the Committee (listed on page 5) met on May 19, 2009 and June 11, 2009 to review and revise the Plan. Prior to the first public information meeting town department heads were notified and public notices were posted to residents and business owners requesting that they consider serving on the Committee. The planning documents used in the planning process (i.e. agendas, attendance sheets) are included in Appendix C. The committee analyzed and revised Section II, III, IV and V of the 2005 Plan and provided input to update them.

To complete this Plan, the Hazard Mitigation Committee followed the following planning steps:

Step 1: Map the Hazards

Committee members identified areas where damage from natural disasters had previously occurred, areas of potential damage, and man-made facilities and infrastructure that were at risk for loss of life, property damage, and other risk factors.

Step 2: Determine Potential Damage

Committee members identified facilities that were considered to be of value to the Town for emergency management purposes, for provision of utilities and services, and for historic, cultural and social value. A GIS-generated map was prepared to show critical facilities identified by the Plainfield Hazard Mitigation Committee. In addition, a summary listing of "Critical Facilities" is presented at the end of Section II.

Step 3: Identify Plans/Policies Already in Place

The Committee identified existing mitigation strategies which are already implemented in the Town related to flood, wind, fire, ice and snow events and earthquakes. A summary chart and the results of this activity are presented in Section III of the *Plan*.

Step 4: Identify the Gaps in Protection/Mitigation

Existing strategies were then reviewed for coverage, effectiveness and implementation, as well as need for improvement. A summary chart and the results of these activities are presented in Section III of the *Plan*.

Step 5: Determine Actions to be Taken

During an open brainstorming session, the Hazard Mitigation Committee developed a list of other possible hazard mitigation actions and strategies for the Town of Plainfield. Ideas proposed included structural projects, planning and public information.

Step 6: Evaluate Feasible Options

The Hazard Mitigation Committee reviewed each of the hazard mitigation actions and strategies that were identified in the brainstorming session using Evaluation Charts. Each strategy was rated (good, average, or poor) for its effectiveness related to several factors (e.g., damage reduction, environmental impact, social acceptability, financial feasibility). Each factor was then scored according to the revised STAPLEE chart and all scores were totaled for each strategy. Strategies were ranked by overall score for preliminary prioritization then reviewed again under step eight.

Step 7: Coordinate with other Agencies/Entities

The Plainfield Master Plan was reviewed, to determine if any conflicts existed or if there were any potential areas for cooperation. The Plainfield Hazard Mitigation Committee coordinated with NH HSEM field staff as well as with the Plainfield Health Officer, who was simultaneously updating the Town's Emergency Operations Plan. Both Kimball Union Academy and Plainfield School officials were given a chance to review the draft Plan and copies were made available at the Town Library for the general public to review as well.

Step 8: Determine Priorities and Action Plan

The Committee reviewed the preliminary prioritization list in order to make changes and determine a final prioritization for new hazard mitigation actions and existing protection strategy improvements identified in previous steps. Finally, the committee prioritized the projects and listed them in the Mitigation Action Plan found at the end of Chapter 6.

Step 9: Adopt and Monitor the Plan

UVLSRPC and Hubbard Consulting LLC compiled the results of steps one through eight in a draft document, as well as helpful and informative materials from the State of New Hampshire Natural Hazard Mitigation Plan, which served as the model for the Plainfield Hazard Mitigation Plan.

Hazard Mitigation Plan Committee Members

NAME	AFFILIATION
David R. Best	Meriden Fire Chief
Jim McCarragher	Plainfield Emergency Management Director
Frank H. Currier	Plainfield Fire Chief
Gordon A. Gillens	Plainfield Police Chief
Stephen Halleran	Plainfield Town Administrator
Jane Hubbard	Hubbard Consulting LLC
Bonnie M. Lockwood	McGrew Management Services LLC

HAZARD MITIGATION GOALS AND OBJECTIVES

The *State of New Hampshire Natural Hazards Mitigation Plan*, which was prepared and is maintained by the New Hampshire Homeland Security and Emergency Management (HSEM), sets forth hazard mitigation goals and objectives for the State of New Hampshire. The Town of Plainfield concurred with these goals and adopted them for the Town.

1. To improve upon the protection of the general population, the citizens of the town and guests, from all natural and man-made hazards.
2. To reduce the potential impact of natural and man-made disasters on the town's critical support services.
3. To reduce the potential impact of natural and man-made disasters on critical facilities in the town.
4. To reduce the potential impact of natural and man-made disasters on the town's infrastructure.
5. To improve emergency preparedness.
6. To improve the town's disaster response and recovery capability.
7. To reduce the potential impact of natural and man-made disasters on private property.
8. To reduce the potential impact of natural and man-made disasters on the town's economy.
9. To reduce the potential impact of natural and man-made disasters on the town's natural environment.
10. To reduce the town's liability with respect to natural and man-made hazards generally.
11. To reduce the potential impact of natural and man-made disasters on the town's specific historic treasures and interests as well as other tangible and intangible characteristics which add to the quality of life of the citizens and guests of the town.
12. To identify, introduce and implement cost effective hazard mitigation measures so as to accomplish the town's goals (above) and to raise the awareness and acceptance of hazard mitigation.

SECTION II: COMMUNITY PROFILE

LOCATION AND NATURAL FEATURES¹



Plainfield is located in Sullivan County in the northern portion of the Connecticut River Valley. As of the 2000 census, the town had a total population of 2,241. Over fifty years, Plainfield's population increased by a total of 1,230 residents, from 1,011 in 1950 to 2,241 residents in 2000. The 2003 Census estimate for Plainfield was 2,393 residents, which ranked 118th among New Hampshire's incorporated cities and towns.

Located in the northern portion of the Connecticut River Valley, Plainfield is situated opposite the confluence of the Ottauquechee and Connecticut Rivers. The Town has markedly varied terrain, including a mix of slopes, wet lowlands, river bottom, upland terraces, and the summit of Croydon Mountain. The Town is divided into three general regions, flat terrace by the River, hilly uplands, and the Croydon Mountain range.

Plainfield's streams and brooks drain four major watersheds: Connecticut River, Mascoma River, Blood's Brooks, and Blow-Me-Down Brook. Ultimately, all of Plainfield's surface water flows into the Connecticut River.

¹ Plainfield Master Plan, 2002 Update

Floodplains for this Plan are defined as the 100-year and 500-year flood hazard zones, as depicted on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM). Plainfield participates in the National Flood Insurance Program (NFIP) administered by FEMA. In order to enable landowners to qualify for federally insured flood insurance, the Town, in its administration of site plan review, subdivision regulations and zoning, must regulate development in the floodplain using federal standards.

National Flood Insurance Program (NFIP)

The town is currently participating in the National Flood Insurance Program (NFIP). The community has Flood Insurance Rate Maps (FIRM) dated 05/23/06. There are 12 NFIP policies and there have been no claims made since 1975. There are no repetitive loss properties.

	Policies in Force	Premium	Insurance in Force	Number of Closed Paid Losses	\$ of Closed Paid Losses	Adjustment Expense
Single Family	12	\$10,129	\$2,099,300	0	\$0.00	\$0.00
2-4 Family	0	\$0	\$0.00	0	\$0.00	\$0.00
All Other Residential	0	\$0	\$0	0	\$0.00	\$0.00
Non Residential	0	\$0	\$0	0	\$0.00	\$0.00
Total	12	\$10,129	\$2,099,300	0	\$0.00	\$0.00

DEVELOPMENT TRENDS

According to the Master Plan, Plainfield's land use plan "is based on the premise that Plainfield's natural resources should be conserved" and "future development...should be directed and limited by the ability of the environment to support that development." With its attractive, rural location and proximity to Lebanon and Claremont, Plainfield is experiencing development pressures. Less naturally suitable lands, such as parcels containing wetlands, steep slopes and other features have recently become candidates for development. The Town of Plainfield aims to regulate development so that natural areas with high resource values, such as floodplains and wetlands, are protected.

HAZARD IDENTIFICATION AND RISK ASSESSMENT

PROFILE OF PAST AND POTENTIAL NATURAL HAZARDS - PLAINFIELD

The Plainfield Hazard Mitigation Committee reviewed the list of hazards provided in the State of New Hampshire Hazard Mitigation Plan, and some hazard history for the State of New Hampshire and Sullivan County in particular. A table of past hazard events in the region can be found on pages 13 Armed with this information, the Committee completed the Hazard Risk Table for the Town of Plainfield, located on page 16.

FLOODING

100-year Floodplain Events

The Hazard Mitigation Committee agreed that the following areas are the most vulnerable to flooding events:

- ❖ River Road
- ❖ Penniman Road; as Stage, Whitaker, and Underhill Roads get more developed there is likely to be more flooding.
- ❖ “Flood House” on River Rd. (residence) – small brook floods behind house
- ❖ Willow Brook Rd. – prone to all wind and winter events as well

According to a report from the Selectmen in 1973, the Flood of 1973 was the worst flood in recent history. Extensive damage to the town’s highways and bridges occurred during the period of June 30 through July 5, and “much of the remainder of the year was devoted to putting things back together.” Plainfield’s damage estimate was the second highest in the state of New Hampshire. The engineering survey placed combined damage to the highways, bridges, culverts, drainage facilities and streambeds at \$184,000. Public property damage was heaviest in western portion of town, with River Road sustaining enormous damage in the form of washed-out culverts, erosion of subgrade material and landslides. The Hell Hollow Bridge was swept away; culverts on Old County, Kenyon and many other roads were undermined, dislodged and wiped out by the heavy runoff. Blow-Me-Down and Blood Brooks were clogged with trunks of dead trees, gravel, muck and other material.

River Ice Jams

The Cold Regions Research and Environmental Laboratory (CRREL) Ice Jam Database lists four past ice jam events in Plainfield, three on the Connecticut River and one on True's Brook. The Committee agreed that the following two areas are most vulnerable to ice jam events:

- ❖ River Road
- ❖ Willowbrook Rd.

Dam Breach and Failure

The Committee agreed that the Wilder Dam upstream is a significant hazard risk, but that no dams in Plainfield pose great risk. Sky Ranch Pond Dam, however, has been vulnerable to beaver damage and could wash out part of Route 1 2A.

WIND (Moderate Vulnerability)

All areas of Plainfield are potentially at risk if a hurricane reaches Grafton County, NH.

Hurricanes

Since 1635, ten hurricanes have reached New Hampshire: 1635, 1778, 1804, 1815, 1869, 1938, 1954, 1960, 1985 and 1991.¹⁰ The 1938 Hurricane was the worst storm on record in town of Plainfield¹¹. When it reached Plainfield, the hurricane was estimated to have winds of nearly 80 miles per hour with gusts up to 125 miles per hour. Trees blew down, many roofs blew off, many outbuildings were completely destroyed, and Kimball Union Academy's gymnasium roof partially collapsed. The town lost electric service for two weeks, and phone service for nearly four weeks. Virtually all of the roads were impassable because of the hundreds of trees down. "The most far-reaching destruction in Plainfield was to the forests...and "because of the huge glut of logs on the market, the timber became almost worthless."

Tornadoes

All areas of Plainfield are potentially at risk for property damage and loss of life due to tornadoes. The Committee recalled an event on August 13, 1999: a tornado passed through Ladieu Rd. and Willow Brook Rd., and into Methodist Hill and Enfield. Trees went down and a couple of roofs were damaged, but there were no injuries reported.

Downbursts

Potentially all locations in Plainfield are at risk for property damage and loss of life due to downbursts. The Committee recalled a microburst event in 1999 on River Road, which caused a tree to land on a FedEx truck (there were no human injuries).

SEVERE WINTER WEATHER *Heavy Snow Storms*

All areas of Plainfield are potentially at risk for property damage and loss of life due to heavy snows. The Committee noted the following:

- ❖ Meriden is higher geographically than Plainfield Village, so there is a lot of variation in storm events
- ❖ Methodist Hill on Enfield side – This is a high-elevation, fairly dense residential development, attractive because of its proximity to Lebanon. There have been increasing calls for emergency services to this section of town.

Ice Storms

All areas of Plainfield are potentially at risk for property damage and loss of life due to ice storms. During the 1998 Ice Storm, Methodist Hill residents were isolated; otherwise, the storm “missed” Plainfield.

WILDFIRE AND STRUCTURE FIRE

There have been 83 major fires (both structure and wildfires) in Plainfield between 1785 and 1988. The three biggest fires are noted below:

- ❖ June 1953: Corbin Park fire started by lightning and burned until late fall. Some areas were not out until snow flew. This event cost the town of Plainfield \$6,534.37 and cost the State of NH over \$1 million. No homes were destroyed in this forest fire.
- ❖ October 23, 1982: The Plainfield Town Highway Garage was destroyed by fire.
- ❖ November 29, 1984, fire in Plainfield Village: Northern New England Storage, Inc., steel frame building, two businesses, and an apartment burned. People were evacuated from the area because of toxic fumes.

The Committee noted the following about fires in Plainfield:

- ❖ Heavily forested town
- ❖ Threats: lightning strikes, logging, tornado wind, sleet storms, older debris, high tension power line from Wilder Dam
- ❖ French’s Ledges – event a few years ago took a lot of manpower. Development is increasing in this area
- ❖ Corbin Park – large fire
- ❖ Fire at old food processing shed on 12A

SEISMIC

Earthquakes

All areas of Plainfield are potentially at risk for property damage and loss of life due to earthquakes. The Committee recalled an event a few years ago. One Committee member noted that there were some structural cracks in his home on Route 12A near Stage Rd.

Landslides

According to the Plainfield Hazard Mitigation Committee, there is landslide potential on Willowbrook Rd., which is the biggest commuting road (Town road); Cornish and Claremont residents also use this road for commuting.

OTHER HAZARDS

The Committee discussed the following other hazards that the Town of Plainfield may be vulnerable to.

1. Hazardous Materials

The Committee noted the following areas vulnerable to a hazardous materials event:

- ❖ The commuter routes, Routes 12A and 120
- ❖ I-91: Close-enough proximity that a major event could have impacts in Plainfield
- ❖ Train derailment in VT: Could also impact Plainfield

2. Terrorism

The following areas, near Plainfield, were noted as vulnerable to terrorist attacks.

- ❖ Dartmouth Hitchcock Medical Center
- ❖ Wilder Dam
- ❖ I-91
- ❖ Kimball Union Academy and Runnemedede School in Plainfield: Both have good emergency plans to deal with intruders, etc.

4. Drought

Plainfield has had some water supply issues during drought years. Drought will also increase the risk of wildfire, especially in areas of high recreational use and as more timberland is set-aside as non-harvested timberland, the potential for the risk of wildfire will increase.

- ❖ People with shallow wells routinely out of water during dry years
- ❖ Plainfield Water District – many improvements needed; about 200 people dependent on this source

5. Health Epidemics/Risks

The Committee briefly discussed both health epidemics and radon potential, and felt the risk to be low for both. However, they did note the following vulnerabilities were such an event to occur:

- ❖ Large senior population in town
- ❖ Two mobile home parks

6. Airplane Crashes

The flight zones from Lebanon Airport pass over Plainfield, and there have been several crash incidents in the past 30 years. There is the potential for mass casualties, as well as forest fire incidents. This type of incident should be planned for in the Town's Emergency Operations Plan.

Past Hazards Events in Plainfield, Sullivan County, and the State of New Hampshire

Hazard	Date	Area Affected (River Basin or Region)	Remarks/Description
Flooding	March 11-21, 1936	Statewide, including Sugar River	Double flood; due to rainfall and snowmelt
Flooding	September 21, 1938	Statewide	Hurricane
Flooding	August 1955	CT River Basin	Heavy rains caused extensive damage throughout
Flooding	6/30 – 7/5, 1973	Plainfield	2 nd highest damage in State of NH; culverts, bridges, streambeds, drainage facilities
Flooding	April 1976	Connecticut River	Rain and snowmelt
Flooding	July - August 1986	Statewide	Severe summer storms: heavy rains, tornados flash flood, and severe winds
Flooding	August 7-11, 1990	Statewide	A series of storm events with moderate to heavy rains.
Flooding	August 19, 1991	Statewide	Hurricane Bob - effects felt statewide
Flooding	October 1996	North/West NH	Sullivan County Declared: FEMA-DR-1077-NH
Flooding	October - Nov. 1995	North/West NH	Sullivan County Declared: FEMA DR-1144-NH
Flooding	June - July 1998	Central & Southern NH	Sullivan County Declared: FEMA DR-123 1-NH
Flooding	October 2005 Floods	Southern NH	Rainfall amounts ranged from around 3 inches in southern New Hampshire up to 9.26 inches at Pinkham Notch. This resulting flooding of small rivers and streams caused additional damage to roads that had been damaged earlier in the month.

Hazard	Date	Area Affected (River Basin or Region)	Remarks/Description
Flooding	April 16, 2007	Statewide	A Nor'easter came through New Hampshire and left behind another round of flooding for many of the state's communities. For many of these communities it was the second time within a year that they were affected by flooding that met or exceeded the 100-year flood. In Plainfield the flooding damaged River Road and Willow Brook Road. The town received \$35,000 in HMGP money.
Ice Jam	March 24, 2003	Plainfield	3-mile long jam on CT River above Sumner Falls
Ice Jam	March 26, 1992	Plainfield	Shallow bend in True's Brook. Caused road flooding and
Ice Jam	March 20, 1968	Plainfield	Ice piled up at Sumner Falls caused water to back up over sections of River Road. Worst section was near William McNamara farm; water was too deep to drive through.
Ice Jam	January 29, 1959	Plainfield	9-mile jam on CT and White Rivers; extended from 3 miles below White River bridge on CT River up to West
Severe Wind	July 18, 2006	Plainfield	Severe winds downed several trees in town.
Severe Wind	August 16, 2007	Plainfield	A severe thunderstorm downed numerous trees and power lines in Plainfield. Numerous severe thunderstorms produced damaging winds and large
Severe Wind	May 9, 2009		Severe downburst downed many trees and closed some roads for two days.
Tornado	May 23, 1782	Sullivan County	No further information available
Tornado	September 9, 1821	Sullivan County	" "
Tornado	July 1, 1831	Sullivan County	" "
Tornado	August 13, 1999	Plainfield	Downed trees and roof damage
Microburst	1999	Plainfield	River Road; tree landed on FedEx truck
Hurricane	September 21, 1938	Statewide	Gusts up to 125 miles per hour; lost phone and electric
Fire	June 1953	Plainfield	Corbin Park; forested area
Fire	October 23, 1982	Plainfield	Town Highway Garage destroyed by fire
Fire	November 29, 1984	Plainfield	Businesses and an apartment burned; toxic fumes were
Winter Storms ("Nor'easters, blizzards, snowstorms)	Too numerous to mention here	Northeast	Most notable events between the years 1955-1985: blizzards of February 1958 and January 1966, triple snowstorms of 1960/61 winter, wind and snowstorm of February 1978, "Presidents' Day Storm of 1979, and
Winter Storms ("Nor'easters, blizzards, snowstorms)	February 10-11, 2005	New England	An intensifying area of low pressure slowed significantly as it moved into the Gulf of Maine on the 10th of February resulting in a widespread heavy snowfall across much of New Hampshire from the early morning hours of the 10th into the afternoon of the 11th. Accumulations of 2 to 33 inches were reported across the state with the highest totals occurring in central and northern portions of the state
Ice Storm	Dec. 17-20, 1929	NH	Disruption and damage to telephone, telegraph, and power system.
Ice Storm	Dec. 29-30, 1942	NH	Glaze storm; severe intensity

Hazard	Date	Area Affected (River Basin or Region)	Remarks/Description
Ice Storm	Dec. - Jan., 1969/70	NH	Power disruption to many communities
Ice Storm	Jan. 8-25, 1979	NH	Major disruptions to power and transportation
Ice Storm	January 7, 1998	NH	52 communities in nine counties impacted, six injuries, one fatality, road closures, power outages, telephone service failure. other damages.
Ice Storm	December 11, 2008 Ice Storm	New Hampshire	New England was blanketed with ice and snow during the December 11 - 12, 2008 winter storm. The weight of the ice caused branches to snap, and trees to either snap or uproot, and brought down power lines and poles across the region. About 400 thousand utility customers lost power during the event, with some customers without power for two weeks. Property damage across northern, central and southeastern New Hampshire was estimated at over \$5 million. In Plainfield the local EOC was activated and the local shelter opened for 3 days. Emergency responders and town officials canvassed neighborhoods to determine needs (shelter, medical, transportation, etc). The Town received \$15,500 in
Earthquake	December 20, 1940	Ossipee, NH	5.5 on Richter scale (this list of earthquakes are those with magnitude 4.2 or more 1924 - 1989)
Earthquake	December 24, 1940	Ossipee, NH	5.5
Earthquake	December 28, 1947	Dover-Foxcraft, ME	4.5
Earthquake	June 10, 1951	Kingston, RI	4.6
Earthquake	April 26, 1957	Portland, ME	4.7
Earthquake	April 10, 1962	Middlebury, VT	4.2
Earthquake	June 15, 1973	In NH @ Quebec border	4.8
Earthquake	January 19, 1982	West of Laconia, NH	4.5

The following tables summarize the impact and probability of natural and man-made hazards.

Natural Hazards	Vulnerable areas/structures	Severity	Probability* In 25 years	Risk Severity x Probability
		Probability of death or injury, physical damage 0: n/a 1: Low 2: Moderate 3: High 4: Catastrophic	Likelihood this will occur 0: Improbable 1: Remote 2: Occasional 3: Probable 4: Frequent	0-3: Low 4-6: Moderate 7-9: High 10-12: Severe
Severe Winter Weather	Higher-elevations, Methodist Hill; Meriden Forested areas;	3	4	12
Lightning	Higher elevation areas have an increased probability, such as the areas with cell towers	2	4	8
Severe Wind (Tornado/ Downburst)	Trees, structures, utilities	2	4	8
Flood	River Road, Penniman Road, Willow Brook Road, culverts, 1 residence	2	3	6
Landslide	Willowbrook Road; road damage; risk to drivers and homes	2	2	4
Wild/Forest Fire	Forested areas; structures; loss of life, high fuel load areas	2	2	4
Earthquake	KUA dorms, Plainfield and Meriden water storage tanks	3	1	3
Dam Failure	Roads and infrastructure	2	1	2
Drought	Residences with shallow wells; Plainfield Water District	1	2	2
Hurricane	Trees, roofs, utilities	2	1	2
Extreme Heat	Due to their widespread nature, a period of extreme heat would affect the entire town.	1	1	1
Hail	None identified	1	1	1
Avalanche		N/A	N/A	N/A

Human Caused Hazards	Severity	Probability* In 25 years	Risk Severity x Probability
	Probability of death or injury, physical damage 0: n/a 1: Low 2: Moderate 3: High 4: Catastrophic	Likelihood this will occur 0: Improbable 1: Remote 2: Occasional 3: Probable 4: Frequent	0-3: Low 4-6: Moderate 7-9 High 10-12: Severe
Utility Interruption	3	3	9
Haz Mat (Transport)	3	2	6
Mass Casualty (Trauma or Medical)	2	2	4
Armed Attack (assault, sniper)	3	1	3
Urban Fire	3	1	3
Civil Disorder	2	1	2
Bomb Threat	1	1	1
Haz Mat (Fixed)	1	1	1
Transport Incident (plane, etc.)	1	1	1
Biological Terrorism	3	0	0
Radiological Release	3	0	0
Terrorist Attack (WMD)	3	0	0

CRITICAL FACILITIES/LOCATIONS

The Critical Facilities section is divided into five categories. The first category contains critical facilities needed for emergency response in the event of a disaster. The second category contains critical facilities that are not utilized for emergency response. The third category contains populations and facilities the Committee wishes to protect in the event of a disaster. The fourth category includes areas of town that are generally prone to hazard events. The fifth category contains facilities that have been considered as potential resources for services or supplies in the event of a disaster. The “Critical Facilities” map at the end of this chapter identifies the facilities in all categories.

1. Critical Facilities Necessary for Emergency Response

1. Police Dept. Vehicles (Not a facility, but most critical equipment for Police)
2. Plainfield Fire Station
3. Meriden Fire Station
4. Meriden Town Hall Offices
5. Highway Garage
6. Meriden Wastewater Treatment Facility
7. Plainfield and Meriden Water Districts
8. Cornish Rescue Squad Headquarters (Cornish)
9. Primary Emergency Shelter: Kimball Union Academy (KUA) Dining Hall
10. Potential Emergency Shelters: Plainfield Community Baptist Church, Christ Community Church, Meriden Congregational Church

2. Facilities Not Necessary for Emergency Response

1. Plainfield Old Town Hall
2. Plainfield Post Office
3. Meriden Post Office
4. Philip Read Memorial Library
5. Meriden Public Library

3. Facilities & Populations to Protect

1. Plainfield Elementary School
2. Runnemedede School
3. Kimball Union Academy (and daycare)
4. Singing Hills Retreat

4. Critical Areas

1. River Road
2. Penniman Road
3. Willow Brook Road
4. Methodist Hill

Critical Facilities in Plainfield

Facility Name	Generator	In 100-Year	Type of Hazard Impact Most Vulnerable To	\$ Value
Meriden Fire Station	Yes	Yes	Flooding, HazMat (gas station across street)	
Plainfield Fire	Yes	No	Wind (metal building)	
Meriden Town Hall Offices	No, but wired	No	KUA Water Tank breach, wind events (slate roof)	\$320,500
Meriden Highway Garage	No	No	Fire	\$189,400 (including sheds)
Meriden WWT Facility	Yes	No	None	
Plainfield Water District (and Pump House)	No	No	Flooding if it bursts, Terrorism	
Meriden Water District	No	No	None	
Plainfield Old Town Hall	No	No	None	\$248,100
Plainfield Post Office	No	No	Terrorism/HazMat	
Meriden Post Office	No	No	Terrorism/HazMat	
Philip Read Memorial Library	No	No	None	\$227,400
Meriden Public Library	No	No	Earthquake (brick building)	\$170,800
Plainfield Community Baptist Church	No	No	Earthquake (Structural cracks)	\$331,000
Christ Community Church	No, but wired	No	Wind	
Meriden Congregational Church	No	No	Earthquake (Structural cracks)	\$905,000
Plainfield Elementary	No	No	Wind	
Singing Hills	Yes	No	Wind and Wildfire	
Runnemedede School	No (?)	No	None	
Kimball Union Academy (and daycare)	No	No	Earthquake, Terrorism, Public Health, HazMat (Pool)	

POTENTIAL LOSS ESTIMATES

This section identifies areas in town that are most vulnerable to hazard events and estimates potential losses in that area. The Plainfield Hazard Mitigation Committee derived these potential loss estimates. It is difficult to ascertain the amount of damage caused by a natural hazard because the damage will depend on the hazard's extent and severity. Additionally, human loss of life was not included in the potential loss estimates but could be expected to occur, depending on the severity of the hazard.

Flooding

River Road: Based on road and infrastructure damages from the Flood of 1973, in today's figures, road infrastructure damage for a flooding event of this magnitude could be expected to reach an estimated \$3.2 million.

Landslide

There is potential for a landslide event on Willowbrook Road. There are no residential structures on this road, but there are two houses on neighboring High Street that could slide in a very severe landslide event. Road reconstruction costs for a landslide event on Willowbrook Road could be expected to reach several million dollars.

High Wind/Hurricane

The estimated assessed value of all residential and commercial structures in Plainfield is \$200 million.¹³ Assuming 1% to 5% damage *townwide*, a hurricane event could result in \$200,00 to \$500,000 of structure damage.

Wildfires

The risk of fire is difficult to predict based on location. The estimated assessed value of all residential and commercial structures in Plainfield is \$200 million.¹⁴ Assuming 1% to 5% damage *townwide*, a large wildfire event could result in \$200,00 to \$500,000 of structure damage.

Winter Storms

New England typically experiences at least one or two heavy snowstorms per year. Power outages, extreme cold and impacts to infrastructure are all common effects of winter storms in the Town of Plainfield. Damage caused from a typical large event varies according to wind velocity, snow accumulation and duration. Using figures from FEMA Disaster #3193 in Plainfield, on December 6, 2003, a typical cost for a winter event of this magnitude is \$3,926. This cost was for road salt and sand and does not include staff time.¹⁵ Assuming 1% to 5% damage *townwide* and based on the assessed value of all structures in Plainfield, a snowstorm could result in \$200,000-500,000 of structure damage.

Earthquake

The Kimball Union Academy dormitories are the highest buildings in Plainfield and are thought to be most vulnerable to an earthquake event. Estimated value for both buildings combined is \$4 million. Also vulnerable in town are the two water tanks, which have a combined value of about \$400,000. The Community Baptist Church, a brick structure, and the Meriden Congregational Church, a stone structure, are valued at \$331,000 and \$905,000 respectively. Based on the assessed value of all structures in Plainfield, assuming 1% to 5% damage townwide, an earthquake could result in anywhere from \$200-500,000 of structure damage.

Assessment of Future Development Losses

The future use of land is dependent upon a number of factors, especially the natural constraints of the land. Attempts to build in land unsuitable for development, including very steep slopes, floodplain, and wetland areas, can increase the likelihood of being impacted by a natural disaster such as landslide, flooding, and wildfire. The Plainfield Master Plan states that: "There is increasing development pressure on less suitably (sic) land.. .Often these parcels contain wetlands, steep slopes, rock outcrops, soils with bedrock within 18 inches of the soil surface, and other features that present difficulties for building, road and other construction activities..." Given these development pressures, and the potential for increased losses from natural disasters, the Town should continue to review and revise land use regulations to manage growth and protect sensitive natural resources. The Committee discussed and is not aware of any planned development projects, but any future planned construction will be addressed in this section of the Plan.

SECTION III: EXISTING MITIGATION STRATEGIES AND PROPOSED IMPROVEMENTS

DESCRIPTION OF EXISTING PROGRAMS

- ❖ National Flood Insurance Program – The minimum National Flood Insurance Program (NFIP) requirements have been adopted as part of the Town’s Zoning Ordinance. This regulates all new and substantially improved structures located in the 100-year floodplain, as identified on the FEMA Flood Maps.
- ❖ Emergency Operations Plan – updated in 2009
- ❖ Master Plan –Updated in 2003 & currently updating
- ❖ Building permits in place since early 1970s
- ❖ School Emergency Plans for the elementary and Kimball Union Academy (KUA)
- ❖ New ordinance on Planned Residential Development/Conservation Design (2003). Two stated purposes are: to “minimize impacts on environmental resources (sensitive lands such as wetlands, floodplain, and steep slopes) and disturbance of natural or cultural features;” and “To reduce erosion and sedimentation by the retention of existing vegetation, and the minimization of development on steep slopes.”
- ❖ Conservation Commission commissioned a new set of digital tax maps, to be used as an analytical tool for making recommendations that will help conserve the most important natural land features and open spaces.
- ❖ Ditch and culvert cleaning and replacement. Have received grants to upgrade culverts and drainage.
- ❖ Plainfield Volunteer Fire Dept. Fire Dept Education during the year
- ❖ Plainfield Police works with youth on education programs.
- ❖ Meriden Volunteer Fire Dept.
- ❖ Cornish Rescue Squad
- ❖ Forest Fire Warden
- ❖ Meriden Village Water District
- ❖ Plainfield Village Water District
- ❖ Flood Plain Ordinance
- ❖ Road Agent/Highway Department
- ❖ Haz Mat Team in this area trying to get up and operating. For now, 15 towns involved in Mutual Aid for Haz Mat.

Summary of Recommended Improvements

The Plainfield Hazard Mitigation Team recommended improvements to existing programs as follows:

- ❖ Town should coordinate emergency response planning with KUA and the Schools.
- ❖ Continue to enhance the GIS database to do more effective environmental and hazard mitigation planning.
- ❖ Protect the 2 water tanks with fencing or other security measures.

Integration of Mitigation Priorities into Planning and Regulatory Tools

Many of the existing regulations as noted in this Section can and should be regularly reviewed. This review process can lead to revisions that will incorporate mechanisms to assist in the implementation of the hazard mitigation priorities as defined in this Plan. This review should continue to be a priority of the Plainfield Planning Board, and will likely include yearly request in the Capital Improvement Program. Moreover, as suggested in the onset of this document, this Plan is a planning tool to be used by the Town of Plainfield as well as other local, state and federal governments, in their effort to reduce future losses from natural and/or man-made hazards before they occur. That being said the Plainfield Planning Board also has the authority, under RSA 674:2, to incorporate this Plan as a new section of the Plainfield Master Plan, which is strongly recommended. This integration would serve well for any future zoning updates that relate to hazard mitigation and for future implementation of the hazard mitigation priorities as defined in this Plan. Under the Action Plan in Chapter 6, all parties listed under the Responsibility/Oversight category shall also review this listing annually, and consider the listed (and updated) mitigation projects within their annual budget process.

SECTION IV: NEWLY IDENTIFIED MITIGATION STRATEGIES AND CRITICAL EVALUATION

During the initial development of this Plan in 2005, the Hazard Mitigation Planning Committee held a brainstorming session to identify mitigation projects. In addition, the Committee established in 2009 reviewed and updated mitigation project list. The following is a list of projects completed since 2005. (New projects are indicated by *Italic text*).

Completed Mitigation Projects
EOP updated in 2009
Master Plan updated in 2003
Natural Resource Inventory completed and is available on the town website.
Work with KUA to develop a thorough Emergency Plan that is consistent with the Plainfield EOP and HazMit Plans
Find central resource location (service) for back-up of all Town records and files
Overlay digital property parcel layer with other GIS data layers such as floodplains and landslide areas, for hazard mitigation planning purposes
Hire contractors to address highest hazard trees throughout Town – in progress.

Summary of New Strategies

The Committee created an updated list of projects based on the hazards for which the town is at risk. These non-prioritized items are contained in the listing below.

1. Pursue funding for a new generator (mobile unit) for the Elementary School
2. Upgrade radio communications for Highway, for communication with Fire & Police
3. Upgrade Plainfield Fire radio communications
4. Investigate creating a local Energy Coop
5. Riverbank stabilization on Willow Brook Rd. (2-phase project)
6. Riverbank stabilization on River Road (2-phase project)
7. *Identify special needs populations (i.e. resident survey, etc.)*
8. *Coordinate updates to the Elementary and KUA emergency response plans.*
9. *Upgrade the highway garage to be more environmentally friendly.*
10. *Update town website to include emergency preparedness and NFIP information and to educate public about potential hazards in town.*
11. *Construct an addition to the Meriden Fire Station. Currently there are 4 trucks in a 3-bay station, which is a safety hazard*
12. *Implement security protection for the 2 water tanks (i.e. fencing, etc.)*
13. *Construct new dry hydrants to enhance fire protection strategy, as identified in the Water Resource Plan. (Singing Hills and Willow Brook are priority)*

Summary of Critical Evaluation

The Plainfield Hazard Mitigation Committee reviewed each of the newly identified mitigation strategies using the following criteria:

- ❖ Does it reduce disaster damage?
- ❖ Does it contribute to community objectives?
- ❖ Is the action environmentally sound?
- ❖ Does it meet existing regulations?
- ❖ Can it be quickly implemented?
- ❖ Is it socially acceptable?
- ❖ Is it technically feasible?
- ❖ Is it administratively possible?
- ❖ Is the action legal?
- ❖ Does the action offer reasonable benefits compared to its cost in implementing?

Prioritized Mitigation Projects:

In 2009, each committee member reviewed the 13 projects listed above. After careful evaluation, each committee ranked the projects by voting for half of the projects. The project that received the most votes was ranked as the highest priority and the project receiving the least amount of votes received the lowest priority. (See Prioritized Mitigation Projects in Appendix C.) The prioritized projects are identified in the Mitigation Action Plan.

**SECTION V:
PRIORITIZED IMPLEMENTATION SCHEDULE**

Plainfield, NH Mitigation Action Plan					
Project	Responsibility/ Oversight	Funding/ Support	Timeframe	Hazard(s) Addressed	Priority (High/Med/Low)
1. Identify special needs populations (i.e. resident survey, etc.)	EMD	Staff Time	1 Year	All Hazards	High
2. Pursue funding for a new generator for the Elementary School.	EMD / Selectmen	Homeland Security and Emergency Management (HSEM) Grant	1 Year	All Hazards	Medium
3. Upgrade radio communications for Highway, for communication with Fire & Police.	Road Agent	Federal Grant / Town Budget	1 Year	All Hazards	Medium
4. Upgrade Plainfield Fire radio communications.	Plainfield Fire Chief	Federal Grant / Town Budget	1 Year	All Hazards	Medium
5. Riverbank stabilization on River Road (2-phase project).	Selectmen	Pre-Disaster Mitigation (PDM) Grant	1-2 Years	Flood	Medium
6. Riverbank stabilization on Willow Brook Rd. (2-phase project).	Selectmen	Pre-Disaster Mitigation (PDM) Grant	1-2 Years	Flood	Medium
7. Construct new dry hydrants to enhance fire protection strategy, as identified in the Water Resource Plan. (Singing Hills and Willow Brook are priority)	Fire Chiefs	Resource Conservation & Development Grant	1-2 Years	Drought, Wildfire	Medium
8. Coordinate updates to the Elementary and KUA emergency	EMD	Staff Time	Annually	All Hazards	Medium

Plainfield, NH Mitigation Action Plan					
Project	Responsibility/ Oversight	Funding/ Support	Timeframe	Hazard(s) Addressed	Priority (High/Med/Low)
response plans.					
9. Upgrade the highway garage to be more environmentally friendly.	Selectmen / Road Agent	Town Budget	1-2 Years	Human Caused	Medium
10. Update town website to include emergency preparedness and NFIP information and to educate public about potential hazards in town.	Town Administrator	Staff Time	1-2 Years	All Hazards	Low
11. Construct an addition to the Meriden Fire Station. Currently there are 4 trucks in a 3-bay station, which is a safety hazard.	Selectmen	Town Budget / State & Federal Grants	5 Years	All Hazards	Low
12. Investigate creating a local Energy Coop	Welfare Officer	Staff Time	3 Years	Human Caused	Low
13. Implement security protection for the 2 water tanks (i.e. fencing, etc.)	Selectmen	Town Budget / State & Federal Grants	3 Years	Human Caused	Low

SECTION VI: ADOPTION AND IMPLEMENTATION OF THE PLAN

Adoption

The Plainfield Selectmen by majority vote officially adopted the *Plainfield Hazard Mitigation Plan* on _____. The formal Certificate of Adoption is on the following page.

Implementation

There were 21 mitigation projects that were prioritized by the Committee. For each project the Committee identified who, when and how they would be implemented. Please refer to the “Action Plan” in Chapter 6 for a description of the timeframe and persons or departments responsible for implementation of the Prioritized Projects. It will be the future responsibility of the Emergency Management Director to ensure implementation of these Prioritized Projects.

Monitoring & Updates

The *Plainfield Hazard Mitigation Plan* must be reviewed, evaluated and updated at least once every five years. The Emergency Management Director is responsible for initiating this review and needs to consult with members of the Plainfield Emergency Management Committee, in order to track progress and update the Prioritized List in Chapter 6. The EMD will convene the Committee at least once every five year to ensure the following:

- ❖ The Hazard Analysis will be evaluated for accuracy.
- ❖ Projects completed will be evaluated to determine if they met their objective.
- ❖ Projects not completed since the last updated will be reviewed to determine feasibility of future implementation.
- ❖ Lastly, new projects will be identified and included in future updates as needed.
- ❖ The public, members of the Committee, surrounding communities, businesses, academia, State agencies and non-profit agencies, will continue to be invited and involved during this process. These groups can be notified through invitations, public notices, newspaper articles, brochures and/or other public outreach activities.
- ❖ In keeping with the process of adopting the 2009 Plainfield Hazard Mitigation Plan, a public hearing to receive public comment will be held. This will require the posting of two public notices, and where appropriate by posting a notice on the town’s Web Site.
- ❖ Updates to the *Plan* may be adopted subsequent to a public meeting or hearing by the Plainfield Board of Selectmen.
- ❖ Once every five years, the EMD will convene at least one meeting with the Committee to review the plan, receive public input and submit an updated plan to FEMA for approval.

- ❖ In future years, the information in this plan may be incorporated as a separate chapter in the Master Plan. The Town's Emergency Management Director will ensure ongoing consistency between the Town's Hazard Mitigation Plan, the Emergency Operations Plan, and school emergency plans.

CERTIFICATION OF ADOPTION

Adoption

The Plainfield Board of Selectmen by majority vote officially adopted the Plainfield Hazard Mitigation Plan on 5/17, 2010.

Reviewed and approved: James Mc Carraher
Signature: [Signature]
Emergency Management Director

Concurrence of approval by the Board of Selectmen:

Signature: [Signature]
Chairman of the Board of Selectmen
Signature: [Signature]
Selectman
Signature: [Signature]
Selectman

**Appendix A:
Financial Resources**

❖ HAZARD MITIGATION GRANT PROGRAM - "Section 404 Mitigation"

The Hazard Mitigation Grant Program (HMGP) in New Hampshire is administered in accordance with the 404 HMGP Administration Plan which was derived under the authority of Section 404 of the Stafford Act in accordance with Subpart N. of 44 CFR.

The program receives its funding pursuant to a Notice of Interest submitted by the Governor's Authorized Representative (or GAR, i.e. the Director of NHOEM) to the FEMA Regional Director within 60 days of the date of a Presidentially Declared Disaster. The amount of funding that may be awarded to the State/Grantee under the HMGP may not exceed 15% of (over and above) the overall funds as are awarded to the State pursuant to the Disaster Recovery programs as are listed in 44 CFR Subpart N. Section 206.431 (d) (inclusive of all Public Assistance, Individual Assistance, etc.). Within 15 days of the Disaster Declaration, an Inter-Agency Hazard Mitigation Team is convened consisting of members of various Federal, State, County, Local and Private Agencies with an interest in Disaster Recovery and Mitigation. From this meeting, a Report is produced which evaluates the event and stipulates the State's desired Mitigation initiatives.

Upon the GAR's receipt of the notice of an award of funding by the Regional Director, the State Hazard Mitigation Officer (SHMO) publishes a Notice of Interest (NOI) to all NH communities and State Agencies announcing the availability of funding and solicits applications for grants. The 404 Administrative Plan calls for a State Hazard Mitigation Team to review all applications. The Team is comprised of individuals from various State

Minimum Project Criteria

- Must conform with the State's "409" Plan
- Have a beneficial impact on the Declared area
- Must conform with:
 - NFIP Floodplain Regulations
 - Wetlands Protection Regulations
 - Environmental Regulations
 - Historical Protection Regulations
- Be cost effective and substantially reduce the risk of future damage
- Not cost more than the anticipated value of the reduction of both direct damages and subsequent negative impacts to the area if future disasters were to occur i.e., min 1:1 benefit/cost ratio
- Both costs and benefits are to be computed on a "net present value" basis
- Has been determined to be the most practical, effective and environmentally sound alternative after a consideration of a range of options
- Contributes to a long-term solution to the problem it is intended to address
 - ❖ Considers long-term changes and has manageable future maintenance and operation

Eligible Subgrantees include:

- State and Local governments,
- Certain Not for Profit Corporations
- Indian Tribes or authorized tribal organizations
- Alaska corporations not privately owned

Agencies.

Eligible Projects may be of any nature that will result in the protection to public or private property and include:

- Structural hazard control or protection projects
- Construction activities that will result in protection from hazards
- Retrofitting of facilities
- Certain property acquisitions or relocations
- Development of State and local mitigation standards
- Development of comprehensive hazard mitigation programs with implementation as an essential component

❖ FLOOD MITIGATION ASSISTANCE (FMA) PROGRAM

New Hampshire has been a participant in the Flood Mitigation Assistance Program (FMA or FMAP) since 1996/97. In order to be eligible, a community must be a participant in the National Flood Insurance Program.

In 1997, the State was awarded funds to assist communities with Flood Mitigation Planning and Projects. A Planning Grant from the 1996/97 fund was awarded to the City of Keene in 1998. In preparation for the development of the Flood Mitigation Plan, the Planning Department of the City of Keene created a digital data base of its floodplain including the digitizing of its tax assessing maps as well as its Special Flood Hazard Areas in GIS layers. The Plan Draft was submitted to FEMA for review and approval in March of 2000. The Plan includes a detailed inventory of projects and a "model" project prioritization approach.

In 1998, the FMAP Planning Grant was awarded to the Town of Salem. Given the complexity of the issues in the Spicket River watershed, the Town of Salem subcontracted a substantial portion of the development of its Flood Mitigation Planning to SFC Engineering Partnership of Manchester, NH, a private engineering firm. Salem submitted a Plan and proposed projects to the State and FEMA in May of 1999 which were approved by FEMA. This made Salem the first community in NH to have a FEMA/NFIP approved Flood Mitigation Plan.

Flood Mitigation Assistance Program

- NFIP Funded by a % of Policy Premiums
- Planning Grants
- Technical Assistance Grants to States (10% of Project Grant)
- Project Grants to communities
- ❖ Communities must have FEMA approved Flood Mitigation Plan to receive Project Funds

❖ PRE-DISASTER MITIGATION PROGRAM (PDM)

Eligible Projects

(44 CFR Part 78)

- Elevation of NFIP insured residential structures
- Elevation and dry-proofing of NFIP insured non-residential structures
- Acquisition of NFIP insured structures and underlying real property
- Relocation of NFIP insured structures from acquired or restricted real property to sites not prone to flood hazards
- Demolition of NFIP insured structures on acquired or restricted real property
- Other activities that bring NFIP insured structures into compliance with statutorily authorized floodplain management requirements
- Beach nourishment activities that include planting native dune vegetation and/or the installation of sand-fencing.
- ❖ Minor physical mitigation projects that do not duplicate the flood prevention activities of other Federal agencies and lessen the frequency of flooding or severity of flooding and decrease the predicted flood damages in localized flood problem areas. These include: modification of existing culverts and bridges, installation or modification of flood gates, stabilization of stream banks, and creation of small debris or flood/storm water retention basins in small watersheds (retention basins, levees, seawalls)

FEMA has long been promoting disaster resistant construction and retrofit of facilities that are

vulnerable to hazards in order to reduce potential damages due to a hazard event. The goal is to reduce loss of life, human suffering, economic disruption, and disaster costs to the Federal taxpayer. This has been, and continues to be accomplished, through a variety of programs and grant funds.

Although the overall intent is to reduce vulnerability before the next disaster threatens, the bulk of the funding for such projects actually has been delivered through a "post-disaster" funding mechanism, the Hazard Mitigation Grant Program (HMGP). This program has successfully addressed the many hazard mitigation opportunities uniquely available following a disaster. However, funding of projects "pre-disaster" has been more difficult, particularly in states that have not experienced major disasters in the past decade. In an effort to address "pre-disaster mitigation", FEMA piloted a program from 1997-2001 entitled "Project Impact" that was community based and multi-hazard oriented.

Through the Disaster Mitigation Act of 2000, Congress approved creation of a national Predisaster Hazard Mitigation program to provide a funding mechanism that is not dependent on a Presidential disaster declaration. For FY2002, \$25 million has been appropriated for the new grant program entitled the ***Pre-Disaster Mitigation Program (PDM)***. This new program builds on the experience gained from Project Impact, the HMGP, and other mitigation initiatives.

Eligible projects include:

- ❖ State and local hazard mitigation planning
- ❖ Technical assistance [e.g. risk assessments, project development]
- ❖ Mitigation Projects
 - Acquisition or relocation of vulnerable properties
 - Hazard retrofits
 - Minor structural hazard control or protection projects
- ❖ Community outreach and education [up to 10% of state allocation]

The funding is 75% Federal share, 25% non-Federal, except as noted below. The grant performance periods will be 18 months for planning grants, and 24 months for mitigation project grants. The PDM program is available to regional agencies and Indian tribes. Special accommodation will be made for "small and impoverished communities", who will be eligible for 90% Federal share, 10% non-Federal.

❖ COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

These Federal funds are provided through the U.S. Department of Housing and Urban Development (HUD) and are administered by the CDBG Program of the New Hampshire Office of State Planning.

Some CDBG disaster related funding has been transferred to FEMA recently and the SHMO is scheduled to receive guidance as to which specific funds and, new program management criteria.

The specific CDBG funds designated for hazard mitigation purposes are made available to address "unmet needs" pursuant to a given Disaster Declaration to States which request them. For these funds, project selection guidance is provided by NHOEM and NHOSP administers the grant.

Pursuant to Declaration DR-1144-NH, \$557,000.00 was made available to the State and pursuant to DR-1199-NH, the grant award is targeted at \$1,500,000.00.

In October of 1998, HUD announced the program guidelines for the expenditure of the DR-1144-NH related funding and the community of Salem applied for, and has received preliminary approval for funding to acquire a 19 unit trailer park in the Floodplain.

Community Development Block Grant

- ***U.S. Dept. of Housing and Urban Development***
- ***Funds for a Declared Disaster's "Unmet Needs"***
- ***Projects must meet one of three National Objectives***
- ***Provide a direct benefit to low and moderate income persons or households***
- ***Prevent or eliminate slums and blight***
- ***Eliminate conditions which seriously and immediately threaten the public health and welfare***

Additional conditions with respect to the expenditure of these funds includes the provision that at least 50% of the grant award must be expended in a manner

Appendix B:

2005 Meeting Documentation



Upper Valley Lake Sunapee
Regional Planning Commission

May 20, 2004

Steve Halleran, Town Administrator
P.O. Box 380
Meriden, NH 03770

Dear Mr. Halleran:

Thank you for your interest in hazard mitigation planning. It is an investment that will enhance and strengthen the community's long-term stability and ability to prevent and respond to hazards. Developing a plan will also ensure compliance with the Disaster Mitigation Act of 2000, which states that NH communities *must* have a local hazard mitigation plan in place by November 1, 2004 to continue to be eligible for post-disaster assistance and certain mitigation grants.

There are a variety of natural hazards - flooding, fire, ice-related storms - and not every community faces the same kinds of threats. There is no "one plan fits all," so each community develops a plan that fits the local needs. The advantages of preparing a Hazard Mitigation Plan are numerous, but of central interest to NH towns is that it allows towns to apply for various assistance programs. The benefits of having a Plan in place before a disaster strikes include:

- ❖ Potential for loss reduction in future events;
- ❖ Reduction of social, emotional, and economic disruption caused by disasters; and
- ❖ Assignment of responsibilities for the mitigation initiatives.

There is no "cost" to the City other than staff time for meetings. Typically, the process involves 5-6 monthly meetings, two hours per meeting. UVLSRPC planners offer assistance in meeting preparation, facilitation, and plan development. The Plan must then be approved by FEMA and adopted locally.

If you have any further questions, please contact me.

Sincerely,

Victoria Boundy
Senior Planner

77 Bank Street, Lebanon, New Hampshire 03766-1704 (603) 448-1680 Fax (603) 448-0170

September 22, 2004

Name
Address

Dear ():

The Town of Plainfield is about to embark on a planning process to develop an 'All Hazards Mitigation Plan.' This planning effort is an investment that will enhance and strengthen the community's long-term stability and ability to prevent and respond to hazards, such as flooding, hazardous material spills, etc. It will also put the town in compliance with the Disaster Mitigation Act of 2000, which states that NH communities *must* have a local hazard mitigation plan in place by November, 2004 to continue to be eligible for post-disaster assistance and hazard mitigation grant funding.

We believe your professional experience will be extremely helpful in this effort, and would like to invite you to participate in an upcoming meeting. We would like to hold our initial meeting on one of the following dates: Thursday, **October 14** or Monday, **October 18**, from 11 a.m. to 1 p.m. *Pizza and refreshments will be provided.* Please contact me by to let me know which date is preferable.

Staff from the Upper Valley Lake Sunapee Regional Planning Commission (UVLSRPC), which is coordinating this project, will provide an overview and will display a base map of the town to aid us in our planning efforts. Representatives from the NH Homeland Security and Emergency Management may also be present.

Some benefits to having a hazard mitigation plan include:

- ❖ Reduction of social, emotional and economic disruption caused by disasters;
- ❖ The establishment of priorities for loss prevention; and
- ❖ Increasing the Town's competitive advantage in applying for state and federal grant programs.

We hope you can join us at our first meeting to learn about this planning process. Please contact me if you have any questions.

Sincerely,

**Hazard Mitigation Committee
Town of Plainfield**

**AGENDA
Tuesday, October 26, 2004
11:00 – 1:00
Meriden Town Offices**

- | | |
|-------|---|
| 11:00 | Introductions and overview of project |
| 11:30 | Determine meeting schedule and review workplan |
| 12:00 | Past/potential hazards in Plainfield - Brainstorm |
| 1:00 | Adjourn |

Handouts (Attached):

- ❖ Overall Hazard Mitigation Goals of the State of New Hampshire
- ❖ Sullivan County Risk Analysis and Hazard History
- ❖ Draft Hazard Mitigation Work Plan

**All Hazard Mitigation Plan
Town of Plainfield, New Hampshire
Proposed Work Plan - 2004/5**

October 2004

- ❖ Determine meeting schedule and set general work plan
- ❖ Determine public outreach strategy
- ❖ Identify past and potential hazards and community risk/vulnerability

November

- ❖ Identify and map critical facilities and evaluate vulnerability to hazards
- ❖ Estimate potential losses

December

- ❖ Review current mitigation policies/programs in place
- ❖ Identify gaps in protection

January 2004

- ❖ Identify and prioritize potential hazard mitigation strategies
- ❖ Set up implementation schedule and evaluate funding opportunities

February

- ❖ Develop draft plan and submit to NHOEM/FEMA

March *(or whenever FEMA has approved)*

- ❖ Hold public hearing to adopt Plan



Upper Valley Lake Sunapee
Regional Planning Commission

**Hazard Mitigation Committee
Town of Plainfield**

**AGENDA
Tuesday, November 23, 2004
8:00 – 10:00 a.m.
Meriden Town Offices**

- | | |
|------|---|
| 8:00 | Assess community vulnerability and calculate potential losses |
| 9:30 | Review existing mitigation programs and identify gaps |



Upper Valley Lake Sunapee
Regional Planning Commission

**Hazard Mitigation Committee
Town of Plainfield**

**AGENDA
Tuesday, December 21, 2004
8:00 – 10:00 a.m.
Meriden Town Offices**

- | | |
|------|--|
| 8:00 | Review existing mitigation programs and identify gaps |
| 8:30 | Discuss potential mitigation strategies and prioritize |

**Hazard Mitigation Committee
Town of Plainfield**

AGENDA

Tuesday, January 18, 2005

9:00 – 11:00 a.m.

Meriden Town Office

- | | |
|--------|---|
| 9 :00 | Continue reviewing and prioritizing potential mitigation strategies |
| 1 0:00 | Prepare implementation schedule for priority projects |
| 1 0:30 | Discuss public review and Plan adoption |
| 1 1:00 | Adjourn |

**Hazard Mitigation Committee
Town of Plainfield**

AGENDA

Tuesday, February 15, 2005

9:00 – 11:00 a.m.

Meriden Town Office

- | | |
|--------|---|
| 9 :00 | Continue reviewing and prioritizing potential mitigation strategies |
| 1 0:00 | Prepare implementation schedule for priority projects |
| 1 0:30 | Discuss public review and Plan adoption |
| 1 1:00 | Adjourn |

Appendix c:

2009 Meeting Documentation

**PUBLIC NOTICE #1
HAZARD MITIGATION PLANNING**

As natural and man-made disaster continue to make national headlines, our own local community leaders are taking steps to reduce the effect of Plainfield's next natural disaster event

The town is currently developing a Hazard Mitigation Plan to identify and mitigate disasters that can occur in Plainfield. A Committee has been assembled and will be having its' first meeting on May 19th, 2009 from 6:00 pm to 8:00pm at the Town Hall. The general public is highly encouraged to attend and, if interested, to be a member of the Committee.

With the development of the Hazard Mitigation Plan, community leaders will be able to identify goals and actions for reducing the effects of natural hazards. Plainfield's community leaders want the town to be a disaster resistant community and believe that the development of a Hazard Mitigation Plan will bring Plainfield one-step closer to that goal. For additional information contact: Steve Halleran, Plainfield Town Administrator, at (603) 469-3201 or plainfield.ta@plainfieldnh.org.

**PUBLIC NOTICE TO THE
RESIDENTS OF PLAINFIELD, NH**

PUBLIC NOTICE #2

**June 11, 2009 at 6:00pm
Plainfield Town Hall
Meriden, NH**

Over the last several months, the Town of Plainfield, with the Hazard Mitigation Planning Committee, has been working to update Plainfield's *Hazard Mitigation Plan*. The *Plan* identifies potential natural and man-made hazards throughout the town and various projects and/or strategies to mitigate their effects. The President signed into law, the Disaster Mitigation Act of 2000 (DMA), Section 322-Mitigation Planning. It requires all local governments to prepare and adopt jurisdiction-wide hazard mitigation plans as a condition of receiving Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation (PDM) project grants.

All residents are formally invited to review a draft of the Updated *Plan* and publicly comment on their concerns regarding the *Plan*.

For more information please contact Steve Halleran, Plainfield Town Administrator, at 469-3201-8377 / plainfield.ta@plainfieldnh.org.

Plainfield, NH All Hazard Mitigation Plan Update

Committee Meeting May 19, 2009 AGENDA

1. *Review 2005 Plan:*

**Review Natural Hazards and Human Caused Hazards
Complete the Hazard Assessment Table**

2. *Next meeting*

**Complete Human Caused Hazard Vulnerability Assessment
Review Existing Policies & Regulations**

3. *Set date for next Committee Meeting*

ATTENDEES

NAME	AFFILIATION
Currier, Frank	Fire Chief
Gillens, Gordon	Plainfield Police Chief
Halleran, Stephen	Town Administrator
Hubbard, Jane	Hubbard Consulting LLC
Lockwood, Bonnie M.	McGrew Management Services LLC
McCarragher, Jim	Plainfield EMD

Plainfield, NH All Hazard Mitigation Plan Update

Committee Meeting June 11, 2009 AGENDA

1. *Review 2005 Plan:*

**Review Existing Policies & Regulations
Update and add Mitigation Projects**
2. *Prioritize Projects via Email*
3. *Send Final Draft to FEMA for Review*

NAME	AFFILIATION
Best, David R.	Meriden Fire Chief
Gillens, Gordon	Plainfield Police Chief
Halleran, Stephen	Town Administrator
Hubbard, Jane	Hubbard Consulting LLC
Lockwood, Bonnie M.	McGrew Management Services LLC
McCarragher, Jim	Plainfield EMD

For purposes of prioritizing the projects listed in the table below, each committee member should vote **for half of the projects (7)**. There are total of 13 projects. The projects will be prioritized based upon the total number of votes received for each project.

Description of Potential Strategy		Votes
1.	Identify special needs populations (i.e. resident survey, etc.)	3
2.	Pursue funding for a new generator for the Elementary School.	2
3.	Upgrade radio communications for Highway, for communication with Fire & Police	2
4.	Upgrade Plainfield Fire radio communications	2
5.	Riverbank stabilization on River Road (2-phase project)	2
6.	Riverbank stabilization on Willow Brook Rd. (2-phase project).	2
7.	Construct new dry hydrants to enhance fire protection strategy, as identified in the Water Resource Plan. (Singing Hills and Willow Brook are priority)	2
8.	Coordinate updates to the Elementary and KUA emergency response plans.	2
9.	Upgrade the highway garage to be more environmentally friendly.	2
10.	Update town website to include emergency preparedness information and to educate public about potential hazards in town.	1
11.	Construct an addition to the Meriden Fire Station. Currently there are 4 trucks in a 3-bay station, which is a safety hazard.	1
12.	Investigate creating a local Energy Coop	0
13.	Implement security protection for the 2 water tanks (i.e. fencing, etc.)	0