HAZARD MITIGATION PLAN
TOWN OF RINDGE, NH

Prepared by the:

Town of Rindge Hazard Mitigation Committee

&

Southwest Region Planning Commission
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- Police Station
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- Emergency Electrical Power Facility
- Emergency Shelters
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- Primary Evacuation Routes
- Bridges Located On Primary Evacuation Routes
- Town Garage/Transfer Station
- Communications
- Hospitals
- Helicopter Landing Sites

Category 2 – Non-Emergency Response Facilities
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- Sewer Infrastructure
- Problem Culverts
- Transfer Station
- Secondary Evacuation Route
- Bridges on Secondary Evacuation Routes

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- Recreation Areas
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- Day Care Facilities
- Churches
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- Inns
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- Apartment Complexes
- Post Office
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- Water
- Hospitals/Medical Supplies
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- Building Material and Heavy Equipment Supplies
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Executive Summary

The Rindge Hazard Mitigation Plan serves as a means to reduce future losses from natural or man-made hazard events before they occur. The Plan was developed by the Rindge Hazard Mitigation Committee and contains statements of policy adopted by the Board of Selectmen.

Natural hazards are addressed as follows:

- Flooding (Riverine, Ice/Snow Melt)
- Wind (Downburst, Tornado & Hurricane)
- Wildfire
- Extreme Winter Weather
- Subsidence
- Radon (Air/Water)
- Drought
- Extreme Heat
- Earthquakes
- Lightning
- Man-Made (Hazardous Materials/Dam Breach)
- Drought
- Extreme Heat
- Earthquakes
- Lightning
- Man-Made (Hazardous Materials/Dam Breach)

The Rindge Hazard Mitigation Committee, as shown per Chapters III and IV, identified “Critical Facilities” and “Areas at Risk” as follows:

**Critical Facilities**

- Emergency Operations Center
- Fire Station
- Police Station
- Emergency Fuel Facilities
- Emergency Electrical Power Facility
- Emergency Shelters
- Dry Hydrants/Fire Ponds/Water Sources
- Evacuation Routes & Bridges (Primary & Secondary)
- Town Garage / Transfer Station
- Communications
- Hospitals
- Helicopter Landing Sites

**Areas at Risk**

- Old New Ipswich Road
- Conservation Lands
- Construction site on US 202 North
- Fuel stations throughout town
- US 202 North at Jaffrey T/L
- Franklin Pierce University Road
- Intersection of US 202/NH 119

The Rindge Hazard Mitigation Committee identified existing hazard mitigation programs as follows:

- Emergency Management Plan
- School Evacuation Plan
- Fire Dry Hydrant Management Plan
- Town Warning System
- Local Road Design Standards
- Local Bridge Maintenance Program
- Local Road Maintenance Program
- Tree Maintenance Program
- Code Enforcement Officer
- Fire Inspector
- Health Officer
- Building Codes
- Shoreland Protection Program
- Winter Storms Operations Plan
- Hazardous Materials Spill Prevention Control & Counter Measures Plan
- Town Radio System
- Mutual Aid
- Erosion and Sedimentation Plan
- Emergency Power Back-up Program
- Town Master Plan
- Wetlands Protection Ordinance
- Safety Awareness Program
- Ambulance Service
- Radiological Evacuation Plan
- Steep Slopes Ordinance
The Rindge Hazard Mitigation Committee prioritized newly identified hazard mitigation strategies as follows:

1. Sandbag program (stockpile materials & organize volunteers)
2. Portable generators for sump pumps and to power up homes of special needs populations
3. Portable Pumps
4. Detours – Acquire cones, barriers, and signs and educate public on detour routes
5. Buy additional radio frequencies and 2 repeaters (radio interoperability)
6. Beaver control program
7. Conduct survey of residents regarding vulnerability and volunteer opportunities
8. ATV’s (Rhinos) & Boats for rescue
9. Install more dry hydrants
10. Coordinate Yankee evacuation plans with the State
11. Power back up for signals at the intersection of routes 119/202
12. Acquire CB & HAM radio for Emergency Operations Center
13. Expand existing surface water testing
14. Reverse 911 system
15. RMS School power backup
16. Franklin Pierce Shelter power back up
17. Power back up for Town Hall
18. Fuel spill containment booms, training, and inspection of gas stations
19. Fix Culvert on Old New Ipswich Road
20. Resolve Mutual Aid radio jams during VT Yankee drills
21. Emergency Transportation Plan for moving people to shelters
22. Neighborhood level plans, with town coordinator designated to each
23. Coordination of volunteers and private resources (snowmobiles, ATVs, etc.)
24. Securing supplies with retail stores
25. Coordinate School Superintendent w/ FD & PD re: days off & trouble students
26. Radiological training for monitors
27. Public education on town warning signals and procedures for extended power outages
28. New fire codes for commercial buildings (more stringent sprinkler regulations)
29. Dam inspection policy
30. Implement septic system ordinance
31. Acquire excavator for Public Works
32. Forest Management practices for conservation lands to prevent forest fires
33. Code enforcement – environmental training for health officer
34. Erosion Sediment Control ordinance
35. Snow fencing/landscaping to prevent white-outs on College Road
36. Security fence around explosives storage area
37. Public sewer around lakes (such as little Michigan)
CHAPTER I
INTRODUCTION

Background

The Federal Emergency Management Agency (FEMA) has mandated that all communities within the State of New Hampshire establish local hazard mitigation plans as a means to reduce future losses from natural or man-made hazard events before they occur. In response to this mandate, the NH Bureau of Emergency Management (BEM) contracted the Southwest Region Planning Commission (SWRPC) to develop a program that would achieve this goal. SWRPC prepared a hazard mitigation planning handbook to be used by local communities as a guide in the preparation of hazard mitigation plans. SWRPC then facilitated two hazard mitigation planning processes with selected communities as pilot projects. The resulting plans laid the foundation in an effort to enable all New Hampshire Regional Planning Commissions, through education outreach, the capability to assist their local communities, such as the Town of Rindge, in the preparation of local hazard mitigation plans.

What is Hazard Mitigation?

"Hazard Mitigation means any action taken to reduce or eliminate the long-term risk to human life and property from natural hazards" (44 CFR 206.401).

Authority

This Hazard Mitigation Plan was prepared under the authority of the Planning Mandate of Section 409 of Public Law 93-288 as amended by Public Law 100-707, the Robert T. Stafford Act of 1988, hereinafter referred to as the "Stafford Act." Accordingly, this All-Hazard Mitigation Plan will be referred to as the "Plan."

Funding Source

This Plan was funded by the NH Bureau of Emergency Management, with grants from the Predisaster Mitigation Competitive Grant Program as well as from funds appropriated by the Town of Rindge.

Purpose

The Rindge All-Hazard Mitigation Plan is a planning tool to be used by the Town of Rindge, as well as other local, state and federal governments, in their efforts to reduce the effects from natural and human-made hazards. This plan does not constitute any sections of Rindge's Master Plan or Town Ordinances.
Scope of the Plan

The scope of this Plan includes the identification of natural hazards affecting the Town of Rindge, as identified by the Hazard Mitigation Committee. The hazards were reviewed under the following categories as outlined in the State of New Hampshire's Natural Hazards Mitigation Plan:

I. Flood, Erosion, Drought, Extreme Heat and Wildfire.
II. Geological Hazards (Earthquake, Subsidence, and Radon).
III. Severe Wind (Tornado, Hurricane, Thunderstorm, Downburst and Lightning).
IV. Winter Weather (Snow, Ice Storm and Extreme Cold).

The Committee also discussed man-made hazards such as Dams and Hazardous Materials Spills.

Methodology

Using the Guide to Hazard Mitigation Planning for New Hampshire Communities handbook, the Rindge Hazard Mitigation Committee developed the content of the Rindge’s Hazard Mitigation Plan by following the nine step process set forth in the handbook. The Committee held monthly meetings, open to the public including area business owners, schools, organizations and communities, starting April 20, 2006 through November 2, 2006, in order to develop the Plan. On [Enter Date] the Rindge Board of Selectmen held a public hearing and adopted the Plan.

The following are dates of Committee meetings and sub-committee meetings.

Public Committee Meetings:

April 20, 2006, 7:00 - 8:30 p.m.: Public informational and organizational meeting, held at Rindge Town Offices.
May 22, 2006, 7:00 - 9:00 p.m.: Working committee meeting held at Rindge Town Offices.
June 6, 2006, 10:00 - 12:00 p.m.: Working committee meeting held at Rindge Town Offices.
July 11, 2006, 10:00 - 1:00 p.m.: Working committee meeting held in Rindge Town Offices.
August 8, 2006, 10:00 - 1:00 p.m.: Working committee meeting held in Rindge Town Offices.
September 19, 2006, 10:00 - 1:00 p.m.: Working committee meeting held in Rindge Town Offices.
November 2, 2006, 10:30 – 12:00 p.m.: Working committee draft plan review meeting held at Rindge Town Offices.

A mailing was made to each committee member, prior to each meeting that contained information from the previous meeting, an agenda sheet, and information to be covered. In addition, the meetings were advertised as a public meeting in accordance with RSA 91-A, and the meeting dates where posted on the town’s website. (Meeting agendas and notices are included in Appendix D at the back of the Plan.)

Public Meetings with the Board of Selectmen:

[Insert Date]: The Board of Selectmen agreed to begin the process of developing a Local Hazard Mitigation Plan. Meeting held at Rindge Town Offices.

[INSERT DATE]: The Board of Selectmen adopted the Local Hazard Mitigation Plan. Public hearing held at Rindge Town Offices.
The Committee developed this Plan as a result of following the described meeting procedures and planning steps:

**Step 1: Establish and Orient a Hazard Mitigation Planning Committee**
Southwest Region Planning Commission presented the Town of Rindge with recommendations for the make up of the committee. Recommendations included the inclusion of town staff, emergency response staff, public works, elected officials, business owners, and those with knowledge of historical events. Town staff selected persons based on these recommendations and submitted a list of prospective members to the Board of Selectmen. The Selectmen approved the members and the committee was formed.

**Step 2: Identification of Hazards and Critical Facilities**
As listed below, the Committee members identified human-made and natural hazards that could or have affected the Town of Rindge.

<table>
<thead>
<tr>
<th>Flooding</th>
<th>Tornado</th>
<th>Hazardous Materials Spills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drought</td>
<td>Hurricanes</td>
<td>Snow Avalanche</td>
</tr>
<tr>
<td>Extreme Heat</td>
<td>Earthquakes</td>
<td>Subsidence</td>
</tr>
<tr>
<td>Wildfire</td>
<td>Severe Wind/Downburst</td>
<td>Radon</td>
</tr>
<tr>
<td>Lightning Strikes</td>
<td>Extreme Winter Weather</td>
<td>Dams</td>
</tr>
</tbody>
</table>

The Committee brainstormed on the type of hazards and locations that have sustained or could be susceptible to each hazard within the Town. The results are shown in the Past and Potential Hazard Map, which can be found at the end of the Plan.

The Committee then identified and catalogued all of the critical facilities within the Town. The result is found in Chapter IV, "Critical Facilities Analysis," and shown on a location map at the end of the Plan.

**Step 3: Assessing Probability, Severity and Risk, and Estimating Potential Losses**
The Committee members completed Risk Assessment Worksheets for all of the types hazards identified in Step 2 in order to assess probability, severity and risk. Potential losses for each hazard type were estimated. This data is found in Chapter IV “Assessing Probability, Severity and Risk- Estimating Potential Losses.”

**Step 4: Analyze Development Trends**
This Step was conducted by town staff and the Regional Planning Commission. The results of this research were shared with the Committee and can be found in Chapter II, “Community Profile.”

**Step 5: Existing Mitigation Strategies and Proposed Improvements**
The Committee identified plans and policies that are already in place to reduce the affects of man-made and natural hazards. Then the Committee evaluated the effectiveness of the existing measures to identify where they can be improved. The results are found in Chapter VII, "Existing Mitigation Strategies." The Committee also identified programs in place that would not be categorized as mitigation strategies.

**Step 6: Brainstorm and Develop Disaster Minimization Alternatives**
To assist with determining mitigation projects, the Committee considered the following eight (8) objectives:

- Preventative (Programs & Policies)
- Property Protection
- Structural
- Public Education & Information
Engineering Projects
Equipment Purchase
Training

The Committee also identified mitigation actions for each of the potential hazards identified in Chapter III.

**Step 7: Prioritized Mitigation Measures**
The Committee developed a prioritized list of mitigation projects identified in Step 6 considered feasible to implement. This prioritized list can be found in Chapter VII.

**Step 8: Develop an Implementation Strategy- Action Plan**
Using the prioritized list of mitigation actions identified in Step 7, the Committee developed a clear strategy that outlines who is responsible for implementing each project, as well as when and how the actions will be implemented.

**Step 9: Adopt and Implement the Plan**
The Committee members reviewed and approved each section of the plan as it was completed. After acceptance by the Committee, the Plan was submitted to the New Hampshire Bureau of Emergency Management for initial review, and then forwarded to FEMA, for formal approval. Once approved, the Plan was formally adopted by the Town of Rindge on _____________.

The Committee approved the "Prioritized Mitigation Projects" list, which identifies responsibility, funding, support and timeframe for each project. Other projects that may be developed with the support of Rindge’s Emergency Management Director shall be led by the head of the department that shares that responsibility. The Town Administrator should be charged with requesting annual reports as to the progress of each project.

It is important to the Town of Rindge that this plan be monitored and updated annually or after a presidentially declared disaster. Chapter VIII addresses this issue.

**Acknowledgements**

The Rindge Board of Selectmen extends special thanks to the Rindge Hazard Mitigation Committee as follows:

Rickard Donovan, *Director of Public Life and Safety*
Carlotta Pini, *Assistant to the Town Administrator*
Patricia Barry, *Selectmen*
Bob Cleland, *Historical Society & Conservation Committee*
Jo Anne Carr, *Town Planner*
Michael Sielicki, *Police Chief*
Robert Forrest, *Director Public Works*
Michael A. Cloutier, Sr., *Highway Foreman*
Evelyn Fogg, Business Owner

The Rindge Board of Selectmen offers thanks to the New Hampshire Bureau of Emergency Management for developing the State of New Hampshire Natural Hazards Mitigation Plan (www.nhoem.state.nh.us) which served as a model for this plan. In addition, special thanks are extended to the staff of the Southwest Region Planning Commission for professional services, process facilitation and preparation of this document.
Hazard Mitigation Goals

Town of Rindge, NH

The overall Goals of the Town of Rindge with respect to Hazard Mitigation are stipulated here:

1. To improve upon the protection of the general population, the citizens of the Town of Rindge and guests, from all natural and human-made hazards.

2. To reduce the potential impact of natural and man-made disasters on the Town of Rindge's Emergency Response Services.

3. To reduce the potential impact of natural and human-made disasters on the Critical Facilities in the Town of Rindge.

4. To reduce the potential impact of natural and human-made disasters on the Town of Rindge's infrastructure.

5. To improve the Town of Rindge's Emergency Preparedness and Disaster Response and Recovery Capability.

6. To reduce the potential impact of natural and human-made disasters on private property in the Town of Rindge.

7. To reduce the potential impact of natural and human-made disasters on the Town of Rindge's economy.

8. To reduce the potential impact of natural and human-made disasters on the Town of Rindge's natural environment.

9. To reduce the Town of Rindge's liability with respect to natural and human-made hazards through a community education program.

10. To reduce the potential impact of natural and human-made disasters on the Town of Rindge's specific historic treasures.

11. To identify, introduce and implement cost-effective Hazard Mitigation measures so as to accomplish the Town's Goals and Objectives and to raise the awareness of and acceptance of Hazard Mitigation opportunities generally.

12. The Town of Rindge will work in conjunction and cooperation with the State of New Hampshire's Hazard Mitigation Goals.
Resource List for Hazard Mitigation Committee

The following list are agencies whose advice was either actively sought in the creation of this plan, or with whom future contacts should be made in carrying out this plan.

New Hampshire Bureau of Emergency Management:
Division of Emergency Management
33 Hazen Drive, Concord, NH 03305

Field Representative: Jeremy LaPlante 603-223-3613
Mitigation Officer: Richard Verville 1-800-852-3792

New Hampshire Department of Transportation:
James Mitchell (District 4) Swanzey, NH 03446 352-2302

Public Service of New Hampshire:
Sue Blothenberg Keene, NH 03431 357-7309 Ext. 5115
1-800-662-7764

Cold Region Research Laboratory:
Kate White Hanover, NH 03755 646-4187

Rindge Memorial School Principal:
John Stone Rindge, NH 03461 899-3363
CHAPTER II
COMMUNITY PROFILE

The Town of Rindge’s master plan and annual report were reviewed and compiled along with up-to-date information from various agencies of the State of New Hampshire and from the Southwest Region Planning Commission. This information, along with anecdotal and factual information from the Hazard Mitigation Committee was used to provide the following profile.

Town Overview

The Town of Rindge is located in the southeastern portion of Cheshire County, in Southwest New Hampshire. Rindge is bounded on the north side by Jaffrey and Sharon, easterly by New Ipswich, westerly by Fitzwilliam, and southerly by the State of Massachusetts. The Town population is 6,137.¹

Location Map of Rindge, NH

The Town of Rindge has a density of 165.6 persons per square mile of land area and contains 37.1 square miles of land area and 2.7 square miles of inland water area. The Town has several significant water bodies, such as Lake Monomonac, Contoocook Lake, Emerson Pond, Grassy Pond, Hubbard Pond, Bullet Pond, Pool Pond, Crowcroft Pond and Pearly Pond. Some of these water features have attracted a substantial amount of shoreline development which consists mostly of seasonal dwellings on small, nonconforming lots of records that were subdivided may years ago. More recently, year-round residences have been built. Additionally, Rindge has large amounts of undeveloped land: 3,831 developed acres and 20,069 undeveloped acres.²

² 1989 data from the Town of Rindge Master Plan (2001 Update)
Rindge has two different watersheds. The Contoocook River watershed, which is part of the Merrimack River Basin, drains approximately 30% of the Town (7,450 acres) to the north. The Millers River watershed is part of the Connecticut River Basin and drains approximately 70% of Rindge (18,150 acres) to the south.

The topography of Rindge is more of a rolling terrain characterized by broader and more gradual slopes than the steeper slopes found in neighboring Jaffrey and New Ipswich. The overall change in topography ranges from a low of approximately 900 feet in the extreme southwest corner near the Fitzwilliam/Rindge/Massachusetts border to approximately 1,500 feet in the extreme southeast corner adjacent to the New Ipswich town line. High points in Rindge are Thrasher Hill 1,382’ and Griswold Hill 1,371’. However, the general terrain ranges mostly in the 1,000 – 1,200 foot elevation.

Rindge has a mid-latitude climate. Average summer temperature is 68 degrees Fahrenheit; average winter temperature is 20 degrees Fahrenheit. Average annual precipitation is 45 inches and the average annual snowfall is 74 inches.

Two major highways pass through Rindge; NH Route 119 and US Route 202. Route 119 is the major east-west artery and Route 202 is the major north-south artery.

A three-member Board of Selectmen governs the Town of Rindge. The Town has a full-time Town Administrator, full-time Fire Chief (Director of Public and Life Safety) with a volunteer Fire Department, a full-time Police Chief, and a full-time Director of Public Works. Area hospitals include the Cheshire Medical Center/Dartmouth-Hitchcock located in Keene, approximately 22 miles northwest, Monadnock Community Hospital in Peterborough, approximately 14 miles north of Rindge, and Heywood Hospital in Gardner, MA, approximately 16 miles south.

**Disaster Risk**

Rindge is prone to a variety of man-made and natural hazards. These include: vehicle accidents, dam failures, riverine and ice jam flooding, erosion, severe wind events, wildfire, drought, ice storms and severe winter storms.

Rindge does not have the same flooding problems as communities to the north which border the Contoocook River because flooding is moderated by an extensive drainage network and the capacity of wetlands to store floodwaters. This allows the waters to be dispersed over a large area and discharged over a longer period of time.

Severe wind events and hurricane residuals have caused damage to Rindge. Over the years unrecorded wind events have caused losses of timber. In 1928, a tornado ripped through West Rindge causing major property damage.

Wildfires have occurred in Rindge as well. There have been several documented wildfires throughout town in the past 70 years. The areas in and around the forests are susceptible to wildfires due to the fuel load and many camping activities.

Winter weather has proven to be a regular hazard throughout the town of Rindge each year. Rindge is susceptible to receiving large volumes of snow from Nor’easters due to its geographical close proximity to the east coast where these storms track. In 1888, Rindge received 40 inches of snow from one of these storms. The town has also received a fair share of damage from ice storms in winter months.
Development Patterns

Examination of the Town’s existing land use as shown in the 1990 Rindge Master Plan indicates that most of the Town’s land area (about 78.4% land) is undeveloped and consists primarily of wooded and brush-covered areas, many of which have substantial development constraints. Rindge’s most prevalent natural limitation for development is its wetlands. Twenty-six percent of the Town’s area is undevelopable, approx. nineteen percent is comprised of wetland soils and another approx. seven percent is surface water.

<table>
<thead>
<tr>
<th>LAND USE</th>
<th>TOTAL ACRES</th>
<th>% OF ACRES IN USE</th>
<th>% OF TOTAL LAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEVELOPED</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential (single &amp; multi)</td>
<td>930</td>
<td>2103</td>
<td>34.7</td>
</tr>
<tr>
<td>Commercial</td>
<td>130</td>
<td>97</td>
<td>4.8</td>
</tr>
<tr>
<td>Industrial</td>
<td>10</td>
<td>21</td>
<td>0.3</td>
</tr>
<tr>
<td>Public/Institutional</td>
<td>990</td>
<td>950</td>
<td>36.9</td>
</tr>
<tr>
<td>Roads and Highways</td>
<td>625</td>
<td>660</td>
<td>23.3</td>
</tr>
<tr>
<td>TOTALS</td>
<td>2,685</td>
<td>3,831</td>
<td>100%</td>
</tr>
<tr>
<td>UNDEVELOPED</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Area</td>
<td>21,215</td>
<td>20,069</td>
<td>82.9%</td>
</tr>
<tr>
<td>TOTAL AREA</td>
<td>25,600</td>
<td></td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Decrease in commercial and public/institutional acreage is due to differences in classification methods.


Residential

Land devoted to residential uses comprises the largest amount of developed acreage in Rindge. Reference to the Existing Land Use Map reveals that the pattern of residential development generally follows the natural features of the land and the existing road network. Today’s residential pattern consists mainly of single family detached dwellings located on various town roads as well as routes 202 and 119.

Agriculture/Vacant Land

Analysis of the present development pattern reveals that agricultural activity has experienced a significant decline in Rindge even though, according to the 1980 Master Plan, the Town once contained some of the most productive farms in the State. Evidence of agricultural activity consisted mainly of hay fields and pastures, and there are only a few active farms still in existence. Numerous vacant areas that were obviously farm fields are currently lying fallow and/or have become overgrown with brush and show evidence of returning to forest land.

Commercial

The greatest concentrations of commercial development are to be found on the southern section of US 202, which is Rindge’s main commercial area. Most of Rindge’s commercial activity is located in this area.
Industrial
There are two areas of industrial uses in town, located in the northwest area along US 202 near the Jaffrey town line and along US 202 south near the Massachusetts state line. There are also a few sand and gravel pits operating in Town.

Recreational
There are many recreational uses in Town. They include the school properties, town and private beaches, Franklin Pierce sports complex, the many private campgrounds and picnic areas, the lakes, and other attractions.

Forest Land
Heavily wooded forest land still covers most of the Town. Most of this land has already been cut for lumber in previous years (dating back to the early 1800s), and so there are no “virgin” stands of timber remaining. Forested land often includes the steeper slopes and wetlands that heretofore have remained undeveloped. These wooded areas still produce timber. They are also important to the town’s landscape because they serve as a recreational resource, provide wildlife habitat, help moderate the climate, and help maintain the rural character of the town.

Roads and Highways
Roads and highways comprise a major portion of a community’s developed land area. In Rindge, the land devoted to the Town and State roads occupies approximately 660 acres or 17.2% of the total developed area (92.92 miles). The land consists of both the traveled road surface and the adjacent right-of-way area.

Public/Institutional Development
Numerous public and private institutional uses are located in Rindge. The 1980 plan showed institutional acreage to be approximately 990 acres. Public facilities include cemeteries, The Old Meeting House, Town Office Building, Rindge Elementary School, Fire Station, Town Forest, Post Office, Wellington Road Recreation Area, State Highway Barn, Annett State Forest, Town Garage, and Solid Waste Transfer Station. Private Facilities include Churches, Franklin Pierce University, Camp Quinapoxet Boy Scout Camp, Camp Monomonac, Hampshire Country School, Cathedral of the Pines Memorial, Meeting School, and Camp Joy.

Rindge is still basically a rural community with three small village centers. The villages of Rindge Center and West Rindge have a fairly concentrated development pattern consisting primarily of residential uses supplemented by commercial (along Route 202) and various public and semi-public uses. The village of East Rindge is strictly a residential neighborhood.

Consideration for Development
The existing topography of Rindge will play a significant role in the location of future land uses such as residential, commercial, and industrial. Rindge contains a significant amount of wetlands and some steep slopes that are not really suitable for development. As a result, development will be oriented to those portions of the Town where such physical constraints will not present significant development problems. Also, developers can use the planned residential development or cluster development concept to mitigate adverse environmental considerations. It is also expected that future development will be oriented to the larger undeveloped land parcels that are scattered throughout the Town.

Analysis of the Natural Features Maps shows that many of these areas are located in close proximity to Routes 119 and 202 and would be easily accessible from these highways. Consequently, it is expected that much of the Town’s future growth will be attracted to, and located in, these highway corridors. It is
expected that the present topography, when coupled with existing soil conditions, will be a major determinant as to where future development will or will not occur in Rindge.

The soils best suited for development in Rindge are the Monadnock, Colton, and Berkshire soils. Most of these soils are on 8-15% slopes and would need erosion and sedimentation control plans when development is proposed on these soils. There is a high permeability rate in the Colton soils and groundwater quality should be a concern for development.

Many of the other soil units in Rindge are rated medium to high for development potential, but many of these soils pose severe restrictions for septic systems due to a restrictive hardpan layer.

**Current Development Trends**

Overall, land use patterns in Rindge are dominated by single family residential development, with fairly significant retail development along US 202. Within Rindge there are also seasonal lakefront properties as well as a large college (Franklin Pierce University). This general pattern is not expected to change, although the Planning Department is very concerned about increased residential development occurring in the eastern part of town (east of US 202). Agriculture, which continues to be a concern, both for the economic activity as well as for the protection of the prime farmlands, does not play a significant role in the local economy. It is unlikely that this will change in the foreseeable future, due as much to national trends in farming as to anything else.

Significant features of the built environment include the Town Center on Payson Hill Rd., the retail development on US 202, and the Franklin Pierce University campus. Rindge's history and traditions are rich, and much attention - both public and private - is given to preserving these features. With the pending increase in development, this is a good time to review the land use regulations relative to protecting the identity and character of the Town; this includes addressing land use along the roads.

The future of the NH 119 and US 202 retail corridors and Franklin Pierce University will have tremendous impact on the whole town. Attention will need to be paid to the land use regulations to ensure that they support the final goals and plans for these important pieces of property.

Based on data collected and analyzed in the Land Use Analysis chapter of Rindge’s Master Plan (2001), certain assumptions can be made in anticipating future development in Rindge.

- If the past 10 years can serve as an indicator, Rindge will continue to see significant increase in population, new homes built, and retail development.
- The road network in and through Rindge will remain unchanged over the next 10-15 years, aside from regular maintenance and improvements. The roads carrying traffic through Rindge, i.e., Routes 119 and 202, will continue to serve as subregional arterials and local collectors.
- Subdivisions will continue to occur in the eastern side of town with mainly single family homes being built on them.

**Road Improvements**

Providing an adequate thoroughfare and transportation system is the most significant public investment activity in the physical development of a town. The existing transportation network, which in the case of Rindge refers exclusively to the system of roads and highways, has a profound influence on the location and development of various land uses through the Town.

Due to the significant financial commitment required for the improvement and maintenance of the road network, and the direct relationship between land use patterns and traffic circulation with the Town, the
identification and analysis of current transportation needs is crucial to the orderly accommodation of growth and development.

Development in Hazard Areas

Some hazards identified in this plan are regional risks and, as such, all new development falls into a hazard area. The exception to this is flooding. Currently, there are no structures located within the Special Flood Hazard Area (SFHA) in Rindge. According to the Community Information System (CIS) of FEMA, there have been no development permits and no variances granted within the SFHA since 1978, the earliest records kept in the CIS for the Town of Rindge. There are currently 13 flood insurance policies in force for a total value of $1,598,700, with no claims since 1978.

National Flood Insurance Program (NFIP)

Areas susceptible to flooding present obvious hazards to life and property, and the continued protection of these areas from development is an important responsibility. Rindge participates in the National Flood Insurance Program administered by the Federal Emergency Management Agency (FEMA). FEMA conducted a flood hazard study for Rindge in 1997 and flood hazard areas were identified in the Pool Pond and Contoocook Lake areas, as well as areas along the Millers River and Lake Monomonac. Flood Insurance Rate Map (FIRM) and Flood Hazard Boundary Maps were prepared by FEMA and are available for review at the Rindge Planning Board office.³

³ Rindge Master Plan – 2006, Natural Resources Chapter, p. 3-17, 8.3 Floodplains
CHAPTER III: HAZARD IDENTIFICATION

The following is a list of natural and manmade disasters, and the areas affected by them, that have or could affect the Town of Rindge. These hazards were identified from the State of New Hampshire Hazard Mitigation Plan (2004), the Federal Emergency Management Administration website, and in a brainstorming session with the Hazard Mitigation Planning Committee meeting on May 22, 2006. The Past and Potential Hazards Map at the end of this Plan reflects the contents of this list.

Hazards

Riverine Flooding
Flooding- Disaster Declarations
Flooding- Localized areas
Drought
Extreme Heat
Wildfires
Lightning
Tornadoes
Hurricanes
Earthquakes
Severe Wind/Downbursts
Extreme Winter Weather
Hazardous Materials Incidents
Snow Avalanche
Subsidence
Radon
Dams

In order to determine estimated losses due to natural and man made hazards in Rindge, each hazard area was analyzed; results are shown below. Human losses were not calculated during this exercise, but could be expected to occur depending on the type and severity of the hazard. Most of these figures exclude both the land value and contents of the structure. The value of all structures, including exempt structures such as schools and churches, is $552,374,838.00, as of December 1, 2005.\(^4\) The median value of a home in Rindge is $114,400 according to the 2000 Census.\(^5\) The data below was calculated using FEMA’s Understanding Your Risks: Identifying Hazards and Estimating Losses (August 2001). In addition, the Committee completed the Vulnerability Assessment Worksheets which provided more data to estimate the potential losses.

As future development in Rindge is unpredictable at this time, it is uncertain as to how many future structures could be threatened by hazards. Only existing structures are considered.

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\(^4\) NH Department of Revenue Administration
\(^5\) Median home value from 2000 Census may not fully reflect current median home values. In the event of a hazard incident, a current home value data should be used to estimate losses.
## Rindge Hazard Mitigation Plan- 2007

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Date</th>
<th>Location</th>
<th>Severity Remarks/Description of Areas Impacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLOODING- DISASTER DECLARATIONS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flood</td>
<td>1927</td>
<td>Southern NH</td>
<td>Damage to Road Network. Caused many roads to wash out.</td>
</tr>
<tr>
<td>Flood</td>
<td>March 11-21, 1936</td>
<td>NH State</td>
<td>Damage to Road Network. Flooding caused by simultaneous heavy snowfall totals, heavy rains and warm weather. Run-off from melting snow with rain overflowed the rivers</td>
</tr>
<tr>
<td>Flood/ Severe Storm</td>
<td>August 27, 1986</td>
<td>Cheshire, Hillsborough Counties, NH</td>
<td>FEMA Disaster # 771-DR (Presidentially Declared Disaster) $1,005,000 in damage</td>
</tr>
<tr>
<td>Flood / Severe Storm</td>
<td>April 16, 1987</td>
<td>Cheshire, Carroll, Grafton, Hillsborough, Merrimack, Rockingham, &amp; Sullivan Counties, NH</td>
<td>FEMA Disaster Declaration # 789- DR (Presidentially Declared Disaster). Flooding of low-lying areas along river caused by snowmelt and intense rain. $4,888,889 in damage.</td>
</tr>
<tr>
<td>Flood</td>
<td>August 7-11, 1990</td>
<td>Belknap, Carroll, Cheshire, Coos, Grafton, Hillsborough, Merrimack, Rockingham, and Sullivan Counties, NH</td>
<td>FEMA Disaster Declaration # 876. Flooding caused by a series of storm events with moderate to heavy rains. $2,297,777 in damage.</td>
</tr>
<tr>
<td>Flood</td>
<td>July 2, 1998</td>
<td>Southern NH</td>
<td>FEMA Disaster Declaration # 1231. Severe storms and flooding</td>
</tr>
<tr>
<td>Heavy Rain/ Flood</td>
<td>September 18-19, 1999</td>
<td>Belknap, Cheshire, Grafton Counties, NH</td>
<td>FEMA Disaster Declaration # DR-1305-NH. Heavy rains associated with Tropical Storm/Hurricane Floyd.</td>
</tr>
<tr>
<td>Severe Storm/ Flood</td>
<td>September 12, 2003</td>
<td>Cheshire and Sullivan Counties, NH</td>
<td>FEMA Disaster Declaration # 1489-DR. Damage amount $1,300,000.</td>
</tr>
<tr>
<td>Flood</td>
<td>October 26th 2005</td>
<td>Cheshire, Grafton, Merrimack, Sullivan, and Hillsborough Counties, NH</td>
<td>FEMA Disaster Declaration # 1610. Severe storms and flooding.</td>
</tr>
</tbody>
</table>

## RIVERINE FLOODING- LOW RISK

RIVERINE FLOODING- LOW RISK

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Date</th>
<th>Location</th>
<th>Remarks/Description of Areas Impacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riverine Flooding</td>
<td>Past and Potential Occurrences</td>
<td>Contoocook Lake &amp; Poole Pond</td>
<td>Flooding of the lake and intermittent streams onto US 202 has occurred and has the potential to occur annually in this area due to accumulation of heavy rain, runoff, and construction of beaver dams. This section of US 202 is located in the 100-year floodplain. Although past flooding has occurred along the road, there is no record of damage.</td>
</tr>
</tbody>
</table>
## Hazard Mitigation Plan - 2007

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Date</th>
<th>Location</th>
<th>Remarks/Description of Areas Impacted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FLOODING- LOCALIZED- MEDIUM RISK</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flood</td>
<td>Past and Potential Occurrences</td>
<td>Northern Hubbard Pond (map #15)</td>
<td>Floods over road due to heavy rain and spring thaw. Town is at peak of watershed, few flooding events.</td>
</tr>
<tr>
<td>Flood</td>
<td>Past and Potential Occurrences</td>
<td>Old New Ipswich Road (map #14)</td>
<td>Beaver Dams cause flooding during heavy rain events due to heavy overflow.</td>
</tr>
<tr>
<td>Flood</td>
<td>Past Occurrences</td>
<td>Lake Monomanoc Dam (map #21)</td>
<td>This dam has been recently repaired.</td>
</tr>
<tr>
<td>Flood</td>
<td>Past and Potential Occurrences</td>
<td>Mill Pond and Island Pond (map #20)</td>
<td>Hampshire County School owns dam. The state was helping in the repair of the dam when it failed in the summer of 2006. No damage was reported due to the failure.</td>
</tr>
<tr>
<td>Flood</td>
<td>Potential Occurrence</td>
<td>Annette Dam (map #19)</td>
<td>Annette dam has been repaired in the last 10 years. It would cause major flooding in Jaffrey if it failed.</td>
</tr>
<tr>
<td>Flood</td>
<td>Potential Occurrence</td>
<td>Grassy Pond Road (map #18)</td>
<td>Major event could cause flooding to houses in this location.</td>
</tr>
<tr>
<td>Flood</td>
<td>Potential Occurrences</td>
<td>Old Cathedral Road (map #17)</td>
<td>Stream has potential for flooding one house. Beaver dam is causing potential flooding.</td>
</tr>
<tr>
<td><strong>DROUGHT- LOW RISK</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drought</td>
<td>1929-1936</td>
<td>Statewide</td>
<td>Regional. Recurrence Interval 10 to &gt; 25 years</td>
</tr>
<tr>
<td>Drought</td>
<td>1939-1944</td>
<td>Statewide</td>
<td>Severe in southeast and moderate elsewhere. Recurrence Interval 10 to &gt; 25 years</td>
</tr>
<tr>
<td>Drought</td>
<td>1947-1950</td>
<td>Statewide</td>
<td>Moderate. Recurrence Interval 10 to &gt; 25 years</td>
</tr>
<tr>
<td>Drought</td>
<td>1960-1969</td>
<td>Statewide</td>
<td>Regional longest recorded continuous spell of less than normal precipitation. Encompassed most of the Northeastern US. Recurrence Interval &gt; 25 years</td>
</tr>
<tr>
<td>Drought</td>
<td>2001-2002</td>
<td>Statewide</td>
<td>Third worst drought on record, exceeded only be the drought of 1956-1966 and 1941-1942.</td>
</tr>
</tbody>
</table>

Rindge has had limited experience with severe drought conditions. Drought will increase the risk of wildfire, especially in areas of high recreational use and forested areas. Forested areas with high fuel content have more potential to burn.
<table>
<thead>
<tr>
<th>Hazard</th>
<th>Date</th>
<th>Location</th>
<th>Remarks/Description of Areas Impacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTREME HEAT- LOW RISK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extreme Heat</td>
<td>July, 1911</td>
<td>New England</td>
<td>11-day heat wave in New Hampshire</td>
</tr>
<tr>
<td>Extreme Heat</td>
<td>Late June to</td>
<td>North America</td>
<td>Temps to mid 90s in the northeast</td>
</tr>
<tr>
<td></td>
<td>September, 1936</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extreme Heat</td>
<td>Late July, 1999</td>
<td>Northeast</td>
<td>13+ days of 90+ degree heat</td>
</tr>
<tr>
<td>Extreme Heat</td>
<td>Early August, 2001</td>
<td>New Hampshire</td>
<td>Mid 90s and high humidity</td>
</tr>
<tr>
<td>Extreme Heat</td>
<td>August 2-4, 2006</td>
<td>New Hampshire</td>
<td>Regional heat wave and severe storms, New Ipswich provided a cooling center at the Ambulance Bay</td>
</tr>
<tr>
<td>Elderly are at risk; however, potential risk is low. Approximately 7.7% of the town population is 65 and over. Quantity of and access to water sources throughout town reduces potential risk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WILDFIRES- MEDIUM RISK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wildfire</td>
<td>Past Occurrence</td>
<td>Eastern Shore of Lake</td>
<td>A bottle rocket ignited brush and burned down a cabin and many trees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Monomonac</td>
<td></td>
</tr>
<tr>
<td>Wildfire</td>
<td>1926</td>
<td>Village center</td>
<td>Burned down in 1926.</td>
</tr>
<tr>
<td>As forested areas are protected through preservation and conservation, debris builds up on the ground, increasing the fuel load and potential wildfire. Entire town - minimal forest fire protection (dependent on on-call firefighters and problems with accessibility). All forested areas – have high potential for fire, with 6” to 10” of brush creating high fuel load. Peat moss creates possibility of underground fires. Lightning strike areas also prone to wildfires.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIGHTNING- MEDIUM- HIGH RISK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lightning</td>
<td>Past and Potential</td>
<td>Pearly Lake</td>
<td>Lightning strikes at private residences on Pearly Lake.</td>
</tr>
<tr>
<td></td>
<td>Occurrences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lightning</td>
<td>Past and Potential</td>
<td>US 202 south</td>
<td>Lightning has struck several times at businesses along US 202</td>
</tr>
<tr>
<td></td>
<td>Occurrences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lightning</td>
<td>Past and Potential</td>
<td>Old New Ipswich Rd</td>
<td>Lightning strikes have been reported on the northern portion of this road. Two power lines and many trees destroyed.</td>
</tr>
<tr>
<td></td>
<td>Occurrences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lightning</td>
<td>Past and Potential</td>
<td>Bancroft Reservoir</td>
<td>Lightning strikes reported in this area.</td>
</tr>
<tr>
<td></td>
<td>Occurrences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lightning</td>
<td>Past and Potential</td>
<td>High Tension power lines</td>
<td>Lightning has struck in the vicinity of the high tension power lines going from Main St. to Goddard Rd</td>
</tr>
<tr>
<td></td>
<td>Occurrences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rindge has experienced several lightning strikes to private properties. High elevations and areas around lakes and wetlands may be more susceptible to lightning strike incidents.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazard</td>
<td>Date</td>
<td>Location</td>
<td>Remarks/Description of Areas Impacted</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>-----------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td><strong>TORNADOS (1950-2003, Fujita Scale given if known)- LOW-MEDIUM RISK</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tornado</td>
<td>September 15, 1922</td>
<td>Cheshire County</td>
<td>F2- tornado incident followed the approximate route from Franklin Pierce road to Payson Hill Road along NH 119. The tornado caused an estimated $100,000 (1928 dollars= $1,066,424 in 2005) mostly in property damage</td>
</tr>
<tr>
<td>Tornado</td>
<td>September 13, 1928</td>
<td>Cheshire County</td>
<td>F2- tornado incident followed the approximate route from Franklin Pierce road to Payson Hill Road along NH 119. The tornado caused an estimated $100,000 (1928 dollars= $1,066,424 in 2005) mostly in property damage</td>
</tr>
<tr>
<td>Tornado</td>
<td>August 13, 1963</td>
<td>Cheshire County</td>
<td>F2</td>
</tr>
<tr>
<td>Tornado</td>
<td>June 6, 1963</td>
<td>Cheshire County</td>
<td>F2</td>
</tr>
<tr>
<td>Tornado</td>
<td>July 2, 1997</td>
<td>Cheshire County</td>
<td>F1</td>
</tr>
</tbody>
</table>

Tornadoes rarely occur in this part of the country; therefore, assessing damages is difficult. Buildings have not been built to Zone 2, Design Wind Speed Codes. Estimated damages to 10% of structures with 20% damage is $11,047,498. Estimated cost does not include building contents, land values or damages to utilities. River corridors and hill tops susceptible. 13 incidents of tornadic activity (F1 or less) occurred in Cheshire County between 1959 - 1991.

| **HURRICANES (Category given if known) and TROPICAL STORMS- LOW-MEDIUM RISK** | | |
| --- | --- | --- | |
| Hurricane | August, 1635 | n/a | Winds 40-75 mph |
| Hurricane | October 18-19, 1778 | n/a | Winds > 50mph |
| Hurricane | October 9, 1804 | n/a | |
| Gale | September 23, 1815 | n/a | |
| Hurricane | September 8, 1869 | n/a | |
| Hurricane | September 21, 1938 | Southern New England | Flooding caused damage to road network and structures. 13 deaths, 494 injured throughout NH. Disruption of electric and telephone services for weeks. 2 Billion feet of marketable lumber blown down. Total storm losses of $12,337,643 (1938 dollars). 186 mph maximum winds. |
| Hurricane (Carol) | August 31, 1954 | Southern New England | Category 3, winds 111-130 mph. Extensive tree and crop damage in NH, localized flooding |
| Hurricane (Edna) | September 11, 1954 | Southern New England | Category 3 in Massachusetts. This Hurricane moved off shore but still cost 21 lives and $40.5 million in damages throughout New England. Following so close to Carol it made recovery difficult for some areas. Heavy rain in New Hampshire |
| Hurricane (Donna) | September 12, 1960 | Southern and Central NH | Category 3 (Category 1 in NH). Heavy flooding in some parts of the State. |
| Tropical Storm (Daisy) | October 7, 1962 | Coastal NH | Heavy swell and flooding along the coast |
| Tropical Storm (Doria) | August 28, 1971 | New Hampshire | Center passed over NH resulting in heavy rain and damaging winds |
| Hurricane (Belle) | August 10, 1976 | Southern New England | Primarily rain with resulting flooding in New Hampshire. Category 1 |

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<table>
<thead>
<tr>
<th>Hazard</th>
<th>Date</th>
<th>Location</th>
<th>Severity Remarks/Description of Areas Impacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hurricane (Gloria)</td>
<td>September, 1985</td>
<td>Southern New England</td>
<td>Category 2, winds 96-110 mph. Electric structures damaged; tree damages. This Hurricane fell apart upon striking Long Island with heavy rains, localized flooding, and minor wind damage in New Hampshire</td>
</tr>
<tr>
<td>Hurricane (Bob)</td>
<td>August 19, 1991</td>
<td>Southern New England</td>
<td>Structural and electrical damage in region from fallen trees. 3 persons were killed and $2.5 million in damages were suffered along coastal New Hampshire. Federal Disaster FEMA-917-DR</td>
</tr>
<tr>
<td>Hurricane (Edouard)</td>
<td>September 1, 1996</td>
<td>Southern New England</td>
<td>Winds in NH up to 38 mph and 1 inch of rain along the coast. Roads and electrical lines damaged</td>
</tr>
<tr>
<td>Tropical Storm (Floyd)</td>
<td>September 16-18, 1999</td>
<td>Southern New England</td>
<td>FEMA DR-1305-NH. Heavy Rains</td>
</tr>
<tr>
<td>Tropical Storm (Tammy)</td>
<td>October 5-13, 2005</td>
<td>East Coast of US</td>
<td>Remnants of Tammy contributed to the October 2005 floods which dropped 20 inches of rain in some places in NH.</td>
</tr>
</tbody>
</table>

Rindge’s location in southwestern New Hampshire reduces the risk of extremely high winds that are associated with hurricanes. The Town has experienced small blocks of downed timber and uprooting of trees onto structures. Hurricanes can and do create flooding. Estimated wind damage 5% of the structures with 10% damage is $2,761,874. Estimated flood damage 10% of the structures with 20% damage is $11,047,498. Cost of repairing or replacing the roads, bridges, utilities, and contents of structures is not included.

**EARTHQUAKES (Magnitude given if known)- LOW-MEDIUM RISK**

<table>
<thead>
<tr>
<th>Earthquake</th>
<th>Date</th>
<th>Location</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earthquake</td>
<td>1638</td>
<td>Central New Hampshire</td>
<td>6.5-7</td>
</tr>
<tr>
<td>Earthquake</td>
<td>October 29, 1727</td>
<td>Off NH/MA coast</td>
<td>Widespread damage Massachusetts to Maine</td>
</tr>
<tr>
<td>Earthquake</td>
<td>December 29, 1727</td>
<td>Off NH/MA coast</td>
<td>Widespread damage Massachusetts to Maine</td>
</tr>
<tr>
<td>Earthquake</td>
<td>November 18, 1755</td>
<td>Cape Ann, MA</td>
<td>6.0, much damage</td>
</tr>
<tr>
<td>Earthquake</td>
<td>1800s</td>
<td>Statewide NH</td>
<td>83 felt earthquakes in New Hampshire</td>
</tr>
<tr>
<td>Earthquake</td>
<td>1900s</td>
<td>Statewide NH</td>
<td>200 felt earthquakes in New Hampshire</td>
</tr>
<tr>
<td>Earthquake</td>
<td>March 18, 1926</td>
<td>Manchester, NH</td>
<td>Felt in Hillsborough County</td>
</tr>
<tr>
<td>Earthquake</td>
<td>December 20, 1940</td>
<td>Ossipee, NH</td>
<td>Both earthquakes of magnitude 5.5, both felt for 400,000 sq miles, structural damage to homes, damage in Boston MA, water main rupture</td>
</tr>
<tr>
<td>Earthquake</td>
<td>December 24, 1940</td>
<td>Ossipee, NH</td>
<td></td>
</tr>
<tr>
<td>Earthquake</td>
<td>December 28, 1947</td>
<td>Dover-Foxcroft, ME</td>
<td>4.5</td>
</tr>
<tr>
<td>Earthquake</td>
<td>June 10, 1951</td>
<td>Kingston, RI</td>
<td>4.6</td>
</tr>
<tr>
<td>Earthquake</td>
<td>April 26, 1957</td>
<td>Portland, ME</td>
<td>4.7</td>
</tr>
<tr>
<td>Hazard</td>
<td>Date</td>
<td>Location</td>
<td>Severity</td>
</tr>
<tr>
<td>--------</td>
<td>------------</td>
<td>-----------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Earthquake</td>
<td>April 10, 1962</td>
<td>Middlebury, VT</td>
<td>4.2</td>
</tr>
<tr>
<td>Earthquake</td>
<td>June 15, 1973</td>
<td>Near NH/Quebec Border, NH</td>
<td>4.8</td>
</tr>
<tr>
<td>Earthquake</td>
<td>January 19, 1982</td>
<td>Gaza (west of Laconia), NH</td>
<td>4.5, walls and chimneys cracked, damage up to 15 miles away in Concord</td>
</tr>
<tr>
<td>Earthquake</td>
<td>October 20, 1988</td>
<td>Near Berlin, NH</td>
<td>4</td>
</tr>
</tbody>
</table>

Moderate potential for serious damage in older portions of town and around lakes. Structures are mostly of wood frame construction estimated loss 20% of town assessed structural valuation (or $110,474,968). Costs of repairing or replacing roads, bridges, power lines, telephone lines, or the contents of the structures are not included. Town should consider seismic design in building code.

SEVERE WIND/DOWNBURST- LOW-MEDIUM RISK
Town at risk - severe localized blasting winds. Structural damage potential. Such events cause small blocks of downed timber. Frequent occurrences in spring and fall.

EXTREME WINTER WEATHER- LOW-MEDIUM RISK

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Date</th>
<th>Location</th>
<th>Remarks/Description of Areas Impacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snow Storm</td>
<td>1888</td>
<td>New Hampshire</td>
<td>40 inches fell in the Rindge area</td>
</tr>
<tr>
<td>Ice Storm</td>
<td>December 17-20, 1929</td>
<td>New Hampshire</td>
<td>Unprecedented disruption and damage to telephone, telegraph and power system. Comparable to 1998 Ice Storm (see below)</td>
</tr>
<tr>
<td>Blizzard</td>
<td>February 14-17, 1958</td>
<td>New Hampshire</td>
<td>20-30 inches of snow in parts of New Hampshire</td>
</tr>
<tr>
<td>Snow Storm</td>
<td>March 18-21, 1958</td>
<td>New Hampshire</td>
<td>Up to 22 inches of snow in south central NH</td>
</tr>
<tr>
<td>Snow Storm</td>
<td>December 10-13, 1960</td>
<td>New Hampshire</td>
<td>Up to 17 inches of snow in southern NH</td>
</tr>
<tr>
<td>Snow Storm</td>
<td>January 18-20, 1961</td>
<td>New Hampshire</td>
<td>Up to 25 inches of snow in southern NH</td>
</tr>
<tr>
<td>Snow Storm</td>
<td>February 2-5, 1961</td>
<td>New Hampshire</td>
<td>Up to 18 inches of snow in southern NH</td>
</tr>
<tr>
<td>Snow Storm</td>
<td>January 11-16, 1964</td>
<td>New Hampshire</td>
<td>Up to 12 inches of snow in southern NH</td>
</tr>
<tr>
<td>Blizzard</td>
<td>January 29-31, 1966</td>
<td>New Hampshire</td>
<td>3rd and most severe storm of 3 that occurred over a 10-day period. Up to 10 inches of snow across central NH</td>
</tr>
<tr>
<td>Snow Storm</td>
<td>December 26-28, 1969</td>
<td>New Hampshire</td>
<td>Up to 41 inches of snow in west central NH</td>
</tr>
<tr>
<td>Snow Storm</td>
<td>February 18-20, 1972</td>
<td>New Hampshire</td>
<td>Up to 19 inches of snow in southern NH</td>
</tr>
<tr>
<td>Snow Storm</td>
<td>January 19-21, 1978</td>
<td>New Hampshire</td>
<td>Up to 16 inches of snow in southern NH</td>
</tr>
<tr>
<td>Snow Storm</td>
<td>February, 1979</td>
<td>New Hampshire</td>
<td>President's Day storm</td>
</tr>
<tr>
<td>Ice Storm</td>
<td>January 8-25, 1979</td>
<td>New Hampshire</td>
<td>Major disruptions to power and transportation</td>
</tr>
<tr>
<td>Snow Storm</td>
<td>April 5-7, 1982</td>
<td>New Hampshire</td>
<td>Up to 18 inches of snow in southern NH</td>
</tr>
<tr>
<td>Ice Storm</td>
<td>February 14, 1986</td>
<td>New Hampshire</td>
<td>Fiercest ice storm in 30 yrs in the higher elevations in the Monadnock region. It covered a swath about 10 miles wide from the MA border to New London NH</td>
</tr>
<tr>
<td>Extreme Cold</td>
<td>Nov- Dec, 1988</td>
<td>New Hampshire</td>
<td>Temperature was below 0 degrees F for a month</td>
</tr>
<tr>
<td>Hazard</td>
<td>Date</td>
<td>Location</td>
<td>Remarks/Description of Areas Impacted</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------</td>
<td>----------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Ice Storm</td>
<td>March 3-6, 1991</td>
<td>New Hampshire</td>
<td>Numerous outages from ice-laden power lines in southern NH</td>
</tr>
<tr>
<td>Ice Storm</td>
<td>January 15, 1998</td>
<td>New Hampshire</td>
<td>Federal disaster declaration DR-1199-NH, 20 major road closures, 67,586 without electricity, 2,310 without phone service, $17+ million in damages to Public Service of NH alone. The incident affected the entire town except for a portion in the southern part. No damage to structures was caused by the incident. See Appendix G for affected areas map.</td>
</tr>
<tr>
<td>Snow Storm</td>
<td>March/April 2001</td>
<td>New Hampshire</td>
<td>Several multiple-feet snow events.</td>
</tr>
</tbody>
</table>

Three types of winter events are heavy snow, ice storms and extreme cold. Occasionally heavy snow will collapse buildings. Ice storms have disrupted power and communication services. Timberland has been severely damaged. Extreme cold affects the elderly. Rindge's recent history has not recorded any loss of life due to the extreme winter weather. These random events are difficult to set a cost to repair or replace any of the structures or utilities affected. Elderly are affected by extreme weather.

HAZARDOUS MATERIALS SPILLS- LOW-MEDIUM RISK

Public transportation of chemicals and bio-hazardous materials through town on NH 119 is a concern. Hazardous materials are also stored at the fireworks store and storage facility on US 202 north. There are three gas stations on NH 119, as well as a marina on the southern point of Lake Monomonac.

SNOW AVALANCHE- LOW RISK

If a snow avalanche were to occur, it could cause damage to roads, bridges, utilities, houses, and other structures. The town does not have steep slopes capable of causing avalanches. The Town has no history of snow avalanche events. If information becomes available regarding vulnerable risk locations or avalanche occurrences, the plan will amended accordingly.

SUBSIDENCE- LOW RISK

Subsidence Past and Potential Occurrences  US 202

Subsidence has occurred and has potential to occur in an area along US 202 on the Jaffrey Town Line. The road in this area is slowly settling, and it does not seem like a rapid and catastrophic failure could happen.

Predictable areas susceptible to subsidence could be along old river channels, quarries or old land fills.

RADON- LOW RISK

Summary Table of Short-term Indoor Radon Test Results in NH’s Radon Database (5/7/99)

<table>
<thead>
<tr>
<th>County</th>
<th># Tests</th>
<th>G. Mean</th>
<th>Maximum</th>
<th>% &gt; 4.0 pCi/l</th>
<th>% &gt; 12.0 pCi/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belknap</td>
<td>744</td>
<td>1.3</td>
<td>22.3</td>
<td>14.4</td>
<td>1.3</td>
</tr>
<tr>
<td>Carroll</td>
<td>1042</td>
<td>3.5</td>
<td>478.9</td>
<td>45.4</td>
<td>18</td>
</tr>
<tr>
<td>CHESHIRE</td>
<td>964</td>
<td>1.3</td>
<td>131.2</td>
<td>15.6</td>
<td>2.3</td>
</tr>
<tr>
<td>Coos</td>
<td>1072</td>
<td>3.2</td>
<td>261.5</td>
<td>41</td>
<td>17</td>
</tr>
<tr>
<td>Grafton</td>
<td>1286</td>
<td>2.0</td>
<td>174.3</td>
<td>23.2</td>
<td>5.2</td>
</tr>
<tr>
<td>Hillsborough</td>
<td>2741</td>
<td>2.1</td>
<td>202.3</td>
<td>29.6</td>
<td>6.8</td>
</tr>
<tr>
<td>Merrimack</td>
<td>1961</td>
<td>2.0</td>
<td>152.8</td>
<td>25.2</td>
<td>6</td>
</tr>
<tr>
<td>Rockingham</td>
<td>3909</td>
<td>3.0</td>
<td>155.3</td>
<td>40</td>
<td>9.5</td>
</tr>
<tr>
<td>Strafford</td>
<td>1645</td>
<td>3.4</td>
<td>122.8</td>
<td>44</td>
<td>13</td>
</tr>
<tr>
<td>Sullivan</td>
<td>466</td>
<td>1.4</td>
<td>29.4</td>
<td>15.7</td>
<td>2.1</td>
</tr>
<tr>
<td>STATEWIDE</td>
<td>15860</td>
<td>2.4</td>
<td>478.9</td>
<td>32.4</td>
<td>8.6</td>
</tr>
</tbody>
</table>

No known records of illness can be attributed to radon. However, Rindge residents should be aware that radon is present. Houses with granite and dirt cellars are at increased risk.
The State of New Hampshire classifies dams into the following four categories:
NM – Non-menace  S – Significant hazard  Blank- Non-Active
L – Low hazard    H – High Hazard

Generally, all Class H dams need to have Emergency Action Plans, and most Class S dams also require them. According to the Department Of Environmental Services Dam Bureau, there are four Class S dams and three Class H dams in Rindge, for which an Emergency Action Plan is required and an inundation zone has been delineated.

<table>
<thead>
<tr>
<th>Dam #</th>
<th>Hazard</th>
<th>Name</th>
<th>Dam Owner</th>
<th>Height(ft)</th>
<th>Impound(ac)</th>
</tr>
</thead>
<tbody>
<tr>
<td>203.01</td>
<td>S</td>
<td>Lower Damon Reservoir Dam</td>
<td>Damon Realty</td>
<td>15</td>
<td>24.5</td>
</tr>
<tr>
<td>203.02</td>
<td>L</td>
<td>Damon Upper Reservoir Dam</td>
<td>Mr. John Hunt</td>
<td>9</td>
<td>49</td>
</tr>
<tr>
<td>203.03</td>
<td>L</td>
<td>Pearly Pond Dam</td>
<td>Pearly Lake Assoc.</td>
<td>7</td>
<td>210</td>
</tr>
<tr>
<td>203.04</td>
<td>NM</td>
<td>Robbins Pond Dam</td>
<td>Mr Fred Dodd</td>
<td>5.98</td>
<td>45</td>
</tr>
<tr>
<td>203.05</td>
<td>NM</td>
<td>Robbins Pond Dam</td>
<td>Unk.</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>203.06</td>
<td>NM</td>
<td>Hale Dam</td>
<td>Mr. Ed Stevens</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>203.07</td>
<td>NM</td>
<td>Sweeney Dam</td>
<td>Unk.</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>203.08</td>
<td>NM</td>
<td>Contoocook River IV</td>
<td>Mr. Fran Berger</td>
<td>10</td>
<td>0.3</td>
</tr>
<tr>
<td>203.09</td>
<td>NM</td>
<td>Contoocook River V</td>
<td>Mr. Richard Smith</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>203.10</td>
<td>S</td>
<td>Island Pond Dam</td>
<td>Hampshire Country School</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>203.11</td>
<td>L</td>
<td>Mill Pond Dam</td>
<td>Hampshire Country School</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>203.12</td>
<td>L</td>
<td>Miller River Dam</td>
<td>Mrs. Peregrine White</td>
<td>13</td>
<td>6.5</td>
</tr>
<tr>
<td>203.13</td>
<td>NM</td>
<td>Miller River Dam</td>
<td>Mrs. Peregrine White</td>
<td>13</td>
<td>6.5</td>
</tr>
<tr>
<td>203.14</td>
<td>L</td>
<td>Miller River III Dam</td>
<td>Stoddard Main Co.</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>203.15</td>
<td>L</td>
<td>Converse Meadow Pond Dam</td>
<td>Mr. John B. Rice</td>
<td>5</td>
<td>33.2</td>
</tr>
<tr>
<td>203.16</td>
<td>S</td>
<td>Converse Reservoir</td>
<td>Mr. John B. Rice</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>203.17</td>
<td>S</td>
<td>Hubbard Pond</td>
<td>NH Water Division</td>
<td>8</td>
<td>187</td>
</tr>
<tr>
<td>203.18</td>
<td>S</td>
<td>Hubbard Pond Inlet Dam</td>
<td>Mr. Frank Robbins</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>203.19</td>
<td>L</td>
<td>Holding Pond Dam</td>
<td>Mr. Frank Robbins</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>203.20</td>
<td>NM</td>
<td>Rugg Pond Dam</td>
<td>Huber Gunhild Tibbetts</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>203.21</td>
<td>L</td>
<td>Crowcroft Pond Dam</td>
<td>Cropond Inc.</td>
<td>10</td>
<td>65</td>
</tr>
<tr>
<td>203.22</td>
<td>L</td>
<td>Crowcroft Pond Dam</td>
<td>Cropond Inc.</td>
<td>10</td>
<td>65</td>
</tr>
<tr>
<td>203.23</td>
<td>NM</td>
<td>Tarbell Brook Dam</td>
<td>Ms. Linda Harmon</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>203.24</td>
<td>NM</td>
<td>Tarbell Brook Dam</td>
<td>Mr. Benton Rice</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>203.25</td>
<td>NM</td>
<td>Recreation Pond Dam</td>
<td>Mr. John B. Rice</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>203.26</td>
<td>NM</td>
<td>Tarbell Brook Dam</td>
<td>Mr. Susan Dickinson</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>203.27</td>
<td>NM</td>
<td>Toy Shop Dam</td>
<td>Mr. A J Wellington</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>203.28</td>
<td>L</td>
<td>Grassly Pond Dam</td>
<td>Town of Jaffrey</td>
<td>4</td>
<td>99</td>
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<tr>
<td>203.29</td>
<td>NM</td>
<td>Bullet Pond Dam</td>
<td>Town of Jaffrey</td>
<td>4</td>
<td>50</td>
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<tr>
<td>203.30</td>
<td>NM</td>
<td>Emerson Pond Dam</td>
<td>Unk.</td>
<td>10</td>
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</tr>
<tr>
<td>203.31</td>
<td>NM</td>
<td>Emerson Pond Brook Dam</td>
<td>Mr. Harris Rice</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>203.32</td>
<td>NM</td>
<td>Emerson Pond Brook Dam</td>
<td>Unk.</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>203.33</td>
<td>NM</td>
<td>Miller River Dam</td>
<td>E.I. Wellington</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>203.34</td>
<td>NM</td>
<td>Miller River Dam</td>
<td>Unk.</td>
<td>11</td>
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<tr>
<td>203.35</td>
<td>NM</td>
<td>Nameless Brook Dam</td>
<td>Unk.</td>
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<tr>
<td>203.36</td>
<td>NM</td>
<td>Ice Pond Dam</td>
<td>Society for Prot. Of NH Forests</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>203.37</td>
<td>NM</td>
<td>Inlet Pond Dam</td>
<td>Town of Jaffrey</td>
<td>4</td>
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<tr>
<td>203.38</td>
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<td>Miller Pond Dam</td>
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<tr>
<td>203.39</td>
<td>NM</td>
<td>Contoocook Lake Dam</td>
<td>BSHN Properties</td>
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<tr>
<td>203.40</td>
<td>NM</td>
<td>Speckhams Dam</td>
<td>Mr. Joseph Connolly</td>
<td>6</td>
<td>0.19</td>
</tr>
<tr>
<td>203.41</td>
<td>L</td>
<td>Stump Pond Dam</td>
<td>Hampshire Country School</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Dam #</td>
<td>Hazard</td>
<td>Name</td>
<td>Dam Owner</td>
<td>Height(ft)</td>
<td>Impound(ac)</td>
</tr>
<tr>
<td>-------</td>
<td>--------</td>
<td>-----------------------</td>
<td>-------------------------</td>
<td>------------</td>
<td>-------------</td>
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<tr>
<td>203.42</td>
<td>NM</td>
<td>Pool Pond Dam</td>
<td>NH DOT</td>
<td>4</td>
<td>144</td>
</tr>
<tr>
<td>203.43</td>
<td></td>
<td>Unnamed Stream Dam</td>
<td>Unk.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>203.44</td>
<td>L</td>
<td>Van Dyke Dam</td>
<td>Mr. Robert Van Dyke</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>203.45</td>
<td>NM</td>
<td>Tarbell Brook Dam</td>
<td>Mr. Richard Whicker</td>
<td>8</td>
<td>2</td>
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<tr>
<td>203.46</td>
<td>NM</td>
<td>Cheshire Marketplace Dam</td>
<td>Market Basket, Inc.</td>
<td>9</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Source: Dam information provided by the NH Dam Bureau in 2006 and will be verified by Town officials
### Chapter IV: Assessing Probability, Severity and Risk
#### Estimating Potential Losses

The Committee members completed Risk Assessment Worksheets for all of the types hazards identified in Chapter III. The process involved assigning Low, Medium, or High values (numerically 1, 2 or 3) to each hazard type for its possible impact to Human, Property, and Business factors. (A score of zero was given if the hazard was non-applicable). To assess probability, a 1, 2, or 3 value was assigned to each hazard type with respect to the likelihood that the hazard would occur in the next 25 years. The Severity was calculated by determining the average of the Human, Property, and Business impacts. Risk was calculated by multiplying severity by probability. Low-Medium-High risk was assigned as shown below. Estimated potential losses and areas of greatest risk are included in the table below.

<table>
<thead>
<tr>
<th>Human Impact</th>
<th>Property Impact</th>
<th>Business Impact</th>
<th>Probability</th>
<th>Severity</th>
<th>Risk</th>
<th>Estimated Potential Losses (Dollars)</th>
<th>Areas of Greatest Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flooding</td>
<td>1 3 2</td>
<td>2</td>
<td>2 2 2.00</td>
<td>4.00</td>
<td>Med</td>
<td>n/a</td>
<td>Along rivers</td>
</tr>
<tr>
<td>Riverine Flooding</td>
<td>0 2 1</td>
<td>1</td>
<td>1 1.00</td>
<td>1.00</td>
<td>Low</td>
<td>n/a</td>
<td>Near waterbodies</td>
</tr>
<tr>
<td>Drought</td>
<td>0 1 1</td>
<td>1</td>
<td>1 0.67</td>
<td>0.67</td>
<td>Low</td>
<td>n/a</td>
<td>Town-wide</td>
</tr>
<tr>
<td>Extreme Heat</td>
<td>1 0 1</td>
<td>1</td>
<td>1 0.67</td>
<td>0.67</td>
<td>Low</td>
<td>n/a</td>
<td>Elderly, Town-wide</td>
</tr>
<tr>
<td>Wild Fire</td>
<td>3 3 2</td>
<td>2</td>
<td>2 2.67</td>
<td>5.33</td>
<td>Med</td>
<td>n/a</td>
<td>Forested areas</td>
</tr>
<tr>
<td>Lightning</td>
<td>2 3 2</td>
<td>3</td>
<td>3 2.33</td>
<td>7.00</td>
<td>Med-High</td>
<td>n/a</td>
<td>Town-wide; High Elevation, power lines</td>
</tr>
<tr>
<td>Tornado</td>
<td>2 3 3</td>
<td>1</td>
<td>1 2.67</td>
<td>2.67</td>
<td>Low-Med</td>
<td>11,047,997</td>
<td>Town-wide</td>
</tr>
<tr>
<td>Hurricane</td>
<td>2 3 3</td>
<td>2</td>
<td>2 2.67</td>
<td>5.33</td>
<td>Low-Med</td>
<td>13,809,372</td>
<td>Town-wide</td>
</tr>
<tr>
<td>Earthquake</td>
<td>2 2 2</td>
<td>1</td>
<td>1 2.00</td>
<td>2.00</td>
<td>Low-Med</td>
<td>110,479,968</td>
<td>Town-wide</td>
</tr>
<tr>
<td>Subsidence</td>
<td>1 1 1</td>
<td>1</td>
<td>1 1.00</td>
<td>1.00</td>
<td>Low</td>
<td>n/a</td>
<td>US 202 @ Jaffrey TL</td>
</tr>
<tr>
<td>Radon</td>
<td>1 2 0</td>
<td>3</td>
<td>1 1.00</td>
<td>3.00</td>
<td>Low</td>
<td>n/a</td>
<td>Town-wide</td>
</tr>
<tr>
<td>Severe Wind</td>
<td>2 3 2</td>
<td>3</td>
<td>3 2.33</td>
<td>7.00</td>
<td>Low-Med</td>
<td>n/a</td>
<td>Town-wide</td>
</tr>
<tr>
<td>Extreme Winter Weather</td>
<td>2 3 2</td>
<td>3 2.33</td>
<td>7.00</td>
<td>Low-Med</td>
<td>n/a</td>
<td>Town-wide; High Elevation, power lines</td>
<td></td>
</tr>
<tr>
<td>Avalanche</td>
<td>1 1 1</td>
<td>0</td>
<td>1 1.00</td>
<td>0.00</td>
<td>Low</td>
<td>n/a</td>
<td>Town-wide</td>
</tr>
<tr>
<td>HazMat Spills</td>
<td>3 3 3</td>
<td>3</td>
<td>3 3.00</td>
<td>9.00</td>
<td>Low-Med</td>
<td>n/a</td>
<td>Fuel depots, gas stations, transfer station</td>
</tr>
<tr>
<td>Dam Failure</td>
<td>1 2 1</td>
<td>2</td>
<td>1 1.33</td>
<td>2.67</td>
<td>Low</td>
<td>n/a</td>
<td>Hampshire School Dam</td>
</tr>
<tr>
<td>Landslides</td>
<td>1 1 1</td>
<td>0</td>
<td>1 1.00</td>
<td>0.00</td>
<td>Low</td>
<td>n/a</td>
<td>Along steep slopes</td>
</tr>
</tbody>
</table>
CHAPTER V
CRITICAL FACILITIES

A Critical Facility is defined as a building, structure, or location which:

- Is vital to the hazard response effort
- Maintains an existing level of protection from hazards for the community
- Would create a secondary disaster if a hazard were to impact it

Critical Facilities Within Hazard Areas
Hazards identified in this plan are regional risks and, as such, all critical facilities fall into the hazard area. The exception to this is flooding. There are three identified critical facilities that fall within the 100-year floodplain. These are Camp Crescent on Monomonac Lake, Advent Church (off South Woodbound Rd) and the Little Michigan sewage service zone on Lake Contoocook.

The Critical Facilities List for the Town of Rindge has been identified through discussions of the Hazard Mitigation Committee. Rindge's Hazard Mitigation Committee has divided this list of facilities into four categories. The first category contains facilities needed for Emergency Response in the event of a disaster. The second category contains Non-Emergency Response Facilities that have been identified by the Committee as non-essential. These are not required in an emergency response event, but are considered essential for the everyday operation of Rindge. The third category contains Facilities/Populations that the Committee wishes to protect in the event of a disaster. The fourth category contains Potential Resources, which can provide services or supplies in the event of a disaster. The Critical Facilities Map at the end of this Plan identifies these facilities. A table at the end of this section identifies critical facilities located in potential hazard areas.

Category 1 - Emergency Response Services:
The Town has identified the Emergency Response Facilities and Services as the highest priority in regards to protection from natural and man-made hazards.

1. Emergency Operations Center
   Rindge Police and Fire Station - 150 Main Street

2. Fire Station
   150 Main Street

3. Police Station
   158 Main Street

4. Emergency Fuel Facilities
   State Highway Garage (NH Department of Transportation Shed) on Rt. 119

5. Emergency Electrical Power Facility
   Emergency Generator at Police Station (158 Main Street)

6. Emergency Shelters
   Rindge Memorial School and Franklin Pierce University.

7. Dry Hydrants - Fire Ponds - Water Sources
   Numerous locations; see Critical Facilities Map at back of Plan
8. Primary Evacuation Routes
   US 202
   NH 119

9. Bridges Located on Primary Evacuation Routes
   US 202, one bridge located on Jaffrey Town Line

10. Town Garage/Transfer Station
    Same as Highway Garage, located at 113 Main St.

11. Communications
    Keene Mutual Aid dispatch system
    Cheshire Sheriff’s department dispatch system
    State of New Hampshire Troop C dispatch system

12. Hospitals
    Cheshire Medical Center (to the west in Keene)
    Monadnock Community Hospital (located to the east in Peterborough)
    Hospital in Gardner, MA (located to the South)

13. Helicopter Landing Sites
    Parking Lot of Cathedral of the Pines (located off of NH 119)
    Franklin Pierce University athletic fields

14. Water & Sewer Departments/Utilities
    Little Michigan area of town, located on the North Shore of Poole Pond, served by the
    Town of Jaffrey Sewer System.

Category 2 - Non Emergency Response Facilities:
The town has identified these facilities as non-emergency facilities; however, they are considered
essential for the everyday operation of Rindge.

1. Water Supply
   Lakes and Ponds (Poole Pond, Pearly Lake, Grassy Pond, Bullet Pond, Lake
   Monomonac, and various other surface waters)

2. Sewer Infrastructure
   Private Sewer System for Franklin Pierce University (owned and operated by the college)

3. Problem Culverts
   Due to the large quantities of water throughout the Town, there are many potential
   problem culverts maintained by the Town and the State. The Highway Foreman
   identified the following:
   - Robbins Rd. to Winchendon
   - East Monomonic Rd. to Winchendon
   - Abel Rd. to Fitzwilliam
   - Fitzgerald Road
   - Old New Ipswich Road
   - Wellington Rd. to US 202
   - Hampshire Road

4. Transfer Station
   Same as Highway Garage, located at 113 Main St.
5. Secondary Evacuation Routes
   - Forristall Rd. and Middle Winchendon Rd.
   - Cathedral Rd. into Jaffrey
   - Main St. onto US 202 South to Winchendon

6. Bridges on Secondary Evacuation Routes
   None

Category 3 - Facilities/Populations to Protect:
The third category contains people and facilities that need to be protected in event of a disaster.

1. Special Needs Populations
   The Hampshire Country School is located in Rindge near the New Ipswich Town Line, on Mill Pond. The School is dedicated to young boys with Asperger’s Syndrome and other non-verbal learning disabilities, the school usually houses 25 children.

   Many residents in Rindge may have disabilities or impairments which make them a priority in the event of a disaster. List should be available at the Emergency Operations Center and may include:
   - Oxygen-dependent people
   - People on a lifeline
   - People assisted by Home Health
   - Shut-ins and disabled
   - Mentally challenged
   - Elderly
   - Hearing impaired
   - Sight impaired

2. Recreation Areas
   - Memorial School Athletic Fields
   - Town Recreational Fields (ball fields, tennis courts, soccer fields)
   - Meeting House and common
   - Franklin Pierce University Athletic Fields
   - Cathedral of the Pines
   - Camp Wildwood (Mass. Audubon) on Old New Ipswich Road

3. Schools
   - Rindge Memorial School
   - Meeting School
   - Heritage Christian School
   - Franklin Pierce University

4. Day Cares
   Private daycare facilities are located at the following locations
   - Cathedral Road
   - Hubbard Hill Road

5. Churches
   - Meeting House Congregational Church (Payson Hill Rd.)
   - West Rindge Methodist Church/Vineyard Church (US 202)
   - Monadnock Full Gospel Church (US 202)
   - North St. Baptist Church
   - Advent Lutheran Church (US 202 & Corner County Road)
6. **Historic Buildings/Sites**
   - Meeting House (Payson Hill Rd.)
   - Cathedral of the Pines (Cathedral Rd.)
   - Historic Society Museum (School St.)

7. **Major Employment Centers**
   - Franklin Pierce University
   - Cheshire Market Place
   - Wal-Mart/Hannaford’s Plaza
   - Dunkin Donuts/KFC- Phase 10 Plaza
   - Fogg’s Mini Mart Plaza
   - Sears Drive
   - Sepco Building on NH 119 (10-12 businesses)
   - Canterbury Square retail on NH 119/Main St.
   - Lilly’s on the Pond on NH 202
   - East Rindge Village
   - Atlas Fireworks (various businesses)

8. **Apartment Complexes**
   - Franklin Pierce University (dormitories)
   - Hasbrook Apartments (Payson Hill Rd.)
   - Meadow View (Taggart) Apartments (Meadow View Rd.)
   - Cromwell Court Condominiums (US 202)
   - Carriage House Apartments
   - Renaissance Senior Housing

9. **Post Office**
   - The Post Office is located on Route 119

10. **Hazardous Material Storage**
    - Atlas Fireworks store (multi-tenant building)
    - Fogg’s Corner - Diesel, Propane, Heating Oil
    - Franklin Pierce Sewage Treatment Plant
    - Fireworks storage area off of US 202
    - Gas Station on NH 119 just west of Payson Hill Rd.
    - Gas Station on NH 119 west of Payson Hill Rd.
    - North of the Border boat landing on Lake Monomonac
    - Wal-Mart (paints, cleaning chemicals, etc.)

**Category 4 - Potential Resources:**
Contains facilities that provide potential resources for services or supplies.

1. **Food**
   - Food Pantry
   - Woodbound Inn
   - Wal-Mart (sundries store on US 202)
   - Market Basket (Grocery Store on US 202)
   - Hannaford’s
   - KFC/TacoBell
   - Pizza Haven
   - North of the Border
2. Water
   Numerous locations - see Critical Facilities Map at back of Plan

3. Hospitals/Medical Supplies
   Cheshire Medical Center (to the west in Keene)
   Monadnock Community Hospital (to the northeast in Peterborough)
   Medical Facilities Located in Keene, Jaffrey or Peterborough
   Helicopter medi-vac from DART and UMass
   Henry Hayward Hospital in Gardner, MA

4. Gravel Pits
   Rindge Sand and Gravel
   Kohl Morgan’s Gravel
   Digz Excavating
   Franklin Pierce University Gravel Pit
   Red White Gravel Pit - Inactive
   Christian Outreach

5. Gas
   Highway Garage (113 Main St. )
   NH DOT maintenance shed on NH 119
   Fogg’s Corner (Diesel & Gas)
   Gas stations on NH 119 west of Payson Hill Rd.

6. Heating Fuel
   Fogg’s Corner (US 202 & NH 119) has storage tanks

7. Building Material and Heavy Equipment Suppliers
   202 Trucking - Heavy Equipment
   Lake Shore Landscaping - Heavy Equipment
   Van Dyke’s Heavy Equipment
   NH DOT Shed on NH 119
   Diggs Excavating (Sepco Building)

8. Miscellaneous Resources
   Emergency Broadcast & Television: WMUR
   Potential Emergency Shelter at Franklin Pierce University
   Amateur Radio Emergency Service: Craig Clark
   Hazardous Material Response Trailer from Southwest New Hampshire Mutual Aid
   Transportation: Buses - Franklin Pierce University
   School bus driver’s homes
   Laidlaw in Peterborough
   Trucks - Local Contractors, National Guard, Keene
   Beds, Cots, Blankets: National Guard
   Red Cross
   Keene Mutual Aid Trailer with cots, beds, and blankets
Additional Information

The Hazard Mitigation Committee identified several campgrounds and trailer parks which should also be included in this list. They include:

- Monadnock Park Trailer Homes
- Camp Wildwood
- Toahnipi Campground
- Crescent Beach Campground
- Camp Joy
- Woodmore Campground

Critical Facilities and Evacuation Routes Potentially Affected by Hazard Areas

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Hazard Area</th>
<th>Critical Facilities Affected</th>
<th>Evacuation Routes Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flooding</td>
<td>Contoocook Lake</td>
<td>Advent Church (off South Woodbound Rd)</td>
<td>US 202 (northern section into Jaffrey)</td>
</tr>
<tr>
<td></td>
<td>Contoocook Lake</td>
<td>Little Michigan (served by public sewage)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lake Mononomac</td>
<td>Crescent Beach Campground</td>
<td></td>
</tr>
<tr>
<td>Wildfire</td>
<td>Dams on Mill Creek</td>
<td>none affected</td>
<td>NH 119</td>
</tr>
<tr>
<td>Lightning</td>
<td>US 202 south</td>
<td>Retail stores in US 202 corridor</td>
<td>None</td>
</tr>
<tr>
<td>Subsidence</td>
<td>Jaffrey Town Line</td>
<td>none affected</td>
<td>US 202</td>
</tr>
<tr>
<td>Hazardous Materials</td>
<td>Northern US 202 (fireworks store and storage facility)</td>
<td>None</td>
<td>US 202</td>
</tr>
<tr>
<td>Hazardous Materials</td>
<td>Gas stations on NH 119</td>
<td>None</td>
<td>US 202/NH 119</td>
</tr>
<tr>
<td>Hazardous Materials</td>
<td>Franklin Pierce University Waste Treatment Plant</td>
<td>All Franklin Pierce emergency facilities</td>
<td>none</td>
</tr>
</tbody>
</table>

(Critical Facilities Map Located In Back of Plan)
CHAPTER VI: EXISTING MITIGATION STRATEGIES & PROPOSED IMPROVEMENTS

This step involves identifying existing mitigation strategies and Town programs and evaluate their effectiveness. This section outlines those programs and recommends improvements to ensure the highest quality emergency services possible.

Existing Mitigation Strategies and Proposed Improvements

<table>
<thead>
<tr>
<th>Existing Protection</th>
<th>Description/Area Covered</th>
<th>Responsible Local Agent</th>
<th>Effectiveness</th>
<th>Proposed Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School Evacuation Plan</strong> - Rindge Memorial School and Franklin Pierce University have evacuation plans in place. The other schools in town have small plans in place. The schools are primarily responsible for having a plan in place and conducting at least 10 fire drills every year. The fire department provides feedback on the plans and the drills</td>
<td>Fire and Emergency Evacuation Plan</td>
<td>Schools</td>
<td>Good</td>
<td>Rindge Memorial and Franklin Pierce have in-depth plans. Other schools have smaller plans. Fire Dept. comments on plans.</td>
</tr>
<tr>
<td><strong>Town-Adopted Building Code</strong> - Rindge maintains a code enforcement officer and has adopted provisions of the NH Life Safety Code and the NH State Building Code. Rindge has also adopted provisions of the International Building Codes for one and two family residential structures. Current program is working. Operate under State Building Codes RSA 155-A with increased restrictions &amp; International Residential Building Codes</td>
<td>Enforces Building Code and Zoning Ordinance Town-Wide</td>
<td>Code Enforcement Officer/Selectmen</td>
<td>Good</td>
<td>Develop comprehensive and coordinated fire sprinkler standard since NFPA contains only minimal standards. Develop fire protection ordinance to have a locally defined set of standards</td>
</tr>
<tr>
<td><strong>Code Enforcement Officer</strong> - The Fire Chief and Code Enforcement Officer jointly enforce building codes and review building permit applications. The Code Enforcement Officer also enforces zoning ordinances and reviews applications.</td>
<td></td>
<td>Fire Chief and Code Enforcement Officer</td>
<td>Fair</td>
<td>The Fire Chief has expressed that in the case of big-box stores, it is difficult to determine whether adequate fire suppression capacity is being met without having access to complete building plans and list of materials (fuel load) to be contained in building</td>
</tr>
<tr>
<td><strong>Emergency Management Plan</strong> - The town’s Emergency Management Plan, adopted in 1994 establishes protocols for all town departments in the event of an emergency. The plan has since been updated</td>
<td>Town-Wide Emergency Response Plan</td>
<td>Emergency Management Director</td>
<td>Good</td>
<td>Updated as required</td>
</tr>
<tr>
<td><strong>Health Officer</strong> - The town has a Health Officer and a Deputy Health Officer. The Health Officer provides mostly informational resources related to septic systems, wells, etc. These positions are appointed by the town.</td>
<td>Inspects Failed Septic Systems, Wells, etc.</td>
<td>Health Officer, and Deputy Health Officer</td>
<td>Fair</td>
<td>Health Officer is only part time volunteer. Additional capacity needed to deal with threats to recreational lakes.</td>
</tr>
<tr>
<td><strong>Fire Inspector</strong> - The Fire Chief annually inspects all commercial, rental, and foster home buildings. Single family homes are inspected on a per-request basis</td>
<td>Commercial, rental &amp; foster homes</td>
<td>Fire Chief</td>
<td>Good</td>
<td>Annual inspections</td>
</tr>
<tr>
<td>Existing Protection</td>
<td>Description / Area Covered</td>
<td>Responsible Local Agent</td>
<td>Effectiveness</td>
<td>Recommended Changes - Actions</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>----------------------------</td>
<td>-------------------------</td>
<td>---------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Emergency Back-up Power Program</strong></td>
<td>Fire and Police Department have backup generators.</td>
<td>Fire Chief Selectmen</td>
<td>Fair</td>
<td>Project underway to provided backup power to Town Hall, Franklin Pierce University and Rindge Memorial as part of Emergency Shelter development. Phone system does not work in Town Hall when power is out.</td>
</tr>
<tr>
<td><strong>Local Road Design Standards</strong></td>
<td>Design Specs/Dead End &amp; Cul de Sacs/Town Existing Road Upgrade Specs</td>
<td>Hwy Dept., Selectmen, &amp; Planning Board</td>
<td>Good</td>
<td>Design Specs/Dead End &amp; Cul de Sacs/Town Existing Road Upgrade Specs</td>
</tr>
<tr>
<td><strong>Local Bridge Maintenance Program</strong></td>
<td>NH DOT Inspects and Does Work Town-wide</td>
<td>NHDOT, Highway Department</td>
<td>Good</td>
<td>none</td>
</tr>
<tr>
<td><strong>Local Road Maintenance Program</strong></td>
<td>Local roads/Town Wide</td>
<td>Highway Department</td>
<td>Good</td>
<td>Use roadway management system to allocate $280,000 annually to maintenance and rehabilitation</td>
</tr>
<tr>
<td><strong>Tree Maintenance Program</strong></td>
<td>Town Wide</td>
<td>Highway Department</td>
<td>Good</td>
<td>Remove dead trees along roads.</td>
</tr>
<tr>
<td><strong>Winter Storms Operations Plan</strong></td>
<td>Whole Town</td>
<td>Fire, Police, and Highway Departments</td>
<td>Good</td>
<td>none</td>
</tr>
<tr>
<td><strong>Town Master Plan</strong></td>
<td>Update 2001/Town Wide</td>
<td>Planning Board, Planning Department</td>
<td>Good</td>
<td>Update as needed</td>
</tr>
<tr>
<td><strong>Steep Slopes Protection</strong></td>
<td>Town-Wide</td>
<td>Code Enforcement Officer, Planning Board</td>
<td>Good</td>
<td>Improve current regulations</td>
</tr>
<tr>
<td>Existing Protection</td>
<td>Description/Area Covered</td>
<td>Responsible Local Agent</td>
<td>Effectiveness</td>
<td>Recommended Changes - Actions</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------</td>
<td>-------------------------</td>
<td>---------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td><strong>Mutual Aid</strong> - Provides assistance to all aspects of Rindge’s Emergency Management Services in town. Southwest New Hampshire Fire Mutual Aid (SWNHFMA) and the Cheshire County Sheriff’s Department provide mutual aid to Rindge. SWNHFMA serves 83 cities and towns and the Cheshire County Sheriff’s Department serves all communities within Cheshire County. The Sheriff’s Department also provides dispatching services for the Police Department.</td>
<td>Provides assistance to all aspects of Rindge Emergency Management Services/Highway Department/whole town</td>
<td>Fire Chief, Police Chief, Emergency Management Director, Highway Department and Selectmen</td>
<td>Good</td>
<td>Fire Dept. – SWNHFMA coordinates mutual aid with 83 regional communities; Police Dept. – Cheshire County Sheriff’s Dept. provides service to all Cheshire County communities; Highway Dept. has verbal agreements with neighboring towns of New Ipswich and Jaffrey, PD with town of New Ipswich.</td>
</tr>
<tr>
<td><strong>Other Mutual Aid</strong> - Rindge has an agreement with New Ipswich for police services and road maintenance. They also have an agreement in place with Jaffrey for road maintenance for some roads in Little Michigan area of the Town</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fire Dry Hydrant Management Plan</strong> - This designates a maintenance schedule for the local dry hydrants used by the Fire Department for water supply for fire prevention and suppression. The Fire Department is responsible for this plan, and they take advantage of low water opportunities to perform the work or install new hydrants. The Highway Department is responsible for keeping the hydrants accessible. Each hydrant is maintained twice a year.</td>
<td>Location and Maintenance of Dry Hydrants</td>
<td>Fire Chief</td>
<td>Fair</td>
<td>This plan works well, but the Fire Department would like to have more hydrants installed</td>
</tr>
<tr>
<td><strong>Hazardous Materials Spill Prevention Control and Counter Measures Plan</strong> - This plan is on hand with the Fire Department in the event that there is an incident. Personnel in the Fire Department and Highway Department receive regular training for handling hazardous materials spills. SWNHFMA’s Haz-Mat Team is called upon in the event of a major spill. This plan works excellently</td>
<td>Fire, Police, and Highway Departments</td>
<td>Fire Chief, Highway Department &amp; SWNHFMA</td>
<td>Good</td>
<td>Plan is held by Fire Chief. Departments receive frequent training. SWNHFMA HazMat Team provides backup.</td>
</tr>
<tr>
<td><strong>Town Warning System</strong> - The town does not have a Town Warning System. The town would like to have a reverse 911 System. There is currently one siren in town, and one siren at the Wildwood Camp that signals when a camper has gone missing</td>
<td>Siren located at Fire Hall, another siren located in Wildwood Camp.</td>
<td>Fire and Police Departments</td>
<td>Poor</td>
<td>Create Reverse 911 system, update siren and provide education on its meaning.</td>
</tr>
<tr>
<td><strong>Erosion and Sedimentation Plan</strong> - E&amp;S plans are established by the state for erosion and sediment control. The Town of Rindge has established stormwater controls more stringent than those of the State for commercial and multi-family developments. The Code Enforcement Officer is responsible for enforcement, but this is difficult due to the lack of continued on-the-job training in environmental sciences</td>
<td>State &amp; local guidelines for roads and soil erosion/Wholesale town</td>
<td>NH DES, Planning Board, &amp; Code Enforcement Officer</td>
<td>Good</td>
<td>More training required for Code Enforcement officer in areas of environmental sciences.</td>
</tr>
<tr>
<td><strong>Wetlands Protection</strong> - The Town has adopted a Wetlands Ordinance that imposes certain restrictions on building within 50’ of a wetland</td>
<td>Town Wide</td>
<td>NH DES; Code Enforcement Officer, Planning Board</td>
<td>Good</td>
<td>none</td>
</tr>
</tbody>
</table>
### Town Radio System - The existing radio system for emergency responders includes analog and digital radios for the Police Department and analog and digital radios for the Fire and Highway Departments. SWNHFMMA provides town-wide alert to emergency responders in the event of an incident. The system works well overall.

<table>
<thead>
<tr>
<th>Description / Area Covered</th>
<th>Responsible Local Agent</th>
<th>Effectiveness</th>
<th>Recommended Changes - Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town wide Frequency</td>
<td>Police, Fire, and Highway Departments</td>
<td>Average</td>
<td>Town is seeking to acquire second frequency</td>
</tr>
</tbody>
</table>

### Shoreland Protection - Designates a protective buffer along all surface waters in town. No local ordinance enacted. Town relies on the State’s Shoreland Protection Act.

<table>
<thead>
<tr>
<th>Description / Area Covered</th>
<th>Responsible Local Agent</th>
<th>Effectiveness</th>
<th>Recommended Changes - Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>All surface waters</td>
<td>Code Enforcement Officer, NH DES</td>
<td>Good</td>
<td>none</td>
</tr>
</tbody>
</table>

### Town-Sponsored Safety Awareness Program - The Fire Department provides annual fire prevention and health safety trainings classes and presentations at the local schools. Local residents may request a fire inspection of their residences if they wish.

<table>
<thead>
<tr>
<th>Description / Area Covered</th>
<th>Responsible Local Agent</th>
<th>Effectiveness</th>
<th>Recommended Changes - Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town-Wide Safety Training</td>
<td>Fire Department</td>
<td>Good</td>
<td>none</td>
</tr>
</tbody>
</table>

### Ambulance Service - The Town currently has ambulance service from Jaffrey/Rindge Memorial. The service provided has been improving and adequately serves the needs of the community.

<table>
<thead>
<tr>
<th>Description / Area Covered</th>
<th>Responsible Local Agent</th>
<th>Effectiveness</th>
<th>Recommended Changes - Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaffrey/Rindge Memorial Ambulance Service – Town wide</td>
<td>Emergency Management Director;</td>
<td>Good</td>
<td>none</td>
</tr>
</tbody>
</table>

### Radiological Evacuation Plan - Town does not have a radiological evacuation plan since it is located outside the 10 mile Vermont Yankee emergency zone. The town has received radiological monitors, but has never received training for them.

<table>
<thead>
<tr>
<th>Description / Area Covered</th>
<th>Responsible Local Agent</th>
<th>Effectiveness</th>
<th>Recommended Changes - Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Emergency Management Director;</td>
<td>Poor</td>
<td>Training on use of radiological meters and inclusion of evacuation routes</td>
</tr>
</tbody>
</table>

### Preliminary Prioritization

The Rindge Hazard Mitigation Team ranked each of the above Mitigation Strategies and Town programs, as shown in the following table, for its effectiveness related to the critical evaluation factors listed below. A numerical value of 3, good (or yes), was determined as the highest rating with 2 corresponding with average (or maybe) and 1 as poor (or no). Actions of highest priority are those with the highest total ranking score. The highest possible score is 42.

- Ability to reduce disaster damage
- Level of social acceptability
- Contributes to other community goals
- Technical feasibility/potential success
- Ability to benefit the environment
- Administratively feasible
- Need for regulation
- Level of political acceptability
- Ability to save/protect historic structures
- Legal authority to implement
- Ability to achieve other community objectives
- Positive cost/benefit review for local economy
- Ability for quick implementation
- Whether there are environmental approvals required
## Recommended Improvements Ranking

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<tbody>
<tr>
<td>1</td>
<td>Buy additional radio frequencies and 2 repeaters (radio interoperability)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<td>3</td>
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<td>2</td>
<td>More dry hydrants</td>
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<td>2</td>
<td>Coordination w/Yankee evacuation (State)</td>
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<td>Expand regular surface water testing</td>
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<td>3</td>
<td>Reverse 911</td>
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<tr>
<td>3</td>
<td>RMS School should have backup power</td>
<td>2</td>
<td>3</td>
<td>3</td>
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<td>3</td>
<td>Franklin Pierce Shelter back up power</td>
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<tr>
<td>3</td>
<td>Power back up for Town Hall</td>
<td>2</td>
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<td>3</td>
<td>1</td>
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<td>4</td>
<td>Radiological training for monitors</td>
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<tr>
<td>4</td>
<td>Public education re: warning signals, cold weather</td>
<td>2</td>
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<tr>
<td>4</td>
<td>New fire codes for commercial buildings (more stringent sprinklers)</td>
<td>3</td>
<td>3</td>
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<tr>
<td>5</td>
<td>Code enforcement – environmental training for health officer</td>
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<td>5</td>
<td>Erosion Sediment Control ordinance</td>
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</table>
CHAPTER VII
MITIGATION STRATEGIES

The Hazard Mitigation Committee held a brainstorming session during the fifth committee meeting. In order to determine mitigation projects, the Committee used the following objectives:

Preventative (Programs & Policies)
Training
Public Education & Information
Engineering Projects
Property Protection
Structural Projects
Equipment Purchases

With these in mind, the Committee reviewed their overall goals and the hazards, both man-made and natural, as identified in Chapter III. The Committee created a list of possible projects from the types of hazards for which Rindge is at risk. These non-prioritized items are in the directory below. A prioritized list and implementation schedule is included in the next chapter.

Preventative (Programs/Policies):

• Continue mutual aid pacts with surrounding communities to share resources in order to be better prepared for emergency situations.
• Coordinate with state agencies to resolve radio jams of Mutual Aid frequency during Vermont Yankee drills.
• Prepare emergency transportation plan for the evacuation of special needs populations during disaster events.
• Coordinate neighborhood level plans with one town representative designated to each town (preferably one in which they live).
• Compile list of volunteers and private resources (snowmobiles, ATVs, etc…)
• Implement Septic System ordinance.
• (see Chapter VI for improvements to existing mitigation measures).

Training:

• No additional training needed at this time (see Chapter V for improvements to existing mitigation measures).

Public Education & Information:

• Detours - Provide the public with information on evacuation procedures, evacuation routes, and emergency shelters (see also Equipment Purchase).
• No additional measures at this time (see Chapter VI for improvements to existing mitigation measures).
Engineering:

• Provide power back-up for US 202/NH 119 intersection, so that when power goes out, police officers do not have to be diverted for traffic control.
• Provide public sewer around lakes to prevent contamination from septic systems.

Property Protection:

• Implement sandbag program, whereas materials and tools would be stockpiled at the Highway garage, and volunteers would be on stand-by to fill and distribute sandbags in case of an emergency.

Structural Projects:

None at this time.

Equipment Purchases:

• Purchase portable generators to power homes of special needs population during power outages and to power sump pumps.
• Purchase portable pumps to pump out flooded basements and houses.
• Detours - Acquire cones, barriers, and detour signs to use when roadways are closed (see also Public Education & Information).
• Acquire ATVs (Rhinos) and boats for rescue and forest fire fighting.
• Acquire CB & Ham radio for Emergency Operations Center.
• Acquire excavator for Public Works department.

Preliminary Prioritization

The Rindge Hazard Mitigation Team ranked each of the above Mitigation Strategies and Town programs, as shown in the following table, for its effectiveness related to the critical evaluation factors listed below. A numerical value of 3, good (or yes), was determined as the highest rating with 2 corresponding with average (or maybe) and 1 as poor (or no). Actions of highest priority are those with the highest total ranking score. The highest possible score is 42.

- Ability to reduce disaster damage
- Contributes to other community goals
- Ability to benefit the environment
- Need for regulation
- Ability to save/protect historic structures
- Ability to achieve other community objectives
- Ability for quick implementation
- Level of social acceptability
- Technical feasibility/potential success
- Administratively feasible
- Level of political acceptability
- Legal authority to implement
- Positive cost/benefit review for local economy
- Whether there are environmental approvals required
## Mitigation Strategies Ranking

### Legend:
- 3 = Good
- 2 = Average
- 1 = Poor

*If no approvals are required, rank is 3. If approvals are, rank is 1.*

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<tbody>
<tr>
<td>1</td>
<td>Sandbag program (stockpile materials &amp; volunteers)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<tr>
<td>2</td>
<td>Portable generators for sumps and houses</td>
<td>3</td>
<td>3</td>
<td>2</td>
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<td>2</td>
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<tr>
<td>2</td>
<td>Portable Pumps</td>
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<tr>
<td>2</td>
<td>Detours – Acquire cones, barriers etc. &amp; Public education</td>
<td>3</td>
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<tr>
<td>3</td>
<td>Conduct survey of residents regarding vulnerability and volunteer opportunities</td>
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<tr>
<td>3</td>
<td>ATV’s (Rhinos) &amp; Boats for rescue</td>
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<td>4</td>
<td>Power back up for 119/202 intersection</td>
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<td>4</td>
<td>Acquire CB &amp; HAM radio for Emergency Ops Ctr</td>
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<td>Resolve Mutual Aid radio jams during Yankee drills</td>
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<tr>
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<td>Emergency Transportation Plan for moving people</td>
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<tr>
<td>5</td>
<td>Neighborhood level plans, with town coordinator designated to each</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
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<tr>
<td>6</td>
<td>Coordination of volunteers and private resources (snowmobiles, atvs)</td>
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<td>3</td>
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<tr>
<td>6</td>
<td>Securing supplies with retail stores</td>
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<td>6</td>
<td>Coordinate School Superintendent w/ FD &amp; PD re: days off &amp; trouble students</td>
<td>2</td>
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<td>7</td>
<td>Implement septic system ordinance</td>
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<td>8</td>
<td>Excavator for Public Works</td>
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<tr>
<td>9</td>
<td>Public sewage around lake (such as little Michigan)</td>
<td>3</td>
<td>3</td>
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<td>3</td>
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POTENTIAL HAZARD LOCATION MITIGATION ACTIONS

The Rindge Hazard Mitigation Committee identified mitigation actions for the locations identified as possible future hazard areas identified in Chapter III. The Potential Hazard Actions Matrix on the following page identifies these proposed mitigation actions. The matrix includes the hazard type (Column 1), location (Column 2), objective (Column 3), risk(s) (Column 4), mitigation actions (Column 5), and comments (Column 6). Mitigation actions identified in the matrix are further considered in Chapter VII, and where determined feasible, have been integrated into the Hazard Mitigation Implementation Schedule.

The Hazard Mitigation Committee made it a priority to focus the town’s hazard mitigation efforts on hazards most likely to affect the community. Therefore, some hazards which have the potential to occur town-wide, but are unpredictable in terms of when, where, and how it would affect the community if it did occur, may not have identified mitigation strategies. The Committee agreed that potential mitigation strategies for each hazard type should be further considered during the annual review of the plan.

Preliminary Prioritization

The Rindge Hazard Mitigation Team ranked each of the above Mitigation Strategies and Town programs, as shown in the following table, for its effectiveness related to the critical evaluation factors listed below. A numerical value of 3, good (or yes), was determined as the highest rating with 2 corresponding with average (or maybe) and 1 as poor (or no). Actions of highest priority are those with the highest total ranking score. The highest possible score is 42.

- Ability to reduce disaster damage
- Contributes to other community goals
- Ability to benefit the environment
- Need for regulation
- Ability to save/protect historic structures
- Ability to achieve other community objectives
- Ability for quick implementation
- Level of social acceptability
- Technical feasibility/potential success
- Administratively feasible
- Level of political acceptability
- Legal authority to implement
- Positive cost/benefit review for local economy
- Whether there are environmental approvals required
<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Location</th>
<th>Objective</th>
<th>Risk(s)</th>
<th>Mitigation Actions</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riverine Flooding/Dams</td>
<td>Many dams throughout town</td>
<td>Reduce threat posed by dam breaches</td>
<td>Many possible structures</td>
<td>Update dam GIS layer to include all dams. Make official current policy of having PW Director check all dams when state sends deficiency letters.</td>
<td>In Progress</td>
</tr>
<tr>
<td>Flooding due to Beaver Dams</td>
<td>All lakes and streams in town</td>
<td>Reduce flooding threat posed by beaver dams.</td>
<td>Medium-High risk to many lakefront structures and roads</td>
<td>Continue catch and release program to control beaver populations.</td>
<td>In Progress</td>
</tr>
<tr>
<td>Flooding</td>
<td>Old New Ipswich road</td>
<td>Reduce annual threat to driver safety, access to homes, and access to evacuation routes caused by potential flooding on the road.</td>
<td>Medium risk to culvert and road</td>
<td>Fix the culvert</td>
<td>Place project on CIP</td>
</tr>
<tr>
<td>Wildfires</td>
<td>All conservation lands and property on Current Use</td>
<td>Reduce annual threat of forest fire by reducing fuel load through program of active forest management</td>
<td>Medium-High risk to various properties in and around forests</td>
<td>Institute forest management plans for properties under conservation</td>
<td>Conservation Commission should be in charge of this item</td>
</tr>
<tr>
<td>Hazardous Materials</td>
<td>Fireworks storage at construction site on US 202 North</td>
<td>Secure site to prevent casualties</td>
<td>Medium-High risk of personal injury</td>
<td>Ask property owner to add fencing around storage of explosives</td>
<td>Fire chief should have informal conversation w/property owner</td>
</tr>
<tr>
<td></td>
<td>All fuel stations in town</td>
<td>Prevent spills of fuels into wetlands and groundwater</td>
<td>Medium risk to the drinking water supply</td>
<td>Require on site booms and spill prevention measures as well as training for employees and frequent inspections</td>
<td></td>
</tr>
<tr>
<td>Drought</td>
<td>Town-wide</td>
<td>n/a</td>
<td>Low-Medium</td>
<td>This town-wide issue is unpredictable in terms of when, where, and how it would affect the community. No mitigation strategies are proposed at this time.</td>
<td></td>
</tr>
<tr>
<td>Extreme Heat</td>
<td>Town-wide</td>
<td>n/a</td>
<td>Low</td>
<td>This town-wide issue is unpredictable in terms of when, where, and how it would affect the community. No mitigation strategies are proposed at this time.</td>
<td></td>
</tr>
<tr>
<td>Radon Air/Water</td>
<td>Town-wide</td>
<td>n/a</td>
<td>Low</td>
<td>This town-wide issue is unpredictable in terms of when, where, and how it would affect the community. No mitigation strategies are proposed at this time.</td>
<td></td>
</tr>
<tr>
<td>Tornado</td>
<td>Town-wide</td>
<td>n/a</td>
<td>Med-High</td>
<td>This town-wide issue is unpredictable in terms of when, where, and how it would affect the community. No mitigation strategies are proposed at this time.</td>
<td></td>
</tr>
<tr>
<td>Subsidence</td>
<td>US 202 North</td>
<td>n/a</td>
<td>Low risk to roadway</td>
<td>US 202 is a state maintained road. Subsidence and drainage issues are well known to NH DOT. No mitigation strategies are proposed at this time.</td>
<td></td>
</tr>
<tr>
<td>Hurricane</td>
<td>Town-wide</td>
<td>n/a</td>
<td>Medium</td>
<td>This town-wide issue is unpredictable in terms of when, where, and how it would affect the community. No mitigation strategies are proposed at this time.</td>
<td></td>
</tr>
<tr>
<td>Earthquakes</td>
<td>Town-wide</td>
<td>n/a</td>
<td>Medium</td>
<td>This town-wide issue is unpredictable in terms of when, where, and how it would affect the community. No mitigation strategies are proposed at this time.</td>
<td></td>
</tr>
</tbody>
</table>
## Potential Hazard Actions Matrix

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Location</th>
<th>Objective</th>
<th>Risk(s)</th>
<th>Mitigation Actions</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe Wind/Downburst</td>
<td>Town-wide</td>
<td>n/a</td>
<td>Low</td>
<td>This town-wide issue is unpredictable in terms of when, where, and how it would affect the community. No mitigation strategies are proposed at this time.</td>
<td></td>
</tr>
<tr>
<td>Lightning Strikes</td>
<td>Town-wide</td>
<td>n/a</td>
<td>Med-High</td>
<td>This town-wide issue is unpredictable in terms of when, where, and how it would affect the community. No mitigation strategies are proposed at this time.</td>
<td></td>
</tr>
<tr>
<td>Extreme Winter Weather</td>
<td>Franklin Pierce University Road</td>
<td>Prevent a potential life safety issue due to drifting snow across roadway.</td>
<td>Low</td>
<td>Replant landscaping along roadway as indicated in siteplan of new condominiums. Currently, an ineffective snow fence is being placed by FP.</td>
<td>Negotiation between town and college.</td>
</tr>
<tr>
<td>------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>---------------------------------</td>
<td>-----------------------------------</td>
<td>---------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Beaver control program</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Fuel spill containment booms, training, and inspection of gas stations</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Fix Culvert on Old New Ipswich Road</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Dam inspection policy</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Forest Management to prevent forest fires</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Snowfencing/landscaping to prevent white-outs on road</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Security fence around explosive storage area</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>
CHAPTER VIII: PRIORITIZED IMPLEMENTATION SCHEDULE AND ACTION PLAN

Summary of Critical Evaluation

The Rindge Hazard Mitigation Committee reviewed each of the actions identified in the Summary of Recommended Improvements in Chapter VI, as well as mitigation strategies from the brainstorm and Potential Hazard Actions Matrix in Chapter VII using the following factors to prioritize mitigation projects:

- ability to reduce disaster damage
- ability to complete or be combined w/other actions
- impact on the environment
- ability to meet regulations
- ability to save or protect historic structures
- ability to meet other community objectives
- the duration of its implementation period
- social acceptability
- technical feasibility / potential success
- administrative workability
- political acceptability
- legal implementation
- cost/benefit review
- environmental compatibility

An additional factor that is not considered here but should be considered by the Committee on a project-by-project basis is the ability to find funding.

Implementation Schedule and Action Plan

The Rindge Hazard Mitigation Committee developed an action plan that outlines who is responsible for implementing each of the prioritized strategies determined in the previous chapters, as well as when and how the actions will be implemented. The following questions were asked to develop an implementation schedule for the identified priority mitigation strategies:

WHO? Who will lead the implementation efforts? Who will put together funding requests and applications?

WHEN? When will these actions be implemented, and in what order?

HOW? How will the community fund these projects? How will the community implement these projects? What resources will be needed to implement these projects?

Each strategy’s total score from the ranking process is included in the table. As additional information becomes available regarding project leadership, timeline, funding sources, and/or cost estimates, the Plan will be reviewed and amended accordingly.
## PRIORITIZED IMPLEMENTATION SCHEDULE (ACTION PLAN)

### IMPLEMENTATION STRATEGY FOR PRIORITY MITIGATION ACTIONS

The Rindge Hazard Mitigation Committee created the following prioritized schedule for implementation:

<table>
<thead>
<tr>
<th>Mitigation Action</th>
<th>Who (Leadership)</th>
<th>When (Deadline)</th>
<th>How (Funding Source)</th>
<th>Cost (Estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buy additional radio frequencies and 2 repeaters (radio interoperability)</td>
<td>Police Chief</td>
<td>Ongoing</td>
<td>Applied from grant from Homeland Security, waiting for FCC</td>
<td>$5-$10,000 each $90/year/frequency for 5 years</td>
</tr>
<tr>
<td>More dry hydrants</td>
<td>Fire Chief/EMD</td>
<td>Ongoing, 2/year</td>
<td>DF Operations line item</td>
<td>$1,000 each</td>
</tr>
<tr>
<td>Coordination w/Yankee evacuation (State)</td>
<td>Fire Chief/EMD Coordinate w/State Representative, BOEM Field Reps</td>
<td>ASAP</td>
<td>N/A</td>
<td>$0</td>
</tr>
<tr>
<td>Expand regular surface water testing</td>
<td>Health Officer and Planning Department, coordinate w/Lake Associations</td>
<td>Summer/Spring 2007</td>
<td>Town Funds/Associations</td>
<td>$2,000/year $100/test x 20/year</td>
</tr>
<tr>
<td>Reverse 911</td>
<td>Police Department</td>
<td>5 years</td>
<td>Grant/Town Match Part of County System</td>
<td>$10,000+</td>
</tr>
<tr>
<td>RMS School should have backup power</td>
<td>Principal &amp; EMD</td>
<td>November Budget Process</td>
<td>Town/School grants &amp; budget</td>
<td>$60-$70,000</td>
</tr>
<tr>
<td>Franklin Pierce Shelter back up power</td>
<td>EMD &amp; Franklin Pierce Emergency Management Committee</td>
<td>Part of overall FP plan due Dec. 31st, 2006 Implement over 3-4 years</td>
<td>Town &amp; College Grants</td>
<td>$150-$200,000</td>
</tr>
<tr>
<td>Power back up for Town Hall</td>
<td>Town Administrator &amp; EMD</td>
<td>1 year</td>
<td>50/50 Town/Grant</td>
<td>$32,000</td>
</tr>
<tr>
<td>Radiological training for monitors</td>
<td>EMD</td>
<td>End of Year</td>
<td>N/A</td>
<td>$0</td>
</tr>
<tr>
<td>Public education re: warning signals, cold weather</td>
<td>EMD/Town Administrator/Schools</td>
<td>1 Year</td>
<td>Emergency Management Line Item</td>
<td>$500</td>
</tr>
</tbody>
</table>

---

Chapter VI, Recommended Improvements:
<table>
<thead>
<tr>
<th>MITIGATION ACTION</th>
<th>WHO (LEADERSHIP)</th>
<th>WHEN (DEADLINE)</th>
<th>HOW (FUNDING SOURCE)</th>
<th>COST (ESTIMATED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New fire codes for commercial buildings (more stringent sprinklers)</td>
<td>Fire Chief &amp; State Fire Marshal</td>
<td>Town Meeting</td>
<td>N/A</td>
<td>$0</td>
</tr>
<tr>
<td>Code enforcement –environmental training for health officer</td>
<td>Town Administrator</td>
<td>3-5 Years</td>
<td>N/A</td>
<td>$35,000/year</td>
</tr>
<tr>
<td>Erosion Sediment Control ordinance</td>
<td>Town Planner</td>
<td>Town Meeting</td>
<td>N/A</td>
<td>$0</td>
</tr>
<tr>
<td>Sandbag program (stockpile materials &amp; volunteers)</td>
<td>Public Works Director</td>
<td>Town Meeting</td>
<td>State supply of sandbags, Town Funded</td>
<td>$500</td>
</tr>
<tr>
<td>Portable generators for sumps and special needs populations</td>
<td>Fire Chief/Director of Public Life and Safety</td>
<td>Acquire 2/year over 3 year period</td>
<td>Town Funds, State Grants, Public Donations</td>
<td>$750/Generator, $4,500 Total</td>
</tr>
<tr>
<td>Portable Pumps for Basements and Buildings</td>
<td>Public Works Director</td>
<td>1/year over 2 years</td>
<td>Town Funds/Grants</td>
<td>$1,500 each, $3,000 Total</td>
</tr>
<tr>
<td>Detours – Acquire cones, barriers etc. &amp; Public education</td>
<td>PD, FD, and Public Works</td>
<td>Ongoing (acquire piecemeal)</td>
<td>Town Funds/Grants, Check w/New Ipswich on how they got theirs</td>
<td>$1,500</td>
</tr>
<tr>
<td>Conduct survey of residents regarding vulnerability and volunteer opportunities</td>
<td>Town Administrator &amp; Planning Director</td>
<td>ASAP</td>
<td>Emergency Line Item</td>
<td>$300</td>
</tr>
<tr>
<td>ATV’s (Rhinos) &amp; Boats for rescue</td>
<td>FD &amp; PD</td>
<td>One Year</td>
<td>Rhino – Grant, Boat – Fundraiser through Mondadnock Fire Chiefs</td>
<td>$35,000 Boat, $10,000 Rhino</td>
</tr>
<tr>
<td>Power back up for 119/202 intersection</td>
<td>Police Chief</td>
<td>End of Year</td>
<td>DOT &amp; Town</td>
<td>$5,000</td>
</tr>
<tr>
<td>Acquire CB &amp; HAM radio for Emergency Ops Center</td>
<td>EMD</td>
<td>Town Meeting</td>
<td>Town</td>
<td>$5,000</td>
</tr>
<tr>
<td>Resolve Mutual Aid radio jams during Yankee drills</td>
<td>FD &amp; PD</td>
<td>ASAP</td>
<td>N/a</td>
<td>N/A</td>
</tr>
<tr>
<td>Emergency Transportation Plan for moving people</td>
<td>EMD</td>
<td>ASAP</td>
<td>Existing Funds</td>
<td>Unknown</td>
</tr>
<tr>
<td>Neighborhood level plans, with town coordinator designated to each</td>
<td>EMD &amp; Neighborhood Associations</td>
<td>1-2 years</td>
<td>Existing Funds</td>
<td>Unknown</td>
</tr>
</tbody>
</table>
### IMPLEMENTATION STRATEGY FOR PRIORITY MITIGATION ACTIONS con’t

<table>
<thead>
<tr>
<th>MITIGATION ACTION</th>
<th>WHO (LEADERSHIP)</th>
<th>WHEN (DEADLINE)</th>
<th>HOW (FUNDING SOURCE)</th>
<th>COST (ESTIMATED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination of volunteers and private resources (snowmobiles, atvs)</td>
<td>EMD</td>
<td>After Surveys 6 months</td>
<td>N/A</td>
<td>Minimal</td>
</tr>
<tr>
<td>Securing supplies with retail stores</td>
<td>EMD</td>
<td>1 Year</td>
<td>N/A</td>
<td>$0</td>
</tr>
<tr>
<td>Coordinate School Superintendent w/ FD &amp; PD re: days off &amp; trouble students</td>
<td>PD &amp; School Principal</td>
<td>Ongoing</td>
<td>N/A</td>
<td>$0</td>
</tr>
<tr>
<td>Implement septic system ordinance</td>
<td>Health Officer/Town Planner</td>
<td>Town Meeting</td>
<td>N/A</td>
<td>$0</td>
</tr>
<tr>
<td>Excavator for Public Works</td>
<td>Public Works Director</td>
<td>5+ Years</td>
<td>CIP Town</td>
<td>$150,000</td>
</tr>
<tr>
<td>Public sewage around lake (such as little Michigan)</td>
<td>Town Planner/Health Officer</td>
<td>15+ Years</td>
<td>Bonds</td>
<td>?</td>
</tr>
</tbody>
</table>

#### Chapter VII – Potential Hazards Action

<table>
<thead>
<tr>
<th>MITIGATION ACTION</th>
<th>WHO (LEADERSHIP)</th>
<th>WHEN (DEADLINE)</th>
<th>HOW (FUNDING SOURCE)</th>
<th>COST (ESTIMATED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaver control program</td>
<td>Public Works Director</td>
<td>Ongoing</td>
<td>Operating Budget</td>
<td>$1,200/year (about $100/beaver)</td>
</tr>
<tr>
<td>Fuel spill containment booms, training, and inspection of gas stations</td>
<td>Code Enforcement Officer &amp; Planning Dept.</td>
<td>Town Meeting</td>
<td>Town Budget</td>
<td>N/A</td>
</tr>
<tr>
<td>Fix Culvert on Old New Ipswich Road</td>
<td>Public Works Director</td>
<td>Fall 2007</td>
<td>Road Construction Funds</td>
<td>$1,000</td>
</tr>
<tr>
<td>Dam inspection policy</td>
<td>Town Administrator &amp; Public Works Director</td>
<td>Ongoing</td>
<td>Part of current work-Existing funding</td>
<td>negligible</td>
</tr>
<tr>
<td>Forest Management to prevent forest fires</td>
<td>Conservation Commission (w/EMD)</td>
<td>Spring 2007</td>
<td>Conservation Funds from Current Use</td>
<td>$8,000</td>
</tr>
<tr>
<td>Snowfencing/landscaping to prevent white-outs on road</td>
<td>Town Planner</td>
<td>Town/Gown Meeting</td>
<td>N/A</td>
<td>$0</td>
</tr>
<tr>
<td>Security fence around explosive storage area</td>
<td>Fire Chief</td>
<td>ASAP</td>
<td>N/A</td>
<td>$0</td>
</tr>
</tbody>
</table>
CHAPTER IX
ADOPTION, IMPLEMENTATION, MONITORING & UPDATE

ADOPTION

The Rindge Board of Selectmen adopted the Rindge Hazard Mitigation Plan on ____________. A copy of the resolution can be found at the end of this chapter. Adopted policy addresses the actions for implementation set forth in the chart “Implementation Strategy for Priority Mitigation Actions” in Chapter VII and in the “Monitoring & Updates” sub-section contained in this Chapter VIII. All other sections of this Plan are supporting documentation for information purposes only and are not included as the statement of policy.

MONITORING & UPDATES

Recognizing that many mitigation projects are ongoing, and that while in the implementation stage communities may suffer budget cuts, experience staff turnover, or projects may fail altogether, a good plan needs to provide for periodic monitoring and evaluation of its successes and failures and allow for updates of the Plan where necessary.

In order to track progress and update the Mitigation Strategies identified in the Action Plan (Chapter VII), the Town Hazard Mitigation Team will revisit the Rindge Hazard Mitigation Plan annually, or after a hazard event. The Emergency Management Director is responsible for initiating this review and needs to consult with the Board of Selectmen and other key local officials. Changes should be made to the Plan to accommodate for projects that have failed or are not considered feasible after a review for their consistency with the timeframe, the community’s priorities, and funding resources. Priorities that did not make the implementation list, but identified as potential mitigation strategies, should be reviewed as well during the monitoring and update of this Plan to determine feasibility of future implementation. In keeping with the process of adopting the 2006 Rindge Hazard Mitigation Plan, a public hearing to receive public comment on Plan maintenance and updating will be held during the annual review period and the final product adopted by the Board of Selectmen appropriately.

The Town of Rindge, NH Hazard Mitigation Plan must be reviewed, revised as appropriate, and resubmitted to FEMA for approval every five years in order to maintain eligibility for Pre-Disaster Mitigation Competitive (PDM-C) and Hazard Mitigation Grant Program project grants.

IMPLEMENTATION OF THE PLAN THROUGH EXISTING PROGRAMS

In addition to work by the Hazard Mitigation Committee and town departments, several other mechanisms exist which will ensure that the Rindge Hazard Mitigation Plan receives the attention it requires for satisfactory use.

Master Plan
Implementation of the Master Plan has been ongoing since its most recent update in 2001. Recommendations from the Rindge Hazard Mitigation Plan will be considered for insertion into future updates of the Master Plan. The Planning Board will consider the Plan as an amendment to its Master Plan. The Local Hazard Mitigation Committee will oversee the process to begin working with the Planning Board to ensure that the Rindge Hazard Mitigation Plan is adopted as a Chapter of the Master Plan.
**Zoning Ordinance and Regulations**

Some of the implementation strategies proposed involve revisions to the Subdivision Regulations and/or the Site Plan Review Regulations as well as the Zoning Ordinance. The Local Hazard Mitigation Committee will oversee the process to begin working with the Planning Board to develop appropriate language for the recommended modifications.

**Continued Public Involvement**

On behalf of the Hazard Mitigation Committee, the Emergency Management Director (EMD), under direction of the Board of Selectmen, will be responsible for ensuring that town departments and the public have adequate opportunity to participate in the planning process. Administrative staff may be utilized to assist with the public involvement process. For the yearly update process, techniques that will be utilized for public involvement include:

- Provide personal invitations to Budget Committee members;
- Provide personal invitations to town department heads;
- Post notices of meetings at the Town Office, Library, and local businesses;
- Post flyers of the project at the Town Office, Library, and local businesses; and
- Submit newspaper articles for publication to the Keene Sentinel and the Monadnock Ledger.

A number of Implementation Action items which will be undertaken relate to public education and involvement. Additionally, members of the public including area business owners, schools, communities, and organizations will be invited to participate in the yearly process of updating the Rindge Hazard Mitigation Plan. These outreach activities will be undertaken during the Plan’s annual review and during any Hazard Mitigation Committee meetings the Board of Selectmen calls to order.
CERTIFICATE OF ADOPTION

TOWN OF RINDGE, NEW HAMPSHIRE

BOARD OF SELECTMEN

A RESOLUTION ADOPTING THE RINDGE

HAZARD MITIGATION PLAN

WHEREAS, the Town of Rindge established a Committee to prepare the Rindge Hazard Mitigation plan; and

WHEREAS, several public planning meetings were held between _____________ and ____________ regarding the development and review of the Rindge Hazard Mitigation Plan; and

WHEREAS, the Rindge Hazard Mitigation Plan contains several potential future projects to mitigate hazard damage in the Town of Rindge; and

WHEREAS, a duly-noticed public hearing was held by the Rindge Board of Selectmen on _____________ to formally approve and adopt the Rindge Hazard Mitigation Plan.

NOW, THEREFORE BE IT RESOLVED that the Rindge Board of Selectmen adopts the Rindge Hazard Mitigation Plan.

ADOPTED AND SIGNED this _____________

_____________________________________________
Arthur C. Fiorelli
Rindge Board of Selectmen

_____________________________________________
Timothy Halliday
Rindge Board of Selectmen

_____________________________________________
Patricia Lang Barry
Rindge Board of Selectmen

ATTEST
APPENDICES
APENDIX A
HAZARD DESCRIPTIONS
The following list describes hazards that have occurred or have the potential to occur in the Town of Rindge. The descriptions provided are those used in the State of NH Hazard Mitigation Plan (2000).

Flooding
Flooding are defined as a temporary overflow of water onto lands that are not normally covered by water. Flooding results from the overflow of major rivers and tributaries, storm surges, and/or inadequate local drainage. Flooding can cause loss of life, property damage, crop/livestock damage, and water supply contamination. Flooding can also disrupt travel routes on roads and bridges. Inland floods are most likely to occur in the spring due to the increase in rainfall and melting of snow; however, floods can occur at any time of the year. A sudden thaw in the winter or a major downpour in the summer can cause flooding because there is suddenly a lot of water in one place with nowhere to go.

100-year Floodplain Events
- Floodplains are usually located in lowlands near rivers, and flood on a regular basis. The term 100-year flood does not mean that a flood will occur once every 100 years. Rather, it is a statement of probability that scientists and engineers use to describe how one flood compares to others that are likely to occur. It is more accurate to use the phrase “1% annual chance of flood.” What this means is that there is a 1% chance of a flood of that size happening in a year.

Rapid Snow Pack Melt
- Warm temperatures and heavy rains cause rapid snowmelt. Quickly melting snow coupled with moderate to heavy rains are prime conditions for flooding.

River Ice Jams
- Rising waters in early spring breaks ice into chunks, which float downstream and often pile up, causing flooding. Small rivers and streams pose special flooding risks because they are easily blocked by jams. Ice collecting in river bends and against structures presents significant flooding threats to bridges, roads, and the surrounding lands.

Severe Storms
- Flooding associated with severe storms can inflict heavy damage to property. Heavy rains during severe storms are a common cause of inland flooding.

Beaver Dams and Lodging
- Flooding associated with beaver dams and lodging can cause road flooding or flooding damage to property.

Drought
A drought is defined as a long period of abnormally low precipitation, especially one that adversely affects growing or living conditions. Droughts are rare in New Hampshire. They generally are not as damaging and disruptive as floods and are more difficult to define. The effect of droughts is indicated through measurements of soil moisture, groundwater levels, and stream-flow. However, not all of these indicators will be minimal during a drought. For example, frequent minor rainstorms can replenish the soil moisture without raising groundwater levels or increasing stream-flow. Low stream-flow correlates with low groundwater levels because ground-water discharge to streams and rivers maintains stream-flow during extended dry periods. Low stream-flow and low groundwater levels commonly cause diminished water supply.

Extreme Heat
Extreme heat is characterized by abnormally high temperatures and/or longer than average time periods of high temperatures. These event conditions may impact the health of both humans and livestock. The State Hazard Mitigation Team is conducting additional research to more accurately characterize extreme heat hazards.

Wildfire
Wildfire is defined as an uncontrolled and rapidly spreading fire.
Forest Fires and Grass Fires
- A forest fire is an uncontrolled fire in a woody area. They often occur during drought and when woody debris on the forest floor is readily available to fuel the fire. Grass fires are uncontrolled fires in grassy areas.

Earthquake
New England is considered a moderate risk earthquake zone. 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, water 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.

Subsidence
The collapse of the Earth’s surface elevation due to the removal of subsurface support. Events range from broad regional lowering of the land surface that occurs over long periods of time, to sudden localized collapse.

Radon
Radon is a naturally occurring radioactive gas with carcinogenic properties. The gas is a common problem in many states, including New Hampshire. Data collected by the NH Office of Community and Public Health’s Bureau of Radiological Health indicates that one third of the houses in New Hampshire have indoor radon levels that exceed the U.S. Environmental Protection Agency’s “action level” of four Pico curies per liter for at least some portion of the year. Radon may also enter homes dissolved in drinking water from drilled wells. A higher level of radon in water from individual drilled wells is a common occurrence in New Hampshire.

Tornado
A tornado is a violent windstorm characterized by a twisting, funnel shaped cloud. They develop when cool air overrides a layer of warm air, causing the warm air to rise rapidly. The atmospheric conditions required for the formation of a tornado include great thermal instability, high humidity, and the convergence of warm, moist air at low levels with cooler, drier air aloft. Most tornadoes remain suspended in the atmosphere, but if they touch down they become a force of destruction.

Tornadoes produce the most violent winds on earth, at speeds of 280 mph or more. In addition, tornadoes can travel at a forward speed of up to 70 mph. Damage paths can be in excess of one mile wide and 50 miles long. Violent winds and debris slamming into buildings cause the most structural damage.

The Fujita Scale is the standard scale for rating the severity of a tornado as measured by the damage it causes. A tornado is usually accompanied by thunder, Lightning, heavy rain, and a loud “freight train” noise. In comparison to a hurricane, a tornado covers a much smaller area but can be more violent and destructive.

Hurricane
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 may extend over 400 miles. High winds and flooding are primary causes of hurricane-inflicted loss of life and property damage.
Severe Wind
Significantly high winds occur especially during tornadoes, hurricanes, winter storms and thunderstorms. Falling objects and downed power lines are dangerous risks associated with high winds. In addition, property damage and downed trees are common during severe wind occurrences.

Downburst
• 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.

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 about 50,000 degrees Fahrenheit, considerably hotter than the surface of the sun. Fires are a likely result of lightning strikes, and lightning strikes can cause death, injury, and property damage.

Extreme Winter Weather
Ice and snow events typically occur during the winter months and can cause loss of life, property damage and tree damage.

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, which freezes on impact. Ice coating at least one-fourth inch of thickness is heavy enough to damage trees, overhead wires and similar objects. Ice storms often produce widespread power outages.

Nor’easter
• A Nor’easter is a large weather system traveling from South to North passing along or near the seacoast. As the storm approaches New England and its intensity becomes increasingly apparent, the resulting counterclockwise cyclonic winds impact the coast and inland areas from a Northeasterly direction. The sustained winds may meet or exceed hurricane force, with larger bursts, and may exceed hurricane events by many hours (or days) in terms of duration.

Snow Avalanches
A snow avalanche is a slope failure consisting of a mass of rapidly moving, fluidized snow that slides down a mountainside. The flow can be composed of ice, water, soil, rock and trees.

Man-Made Hazards

Hazardous Materials
• Hazardous materials spills or releases can cause damage of loss to life and property. Short or long-term evacuation of local residents and businesses may be required, depending on the nature and extent of the incident.

Dam Breach and Failure
• Dam failure results in rapid loss of water that is normally held by the dam. These kinds of floods are extremely dangerous and pose a significant threat to both life and property.
APPENDIX B: RESOURCES
RESOURCES USED IN THE PREPARATION OF THIS PLAN

NH BEM’s State of New Hampshire Natural Hazards Mitigation Plan (9/99)

Massachusetts’s Flood Hazard Mitigation Planning: A Community Guide (6/97)

SWRPC’s Hazard Mitigation Planning for New Hampshire Communities (10/02)

BEM’s Hazard Mitigation Plan for New Hampshire Communities (12/97 draft document)

BEM / NH OEP’s Flood Insurance Handbook (4/94)

FEMA’s Community Based Hazard Mitigation Planning: Lowering the Risks and Costs of Disasters (8/98)

FEMA’s Understanding Your Risks: Identifying Hazards and Estimating Losses, August 2001

The Local Mitigation Strategy: A Guidebook for Florida Cities and Counties (4/98)

Texas Community Official’s Primer on Floodplain Planning Strategies and Tools (6/94)

City of Keene, NH’s Flood Hazard Mitigation Plan (2/2000 final draft)

City of Saco, ME’s All Hazard Mitigation Plan (1/2000)

City of Montpelier, VT’s Flood Hazard Mitigation Plan (5/98 draft)

Town of Rindge, NH’s Master Plan (2001 update)
Agencies

New Hampshire Bureau of Emergency Management (BEM) ................................................................. 271-2231
Hazard Mitigation Section ...................................................................................................................... 271-2231

Federal Emergency Management Agency (FEMA) ................................................................................ (877) 336-2734

NH Regional Planning Commissions:
Central NH Regional Planning Commission ...................................................................................... 226-6020
Lakes Region Planning Commission .................................................................................................... 279-8171
Nashua Regional Planning Commission .............................................................................................. 883-0366
North Country Council .......................................................................................................................... 444-6303
Rockingham Planning Commission ...................................................................................................... 778-0885
Southern New Hampshire Planning Commission .................................................................................. 669-4664
Southwest Region Planning Commission ............................................................................................. 357-0557
Strafford Regional Planning Commission .............................................................................................. 742-2523
Upper Valley Lake Sunapee Regional Planning Commission .............................................................. 448-1680

NH Executive Department:
Governor’s Office of Energy and Community Services ........................................................................ 271-2611
New Hampshire Office of Energy and Planning .................................................................................. 271-2155

NH Department of Cultural Resources: .................................................................................................. 271-2540
Division of Historical Resources ............................................................................................................ 271-3483

NH Department of Environmental Services: .......................................................................................... 271-3503
Air Resources .......................................................................................................................................... 271-1370
Air Toxins Control Program .................................................................................................................... 271-0901
Asbestos Program .................................................................................................................................... 271-1373
Childhood Lead Poisoning Prevention Program ..................................................................................... 271-5733
Environmental Health Tracking Program ............................................................................................... 271-4072
Environmental Toxicology Program ....................................................................................................... 271-3994
Health Risk Assessment Program .......................................................................................................... 271-6909
Indoor Air Quality Program ................................................................................................................... 271-3911
Occupational Health and Safety Program .............................................................................................. 271-2024
Radon Program ....................................................................................................................................... 271-4764
Geology Unit ........................................................................................................................................... 271-3503
Pollution Preventive Program ................................................................................................................. 271-6460
Waste Management ............................................................................................................................... 271-2900
Water Supply and Pollution Control ...................................................................................................... 271-3414
Rivers Management and Protection Program .......................................................................................... 271-8801

NH Office of Energy & Planning (OEP) .................................................................................................... 271-2155

NH Municipal Association ..................................................................................................................... 224-7447

NH Fish and Game Department ............................................................................................................. 271-3421
Region 1, Lancaster ................................................................................................................................. 788-3164
Region 2, New Hampton .......................................................................................................................... 744-5470
Region 3, Durham .................................................................................................................................... 868-1095
Region 4, Keene ...................................................................................................................................... 352-9669

NH Department of Resources and Economic Development: ................................................................. 271-2411
Economic Development .......................................................................................................................... 271-2629
Travel and Tourism ................................................................................................................................. 271-6870
Division of Forests and Lands .................................................................................................................. 271-2214
Mitigation Funding Resources

404 Hazard Mitigation Grant Program (HMGP) ...........................................................................NH Bureau of Emergency Management
406 Public Assistance and Hazard Mitigation .............................................................NH Bureau of Emergency Management
Community Development Block Grant (CDBG) ........................................................................NH BEM, NH OSP, also refer to RPC
Dam Safety Program ...........................................................................................................NH Department of Environmental Services
Disaster Preparedness Improvement Grant (DPIG) .............................................................NH Bureau of Emergency Management
Emergency Generators Program by NESEC‡ ........................................................................NH Bureau of Emergency Management
Emergency Watershed Protection (EWP) Program ..............................................................USDA, Natural Resources Conservation Service
Flood Mitigation Assistance Program (FMAP) ...........................................................................NH BEM, NH OEP
Flood Plain Management Services (FPMS) ...........................................................................US Army Corps of Engineers
Mitigation Assistance Planning (MAP) .....................................................................................NH Bureau of Emergency Management
Mutual Aid for Public Works ..............................................................................................NH Municipal Association
National Flood Insurance Program (NFIP) † ...........................................................................NH OSP, NH BEM
Power of Prevention Grant by NESEC‡ ................................................................................NH Bureau of Emergency Management
Project Impact .......................................................................................................................NH Bureau of Emergency Management
Roadway Repair & Maintenance Program(s) ........................................................................NH Department of Transportation
Section 14 Emergency Stream Bank Erosion & Shoreline Protection ...................................US Army Corps of Engineers
Section 103 Beach Erosion ......................................................................................................US Army Corps of Engineers
Section 205 Flood Damage Reduction ..................................................................................US Army Corps of Engineers
Section 208 Snagging and Clearing .......................................................................................US Army Corps of Engineers
Shoreline Protection Program .................................................................................................NH Department of Environmental Services
Various Forest and Lands Program(s) ..................................................................................NH Department of Resources and Economic Development
Wetlands Programs ...................................................................................................................NH Department of Environmental Services

‡NESEC – Northeast States Emergency Consortium, Inc. is a 501(c)(3), not-for-profit natural disaster, multi-hazard mitigation and emergency management organization located in Wakefield, Massachusetts. Please, contact NH BEM for more information.

† Note regarding National Flood Insurance Program (NFIP) and Community Rating System (CRS):
The National Flood Insurance Program has developed suggested floodplain management activities for those communities who wish to more thoroughly manage or reduce the impact of flooding in their jurisdiction. Through use of a rating system (CRS rating), a community’s floodplain management efforts can be evaluated for effectiveness. The rating, which indicates an above average floodplain management effort, is then factored into the premium cost for flood insurance policies sold in the community. The higher the rating achieved in that community, the greater the reduction in flood insurance premium costs for local property owners. The NH Office of Energy & Planning can provide additional information regarding participation in the NFIP-CRS Program.
## Websites

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Internet Address</th>
<th>Summary of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Hazards Research Center, U. of Colorado</td>
<td><a href="http://www.colorado.edu/hazards/">http://www.colorado.edu/hazards/</a></td>
<td>Searchable database of references and links to many disaster-related websites.</td>
</tr>
<tr>
<td>Atlantic Hurricane Tracking Data by Year</td>
<td><a href="http://wxp.eas.purdue.edu/hurricane">http://wxp.eas.purdue.edu/hurricane</a></td>
<td>Hurricane track maps for each year, 1886 – 1996</td>
</tr>
<tr>
<td>National Emergency Management Association</td>
<td><a href="http://nemaweb.org">http://nemaweb.org</a></td>
<td>Association of state emergency management directors; list of mitigation projects.</td>
</tr>
<tr>
<td>U.S. State &amp; Local Gateway</td>
<td><a href="http://www.statelocal.gov/">http://www.statelocal.gov/</a></td>
<td>General information through the federal-state partnership.</td>
</tr>
<tr>
<td>USGS Real Time Hydrologic Data</td>
<td><a href="http://h20.usgs.gov/public/realtime.html">http://h20.usgs.gov/public/realtime.html</a></td>
<td>Provisional hydrological data</td>
</tr>
<tr>
<td>FEMA, National Flood Insurance Program, Community Status Book</td>
<td><a href="http://www.fema.gov/fema/csb.htm">http://www.fema.gov/fema/csb.htm</a></td>
<td>Searchable site for access of Community Status Books</td>
</tr>
<tr>
<td>Florida State University Atlantic Hurricane Site</td>
<td><a href="http://www.met.fsu.edu/explores/tropical.html">http://www.met.fsu.edu/explores/tropical.html</a></td>
<td>Tracking and NWS warnings for Atlantic Hurricanes and other links</td>
</tr>
<tr>
<td>NASA Optical Transient Detector</td>
<td><a href="http://www.ghcc.msfc.nasa.gov/otd.htm">http://www.ghcc.msfc.nasa.gov/otd.htm</a></td>
<td>Space-based sensor of lightning strikes</td>
</tr>
<tr>
<td>The Tornado Project Online</td>
<td><a href="http://www.tornadoproject.com/">http://www.tornadoproject.com/</a></td>
<td>Information on tornadoes, including details of recent impacts.</td>
</tr>
<tr>
<td>National Severe Storms Laboratory</td>
<td><a href="http://www.nssl.uoknor.edu/">http://www.nssl.uoknor.edu/</a></td>
<td>Information about and tracking of severe storms.</td>
</tr>
<tr>
<td>USDA Forest Service Web</td>
<td><a href="http://www.fs.fed.us/land">http://www.fs.fed.us/land</a></td>
<td>Information on forest fires and land management.</td>
</tr>
</tbody>
</table>
APPENDIX C: HAZARD MITIGATION RESOURCE PROFILES

The following are fact sheets about the various hazard mitigation grant programs
What types of projects can be funded by the HMGP?

HMGP funds may be used to fund projects that will reduce or eliminate the losses from future disasters. Projects must provide a long-term solution to a problem, for example, elevation of a home to reduce the risk of flood damages as opposed to buying sandbags and pumps to fight the flood. In addition, a project's potential savings must be more than the cost of implementing the project. Funds may be used to protect either public or private property or to purchase property that has been subjected to, or is in danger of, repetitive damage. Examples of projects include, but are not limited to:

- Acquisition of real property for willing sellers and demolition or relocation of buildings to convert the property to open space use
- Retrofitting structures and facilities to minimize damages from high winds, earthquake, flood, wildfire, or other natural hazards
- Elevation of flood prone structures
- Development and initial implementation of vegetative management programs
- Minor flood control projects that do not duplicate the flood prevention activities of other Federal agencies
- Localized flood control projects, such as certain ring levees and floodwall systems, that are designed specifically to protect critical facilities
- Post-disaster building code related activities that support building code officials during the reconstruction process

What are the minimum project criteria?

There are five issues you must consider when determining the eligibility of a proposed project.

- Does your project conform to your State's Hazard Mitigation Plan?
- Does your project provide a beneficial impact on the disaster area, i.e. the State?
- Does your application meet the environmental requirements?
- Does your project solve a problem independently?
- Is your project cost-effective?
Title 1 of the Housing and Community Development Act of 1974 authorized the Community Development Block Grant (CDBG) program. The primary purpose of the CDBG program is the development of viable communities by providing decent housing, suitable living environments, and expanding economic opportunities, principally for low and moderate income people. The program is sponsored by the US Department of Housing and Urban Development (HUD) and the New Hampshire program is administered through the Community Development Finance Authority (CDFA).

Typically, each year the New Hampshire CDBG program receives approximately $10 million from HUD to use towards the CDBG Programs: Housing, Public Facilities, Economic Development, Feasibility Studies, and Emergencies and Unanticipated Events. Since 1983, over 773 grants and over $188 million have been funded throughout New Hampshire.

Any municipality or county, other than entitlement communities of Rochester, Dover, Portsmouth, Manchester, and Nashua, is eligible to apply to CDFA for CDBG funding. A nonprofit agency may also apply through its municipality or county as a sub-recipient of CDBG money. All eligible municipalities and counties can apply for up to $500,000 in CDBG funds per year. Entitlement communities are those communities that, due to their population, receive CDBG money directly from HUD as a special set-aside.

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.

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.

Mitigation Programs of Other NH State Agencies

The following agencies of the State of New Hampshire are directly or indirectly involved in activities that include Hazard Mitigation Planning and/or program implementation:

- NH Department of Transportation Bureau of Repair and Maintenance
- NH OEP/NFIP Program
- NH OEP Coastal Program
- NH DRED Division of Forests and Lands
- NH DES Water Resources Division – Dam Safety Program
- NH DES Wetlands Program
- NH DES Shoreland Protection Program
APPENDIX D: MATRIX OF FEDERAL ALL-HAZARDS GRANTS

This matrix provides information about key all-hazards grant programs from the Departments of Homeland Security, Justice, Transportation, Health and Human Services, and Education under which state, local, and tribal governments, first responders, and the public are eligible to receive preparedness, response, recovery, mitigation, and prevention assistance.
<table>
<thead>
<tr>
<th>Organization</th>
<th>Grant Programs Identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency (EPA)</td>
<td>2. EPA Grant and Contract Vehicles to move funding from DHS to localities for the regular retrieval of Bio Watch sampling filters and delivery for analysis</td>
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<tr>
<td>Nuclear Regulatory</td>
<td>1. NRC provides pharmaceutical intervention to states with populations within the 10-mile emergency planning zone of Commercial nuclear power plants.</td>
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<tr>
<td>Commission (NRC)</td>
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</table>
| Department of Justice        | 1. State Domestic Preparedness Equipment Support Program  
| (DOJ)                        | 2. Antiterrorism and Emergency Assistance Program  
|                              | 3. Domestic Antiterrorism Technology Development Program  
|                              | 4. COPS Interoperable Communications Technology Program                                                                                                                                 |
| Department of Agriculture    | 1. State Fire Assistance  
| (USDA)                       | 2. Volunteer Fire Assistance  
|                              | 3. First Responder Initiative                                                                                                                                 |
| Department of Energy         | 1. Working Agreement: DOE, the Shoshone-Bannock Tribes and the Idaho National Engineering and Environmental Laboratory  
| (DOE)                        | 2. Environmental oversight and Monitoring Agreement: Office of Nuclear Energy and the State of Idaho  
|                              | 3. Agreement-in-Principle: Waste Isolation Pilot Plant (DOE), the Western Governors Association and the State of Idaho  
|                              | 4. Office of Civilian Radioactive Waste Management Training Program  
|                              | 5. Agreement-in-Principle with the State of Texas Energy Conservation Office  
|                              | 6. Agreement-in-Principle with the six counties and the State of Nevada  
|                              | 8. S.C. Dept. of Health and Environmental Control Agreement-in-Principle Grants  
|                              | 11. Office of River Protection Grant  
|                              | 12. Memorandum of Understanding (MOU): DOE and City of Miamisburg  
|                              | 13. Ohio Field Office MOU with West Valley, N.Y., Volunteer Hose Company                                                                                                                                 |
| Tennessee Valley Authority   | 1. Supplemental Agreements: Tennessee Emergency Management Agency and Alabama Emergency Management Agency, for off-site support of nuclear power plant radiological emergency plans |
| (TVA)                       |                                                                                                                                                          |
| Agency (EPA)                 | 2. EPA Grant and Contract Vehicles to move funding from DHS to localities for the regular retrieval of Bio Watch sampling filters and delivery for analysis |
| Nuclear Regulatory           | 1. NRC provides pharmaceutical intervention to states with populations within the 10-mile emergency planning zone of Commercial nuclear power plants.              |
| Commission (NRC)             |                                                                                                                                                          |
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| (DOJ)                        | 2. Antiterrorism and Emergency Assistance Program  
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### Federal Preparedness Grant Programs as Reported to DHS/FEMA NIMS Integration Center

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12. Memorandum of Understanding (MOU): DOE and City of Miamisburg  
13. Ohio Field Office MOU with West Valley, N.Y., Volunteer Hose Company                                                                                                                                                                                                                                                                       |
| Tennessee Valley Authority (TVA)  | 1. Supplemental Agreements: Tennessee Emergency Management Agency and Alabama Emergency Management Agency, for off-site support of nuclear power plant radiological emergency plans                                                                                                                                                                                                 |
| Department of Education           | 1. School Emergency Response and Crisis Management Plan Discretionary Grant Program                                                                                                                                                                                                                                                                             |
| Department of Homeland Security (DHS) | 1. State Homeland Security Grant Program  
2. Assistance to Firefighters Grant Program  
3. Interoperable Communications Equipment Grant  
4. SARA Title III Training Program  
5. Urban Search and Rescue  
6. State and Local Emergency Operation Centers  
7. Community Emergency Response Teams  
8. Emergency Management Performance Grants  
9. Chemical Stockpile Emergency preparedness Program  
10. State and Local Emergency operations Planning Grants  
11. Citizen Corps  
12. Metropolitan Medical Response System  
13. National Fire Academy Training Grants  
14. First Responder Grants                                                                                                                                                                                                                                                                                                                      |
<table>
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<tr>
<th>Organization</th>
<th>Grant Programs Identified</th>
</tr>
</thead>
</table>
| Department of Health and Human Services (HHS) | 1. Public Health and Social Services Emergency Fund  
2. State Rural Hospital Flexibility Program  
3. EMS for Children  
4. Superfund Hazardous Substances Basic Research and Education  
5. Metropolitan Medical Response System  
6. Immunization Research, Demonstration, Public Information and Education  
7. Surveillance of Hazardous Substance Emergency Events  
8. Human Health Studies, Applied Research and Development  
9. Immunization Grants  
10. Bioterrorism Preparedness Programs |
| Department of the Interior (DOI) | 1. Rural Fire Assistance Program  
2. Earthquake Hazards Reduction Program  
3. Volcano Hazards Reduction Program |
2. Airport Improvement Program  
4. Un-tethered Trailer Tracking and Security Project  
5. Operation Respond  
6. Port Security Grant Program  
7. Maritime Transportation Security Act Training  
8. Ready Reserve Force  

AUGUST 2005
Rindge Hazard Mitigation Team
Meeting #1

AGENDA

April 20, 2006
7:00 p.m.
Rindge Town Offices

1) Introduction

2) Purpose of Committee
   - Why selected to serve on Committee
   - What we are doing and why

3) What is Hazard Mitigation Planning?
   - PowerPoint Presentation on Hazard Mitigation

4) Step 1: Organize Hazard Mitigation Team
   - Establish a chairperson/point of contact

5) What must we do to prepare a Hazard Mitigation Plan?
   - Explain/set milestones (approximate number of committee meetings)
   - Agree on next committee meeting date

6) Question and Answer Period

7) Set Goals for Next Meeting
Rindge Hazard Mitigation Team

Meeting #2

AGENDA

May 22, 2006

7:00 p.m.

Rindge Town Offices

1) Step 2: Identify Hazards (past and potential) on Base Map
   - What are the hazards?
   - What is at risk from those hazards?

2) Develop Base Map with Critical Facilities
   - Identify Critical Facilities on Base Map. Please refer to enclosed packet for descriptions of facilities to be included.

3) Question and Answer Period

4) Set Goals for Next Meeting
Rindge Hazard Mitigation Team

Meeting #3

AGENDA

June 6, 2006

10:00 a.m.

Rindge Town Offices

1) Review and finish Step 2: Identifying Hazards
   • Past and Potential
   • Critical Facilities

2) Step 3: Assessing Vulnerability
   • Estimating Potential Losses

3) Step 4: Analyzing Development Trends
   • Looking at Community Change
   • Review Development Regulations for Development Management
   • Map Out Development Patterns

4) Step 5: Existing Mitigation Strategies
   • Identifying What’s in Place
   • What are we Already Doing?
   • Identify gaps in Current Protection

5) Question and Answer Period

6) Set Goals for Next Meeting
Rindge Hazard Mitigation Team

Meeting #4

AGENDA

July 11, 2006

10:00 a.m.

Rindge Town Offices

1) Review Step 5: Identifying Plans in Place
   • Where are the gaps?
   • What are we already doing?

2) Step 6, Part 1: Brainstorming Mitigation Actions
   • What actions can be taken?
   • Evaluating Action Feasibility

3) Step 6, Part 2: Potential Hazards Action Matrix
   • Identify objectives and actions for mitigating potential hazards identified in Step 2

   Evaluate Actions -“What is Feasible?”
   • Fill out the Evaluation Chart for each action.
     Grade/Rank the actions according to the Evaluation Chart
   • Match the action against the STAPLEE criteria
     Grade/Rank the actions according to the STAPLEE criteria

4) Step 7: Select Actions (Establishing Priorities)
   Further refine the list of mitigation objectives developed in Steps 5 & 6 that are appropriate to your community and prioritize them in order of importance.
   • Establish a minimum acceptable level for actions.
   • Select actions which best suit community’s needs.
   • Prioritize actions
   • Include actions that can be implemented quickly

5) Question and Answer Period

6) Set Goals for Next Meeting
Rindge Hazard Mitigation Team

Meeting #5

AGENDA

August 8, 2006

10:00 a.m.

Rindge Town Offices

1) Review Step 6: Potential Mitigation Actions
   - What actions could be taking?
   - Evaluating Potential Actions?

2) Step 7: Select Actions (Establishing Priorities)
   Further refine the list of mitigation objectives developed in Steps 5 & 6 that are appropriate to your community and prioritize them in order of importance.
   - Establish a minimum acceptable level for actions.
   - Select actions which best suit community’s needs.
   - Prioritize actions
   - Include actions that can be implemented quickly

3) Step 8: Develop a Strategy (How do we Implement Actions?)
   The Committee will develop a strategy that outlines:
   - Who is responsible for implementing each prioritized action.
   - When these actions will be implemented.
   - How the community will fund the projects.

4) Question and Answer Period

5) Set Goals for Next Meeting
Rindge Hazard Mitigation Team

Meeting #6

AGENDA

September 19, 2006

10:00 a.m.

Rindge Town Offices

1. Review and Complete
   - Step 7 - Establishing Priorities.
   - Step 8 - Implementation Strategies

2. Review and Revise as necessary previous steps
   Review prior steps and collect any information which might have been overlooked. We will review the information collected and the maps created.

3. Discuss next steps
   Next steps will include review of draft plan by Committee, review by FEMA, and adoption of plan by Board of Selectmen.

4. Question and Answer Period

5. Adjourn
Rindge Hazard Mitigation Team

Meeting #7

AGENDA

November 2, 2006

1) Review & Revise as necessary final draft of the *Rindge Hazard Mitigation Plan*

2) Discuss next steps for the *Rindge Hazard Mitigation Plan* including FEMA review and adoption by the Board of Selectmen.
APPENDIX F
PUBLIC RELATIONS
TOWN OF RINDGE
Office of the Selectmen

PUBLIC NOTICE

The Hazard Mitigation Committee will be holding a public meeting at the Rindge Town Office on

Thursday, April 20
7:00 p.m.
The Hazard Mitigation Committee will be holding a public meeting at the Rindge Town Office on

Monday, May 22
7:00 p.m.
TOWN OF RINDGE
Office of the Selectmen

PUBLIC NOTICE

The Hazard Mitigation Committee will be holding a public meeting at the Rindge Town Office on

Tuesday, July 11
10:00 a.m.
APPENDIX G

PROJECT STATUS SHEETS

The following form can be used to keep track of projects identified in the hazard mitigation plan that are in progress or that have been completed.
<table>
<thead>
<tr>
<th>Project Title/Description</th>
<th>Page # in Plan</th>
<th>Date of Project Completion</th>
<th>Comments</th>
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# HAZARD MITIGATION PLAN - PROJECT STATUS

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