

Town of Plainfield, New Hampshire



Hazard Mitigation Plan Update 2014

Town Adoption Date: July 16, 2014
FEMA Approval Date: August 21, 2014

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Chapter 1 INTRODUCTION

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”.

Funding Source

This Plan was funded by the NH Homeland Security and Emergency Management (HSEM) through an Emergency Management Planning Grant, with soft match provided by the Town of Plainfield.

Purpose

This Hazard Mitigation 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 the effects from natural and man-made hazards.

Introduction

On October 30, 2000 the President signed into law the Disaster Mitigation Act of 2000 (DMA 2000). The ultimate purpose of DMA 2000 is to:

- Establish a national disaster hazard mitigation program that will reduce loss of life and property, human suffering, economic disruption, and disaster assistance costs resulting from disasters, and
- Provide a source of pre-disaster hazard mitigation funding that will assist State and local governments in accomplishing that purpose.

DMA 2000 amends the Robert T. Stafford Disaster Relief and Emergency Assistance Act by, among other things, adding a new section, 322 – Mitigation Planning. This places new emphasis on local mitigation planning. **It requires 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) mitigation project grants.** Local governments must review and if necessary, update the mitigation plan annually to continue program eligibility.

Why Develop a Mitigation Plan?

The full cost of the damage resulting from natural hazards – personal suffering, loss of lives, disruption of the economy, loss of tax base – is difficult to measure. Our State is subject to many types of natural hazards: floods, hurricanes, severe winter weather, earthquakes, tornadoes, downbursts, and wildfires, all of which can have significant economic and social impacts. Some, such as hurricanes,

are seasonal and strike in predictable locations. Others, such as floods, can occur anytime of the year and almost anywhere in the State.

Scope of the Plan

The scope of this Plan includes the identification of natural hazards affecting the Town, as identified by the Hazard Mitigation Planning Committee. The hazards reviewed under the scope of this plan include those that are outlined in the State of New Hampshire's Hazard Mitigation Plan:

Flooding	Landslide	Lightning
Dam Failure	Avalanche	Severe Wind
Extreme Heat	Hurricane	Winter Weather
Drought	Hail	Wildfire
Earthquake	Human Caused Hazards	

Methodology

In 2005, the Plainfield Hazard Mitigation Committee in conjunction with the UVLSRPC, developed the original 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.

In 2009, Hubbard Consulting LLC was contracted to coordinate and develop the Update of the 2005 Plan. The 2009 Plan was adopted by the Board of Selectmen on February 17, 2010.

During the 2013 update, the Hazard Mitigation Planning Committee with the assistance of Hubbard Consulting LLC held a total of four meetings on April 2, April 30, June 11 and July 15, 2013. Public notices were posted at the Town Hall, Town Website and Post office; inviting members of the Committee, surrounding communities, businesses, academia, State agencies and non-profit agencies. In addition, email notifications were sent to adjacent communities, the Upper Valley Regional Planning Commission, the Chamber of Commerce and the NH HSEM. No members of the public attended the meetings or commented on the Plan. The Emergency Management Directors from surrounding towns were notified of the Plan Update and asked to comment on the Plan (see Appendix B). The committee analyzed and revised the following sections of the Plan and provided input to update them: Chapters 3, 4, 5 and 6. The Board of Selectmen will hold a public hearing and formally adopt the Plan once it has been approved by FEMA.

The committee developed this Plan as a result of the above meetings and the following planning process.

Step 1: Form a Hazard Mitigation Planning Committee

Prior to the first public information meeting the Town Administrator contacted town department heads and posted public notices to residents, business owners

and neighboring towns, requesting that they consider serving on the Committee (See Appendix B). The Committee Members consisted of town staff and school representatives.

Step 2: Set Hazard Mitigation Goals

At the first working meeting the committee identified the Town's Hazard Mitigation Goals. Five Hazard Mitigation Goals were adapted from the State of New Hampshire's Natural Hazards Mitigation Plan. This first step is extremely important in helping the committee understand the purpose of the Plan and the direction it should go. (See the end of this chapter for the "Hazard Mitigation Goals of the Town of Plainfield, NH".)

Step 3: Hazard Identification

The Committee members identified natural hazards and human-caused hazards that have or could potentially affect the Town of Plainfield. The results of this step can be found in Chapter 3.

Step 4: Critical Facilities Analysis

The Committee members created a Critical Facilities List for the Town. The Critical Facilities List is divided into 3 sections: Facilities needed for Emergency Response; Facilities not necessary for emergency response; and places and populations to protect in the event of a disaster. These were then evaluated for their vulnerability to the hazards identified in Step 3.

Step 5: Capability Assessment

The Committee members identified what plans and policies are already in place to reduce the affects of hazards. The results of this step can be found in Chapter 5. Many of these plans and technical reports were reviewed and incorporated during the planning process. They include the Plainfield Emergency Operations Plan (2012) and the Plainfield Master Plan (2013)

Step 6: Develop Objectives

The Committee identified "Problem Statements" for each of the hazards identified earlier in the planning process. All of the hazards have at least one problem statement associated with them (See Problem Statement in Appendix B). These problem statements were then utilized as objectives in developing mitigation projects, as described in the next step.

Step 7: Develop Specific Mitigation Measures

As a result of the problem statements identified in step 6, the committee brainstormed specific projects or mitigation measures to address each hazard. The Committee Members used the "*Mitigation Project Identification Worksheet*", as shown in Appendix B, to identify mitigation projects that directly address the hazards affecting the community. Finally, the committee prioritized the top priority projects and listed them in the Mitigation Action Plan found at the end of Chapter 6.

Step 8: Adopt and Implement the Plan

After acceptance by the committee the Plan was submitted to the NH HSEM and FEMA Region 1 for formal Approval. The Board of Selectmen formally adopted the Plan on July 16, 2014. The letter of approval from FEMA Region 1 can be found in Appendix C.

With respect to any ongoing mitigation projects, the lead and support agencies/people for such activity will be tasked with implementing the Plan's mitigation projects. The Committee approved the "Mitigation Action Plan", which identifies responsibility, funding/support and a timeframe for each of the prioritized projects. The Emergency Management Director is tasked with requesting annual reports as to the progress of each project.

Step 9: Monitor and Update the Plan

It is important that this plan be monitored and updated annually or after a presidentially declared disaster. Chapter 7 specifically addresses this issue.

Hazard Mitigation Goals Town of Plainfield, NH

During the 2014 update, the Committee reviewed these goals but made no changes in priorities or goals. The overall Goals of the Town of Plainfield with respect to Hazard Mitigation are as follows:

1. To improve upon the protection of the general population, the citizens of the Town of Plainfield and guests, from natural and man-made hazards.
2. To reduce the potential impact of natural and man-made disasters on the Town of Plainfield's:
 - Emergency Response Capability
 - Critical Facilities
 - Infrastructure
 - Private property
 - Economy
 - Natural environment
 - Historic treasures
3. To improve the Town of Plainfield's:
 - a. Emergency preparedness and communication network.
 - b. Disaster response and recovery capability.
4. To identify, introduce and implement cost effective Hazard Mitigation measures so as to accomplish the Town's Goals and Objectives.
5. To work in cooperation with the State of New Hampshire's Hazard Mitigation Goals.

Hazard Mitigation Planning Committee

Name	Title/Affiliation
2005 Committee	
Steve Halleran	Plainfield Town Administrator
Pat Cerra	Plainfield Health and Welfare
Officer Gordon Gillens	Plainfield Police Department
Douglas Plummer	Kimball Union Academy
Chief David Best	Meriden Fire Chief
Ken Stocker	Plainfield Highway Department
Vicky Boundy	Upper Valley Lake Sunapee Regional Planning Commission
2013 Committee	
Steve Halleran	Plainfield Town Administrator
Paul Roberts	Plainfield Police Chief
Will Heighes	Plainfield Police Department
Frank Currier	Plainfield/Meridan Fire Chief
Jim McCarragher	Plainfield Emergency Management Director
Douglas Plummer	Kimball Union Academy
Jane Hubbard	Hubbard Consulting LLC, Consultant
Bonnie Lockwood	McGrew Management Services LLC, Consultant

ACKNOWLEDGEMENTS

The Committee members listed above participated in committee meetings, provided departmental information, contributed in their field of expertise, reviewed and commented on committee meeting minutes, reviewed drafts of the Plan and worked together to identify and prioritize mitigation projects.

*Many thanks to all the hard work and effort from each and every one of you.
This plan would not exist without your knowledge and experience.*

Thank you!

Chapter 2 COMMUNITY PROFILE

Community Description ¹

Plainfield is located in Sullivan County in the northern portion of the Connecticut River Valley. As of the 2010 census, the town had a total population of 2,364. 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 2010 Census estimate for Plainfield was 2,364 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.

National Flood Insurance Program (NFIP)

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.

The town joined the NFIP on 4/18/1983 and is currently participating in the National Flood Insurance Program (NFIP). The community has Flood Insurance Rate Maps (FIRM) and Flood Insurance Study (FIS) dated 05/23/06. Since the 2009 edition of this Plan, there have been 3 additional NFIP policies added and an increase of almost one million dollars of Insurance in Force. There are a total 14 NFIP policies and there have been no claims made since 1975. There are no repetitive loss properties.

The Town's existing ordinance meets the minimum requirements of the NFIP. The Town will continue maintain procedures and regulations that are in

¹ Plainfield Master Plan, 2013 Update
2014

compliance with the NFIP by conducting Community Assistance Visits (CAVs) with the Office of Energy and Planning and updating the Floodplain Ordinance as federal requirements are updated.

NFP Insurance Summary for Plainfield, NH						
Occupancy	Policies in Force	Premium	Insurance in Force	Number of Closed Paid Losses	\$ of Closed Paid Losses	Adjustment Expense
Single Family	14	\$14,813	\$2,810,100	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	1	\$3,145	\$275,000	0	\$0.00	\$0.00
Total	15	\$17,968	\$3,085,100	0	\$0.00	\$0.00

DISASTER RISK

Plainfield is prone to a variety of natural hazards. These include: flooding, dam breach, severe wind events (downbursts, hurricanes, and tornadic activity), wildfire, drought, earthquake, lightening strikes, extreme heat, and severe winter weather, in addition to man-made hazards. The following table summarizes the impact and probability of natural and man-made hazards.

Calculating Potential Loss

It is difficult to determine the amount of damage that could be caused by natural or human-caused hazards because the damage will depend on the hazard's extent and severity, making each hazard event somewhat unique. Therefore, to calculate potential economic loss, we have assume that structures impacted by hazards could result in damage of either 1% or 5% of the assessed value.

Based on this assumption, the potential loss from any of the identified hazards would range from \$2,231,464 (1%) or \$11,157,322 (5%) based on the 2013 Plainfield town valuations which lists the assessed value of all structures in Plainfield to be \$223,146,447. (See table below).

Human loss of life was not included in the potential loss estimates, but could be expected to occur, depending on the severity and type of the hazard.

ASSESSED VALUE OF ALL STRUCTURES			
Type	2013 Value	1% Damage	5% Damage
Residential	\$170,924,047	\$1,709,240	\$8,546,202
Manufactured Housing	\$3,832,900	\$38,329	\$191,645
Commercial	\$2,669,300	\$26,693	\$133,465
Tax Exempt	\$38,737,200	\$387,372	\$1,936,860
Utilities	\$6,983,000	\$69,830	\$349,150
Total	\$223,146,447	\$2,231,464	\$11,157,322
<i>Source: DRA MS 1 Tax Rate Setting Form</i>			

Natural Hazards	Human Impact	Property Impact	Business Impact	Severity	Probability In 25 years	Risk <i>Severity x Probability</i>
	Probability of death or injury 0: n/a 1: Low 2: Moderate 3: High 4: Catastrophic	Physical loss damage 0: n/a 1: Low 2: Moderate 3: High 4: Catastrophic	Interruption of service 0: n/a 1: Low 2: Moderate 3: High 4: Catastrophic	<i>Avg. of Human / Property / Business</i>	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	2	2	2	2	4	8
Flood	1	2	2	1.7	4	6.8
Severe Wind <i>(Tornado/ Downburst)</i>	2	2	2	2	3	6
Lightning	1	2	1	1.3	4	5.2
Hurricane	1	2	1	1.3	3	3.9
Wild/Forest Fire	1	2	1	1.3	3	3.9
Earthquake	3	3	3	3	1	3
Dam Failure	2	2	2	2	1	2
Drought	1	1	1	1	2	2
Landslide	1	1	1	1	2	2
Extreme Heat	1	0	1	.66	3	1.98
Hail	1	1	1	1	1	1
Avalanche	-	-	-	-	-	-

Human Caused Hazards	Human Impact	Property Impact	Business Impact	Severity	Probability* In 25 years	Risk Severity x Probability
	Probability of death or injury 0: n/a 1: Low 2: Moderate 3: High 4: Catastrophic	Physical loss damage 0: n/a 1: Low 2: Moderate 3: High 4: Catastrophic	Interruption of service 0: n/a 1: Low 2: Moderate 3: High 4: Catastrophic	Avg. of Human / Property / Business	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
Haz Mat (Transport)	3	2	2	2.3	3	6.9
Mass Casualty (Trauma or Medical)	3	1	2	2	3	6
Utility Interruption	1	1	2	1.3	4	5.2
Transport Incident (plane, train, etc.)	1	1	1	1	3	3
Haz Mat (Fixed)	1	1	1	1	2	2
Armed Attack (assault, sniper)	3	1	1	1.6	1	1.6
Biological Terrorism	3	1	1	1.6	1	1.6
Radiological Release	2	1	2	1.6	1	1.6
Urban Fire	2	2	1	1.6	1	1.6
Civil Disorder	1	1	1	1	1	1
Terrorist Attack (WMD)	3	2	1	2	0	0

*Probability Terms are defined as:

Improbable: Not likely to occur in any 25 year period.

Remote: May occur once in any 25 year period.

Occasional: May occur several times in any 25 year period.

Probably: Very Likely to occur one or more times in any 25 year period.

Frequent: Very likely to occur multiple times in any 25 year period.

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.

Population Trends for Regional Geographic Areas				
Population	US Census Tables			
Year	1990	2000	2009	2010
Plainfield % Growth	2,056	2,241 9%	2,535 13%	2,364
Lebanon NH-VT Metro Area % Growth		27,138	28,155 4%	Not Reported
Sullivan County % Growth	38,592	40,458 5%	42,641 5%	Not Reported
Grafton County % Growth	74,929	81,743 9%	85,626 5%	Not Reported

Housing Trends for Regional Geographic Areas				
HOUSING UNITS	US Census Tables			NHOEP Housing Rpt Total Est. Units
Year	1990	2000	2009	2009
Plainfield % Growth	784	877 12%	1,046 19%	994 13%
Lebanon NH-VT Metro Area % Growth		10,784 8%	11,679	NOT REPORTED
Sullivan County % Growth	19,532	20,158 3%	21,515 7%	22,177 10%
Grafton County % Growth	42,206	43,729 4%	47,056 8%	49,572 13%

The Hazard Mitigation Planning Committee utilized the Master Plan to review and incorporate development changes. However, due to no substantial changes in development since the 2009 Plan, there were no changes in priorities made to the Plainfield Hazard Mitigation Plan Update 2013.

Chapter 3 HAZARD IDENTIFICATION

Winter Weather

Definition
<p>Heavy Snow Storms: A winter storm can range from moderate snow to blizzard conditions. Blizzard conditions are considered blinding wind-driven snow over 35 mph that lasts several days. A severe winter storm deposits four or more inches of snow during a 12-hour period or six inches of snow during a 24-hour period. Ice Storms: An ice storm involves rain that freezes upon impact. Ice coating at least one-fourth inch in thickness is heavy enough to damage trees, overhead wires and similar objects.</p> <p>Blizzard: A blizzard is a violent snowstorm with winds blowing at a minimum speed of 35 miles (56 kilometers) per hour and visibility of less than one-quarter mile (400 meters) for three hours.</p> <p>Nor'Easter: A Nor'easter is a large weather system traveling from south to north, passing along the coast. As the storm's intensity increases, the resulting counterclockwise winds that impact the coast and inland areas in a Northeasterly direction. Winds from a Nor'easter can meet or exceed hurricane force winds</p>
Location
<p>There is a town-wide vulnerability to severe winter weather. Nor'easters (wind), Ice Storms, Heavy Snow Accumulations and Severe Cold can occur at any place within the Town and generally affect the entire Town when it happens. The higher elevations are more likely to experience snow or ice before the lower terrain.</p>
Extent/Impact
<p>Heavy snow accumulations (generally considered one that deposits four or more inches of snow in a 12-hour period) especially those associated with nor'easters can have a significant affect on the Town, including extended power outages, road closures, collapsed roofs and increased snow removal costs. During ice storms, ice forms on cold surfaces, such as trees and power lines, and may continue to form until the ice is quite deep, as much as several inches thick. Ice damage results in power outages, road closures and forest damage. Ice on the roads can be the most difficult for a rapid emergency response. Private roads are difficult for emergency response vehicles due to the restricted access to roads during winter.</p>
Previous Occurrence
<p>December of 1929: Ice Storm caused disruption and damage to telephone, telegraph, and power system.</p> <p>December 1942: Ice storm has severe intensity for Sullivan County.</p> <p>January 20, 1978: 20 inch snowstorm leaving 20' high snowdrifts</p> <p>February 8-10, 1969: Snow accumulations up to 27" in southeastern New Hampshire and up to 42" in northeastern New Hampshire.</p> <p>Dec.- Jan. 1969: Ice storm with power disruption to many communities.</p> <p>January 7-9, 1998 (NOAA): A severe Ice Storm hit sections of New Hampshire from January 7 through January 9 1998. Statewide, the storm knocked out power to about 55,000 customers, an estimated 125,000 people. During the time without power, residents and those involved with the restoration efforts had to contend with snow, additional freezing rain, rain, slippery roads, falling ice and other debris, sub-zero temperatures, strong winds, and dangerous wind chills. Debris cleanup from the storm was expected to last into the summer. Within the state, there were no deaths directly attributed to the storm, although one utility worker was partially paralyzed when struck by a falling tree while making repairs to a line. Carbon monoxide poisoning was a problem and many residents were treated at area hospitals. Long-term effects from the ice storm are expected to persist for many years.</p> <p>December 11-12, 2008 (NOAA): A major winter storm brought a mixture of snow, sleet, and freezing rain to New Hampshire from the morning of December 11th to the morning of December 12th. The greatest impact in the state was in southern and central New Hampshire where a significant ice storm occurred. Following the ice storm, recovery and restoration efforts were negatively impacted by</p>

additional winter weather events that passed through the state. The freezing rain and sleet continued overnight and into Friday morning before ending. Precipitation amounts across the southern and central part of the state ranged from 1 to 3 inches, ice accretion to trees and wires in these areas generally ranged from about a half inch to about an inch. 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 emergency grant funds.

February 24, 2010 (NOAA) - Sullivan County Declared Disaster: A major storm system affected the northeastern U.S. from February 23rd through March 2nd. Areas of surface low pressure rotating around an upper level atmospheric system brought high winds, heavy snow, heavy rain, inland and coastal flooding, and coastal erosion to the area during the period. The intensifying low brought a continuation of the high winds, heavy rain, heavy snow, coastal flooding, and coastal erosion to the northeast. The high winds brought down trees and branches throughout the area and caused widespread power outages and blocked many roadways. Snowfall ranged from 12 to 24 inches in Sullivan County. The Town of Plainfield experienced a large number of damaged and downed trees, leaving 600 cubic yards of debris scattered throughout town.

March, 6, 2011 (NOAA)

An area of low pressure began to develop over the southeastern states Sunday and then moved northeast along the frontal boundary Sunday night and Monday as it intensified rapidly. Light rain, associated with the approaching cold front began to fall Sunday morning. The precipitation became heavy by late afternoon as the intensifying area of low pressure approached New Hampshire from the south. At the same time, colder air started funneling into the state from the north and changed the rain to snow across Coos County. As the colder air continued to move southward late Sunday afternoon and evening, the rain changed to freezing rain across Grafton County and the higher elevations of Sullivan and Merrimack Counties. Across the state, heavy snow, freezing rain and rain continued through the night and finally ended early Monday afternoon, March 7th. In addition to the precipitation, strong and gusty winds developed across the region Sunday night and continued Monday. Winds gusted to about 20 to 25 mph across much of southern New Hampshire during the storm with gusts of about 30 to 45 mph as the storm moved east Monday afternoon.

Across northern New Hampshire, snowfall accumulations from the storm ranged from 8 to 22 inches. In Grafton and Sullivan Counties, ice accretion was reported. This ice, in combination with the wind, brought down trees and tree limbs across Grafton and Sullivan Counties leading to numerous power outages and more than \$700,000 in damage.

In Plainfield, voting day logistics had to be changed to the town hall with back up power, as the regular voting location at the school had no power. Kimball Union Academy and the elementary school were without power for several days.

Probability
<i>Remote/Occasional/Probable/Frequent (in 25 years)</i>
Frequent

Lightning

Definition													
<p>By definition, all thunderstorms contain lightning. Lightning is a giant spark of electricity that occurs within the atmosphere, or between the atmosphere and the ground. As lightning passes through the air, it heats the air to a temperature of 50,000 F, considerably hotter than the surface of the Sun.</p>													
Location													
<p>The entire Town is at moderate risk to lightning hazard. The higher elevation areas have an increased probability, such as the areas with cell towers, however lightning strikes can occur anywhere in the Town.</p>													
Extent/Impact													
<p>Residents and visitors to the New Hampshire area are more vulnerable to being struck by lightning because of the activities with which they are involved, particularly on those warm summer days when lightning is most likely to occur. Often, many people are outside enjoying the variety of recreational activities that attract people to New England during the summer when the vulnerability to lightning strike is highest. More likely to be affected are structures and utilities, often resulting in structure fires and power outages. The National Oceanographic Atmospheric Administration (NOAA) defines the extent of lightning activity with a LAL scale as shown in the table on the on the right.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #0056b3; color: white; text-align: center;">LAL 1</td> <td>No thunderstorms</td> </tr> <tr> <td style="background-color: #0056b3; color: white; text-align: center;">LAL 2</td> <td>Isolated thunderstorms. Light rain will occasionally reach the ground. Lightning is very infrequent, 1 to 5 cloud to ground strikes in a five minute period.</td> </tr> <tr> <td style="background-color: #0056b3; color: white; text-align: center;">LAL 3</td> <td>Widely scattered thunderstorms. Light to moderate rain will reach the ground. Lightning is infrequent, 6 to 10 cloud to ground strikes in a 5 minute period.</td> </tr> <tr> <td style="background-color: #0056b3; color: white; text-align: center;">LAL 4</td> <td>Scattered thunderstorms. Moderate rain is commonly produced Lightning is frequent, 11 to 15 cloud to ground strikes in a 5 minute period.</td> </tr> <tr> <td style="background-color: #0056b3; color: white; text-align: center;">LAL 5</td> <td>Numerous thunderstorms. Rainfall is moderate to heavy. Lightning is frequent and intense, greater than 15 cloud to ground strikes in a 5 minute period.</td> </tr> <tr> <td style="background-color: #0056b3; color: white; text-align: center;">LAL 6</td> <td>Dry lightning (same as LAL 3 but without rain). This type of lightning has the potential for extreme fire activity and is normally highlighted in fire weather forecasts with a Red Flag Warning.</td> </tr> </table>	LAL 1	No thunderstorms	LAL 2	Isolated thunderstorms. Light rain will occasionally reach the ground. Lightning is very infrequent, 1 to 5 cloud to ground strikes in a five minute period.	LAL 3	Widely scattered thunderstorms. Light to moderate rain will reach the ground. Lightning is infrequent, 6 to 10 cloud to ground strikes in a 5 minute period.	LAL 4	Scattered thunderstorms. Moderate rain is commonly produced Lightning is frequent, 11 to 15 cloud to ground strikes in a 5 minute period.	LAL 5	Numerous thunderstorms. Rainfall is moderate to heavy. Lightning is frequent and intense, greater than 15 cloud to ground strikes in a 5 minute period.	LAL 6	Dry lightning (same as LAL 3 but without rain). This type of lightning has the potential for extreme fire activity and is normally highlighted in fire weather forecasts with a Red Flag Warning.
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LAL 6	Dry lightning (same as LAL 3 but without rain). This type of lightning has the potential for extreme fire activity and is normally highlighted in fire weather forecasts with a Red Flag Warning.												
Previous Occurrence													
<p>Plainfield experiences annually lightning events. There are no official records on lighting events but there have been several structure fires as a result of lightning strikes with in the last 20 years.</p>													
Probability													
<p><i>Remote/Occasional/Probable/Frequent (in 25 years)</i></p>													
Frequent													

Severe Wind (Tornado/Downburst)

Definition
<p>A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud. These events are spawned by thunderstorms and occasionally by hurricanes. They may also occur singularly or in multiples. A downburst is a severe, localized wind blasting down from a thunderstorm. These “straight line” winds are distinguishable from tornadic activity by the pattern of destruction and debris. Downbursts fall into two categories: Microburst which covers an area less than 2.5 miles in diameter; and Macroburst which covers an area at least 2.5 miles in diameter</p>
Location
<p>Severe wind events (tornado, downburst or high winds associated with thunderstorms) can occur anywhere in Plainfield. Generally the higher elevations are more susceptible as well as more vulnerable due to the fact that they are home to communication towers.</p>
Extent/Impact

Depending on the size and location of these events, the destruction to property may be devastating. Several of the more significant and recent events within southern New Hampshire have caused several millions of dollars in damage and at least 5 fatalities. The strongest tornado to hit anywhere in NH is an F-2 Tornado. According to the Fujita scale, which rates tornado intensity, an F-2 tornado maintains wind speeds from 113-157 mph. and can cause considerable damage. Roofs could be torn off frame houses; mobile homes demolished; large trees snapped or uprooted; and light object missiles would be generated as a result of an F-2 Tornado.

EF 0	65-85 mph
EF 1	86-110 mph
EF 2	111-135 mph
EF 3	136-165 mph
EF 4	166-200 mph
EF 5	Over 200 mph

Previous Occurrence

July 18, 2006: Severe winds downed several trees in town.
August 16, 2007: A severe thunderstorm downed numerous trees and power lines in Plainfield. Numerous severe thunderstorms produced damaging winds and large hail during the evening of August 16th.
May 9, 2009: Severe downburst downed many trees and closed some roads for two days.
August 21, 2011 (NOAA): A strong upper trough and associated cold front pushed into the region on the afternoon of the 21st. Good low level moisture and instability combined with an impressive wind field aloft to produce numerous severe thunderstorms during the afternoon and evening hours. All reports of damage were due to strong winds. A severe thunderstorm downed trees on Route 12a near Freeman Road in Plainfield

Probability

Remote/Occasional/Probable/Frequent (in 25 years)

Frequent

Flooding

Definition

Flooding is the temporary overflow of water onto land that is not normally covered by water. Flooding results from the overflow of major rivers and tributaries, storm surges, and/or inadequate local drainage. Flooding events considered in this Plan include 100-year and 500-year floodplain events, rapid snow pack melt and ice jams.

Location

Flooding in Plainfield will occur in the 100 year floodplain as designated on the FEMA Flood Insurance Rate Map. These 100-year floodplains and historical flooding locations are shown on the National Flood Insurance Rate Maps dated 5/23/2006. These areas primarily include Connecticut River and Mascoma River and other minor tributaries. Roads most commonly affected are River Road, Penniman Road and Willow Brook Road. The potential is moderate but the impact historically is minimal.

Extent/Impact

The extent of damage caused by any flood depends on the depth and duration of flooding, the topography of the area flooded, velocity of flow, rate of rise, and the amount and form of development in the floodplain. Primarily flooding impacts the road, culvert and bridge infrastructure more than residential and non-residential buildings. Since 1978, there have been no flood insurance claims. FEMA defines flood hazards by the 100-year and 500-year flood events. A 100-year flood event is defined as flood event having a 1% chance of being equaled or exceeded in any given year. The 500-year flood event is defined as flood event having a .2% chance of being equaled or exceeded in any given year. The Town of Plainfield Flood Insurance Rate Maps (FIRM) identify both a A and AE zones. A zones are subject to the 100-year flood, however because there has been no detailed hydraulic studies, there is no Base Flood Elevation (BFE)determined for these zones. The AE zones are subject to the 100 year flood and have BFEs delineated on the FIRM.

Previous Occurrence

March 11-21, 1936: Double flood; first due to rains and snowmelt; second, due to large rainfall.
August 1955: Heavy rains caused extensive damage throughout the river basin.
June 30 - July 5 1973: Flood damage to culverts, bridges, streambeds, and drainage facilities.
July - August 1986 Statewide flooding from severe summer storms, heavy rains, flash flooding and

severe winds.

August 7-11, 1990: A series of storm events with moderate to heavy rains.

August 7-11, 1991: FEMA DR-917-NH: Hurricane Bob struck New Hampshire causing extensive damage in Rockingham and Stafford counties, but the effects were felt statewide.

January 3, 1996 FEMA DR-1077-NH – Storms and flooding

October 29, 1996 FEMA DR-1144-NH – Severe storms and flooding

July 2, 1998: FEMA DR-1231-NH – Severe storms and flooding

October 8, 2005 FEMA DR- 1610 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. Tragically, two young people lost their lives in the nearby Town of Unity when they attempted to drive over a bridge that had already been washed away.

April 15-23, 2007: 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.

August 28, 2011 (NOAA) - Sullivan County Declared Disaster

Heavy rain from Tropical Storm Irene caused widespread flooding of small rivers and streams across many counties in New Hampshire. Damage to roads and bridges was extreme with repair costs in the millions. Heavy rain from Tropical Storm Irene caused flooding on small rivers and streams throughout Sullivan County.

Probability

Remote/Occasional/Probable/Frequent (in 25 years)

Probable

Hurricane

Definition

A hurricane is a tropical cyclone in which winds reach speeds of 74 miles per hour or more and blow in a large spiral around a relatively calm center. The eye of the storm is usually 20-30 miles wide and the storm may extend over 400 miles. High winds are a primary cause of hurricane-inflicted loss of life and property damage. The Saffir-Simpson Hurricane Wind Scale is a 1 to 5 rating based on a hurricane's sustained wind speed. This scale estimates potential property damage. Hurricanes reaching Category 3 and higher are considered major hurricanes because of their potential for significant loss of life and damage. Category 1 and 2 storms are still dangerous, however, and require preventative measures.

Location

When hurricane events occur in Plainfield they affect the entire Town. Certainly, the heavy rainfall associated with hurricanes will impact the 100-year floodplain but the high winds can have an impact on the whole Town.

Extent/Impact

New Hampshire's exposure to direct and indirect impacts from hurricanes is real, but modest, as compared to other states in the region. That being said, the probability of hurricanes occurring in Plainfield is possible. The largest impact is on the floodplain areas due to heavy rains. High winds cause trees to fall down thereby causing power outages, structural damage to buildings, road closures and debris management issues. Wind speeds within hurricanes may reach 250 miles per hour in a Category 5 hurricane, as measured on the Saffir-Simpson Hurricane Scale. Tropical depressions are considered to be of hurricane force when winds reach 74 miles per hour. Damage resulting from winds of this force can be substantial, especially considering the duration of the event, which may last for many hours.

Category	Wind Speed (mph)	Damage at Landfall
1	74-95	Minimal
2	96-110	Moderate
3	111-130	Extensive
4	131-155	Extreme
5	> 155	Catastrophic

Previous Occurrence
<p>September 21, 1938 - The Great New England Hurricane: Statewide there were 13 Deaths, 1,363 families received assistance. Disruption of electric and telephone services for weeks. 2 Billion feet of marketable lumber blown down. Flooding occurred throughout the State, in some cases equaling and surpassing the Flood of 1936. Total Direct Losses - \$12,337,643</p> <p>August 19, 1991 - Hurricane Bob: Extensive amount of trees blown down and property damage Statewide and localized flooding.</p> <p>August 28, 1971 - Tropical Storm Doria's center passed over New Hampshire resulting in heavy rain and damaging winds.</p> <p>August 28, 2011: Heavy rain from Tropical Storm Irene caused widespread flooding of small rivers and streams across many counties in New Hampshire. Damage to roads and bridges was extreme with repair costs in the millions. Heavy rain from Tropical Storm Irene caused flooding on small rivers and streams throughout Sullivan County. The Town received almost \$20,000 as result of a Presidential Declaration DR-4026-NH.</p>
Probability
<i>Remote/Occasional/Probable/Frequent (in 25 years)</i>
Occasional

Wildfire

Definition	
Any free burning uncontrollable wildland fire not prescribed for the area which consumes the natural fuels and spreads in response to its environment.	
Location	
The Town of Plainfield and the surrounding communities are heavily forested and are therefore vulnerable to this hazard, particularly during periods of drought. The majority of town relies on dry hydrants or cisterns for fire suppression.	
Extent/Impact	
<p>Fires in New Hampshire are predominantly human-caused, and roughly half of the total fire activity is in the most populous three southern counties. The proximity of many populated areas to the forested lands exposes these areas and their populations to the potential impact of wildfire. In addition, the potential for wildfires increases during a prolonged drought. Finally, there are large areas of town that are inaccessible during a wildfire due to lack of road access. Even some residential driveways with the homes located far from a main road are difficult to access. The National Wildfire Coordinating Group (NWCG) classifies a wildfire into one of several ranges of fire, based upon the number of acres burned. The following list provides NWCG's scale for wildfire values</p>	Value
	A
	B
	C
	D
	E
	F
	G
	H
	I
	J
	K
L	
	Description
	Greater than 0 but less than or equal to 0.25 Acres
	0.26 to 9.9 Acres
	10.0 to 99.9 Acres
	100 to 299 Acres
	300 to 999 Acres
	1000 to 4999 Acres
	5000 to 9999 Acres
	10000 to 49999 Acres
	50000 to 99999 Acres
	100000 to 499999 Acres
	500000 to 999999 Acres
	1000000 + Acres
Previous Occurrence	
<p>There have been 83 major fires (both structure and wildfires) in Plainfield between 1785 and 1988. The three biggest fires are noted below:</p> <p>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</p>	

<p>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.</p>
<p>Probability <i>Remote/Occasional/Probable/Frequent (in 25 years)</i></p>
<p>Occasional</p>

Drought

<p>Definition</p>
<p>Drought is a deficiency in precipitation over an extended period, usually a season or more, resulting in a water shortage causing adverse impacts on vegetation, animals, and/or people.</p>
<p>Location</p>
<p>Droughts are difficult to define geographically. Due to their widespread nature a drought would affect the entire Town. However, a drought can affect fire suppression in those areas that do not have access to the public water system.</p>
<p>Extent/Impact</p>
<p>Droughts are not as damaging to the Town as floods or winter weather. However a severe drought can affect public water supply, increase the probability of fires, and impede fire suppression. Those areas with minimal fire protection are at a higher risk as a result of a prolonged drought.</p>
<p>Previous Occurrence</p>
<p>According to the NH State Hazard Mitigation Plan (2004), five droughts of significant extent and duration are evident in the 1900s: 1929-36, 1939-44, 1947-50, 1960-69 and 2001-2002. The 2001-02 drought was the 3rd worst on record, exceeded only by the droughts of 1965-1966 and 1941-1942. All of these droughts were statewide in extent and had recurrence intervals ranging from 10 to more than 25 years. In the statewide drought of 2001/02 private wells dried up and agriculture was affected. The State experienced a moderate in early 2012.</p>
<p>Probability <i>Remote/Occasional/Probable/Frequent (in 25 years)</i></p>
<p>Probable</p>

Landslide

<p>Definition</p>
<p>A Landslide is the downward or outward movement of slope forming materials reacting under the force of gravity. These include mudflows, mudslides, debris flows, rockslides, debris avalanches, debris slides and earth flows. Landslides may be formed when a layer of soil atop a slope becomes saturated by significant precipitation and slides along a more cohesive layer of soil or rock.</p>
<p>Location</p>
<p>According to the Plainfield Hazard Mitigation Committee, there is landslide potential on Willowbrook Road, which is the biggest commuting road.</p>
<p>Extent/Impact</p>
<p>Due to the very limited area that is susceptible to landslides, the impact is minimal. At the moment the only potential impact would just be the cost of road repair and debris removal from the roads.</p>
<p>Previous Occurrence</p>
<p>There is no significant history of landslide events in Plainfield.</p>
<p>Probability <i>Remote/Occasional/Probable/Frequent (in 25 years)</i></p>
<p>Probable</p>

Earthquake

Definition

An earthquake is a rapid shaking of the earth caused by the breaking and shifting of rock beneath the earth's surface. Earthquakes can cause buildings and bridges to collapse, disrupt gas, electric and phone lines, and often cause landslides, flash floods, fires, and avalanches. Larger earthquakes usually begin with slight tremors but rapidly take the form of one or more violent shocks, and end in vibrations of gradually diminishing force called aftershocks. The underground point of origin of an earthquake is called its focus; the point on the surface directly above the focus is the epicenter. The magnitude and intensity of an earthquake is determined by the use of scales such as the Richter scale and Mercalli scale.

Location

According to the NH State Hazard Mitigation Plan, New Hampshire is considered to lie in an area of "Moderate" seismic activity with respect to other areas of the United States and is bordered to the North and Southwest by areas of "Major" activity. There are no identified fault lines for the entire state, therefore an earthquake could occur and/or affect any location in the Town.

Extent/Impact

The magnitude and intensity of an earthquake is determined by the use of scales such as the Richter Scale and Mercalli scale. Earthquakes with a magnitude of 2.0 to 4.9 are considered minor to light, and those 5.0 to 6.9 are considered moderate to strong. It is assumed that all of the buildings in the Town have not been designed to withstand seismic activity. More specifically, the older historic buildings that are constructed of non-reinforced masonry are especially vulnerable to any moderate sized earthquake. In addition, utilities (water, gas, etc) are susceptible to earthquake damage. Plainfield has experienced the effect of small to moderate earthquakes that had minor to no effect on the town's infrastructure. However, if a large (6+ on the Richter Scale) occurred in or around the town, it is assumed that structural damage would be moderate to severe.

Richter Scale	Magnitude Earthquake Effects
2.5 or less	Usually not felt, but can be recorded by seismograph.
2.5 to 5.4	Often felt, but only causes minor damage.
5.5 to 6.0	Slight damage to buildings and other structures.
6.1 to 6.9	May cause a lot of damage in very populated areas.
7.0 to 7.9	Major earthquake. Serious damage.
8.0 or greater	Great earthquake. Can totally destroy communities near the epicenter.

Previous Occurrence

<u>New England Location</u>	<u>Date</u>	<u>Magnitude</u>
Ossipee, NH	December 20, 1940	5.5
Ossipee, NH	December 24, 1940	5.5
Dover-Foxcroft, ME	December 28, 1947	4.5
Kingston, RI	June 10, 1951	4.6
Portland, ME	April 26, 1957	4.7
Middlebury, VT	April 10, 1962	4.2
Near NH Quebec Border, NH	June 15, 1973	4.8
West of Laconia, NH	Jan. 19, 1982	4.5

Probability

Remote/Occasional/Probable/Frequent (in 25 years)

Remote

Dam Failure

Definition
According to the NH Department of Environmental Services (DES), a dam is any artificial barrier which impounds or diverts water which: has a height of 6 feet or more; or is located at the outlet of a great pond, regardless of height or storage; or is an artificial barrier which impounds liquid Industrial or liquid commercial wastes, or septage or sewage, regardless of height or storage.
Location
There are no dams located in Plainfield with a significant risk. However, Wilder Dam upstream on the Connecticut River is a Class C Dam that could impose a great risk to Plainfield. The Emergency Action Plan for this Plan is available through the NH Department of Environmental Services.
Extent/Impact
A Class C structure means a dam that has a high hazard potential because it is in a location and of a size that failure or misoperation of the dam would result in probable loss of human life as a result of: <ul style="list-style-type: none"> ▪ Water levels and velocities causing the structural failure of a foundation of a habitable residential structure or commercial or industrial structure which is occupied under normal conditions. ▪ Water levels rising above the first floor elevation of a habitable residential structure or a commercial or industrial structure which is occupied under normal conditions when the rise due to dam failure is greater than one foot. ▪ Structural damage to an interstate highway which could render the road impassable or interrupt public safety services.
Previous Occurrence
There is no history of significant dam failures in Plainfield.
Probability
<i>Remote/Occasional/Probable/Frequent (in 25 years)</i>
Remote

Extreme Heat

Definition
A Heat Wave is a “Prolonged period of excessive heat, often combined with excessive humidity.” Heat kills by pushing the human body beyond its limits. In extreme heat and high humidity, evaporation is slowed and the body must work extra hard to maintain a normal temperature.
Location
Extreme heat events are difficult to define geographically. Due to their widespread nature a period of extreme heat would affect the entire Town.
Extent/Impact
Extreme heat conditions may impact the health of residents and visitors. Facilities without generators and air-conditioners that house the elderly and disabled are very susceptible to human health issues. Roads, bridges, railroads etc. may be damaged due to extreme heat. Utilities are also vulnerable as the demand for air-condition rises.
Previous Occurrence
There is no significant history of extreme heat events in Plainfield.
Probability
<i>Remote/Occasional/Probable/Frequent (in 25 years)</i>
Remote

Hail

Definition		
Hail is defined as a showery precipitation in the form of irregular pellets or balls of ice more than 5 mm in diameter, falling from a cumulonimbus cloud.		
Location		
Due to its widespread nature a hail event could affect any part of Town.		
Extent/Impact		
Hail can damage communications and IT functions, and can damage agricultural crops. Due to the complexities and various factors involved in the formation of hail particle size and weight, the impact can vary tremendously. The bigger the diameter of the hailstone, the bigger the impact on agriculture, infrastructure and other objects.		
Hail Size Description Chart		
Hailstone size	Measurement	
	in.	cm.
bb	< 1/4	< 0.64
pea	1/4	0.64
dime	7/10	1.8
penny	3/4	1.9
nickel	7/8	2.2
quarter	1	2.5
half dollar	1 1/4	3.2
golf ball	1 3/4	4.4
billiard ball	2 1/8	5.4
tennis ball	2 1/2	6.4
baseball	2 3/4	7.0
softball	3.8	9.7
Compact disc / DVD	4 3/4	12.1
Previous Occurrence		
There is no significant history of hail events in Plainfield.		
Probability		
<i>Remote/Occasional/Probable/Frequent (in 25 years)</i>		
Remote		

Avalanche

Description
Due to no history of avalanche as well as the lack of avalanche conditions within the Town of Plainfield, the Committee chose not to recognize the risk of avalanche in this Plan.

Human Caused Hazards

History:

There is no significant history of human caused events in the Town of Plainfield. The following Human Caused Hazard Vulnerability Table was completed by the Committee utilizing a vulnerability tool developed by FEMA.

Critical Facility	Man Made Hazard Vulnerability Score							
	Visibility	Target	Accessibility	Mobility	Hazardous Materials	Collateral Damage	Site Population	TOTAL
Meriden Water District	2	4	5	5	2	5	3	26
Kimball Union Academy (Shelter)	4	3	5	5	2	4	2	25
Plainfield Water District	1	4	5	5	2	5	2	24
Plainfield Elementary School	3	3	4	5	1	4	2	22
Singing Hills (Shelter)	2	2	5	5	1	3	2	20
Meriden Town Hall Offices	3	3	5	5	0	1	1	18
Highway Garage	3	2	5	5	1	1	1	18
Police Department (at Town Office)	3	3	5	5	0	1	1	17
Meriden Fire Station	3	1	5	5	0	1	1	16
Plainfield Fire Station	3	1	5	5	0	1	1	15

1-11 Low Vulnerability

12-22 Moderate Vulnerability

23-35 High Vulnerability

Chapter 4 CRITICAL FACILITIES

Introduction

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.

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, NH

Facility Name	Generator	In 100-Year	Type of Hazard Impact Most Vulnerable To	Assessed Value
Meriden Fire Station	Yes	Yes	Flooding, HazMat (gas station across street)	\$242,600
Plainfield Fire	Yes	No	Wind (metal building)	\$286,800
Meriden Town Hall Offices	No, but wired	No	KUA Water Tank breach, wind events (slate roof)	\$474,800
Plainfield Highway Garage	No	No	Fire	\$290,500
Meriden WWT Facility	Yes	No	None	\$820,100
Plainfield Water District (and Pump House)	No	No	Flooding if it bursts, Terrorism	\$344,200
Meriden Water District	No	No	None	\$64,800
Plainfield Old Town Hall	No	No	None	\$321,400
Plainfield Post Office	No	No	Terrorism/HazMat	\$105,400
Meriden Post Office	No	No	Terrorism/HazMat	\$109,900
Philip Read Memorial Library	No	No	None	\$110,800
Meriden Public Library	No	No	Earthquake (brick building)	\$278,800
Plainfield Community Baptist Church	No	No	Earthquake (Structural cracks)	\$635,200
Christ Community Church	No, but wired	No	Wind	\$2,871,000
Meriden Congregational Church	No	No	Earthquake (Structural cracks)	\$1,093,300
Plainfield Elementary	No	No	Wind	\$3,575,900
Singing Hills	Yes	No	Wind and Wildfire	\$2,152,600
7th Day School	No (?)	No	None	\$787,599
Kimball Union Academy (and daycare)	No	No	Earthquake, Terrorism, Public Health, HazMat (Pool)	\$154,000

Chapter 5 CAPABILITY ASSESSMENT

The table on the following page is a list of current policies and regulations adopted by the Town of Plainfield that protect people and property from natural and man-made hazards. The table includes a description of the policy/regulation, the responsible agent, the policy's effectiveness and recommended strategies to improve mitigation efforts.

Integration of Mitigation Priorities into Planning and Regulatory Tools

The Town should conduct periodic review of these regulations and this Hazard Mitigation Plan. Reviewing these plans on a regular basis will ensure the integration of mitigation strategies. This review will continue to be a priority of the Plainfield Emergency Management Director and will likely include yearly requests in the annual budget process. 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 the effort to reduce future losses from natural and/or man-made hazardous events before they occur. Under the Prioritized Mitigation Projects *Action Plan* (found 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 requests.

Existing Protection Matrix Plainfield, NH				
Existing Protection	Description	Responsible Agent	Effectiveness* <i>Poor/Average/Exc.</i>	Status
Floodplain Ordinance	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.	Planning Board / Zoning Board / Building Inspector	Excellent	Continue to enforce floodplain regulations, including substantially improved structures; and amend regulations as necessary per federal requirements.
Emergency Operations Plan	The Town maintains an EOP that meets the recommendations by the NH Homeland Security Emergency Management. This plan identifies the response procedures and capabilities of the Town of Plainfield in the event of a natural or man-made disaster.	EMD	Excellent	Planned for update in 2015.
Digital Tax Maps	The 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.	Conservation Commission	Excellent	Continue to update maps.
Elevation Certificates Maintained	Elevation certificates are maintained for new and substantially built structures in the 100-year floodplain.	Building Inspector	Excellent	The Town continues to administer, enforce, and ensure that Elev. Cert. are properly filed, certified and implemented.
School Emergency Plans	The two public and private schools in Town, are required by NH law to develop and maintain an emergency response plan. The Town of Plainfield participates in their updates and emergency training.	EMD	Excellent	Continue to participate in school emergency response planning.

Existing Protection Matrix Plainfield, NH				
Existing Protection	Description	Responsible Agent	Effectiveness* <i>Poor/Average/Exc.</i>	Status
Hazardous Materials Plan / Team	There are no substantial Hazardous Material facilities that warrant a Hazardous Material Plan. There is also a regional HazMat response team that serves the town.	Fire Chief	Excellent	Continue to participate in the Southwest Mutual Aid Hazardous Response Team.
Master Plan	The Master Plan serves as the guiding document for future development in Plainfield. It also serves as the guiding document to assist the Planning Board as it updates the Town Zoning Ordinance, Subdivision and Site Plan Review Regulations and other regulations that fall under its jurisdiction.	Planning Board	Excellent	Updated in 2013

*Effectiveness terms are defined as:

- Poor: Outdated and/or ineffective and needs to be reviewed/updated.
- Average: Meets minimum requirements and may require potential reviews/updates.
- Excellent: Regulations meets all requirements and requires no reviews/updates.

Chapter 6 MITIGATION PROJECTS

Hazard Identification

The Committee utilized the *Hazard Identification Worksheet*, as shown in Appendix B, to identify potential hazards, the historical occurrence, locations, assets at risk and the probability of each hazard. The results of this process can be found in Chapter 3.

Problem Statements

From the Hazard Identification process the Committee developed a list of Problem Statements for each Hazard (see Appendix B). Based on the hazards and risks within the town, the Committee summarized the ‘problems’ associated for every hazard identified. These problem statements allowed the Committee to identify mitigation alternatives during the project identification step described below.

Goals Identified

The Committee identified Goals (shown in Chapter 1) based on the hazards identified, as well as the Mitigation Goals identified in the NH Hazard Mitigation Plan.

Project Identification

Using the *Mitigation Project Identification Worksheet* (see Appendix B) as a guide, the Committee members identified mitigation projects for each problem Statement. Specific objectives (mitigation alternatives) included: Prevention, Property Protection, Public Education, Natural Resource Protection, Emergency Services and Structural Projects. In total, there were fifteen (15) projects identified.

This process resulted in the *Mitigation Project Identification Matrix*. For illustrative purposes the table below is an excerpt from the *Matrix* included in Appendix B. In this *Matrix*, the committee was able to determine a basic benefit/cost by using the STAPLEE method. For each project identified, the committee considered the STAPLEE Criteria (Social, Technical, Administrative, Political, Legal, Economic and Environmental) to guide their decision in prioritizing the projects. One component of STAPLEE is the Economic criteria which aided the committee in determining whether the benefits outweigh the costs.

Mitigation Project Identification Matrix									
Hazard	Problem Statement	Projects <i>Prevention /Property Protection/ Public Educ./ Nat.Resources /Emerg.Serv / Structural</i>	Social	Technical	Administrativ	Political	Legal	Economic	Environment
Flood	Heavy and prolonged rain events cause flood damage primarily to roads and culverts.	Continue to enhance GIS mapping for more effective mitigation planning.	+	+	+	+	+	+	+

Excerpt from Mitigation Project Identification Matrix

Prioritized Mitigation Projects

Each committee member reviewed the mitigation projects. After careful evaluation, the 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 B.) The prioritized projects are identified in the Mitigation Action Plan.

There have been no significant changes to mitigation priorities for the Town of Plainfield. The Town has not experienced any changes in resources, new hazard impacts, or development patterns that merit changes to mitigation priorities. The Hazard Mitigation Committee identified new projects as described below and prioritized them as discussed above.

Mitigation Project Status:

The Town completed the original version of this Plan in 2009. The completed projects listed below are not included in the 2014 edition of the Plan. In addition, the Committee deleted some projects and added new projects to the Plan.

Completed Projects since 2009
The Town of Plainfield coordinated emergency response planning with the local private high school, Kimball Union Academy, as well as the local elementary school.
Coordinated updates to KUA and the Elementary School emergency response plans.
Protected 1 water tank with fencing.
Conducted some enhancements to the GIS mapping database.
Identified special needs populations through a resident survey.
Riverbank stabilized on River Road.
Updated the town website to include emergency preparedness and NFIP information.
Installed 2 repeaters and added 2 new FCC frequencies to allow for interoperable communications.
Deleted Projects
Construction of an addition to the Meriden Fire Station was deleted due to lack of funds and not cost beneficial.
Purchase a new generator for elementary school was deleted because the town hall and KUA are designated shelters with generators.
Upgrade to highway garage was deleted due to lack of priority and not a mitigation activity.
Investigate a local energy coop was deleted due to lack of interest and not a mitigation activity.
Continuing Projects since 2009
Constructing additional dry hydrants.
Implement security for the Meriden water tank.
Updating special needs populations.
Continue GIS mapping.

Mitigation Action Plan

The projects identified in 2009 included preparedness projects as well as mitigation projects. During the 2014 update, the committee prioritized only the mitigation projects. The mitigation projects were compiled in the Mitigation Action

Plan found on Page 6-4 which identifies Responsibility, Funding, Time frame, Hazards Addressed and the Priority for each mitigation project. The preparedness projects are identified on page 6-5.

Since the 2009 version of the Hazard Mitigation Plan (HMP), the Town did not incorporate mitigation strategies into other planning mechanisms. However, the Town will consider incorporating HMP activities into other planning documents over the next five years. Some of those plans could include the following:

- Master Plan – The Master Plan is updated every 5 to 10 years in accordance with RSA 674. This plan also includes a discussion of capital improvements within the Town. The next Master Plan update will integrate mitigation strategies and actions from the HMP (which will have been updated in accordance with the provisions of Section VI in this plan).
- Emergency Operations Plan (EOP) – The EOP is designed to allow the Town to respond more effectively to disasters as well as mitigate the risk to people and property. The EOP will be reviewed to ensure that where appropriate, specific mitigation actions outlined in the HMP are also addressed in the EOP.

MITIGATION ACTION PLAN

The following is the completed list of projects, recommended by the Committee. The following action plan identifies Responsibility, Funding and a Time frame for the mitigation projects for each objective.

Plainfield, NH Mitigation Action Plan						
Project	Responsibility/ Oversight	Funding/ Support	Timeframe	Hazard(s) Addressed	Estimated Cost	Priority (High/Med/Low)
1. Update special needs population database annually and distribute to Fire Departments and EMD.	EMD	Local funds	2015	All Hazards	None (staff time only)	High
2. Inform public about severe winter weather impacts.	Town Administrator	Local assistance	2014	Winter Weather	None (staff time only)	High
3. Conduct an outreach program to citizens in the 100-year floodplain, as well as those in the inundation pathway of dams.	Town Administrator	Grants and local funds	2016	Flood	None (staff time only)	Medium
4. Continue to enhance GIS mapping for more effective mitigation planning, including flood risk.	Town Administrator	State and local funds	2018	All Hazards	\$1,000 - \$5,000	Medium
5. Continue to enforce floodplain regulations, including substantially improved structures; and amend regulations as necessary per federal requirements.	Town Administrator	Local funds	2014	Flood	None (staff time only)	Medium
6. Implement a regular drainage maintenance system.	Highway and Board of Selectmen	Local and State funds	2015	Flood	\$10,000 - \$50,000	Medium
7. Apply soil stabilization measures, such as planning soil stabilization vegetation on publicly owned slopes.	Highway and Conservation Com.	Local and State funds	2015	Landslide	\$1,000 - \$20,000	Medium
8. Establish guidelines for all utilities regarding tree pruning around lines.	Planning Board	Local assistance	2016	Severe Wind, Hurricane, Winter Weather	None (staff time only)	Medium

Plainfield, NH Mitigation Action Plan						
Project	Responsibility/ Oversight	Funding/ Support	Timeframe	Hazard(s) Addressed	Estimated Cost	Priority (High/Med/Low)
9. Ensure school officials are aware of the best area of refuge in school buildings.	Fire/Police/ Schools	Local assistance	2014	Severe Wind	None (staff time only)	Medium
10. Conduct multi hazard drills in schools and public buildings	EMD/Police/ Fire	Local and State funds	2014	All Hazards	\$1,000 - \$15,000	Medium
11. Construct additional dry hydrants, cisterns and fire ponds, per the recommendations of the 2009 Water Resource Plan.	Fire	Local funds	2014	Wildfire, Drought	\$1,000 - \$10,000	Medium
12. Educate public on generator safety/carbon monoxide.	Town Administrator	Local assistance	2014	Winter Weather	None (staff time only)	Medium
13. Adopt and enforce International building Code (IBC) and International Residential Code (IRC)	Planning/ Zoning	Local funds and Office of Energy & Planning	2017`	All Hazards	None (staff time only)	Low
14. Install lightning protection devises and methods (lighting rods, grounding, etc) on communications infrastructure and other critical facilities.	Police/Fire	Local and State funds	2015	Lightning	\$1,000 - \$10,000	Low
15. Implement security protection for the Meriden Water Tank.	Meridan Village Water	Local and State funds	2018	Human Caused	\$5,000 - \$20,000	Low

Non- Mitigation Actions				
Project	Responsibility/ Oversight	Funding/ Support	Time frame	Hazard(s) Addressed
Updated radio equipment for Fire, Police, EMS and Public Works.	Police	Local funds	2015	All Hazards

Chapter 7

ADOPTION, IMPLEMENTATION, MONITORING

Adoption

The Plainfield Selectmen by majority vote officially adopted the *Plainfield Hazard Mitigation Plan Update 2014* on July 16, 2014. The formal Adoption is on page 7-3.

Implementation

There were 15 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 Update 2014* should be reviewed and evaluated annually; and formally updated 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 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, newspapers articles, brochures and/or other public outreach activities.
- In keeping with the process of adopting the Plainfield Hazard Mitigation Plan Update 2014, a public hearing to receive public comment will be held. This will require the posting of two public notices.
- 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 submit an updated plan to FEMA for approval.

Annual Hazard Mitigation Plan Update, Monitor & Evaluate Schedule and Public Involvement			
Meeting Schedule	Task	Town of Andover Responsibilities	Public Involvement (neighboring communities)
Annually or as needed	Assess current status of funding for mitigation projects. Discuss any new projects/plans that should be obtained for your community.	Dept. heads and Board of Selectmen to locate and apply for sources of funding and implement the proposed strategies and plans.	Residents, businesses, and neighboring / watershed communities.
Annually or as needed	Meet to discuss the Hazard Mitigation Plan content and any updates needed for the plan	Department Heads or other agencies.	Residents, businesses, and neighboring / watershed communities.
Annually or as needed	Discussion and evaluation of Training Programs and public outreach efforts. New public outreach methods discussed.	Department Heads or other agencies.	Residents, businesses, and neighboring / watershed communities.

**CERTIFICATION OF ADOPTION
TOWN OF PLAINFIELD, NH
P. O Box 380, Meriden, NH 03770**

DATE: July 16, 2014

A RESOLUTION ADOPTING THE TOWN OF PLAINFIELD, NH HAZARD MITIGATION PLAN UPDATE (2014)

WHEREAS, the Town of Plainfield, NH has historically experienced severe damage from natural hazards and it continues to be vulnerable to the effects of - only those natural hazards profiled in the plan (i.e. *flooding, thunderstorm, high wind, winter storms, earthquakes, and dam failure*), resulting in loss of property and life, economic hardship, and threats to public health and safety; and

WHEREAS, the Town of Plainfield, NH, has developed and received conditional approval from the Federal Emergency Management Agency (FEMA) for its Hazard Mitigation Plan Update (**year**) under the requirements of 44 CFR 201.6; and

WHEREAS, public and committee meetings were held between April 2, 2013 and July 15, 2013 regarding the development and review of the Hazard Mitigation Plan Update (2014); and

WHEREAS, the Plan specifically addresses hazard mitigation strategies and Plan maintenance procedure for the Town of Plainfield, NH; and

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

WHEREAS, adoption of this Plan will make the Town of Plainfield, NH eligible for funding to alleviate the impacts of future hazards; now therefore be it

RESOLVED by the Board of Selectmen:

1. The Plan is hereby adopted as an official plan of the Town of Plainfield, NH
2. The respective officials identified in the mitigation strategy of the Plan are hereby directed to pursue implementation of the recommended actions assigned to them;
3. Future revisions and Plan maintenance required by 44 CFR 201.6 and FEMA are hereby adopted as a part of this resolution for a period of five (5) years from the date of this resolution.
4. An annual report on the progress of the implementation elements of the Plan shall be presented to the Board of Selectmen by April 1st of each year.

IN WITNESS WHEREOF, the undersigned has affixed his/her signature and the corporate seal of the Town of Plainfield, NH this 16th day of July, 2014.

Michelle Marsh
Town Clerk
7/16/2014

W. J. ...
R. C. ...
Janet A. Belya

ACRONYMNS

BMP – Best Management Practices
CDBG - Community Development Block Grant
CRS – Community Rating System
DES – Department of Environmental Services
DHS – Department of Homeland Security
DMA – Disaster Mitigation Act
DOT – Department of Transportation
EAP – Emergency Action Plan
EMD – Emergency Management Director
EMPG – Emergency Management Planning Grant
EMS – Emergency Medical Services
EOC – Emergency Operations Center
EOP – Emergency Operations Plan
FEMA – Federal Emergency Management Agency
FIRM – Flood Insurance Related Maps
FMA – Flood Mitigation Assistance Program
GIS – Geographic Information System
HAZMAT – Hazardous Material
HMGP – Hazard Mitigation Grant Program
HSEM – Homeland Security and Emergency Management
ICC – International Code Council
NFIP – National Flood Insurance Program
NH HSEM – NH Homeland Security and Emergency Management
PDM – Pre-Disaster Mitigation
OEP – Office of Energy Planning
RC&D – Resource Conservation and Development
USGS – United State Geological Survey

APPENDICES

Appendix A
Appendix B
Appendix C

Hazard Mitigation Resources
Documentation of Planning Process
Approval Letter from FEMA

APPENDIX A

Hazard Mitigation 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

- Eligible Subgrantees include:**
- State and Local governments,
 - Certain Not for Profit Corporations
 - Indian Tribes or authorized tribal organizations
 - Alaskan corporations not privately owned.

- 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 modification requirements

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
 - Development or improvement of warning systems

◆ 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 (not dikes, levees, seawalls etc.)

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 which benefits individuals who earn 80% or less than the area's (county's) median income.

WEBSITES FOR MITIGATION RESOURCES	
American Planning Association	http://www.planning.org
Catalog of Federal Domestic Assistance Programs	http://aspe.os.dhhs.gov/cfda
Community Rating System	http://www.fema.gov/nfip/crs.htm
FEMA Individual Assistance Program	http://www.fema.gov/rrr/inassist.shtm
FEMA Mitigation Planning	http://www.fema.gov/fima/planning
FEMA Public Assistance Program	http://www.fema.gov/rrr/pa
Flood Hazard Mitigation	http://www.fema.gov/hazards/floods
Flood Mitigation Assistance Program	http://www.fema.gov/fima/mtap.shtm
Habitat for Humanity	http://www.habitat.org/
Hazard Mitigation Grant Program	http://www.fema.gov/fima/hmgp/
HAZUS and HAZUS–MH	http://www.fema.gov/hazus/index.shtm
Home Rule and Dillon Rule	http://www.naco.org/pubs/research/briefs/dillon.cfm
Institute for Business and Home Safety	http://www.ibhs.org/
Institute for Local Self Government	http://www.ilsq.org/
Landslide Hazard Mitigation	http://www.fema.gov/hazards/landslides
Maxwell Campbell Public Affairs Institute: City and County Report Cards	http://www.governing.com/gpp/2000/gp0intro.htm http://www.governing.com/gpp/2002/gp2intro.htm
Mitigation Success Stories	http://www.fema.gov/fima/success.shtm
Multi-hazard Mapping Initiative	http://www.hazardmaps.gov
National Association of Regional Councils	http://www.narc.org
National Dam Safety Program	http://www.fema.gov/fima/damsafe/
National Earthquake Hazard Reduction Program	http://www.fema.gov/hazards/earthquakes/eqmit.shtm
National Flood Insurance Program	http://www.fema.gov/nfip
National Hurricane Program	http://www.fema.gov/hazards/hurricanes/nhp.shtm
National League of Cities	http://www.nlc.org
Native eDGE	http://nativeedge.hud.gov
NH Bureau of Emergency Management	http://www.nhoem.state.nh.us
Pre-Disaster Mitigation Program	http://www.fema.gov/fima/pdm
Protecting Your Home	http://www.fema.gov/hazards/tornadoes/presskit3.shtm
Protecting Your Property from Fire: Dealing with Vegetation and Combustible Materials	http://www.fema.gov/fima/how2001
Protecting Your Property from Fire: Roofing	http://www.fema.gov/fima/how2002.shtm
Protecting Your Property from Wind	http://www.fema.gov/fima/how2018.shtm
Protecting Yourself from Tornadoes: Safe Rooms	http://www.fema.gov/mit/saferoom
Small Business Administration	http://www.sba.gov/disaster
The Grantsmanship Center: Community Foundations	http://www.tgci.com/resources/foundations/searchGeoLoc.asp
Tribal Governments: Laws, Legislation, and Related Topics	http://www.findlaw.com/01topics/21indian/index.html
U.S. Army Corps of Engineers	http://www.usace.army.mil
U.S. Department of Agriculture	http://www.usda.gov/da/disaster/nda.htm
U.S. Department of Agriculture, Natural Resources Conservation Service	http://www.nrcs.usda.gov
U.S. Department of Housing and Urban Development	<a href="http://www.hud.gov/offices/cpd/communitydevelopment/
programs/dri/driquickfacts.cfm">http://www.hud.gov/offices/cpd/communitydevelopment/ programs/dri/driquickfacts.cfm
U.S. Department of Transportation	http://www.fhwa.dot.gov/programadmin/erelief.html
U.S. Environmental Protection Agency	http://www.epa.gov/
U.S. State and Local Government Gateway	http://www.firstgov.gov/Government/State_Local.shtml
Wildfire Hazard Mitigation	http://www.fema.gov/hazards/fires

APPENDIX B

Documentation of Planning Process

Including:

Agendas

Attendance Sheets

Public Notices / Email Notices

Problem Statements

Mitigation Project Identification Matrix

Prioritized Mitigation Projects

Plainfield, NH Hazard Mitigation Plan

April 2, 2013 Committee/Public Meeting AGENDA

1. Introductions
2. Overview of Hazard Mitigation
3. Review/Update Goals
4. Review/Update Hazard History
5. Review/Update Risk Matrix
6. Develop Hazard Problem Statements - If time.....
7. Review for next meeting:

Update Critical Facilities (Chap. 4)
Update Capability Assessment (Chap.5)
Distribute Sample Mitigation Projects

ATTENDEES

Name	Affiliation
Steve Halleran	Plainfield Town Administrator
Will Heighes	Plainfield Police Department
Frank Currier	Meridan Fire Chief
Jim McCarragher	Plainfield Emergency Management Director
Douglas Plummer	Kimball Union Academy
Jane Hubbard	Hubbard Consulting LLC
Bonnie Lockwood	McGrew Management Services LLC

Plainfield, NH Hazard Mitigation Plan

April 30, 2013 Committee/Public Meeting AGENDA

1. Review/update Critical Facilities - Chapter 4
2. Review/update Capability Assessment - Chapter 5
3. Update Mitigation Projects - Chapter 6
4. Distribute list of 'sample mitigation projects'
5. Review for next meeting:

Identify and Prioritize Mitigation Projects
Complete Mitigation Action Plan

ATTENDEES

Name	Affiliation
Steve Halleran	Plainfield Town Administrator
Will Heighes	Plainfield Police Department
Frank Currier	Plainfield Fire Chief
Jim McCarragher	Plainfield Emergency Management Director
Douglas Plummer	Kimball Union Academy
Jane Hubbard	Hubbard Consulting LLC
Bonnie Lockwood	McGrew Management Services LLC

Plainfield, NH Hazard Mitigation Plan

June 11, 2013

Committee/Public Meeting AGENDA

1. Identify new Mitigation Projects using the "Problem Statements to Projects" matrix and the FEMA Mitigation Ideas manual.

2. Next Step:

Prioritize Projects and Complete the Mitigation Action Plan

ATTENDEES

Name	Affiliation
Steve Halleran	Plainfield Town Administrator
Will Heighes	Plainfield Police Department
Frank Currier	Plainfield Meridan Fire Chief
Jim McCarragher	Plainfield Emergency Management Director
Douglas Plummer	Kimball Union Academy
Elizabeth Lufkin	NH Homeland Security and Emergency Management
Jane Hubbard	Hubbard Consulting LLC
Bonnie Lockwood	McGrew Management Services LLC

Plainfield, NH Hazard Mitigation Plan

July 15, 2013

Committee/Public Meeting AGENDA

1. Prioritize Projects

2. Complete the Mitigation Action Plan

3. Next Step:
 Finalize Final Draft for FEMA Review

ATTENDEES

Name	Affiliation
Steve Halleran	Plainfield Town Administrator
Will Heighes	Plainfield Police Department
Frank Currier	Plainfield Fire Chief
Jim McCarragher	Plainfield Emergency Management Director
Douglas Plummer	Kimball Union Academy
Jane Hubbard	Hubbard Consulting LLC
Bonnie Lockwood	McGrew Management Services LLC

PUBLIC NOTICE TO THE RESIDENTS OF PLAINFIELD, NH

HAZARD MITIGATION PLAN UPDATE

**April 11, 2013
6:00 - 8:00pm
Plainfield Town Hall
Meriden, NH**

The Town of Plainfield is beginning in the process of working with the Hazard Mitigation Planning Committee to update and revise Plainfield's *All 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 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, neighborhood groups, business owners and other interested parties are formally invited to participate in the planning process and publicly comment on their concerns regarding the *Plan*. For more information please visit the Town Hall or contact Jane Hubbard, Hubbard Consulting LLC at jhubb_99@yahoo.com or at 603-848-8801.

THIS IS A PUBLIC NOTICE AND OPEN TO THE PUBLIC

Notices posted on or before every meeting at the Plainfield Town Hall and Plainfield Post Office. In addition email notices were sent to neighboring towns, chamber of commerce and the regional planning commission.

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

PUBLIC NOTICE

**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.

THIS IS A PUBLIC NOTICE AND OPEN TO THE PUBLIC

Notices posted on or before every meeting at the Plainfield Town Hall and Plainfield Post Office. In addition email notices were sent to neighboring towns, chamber of commerce and the regional planning commission.

Email: March 19, 2014

The Town of Plainfield, NH is in the process of updating its Hazard Mitigation Plan. This Plan is a tool to be used by the Town, as well as other local, state and federal governments, in an effort to reduce the effects of natural and man-made hazards. Our communities and organizations share common hazards which do not respect governmental boundaries. Therefore, we are personally inviting you to participate in the planning process to update the Town's Hazard Mitigation Plan.

We encourage you to attend the Committee meeting on April 11th at 6:00pm at the Plainfield Town Hall in Meriden. If you are unable to attend this meeting you may access a copy of the Planning Documents and/or comment on hazard mitigation issues by emailing Jane Hubbard, with Hubbard Consulting LLC at jhubb_99@yahoo.com or at [603-848-8801](tel:603-848-8801).

For further information on Mitigation Planning, we are attaching a Mitigation Fact Sheet. We look forward to hearing your ideas on how to mitigate future hazards for the community.

The above email was sent to the following individuals:

- Members of the Planning Committee
- Elizabeth Lufkin, Field Representative, NH HSEM
- Doug Plummer at Kimball Union Academy
- Chris Christopoulos, Fire Chief, Lebanon, NH
- Steve Allen, Upper Valley Public Health Network
- R Crate, Enfield, NH
- EMD in Croydon, NH
- EMD in Grantham, NH
- Lebanon Chamber of Commerce
- Vicky Davis at Upper Valley Lake Sunapee Regional Planning Commission

Plainfield, NH	
Hazard	Problem Statements
Avalanche	The Hazard Mitigation Committee found no significant history or potential for Avalanche to consider for mitigation.
Dam Failure	<ol style="list-style-type: none"> 1. Wilder Dam in Lebanon and Moore Dam in Littleton could cause significant flood damage in Plainfield. 2. Emergency Actions Plans for Wilder Dam and Moore should be reviewed, updated and shared with the public. 3. Man made ponds and beaver ponds pose a minimal to moderate threat of flood damage.
Drought	<ol style="list-style-type: none"> 4. An extended drought increases the probability of fires and may hinder fire suppression in minimal fire protection areas. 5. The town relies on shuttling and tankers for fire suppression for a majority of the town. 6. About 600 citizens rely on water from the Plainfield and Meriden Water Districts.
Earthquake	<ol style="list-style-type: none"> 7. Town municipal critical facilities may be at risk.
Extreme Heat	<ol style="list-style-type: none"> 8. Special populations are at risk during extreme heat events. 9. Potential for increase in wild fire. 10. Increase in power outages and brownouts.
Flood	<ol style="list-style-type: none"> 11. Heavy and prolonged rain events cause flood damage primarily to roads and culverts. 12. Areas vulnerable to flooding include River Road, Penniman Road, Grantham Mt. Road, and Croydon Turnpike. 13. At least one residential property (River Road) is prone to repetitive flooding.
Hail	The Hazard Mitigation Committee found no significant history or potential for Hail to consider for mitigation.
Hurricane	<ol style="list-style-type: none"> 14. Power outages from downed utilities, minor structural damage, debris removal, limited access and flooding can affect the town as a result of a hurricane. 15. Creates the need for temporary shelter.
Landslide	<ol style="list-style-type: none"> 16. River Road (municipally owned) is susceptible to minimal landslide hazards.
Lightning	<ol style="list-style-type: none"> 17. Structural and forest fires can result from frequent lightning strikes 18. Utilities are at risk from lightning strikes.
Severe Wind (Tornado/Downburst)	<ol style="list-style-type: none"> 19. Wind damage can result in downed utilities causing power outages and limit access. 20. High density population/recreational areas are at high risk in severe wind events.
Wild/Forest Fire	<ol style="list-style-type: none"> 21. Need to develop additional sources of fire suppression (cisterns, fire ponds, etc), as recommended in the 2009 Water Resource Plan. 22. Majority of the town has limited accessibility for emergency apparatus.
Winter Weather	<ol style="list-style-type: none"> 23. All structures are susceptible to collapse due to heavy snow loads. 24. Resulting power outages result in increased emergency response calls and could require opening a shelter. 25. Financial burden to town for snow removal. 26. Severe damage to roads due to pot holes.

Human Caused Hazards	<p>27. Several areas are more vulnerable to terrorist incidents: Dartmouth Hitchcock Center in neighboring Lebanon/Hanover, Wilder Dam, Moore Dam, and I-91 across the river in Vermont.</p> <p>28. Transportation related haz-mat spills are likely due to the local connector roads to and from Vermont.</p> <p>29. Kimball Union Academy is a private high school with students from all over the world. They have emergency plans.</p> <p>30. Municipal buildings, including schools, are at risk to armed assault.</p> <p>31. The Town is at risk to aviation accidents (Lebanon Airport).</p>
Public Health	<p>32. Continue to work with Public Health Emergency Preparedness Plan (PHEPRP)</p>

Mitigation Project Identification Matrix									
Hazard	Problem Statement	Projects <i>Prevention /Property Protection/ Public Educ./ Nat.Resource /Emerg.Serv / Structural</i>	Social	Technical	Administrative	Political	Legal	Economic	Environments
Avalanche	The Hazard Mitigation Committee found no significant history or potential for Avalanche to consider for mitigation.	Not Applicable	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Dam Failure	<ol style="list-style-type: none"> 1. Wilder Dam in Lebanon and Moore Dam in Littleton could cause significant flood damage in Plainfield. 2. Emergency Actions Plans for Wilder Dam and Moore should be reviewed, updated and shared with the public. 3. Man made ponds and beaver ponds pose a minimal to moderate threat of flood damage. 	Conduct an outreach program to citizens in the 100-year floodplain, as well as those in the inundation pathway of dams.	+	+	+	+	+	+	+
Drought	<ol style="list-style-type: none"> 4. An extended drought increases the probability of fires and may hinder fire suppression in minimal fire protection areas. 5. The town relies on shuttling and tankers for fire suppression for a majority of the town. 6. About 600 citizens rely on water from the Plainfield and Meriden Water Districts. 	Construct additional dry hydrants, cisterns and fire ponds, per the recommendations of the 2009 Water Resource Plan.	+	+	+	+	+	+	+
Earthquake	<ol style="list-style-type: none"> 7. Town municipal critical facilities may be at risk. 	Adopt and enforce International building Code (IBC) and International Residential Code (IRC)	+	+	+	+	+	+	+
Extreme Heat	<ol style="list-style-type: none"> 8. Special populations are at risk during extreme heat events. 9. Potential for increase in wild fire. 10. Increase in power outages and brownouts. 	Update special needs population database annually and distribute to Fire Departments and EMD.	-	+	+	+	+	+	+
Flood	<ol style="list-style-type: none"> 11. Heavy and prolonged rain events cause flood damage primarily to roads and 	Continue to enhance GIS mapping for more effective mitigation planning, including flood	+	+	+	+	+	+	+

Mitigation Project Identification Matrix									
Hazard	Problem Statement	Projects <i>Prevention /Property Protection/ Public Educ./ Nat.Resource /Emerg.Serv / Structural</i>	Social	Technical	Administrative	Political	Legal	Economic	Environments
	culverts. 12.Areas vulnerable to flooding include River Road, Penniman Road, Grantham Mt. Road, and Croydon Turnpike. 13. At least one residential property (River Road) is prone to repetitive flooding.	risk.							
		Continue to enforce floodplain regulations, including substantially improved structures; and amend regulations as necessary per federal requirements.	+	+	+	+	+	+	+
		Mitigate (acquisition, elevation or floodproof) the residential property on River Road.	+	-	-	+	+	+	+
		Implement a regular drainage maintenance system.	+	+	+	+	+	+	+
Hail	The Hazard Mitigation Committee found no significant history or potential for Hail to consider for mitigation.	Not Applicable	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Hurricane	14.Power outages from downed utilities, minor structural damage, debris removal, limited access and flooding can affect the town as a result of a hurricane. 15. Creates the need for temporary shelter.	Retrofit critical facilities to reduce wind damage (roof anchoring and reinforcing, etc.).	+	+	+	+	+	+	+
Landslide	16. River Road (municipally owned) is susceptible to minimal landslide hazards.	Apply soil stabilization measures, such as planting soil stabilization vegetation on publicly owned slopes.	+	+	+	+	+	+	+
Lightning	17.Structural and forest fires can result from frequent lightning strikes 18.Utilities are at risk from lightning strikes.	Install lightning protection devices and methods (lighting rods, grounding, etc) on communications infrastructure and other critical facilities.	+	+	+	+	+	+	+
		Post lightning safety and warning signage at local parks	+	+	+	+	+	+	+
Severe Wind (Tornado/	19.Wind damage can result in downed utilities causing power outages and limit access.	Establish standards for all utilities regarding tree pruning around lines.	+	+	+	+	+	+	+

Mitigation Project Identification Matrix									
Hazard	Problem Statement	Projects <i>Prevention /Property Protection/ Public Educ./ Nat.Resource /Emerg.Serv / Structural</i>	Social	Technical	Administrative	Political	Legal	Economic	Environments
			Downburst)	20.High density population/recreational areas are at high risk in severe wind events.	Ensure school officials are aware of the best area of refuge in school buildings.	+	+	+	+
		Conduct tornado drill in schools and public buildings	+	+	+	+	+	+	+
Wild/Forest Fire	21.Need to develop additional sources of fire suppression (cisterns, fire ponds, etc), as recommended in the 2009 Water Resource Plan. 22.Majority of the town has limited accessibility for emergency apparatus.	Construct additional dry hydrants, cisterns and fire ponds, per the recommendations of the 2009 Water Resource Plan.	+	+	+	+	+	+	+
Winter Weather	23.All structures are susceptible to collapse due to heavy snow loads.	Inform public about severe winter weather impacts.	+	+	+	+	+	+	+
	24.Resulting power outages result in increased emergency response calls and could require opening a shelter.	Educate public on generator safety/carbon monoxide.	+	+	+	+	+	+	+
	25.Financial burden to town for snow removal. 26.Severe damage to roads due to pot holes.	Upgrade radio equipment for Fire, Police, EMS and Public Works. (NOT Mitigation)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Human Caused Hazards	27.Several areas are more vulnerable to terrorist incidents: Dartmouth Hitchcock Center in neighboring Lebanon/Hanover, Wilder Dam, Moore Dam, and I-91 across the river in Vermont. 28.Transportation related haz-mat spills are likely due to the local connector roads to and from Vermont. 29.Kimball Union Academy is a private high school with students from all over the world. They have emergency plans. 30.Municipal buildings, including schools, are at risk to armed assault. 31.The Town is at risk to aviation accidents	Implement security protection for the Meriden Water Tank.	+	+	+	+	+	+	

Mitigation Project Identification Matrix									
Hazard	Problem Statement	Projects <i>Prevention /Property Protection/ Public Educ./ Nat.Resource /Emerg.Serv / Structural</i>	Social	Technical	Administrative	Political	Legal	Economic	Environments
	(Lebanon Airport).								
Public Health	32.Continue to work with Public Health Emergency Preparedness Plan (PHEPRP)	None Identified.	n/a	n/a	n/a	n/a	n/a	n/a	n/a

For purposes of prioritizing the mitigation projects listed in the table below, each committee member should vote **for half of the projects (3) by placing a check mark in the "# of votes" column**. The projects will be prioritized based upon the total number of votes received for each project.

PRIORITIZED MITIGATION PROJECTS	# OF VOTES
PROJECT DESCRIPTION	
1. Conduct an outreach program to citizens in the 100-year floodplain, as well as those in the inundation pathway of dams.	Medium (3)
2. Adopt and enforce International building Code (IBC) and International Residential Code (IRC)	Low (1)
3. Update special needs population database annually and distribute to Fire Departments and EMD.	High (5)
4. Continue to enhance GIS mapping for more effective mitigation planning, including flood risk.	Medium (2)
5. Continue to enforce floodplain regulations, including substantially improved structures; and amend regulations as necessary per federal requirements.	Medium (3)
6. Mitigate (acquisition, elevation or floodproof) the residential property on River Road.	Low (1)
7. Implement a regular drainage maintenance system.	Medium (3)
8. Retrofit critical facilities to reduce wind damage (roof anchoring and reinforcing, etc.).	Low (0)
9. Apply soil stabilization measures, such as planning soil stabilization vegetation on publicly owned slopes.	Medium (3)
10. Install lightning protection devices and methods (lighting rods, grounding, etc) on communications infrastructure and other critical facilities.	Low (1)
11. Post lightning safety and warning signage at local parks	Low (0)
12. Establish standards for all utilities regarding tree pruning around lines.	Medium (2)
13. Ensure school officials are aware of the best area of refuge in school buildings	Medium (3)
14. Conduct multi hazard drills in schools and public buildings	Medium (3)
15. Construct additional dry hydrants, cisterns and fire ponds, per the recommendations of the 2009 Water Resource Plan.	Medium (3)
16. Implement security protection for the Meriden Water Tank.	Low (0)
17. Inform public about severe winter weather impacts.	High (4)
18. Educate public on generator safety/carbon monoxide.	Medium (3)

5 committee members voted. Low: 0-1

Med: 2-3

High: 4-5

APPENDIX C

Approval Letter from FEMA



U.S. Department of Homeland Security
FEMA Region I
99 High Street, Sixth Floor
Boston, MA 02110-2132

FEMA

AUG 21 2014

Robert W. Taylor, Chair
Select Board
Town of Plainfield
P.O. Box 380
Plainfield, NH 03770

Dear Mr. Taylor:

Thank you for the opportunity to review the Town of Plainfield, New Hampshire Hazard Mitigation Plan Update 2014. The Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA) Region I has evaluated the plan for compliance with 44 C.F.R. Pt. 201. The plan satisfactorily meets all of the mandatory requirements set forth by the regulations.

With this plan approval, the Town of Plainfield is eligible to apply to New Hampshire Homeland Security and Emergency Management for mitigation grants administered by FEMA. Requests for mitigation funding will be evaluated individually according to the specific eligibility requirements identified for each of these programs. A specific mitigation activity or project identified in your community's plan may not meet the eligibility requirements for FEMA funding; even eligible mitigation activities or projects are not automatically approved.

Approved mitigation plans are eligible for points under the National Flood Insurance Program's Community Rating System (CRS). Complete information regarding the CRS can be found at www.fema.gov/business/nfip/crs.shtm, or through your local floodplain administrator.

The Town of Plainfield, New Hampshire Hazard Mitigation Plan Update 2014 must be reviewed, revised as appropriate, and resubmitted to FEMA for approval within **five years of the plan approval date of August 19, 2014** in order to maintain eligibility for mitigation grant funding. We encourage the Town to continually update the plan's assessment of vulnerability, adhere to its maintenance schedule, and implement, when possible, the mitigation actions proposed in the plan.

Robert w. Taylor
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AUG 21 2014

Once again, thank you for your continued dedication to public service demonstrated by preparing and adopting a strategy for reducing future disaster losses. Should you have any questions, please do not hesitate to contact Marilyn Hilliard at (617) 956-7536.

Sincerely,



Paul F. Ford
Acting Regional Administrator

PFF:mh

cc: Beth Peck, New Hampshire State Hazard Mitigation Officer
Jennifer Gilbert, Asst. New Hampshire State NFIP Coordinator
Parker Moore, New Hampshire Hazard Mitigation Program Assistant
Steve Halleran, Town Administrator, Plainfield
Jane Hubbard, Planner Consultant, Hubbard Consulting, LLC

Enclosure