Town of Belmont, NH

Hazard Mitigation Plan Update 2024

Town Adopted: _____

FEMA Approved: _____

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Chapter 1
INTRODUCTION

Authority

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

Funding Source

This Plan was funded by the NH Homeland Security and Emergency Management (HSEM) through a Building Resilient Infrastructure & Communities (BRIC) Grant, with in-kind matching funds by the Town of Belmont.

Purpose

This Hazard Mitigation Plan is a planning tool to be used by the Town of Belmont, as well as other local, state and federal governments, in their effort to reduce the effects from natural and man-made hazards.

Introduction

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

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

DMA 2000 amends the Robert T. Stafford Disaster Relief and Emergency Assistance Act by, among other things, adding a new section, 322 – Mitigation Planning. This places new emphasis on local mitigation planning. **It requires local governments to prepare and adopt jurisdiction-wide hazard mitigation plans as a condition of receiving Hazard Mitigation Assistance (HMA) grants.** Local governments must review and if necessary, update the mitigation plan every five years to continue program eligibility. However, it is recommended that this Plan be reviewed/updated annually or after a hazard event to be consistent with Chapter 7.

<u>Why Develop a Mitigation Plan?</u>

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

Scope of the Plan

The scope of this Plan includes the identification of natural hazards affecting the town, as identified by the Hazard Mitigation Planning Committee. The hazards reviewed under the scope of this plan include those that are outlined in the State of New Hampshire's Multi-Hazard Mitigation Plan Update 2018.

Dam Failure	**Hurricane/Tropical**	**Severe Wind**
Drought	**Infectious Disease**	**Solar Storms**
Extreme Temps	**Landslide**	**Wildfire**
Earthquake	**Lightning**	**Winter Weather**
Flooding		

Methodology

In 2024, the Town of Belmont Hazard Mitigation Planning Committee, with the assistance of Hubbard Consulting LLC, met to review and update the Hazard Mitigation Plans. During this 2024 update, the Town came together to update the 2019 Hazard Mitigation Plan.

A total of four meetings were held on September 10, 2024, September 17, 2024, October 8, 2024 and October 29, 2024. Public notices were posted at the Town Office, Post Office and Town Website inviting members of all town departments and boards, surrounding communities, businesses, academia, State agencies and non-profit agencies. In addition, email notifications were sent to adjacent communities, the Lakes Regional Planning Commission, NH Office of Planning & Development (OPD) and the NH HSEM. The invited stakeholders work with or represent underserved communities and socially vulnerable populations. In addition, a link to a public survey was included in the public notice. This survey allows residents to provide input on past hazards and areas of concern. There was one person that completed the survey. There were no members of the general public that attended the meetings. The Emergency Management Directors from surrounding towns were notified of the Plan Update and asked to comment on the Plan (see Appendix B).

The committee analyzed and revised all Chapters of the Plan and provided input to update them. Noteworthy updates include:

- Added Cyber Incident, Infectious Disease and Solar Storms as new hazards and revised Extreme Heat to Extreme Temperatures.

After acceptance by the committee, the Plan was submitted to the NH HSEM and FEMA Region 1 for formal Approval. The Board of Selectmen formally adopted the Plan on _____. FEMA formally approved the Plan on _____.

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

Step 1: Form a Hazard Mitigation Planning Committee

Prior to the first public information meeting town department heads were notified and public notices were posted to residents, business owners and neighboring towns, requesting that they consider serving on the Committee (See Appendix B). The Committee Members consisted of town staff. A press release was published inviting residents, businesses, neighboring communities, academia and other private non-profit interests to participate in the planning process.

Step 2: Set Hazard Mitigation Goals and Objectives

At the first working meeting the committee reviewed and made minor revisions to the town's Hazard Mitigation Goals. The Hazard Mitigation Goals were adapted from the State of New Hampshire's Natural Hazards Mitigation Plan. This first step is extremely important in helping the committee understand the purpose of the Plan and the direction it should go.

Step 3: Hazard Identification

The Committee members identified natural hazards and human-caused hazards that have or could potentially affect the Town of Belmont. The results of this step can be found in Chapters 2 and 3.

Step 4: Critical Facilities Analysis

The committee members updated the Critical Facilities List. The Critical Facilities List is divided into 3 sections: Facilities needed for Emergency Response; Facilities not necessary for emergency response; and places and populations to protect in the event of a disaster. The results of this step can be found in Chapter 4.

Step 5: Capability Assessment

The committee members identified what plans and policies are already in place to reduce the effects of hazards. The results of this step can be found in Chapter 5. Many of these plans and technical reports were reviewed and incorporated during the planning process.

Step 6: Develop Objectives

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

Step 7: Develop Specific Mitigation Measures

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

Step 8: Adopt and Implement the Plan

After acceptance by the committee the Plan was submitted to the NH Homeland Security and Emergency Management and FEMA Region 1 for formal Approval. The Board of Selectmen formally adopted the Plan on _____. The letter of approval from FEMA Region 1 can be found in Appendix C.

Step 9: Monitor and Update the Plan

It is important that this plan be monitored and updated every five years. With respect to any ongoing mitigation projects, the lead and support agencies/people for such activity will be tasked with implementing the Plan's mitigation projects. The committee approved the "Prioritized Mitigation Projects" list, which identifies responsibility, funding/support and a timeframe for each of the prioritized projects. The Emergency Management Director should be tasked with requesting annual reports as to the progress of each project. Chapter 7 specifically addresses this issue.

Incorporation of Existing Plans, Studies, Reports and Technical Information

The planning process included a complete review of the Belmont Hazard Mitigation Plan of 2019 for updates, development changes and accomplishments. In addition, as noted in the Bibliography and in footnotes located throughout the Plan many other documents were discussed in the development of this mitigation plan, such as the Master Plan, Emergency Operations Plan and Cyber Security Plan. Other technical manuals, federal and state laws as well as research data were combined with these elements to produce this integrated hazard mitigation plan. Please refer to the footnotes and the Bibliography in the Appendices.

Mitigation Goals

Before identifying new mitigation actions, the Team established and adopted the following broad hazard mitigation goals. The goals that are in the 2018 State of New Hampshire Multi-Hazard Mitigation Plan were also reviewed. The Goals were not modified for any substantial content, as there has not been any substantial change in development. After discussing these goals, the Town of Belmont agreed to the following goals for this Plan.

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

2. To reduce the potential impact of natural and human-caused disasters on Belmont's Critical Support Services, Critical Facilities, and Infrastructure.

3. To improve Belmont's Emergency Preparedness, Disaster Response, and Recovery Capability town wide.

4. To reduce the potential impact of natural and human-caused disasters on Belmont's economy, environment, historical & cultural treasures, and private property.

5. To identify, introduce and implement cost effective Hazard Mitigation measures in order to accomplish Belmont's Goals.

6. To reduce Belmont's liability with respect to natural and human-caused hazards generally.

7. To address the challenges posed by climate change as they pertain to increasing risks in Belmont's infrastructure and natural environment.

2024 Hazard Mitigation Planning Committee

Name	Title/Affiliation
Alicia Jipson	Belmont Town Administrator
Becky Beaulac	Belmont Fire Department
Brian Jackes	Belmont Public Works Asst. Director
Craig Clairmont	Belmont DPW Director
Danielle St. Onge	Belmont Parks & Recreation Director
Deborah Black	Belmont Fire Chief / EMD
Donald Pickowicz	Belmont Asst. Fire Chief
Glenn Caron	Belmont Building Official
Jane Hubbard	Hubbard Consulting LLC
Karen Santoro	Belmont Town Planner
Michael Tursi	Superintendent of Schools

Patrick Golden	Belmont Buildings & Grounds
Ruth Mooney	Belmont Board of Selectmen, Chair
Stephen Forster	Belmont Finance Director
Steve Akerstrom	Belmont Police Captain

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

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

Chapter 2
COMMUNITY PROFILE

Community Description

The Town of Belmont is located in the south-central portion of Belknap County, in the Lakes Region of New Hampshire. The Town is bounded to the north by Gilford and Laconia, easterly by Gilmanton, westerly by Sanbornton and Tilton and southerly by Northfield and Canterbury. From 1960 to 1990, Belmont experienced a remarkable growth, nearly tripling its population from 1,953 to 5,796. From 1990 to 2000, Belmont's growth slowed to a rate of around 15% and from 2000 to 2010 that rate of growth slowed to just below 10%, resulting in a 2010 population of 7,356 with a moderate influx of seasonal inhabitants. Between 2010 and 2018, Belmont's population growth slowed, like much of New Hampshire, increasing by 0.7% from 7,356 to 7,365. The US Census population of the Town in 2023 was 7,426.

Belmont consists of 31.9 square miles (20,427 acres) of which there are approximately 1,248 acres of water. The most prominent surface waters are Lake Winnisquam, Silver Lake, Sargent Lake, and the Winnipesaukee and Tioga Rivers, as well as Badger Brook. The Winnipesaukee River flows along the northwestern edge of Belmont, taking water from Lake Winnipesaukee to Winnisquam and Silver Lakes, then flowing into the Upper Merrimack River. The Tioga River flows east to west across Belmont passing through downtown. Badger Brook is the outlet of both Sargent Lake (43 acres) and Gilmanton's Sawyer Lake (81 acres). Most of Belmont is part of the Winnipesaukee River watershed.

Belmont's topography features a series of rolling hills strung out in a northeast to southwest direction. There is a significant wetlands complex in the western corner of town, and it sits atop a large aquifer, which provides drinking water for parts of Belmont, Northfield, and Tilton.

Two major highways pass through Belmont: US Route 3 and NH Routes 106, 107 and 140.

A five-member Board of Selectmen governs the Town of Belmont. The Town employs a Town Administrator, Planner, Land Use Technician, and Building Inspector/Code Enforcement Officer/Health Officer. Belmont's full-time Police Chief oversees a staff of 26. Belmont's full-time Fire Chief, who also serves as the Emergency Management Director, oversees a staff of approximately 30. The Town provides emergencies fire and EMS services, providing 24-hour ambulance coverage for the Town.

The Department of Public Works 8 FT and 3 PT maintains 57 miles of asphalt road and 10 miles of gravel road. Belmont's electric service is provided by both the NH Electric Cooperative and by Eversource. While many Belmont residents get their drinking water from private wells, a municipal water department delivers clean water to around 650 service connections, serving over 1,600 people.

Concord Hospital Laconia, Clinic and offices are located seven miles north of Belmont in Laconia. Convenient MD and Clear Choice urgent care located on Daniel Webster Highway. Concord Hospital-Franklin is nine miles to the west, and Concord Hospital is 26 miles to the south.

National Flood Insurance Program (NFIP)

Floodplains for this Plan are defined as the 100-year and 500-year flood hazard zones, as depicted on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM). Belmont participates in the National Flood Insurance Program (NFIP) administered by FEMA. In order to enable landowners to qualify for federally insured flood insurance, the Town, in its administration of site plan review, subdivision regulations and zoning, must regulate development in the floodplain using federal standards. The Town will continue to adopt and enforce floodplain management requirements, including regulating new construction and substantial improvements in Special Flood Hazard Areas (SFHAs).

The Town joined the NFIP on September 1, 1989 and is currently participating in the National Flood Insurance Program (NFIP). The community has Flood Insurance Rate Maps (FIRM) and Flood Insurance Study dated September 1, 1989 and has adopted them as part of the Town's Zoning Ordinance. These maps are extremely outdated but are being updated by FEMA and should be released in the near future. There are currently 27 NFIP policies with $5,159,000 in coverage and 4 repetitive loss properties (all residential property) with one of them being a Severe Repetitive Loss.

The Town's existing ordinance meets the minimum requirements of the NFIP, according to the latest Community Assistance Visit. The Town will continue to maintain procedures and regulations that are in compliance with the NFIP by conducting Community Assistance Visits (CAVs) and Community Assistance Contacts (CAC) with the Office of Strategic Initiative (OSI) and updating the Floodplain Ordinance as federal requirements are updated. The last CAC was conducted on 06/30/2021 and the last CAV was conducted on 02/27/2007. The Town will continue to hold CAVs/CACs with OPD in the future.

All new structures in town must have a local Building Permit, which requires that the owner indicate whether the structure is within the floodplain; the 1989 FIRM maps are available at the Town Hall as well as on the town webpage. The town maintains a list of all actions taken at the annual Town Meeting regarding the town's floodplain ordinance and participation in the NFIP. The Land Use office developed a two-page sheet with NFIP resources and makes it available to all on the town webpage. Properties within the floodplain are required to submit an elevation certificate and such folders are marked differently. The most recent Community Assistance Visit (CAV) with the Land Use Department from the State Floodplain Coordinator was in 2007. That report indicated that the town was "fully compliant with the requirements of the NFIP at this time." The town has utilized the State Floodplain Coordinator's technical assistance at times on floodplain issues.

The Building & Code Enforcement Official and the Town Planner review substantial improvements and new developments in the 100-year floodplain. The Town abides by the International Building Codes (IBC) and the International Residential Codes (IRC) adopted by the State of New Hampshire.

The Building & Code Enforcement Official and the Town Planner are responsible for making determinations of substantial improvement and substantial damage. These determinations are made for all development in a special flood hazard area that proposes to improve an existing structure including alterations, movement, enlargement, replacement, repair, additions, rehabilitations, renovations, repairs of damage from any origin (such as, but not limited to flood, fire, wind, or snow) and any other improvement of or work on such structure including within its existing footprint.

The Building & Code Enforcement Official and the Town Planner in coordination with any other applicable community official(s), shall be responsible for the following:

1. Determine if a substantial damage (SD) determination needs to be made and communicate SD and permit requirements to property owners.
2. Verify the cost of repairs to the structure.
3. Verify the market value of the structure.
4. Make the SD determination and issue it to the property owner.
5. Permit development/ensure compliance with community ordinance.
6. Inspect development and maintain as-built compliance documentation post construction."

Disaster Risk

Belmont is prone to a variety of natural hazards. These include: flooding, dam breach, severe wind, wildfire, drought, earthquake, hurricane, infectious disease, lightning strikes, extreme temperatures, solar storms and severe winter weather, in addition to human-caused hazards. The Committee utilized local knowledge and historical records to determine the 'Impact and Severity' ratings in the following table. In addition, the Committee utilized a variety of resources to incorporate how climate change may impact the 'Probability' of future events[1]. The following tables summarize the impact and probability of natural and man-made hazards.

[1] [1] www.climate.gov, /www.des.nh.gov/climate-and-sustainability/climate-change

Natural Hazards	Human Impact Probability of death or injury 1: Low 2: Moderate 3: High 4: Catastrophic	Property Impact Physical loss damage 1: Low 2: Moderate 3: High 4. Catastrophic	Business Impact Interruption of service 1: Low 2: Moderate 3: High 4. Catastrophic	Severity *Avg. of Human / Property / Business*	Probability *In 25 years* Likelihood this will occur 1: Unlikely 2: Occasional 3: Likely 4: Highly Likely	Risk *Severity x Probability* 0-3: Low 4-7: Moderate 8-11 High 12-16: Severe
Severe Wind *(Tornado/ Downburst)*	2	3	3	**2.6**	**4**	**10.4**
Winter Weather	1	1	3	**1.6**	**4**	**6.4**
Hurricane/ Tropical Storm	1	3	2	**2**	**3**	**6**
Lightning	1	1	2	**1.3**	**4**	**5.2**
Wild/Forest Fire	1	3	2	**2**	**2**	**4**
Drought	1	2	1	**1.3**	**3**	**3.9**
Flooding (Inland)	1	3	1	**1.6**	**2**	**3.2**
Extreme Temps	1	1	1	**1**	**3**	**3**
Infectious Disease	2	1	1	**1.3**	**2**	**2.6**
Dam Failure	2	3	1	**2**	**1**	**2**
Earthquake	1	1	1	**1**	**2**	**2**
Landslide	1	2	1	**1.3**	**1**	**1.3**
Solar Storms	1	1	1	**1**	**1**	**1**

*Probability Terms are defined as:

Unlikely: Less than 1% probability in the next 25-year period.
Occasional: Between 1% and 10% probability in the next 25-year period.
Likely: Between 10% and 90% probability in the next 25-year period.
Highly Likely: 90 to 100% probability in the next 25-year period

Human Caused Hazards	Human Impact Probability of death or injury 0: n/a 1: Low 2: Moderate 3: High 4: Catastrophic	Property Impact Physical loss damage 0: n/a 1: Low 2: Moderate 3: High 4. Catastrophic	Business Impact Interruption of service 0: n/a 1: Low 2: Moderate 3: High 4. Catastrophic	Severity *Avg. of Human / Property / Business*	Probability* *In 25 years* Likelihood this will occur 1: Unlikely 2: Occasional 3: Likely 4: Highly Likely	Risk *Severity x Probability* 0-3: Low 4-7: Moderate 8-11 High 12-16: Severe
Transportation Accident	3	3	3	**3**	**4**	**12**
Terrorism/Violence	3	2	2	**2.3**	**3**	**6.9**
Long Term Utility Outage	1	1	3	**1.6**	**4**	**6.4**
Cyber Incident	1	2	3	**2**	**3**	**6**
Conflagration	1	3	1	**1.6**	**3**	**4.8**
Hazardous Materials	1	3	1	**1.6**	**3**	**4.8**
Mass Casualty	2	2	1	**1.6**	**3**	**4.8**
Aging Infrastructure	1	1	2	**1.3**	**2**	**2.6**
Known & Emerging Contaminants	1	1	1	**1**	**1**	**1**
Radiological	1	1	1	**1**	**1**	**1**

*Probability Terms are defined as:

Unlikely:	Less than 1% probability in the next 25-year period.
Occasional:	Between 1% and 10% probability in the next 25-year period.
Likely:	Between 10% and 90% probability in the next 25-year period.
Highly Likely:	90 to 100% probability in the next 25-year period

CALCULATING POTENTIAL LOSS

It is difficult to ascertain the amount of damage that could be caused by a natural or man-made hazard because the damage will depend on the hazard's extent and severity, making each hazard event somewhat unique. The assumption used here when calculating the damage to property is equal to: 0-1%, 1-5%, or 5-10% of Belmont's structures, depending on the nature of the hazard, whether or not the hazard is localized, and its economic impact.

The total local assessed building value included in this analysis is $545,025,506 including buildings and utilities. Based on this assumption, the potential loss from any of the identified hazards under a low, medium, and high damage scenario of buildings and utilities would range from $0 to $9,014,249 (low) or $9,014,250 to $45,071,243 (medium) or $45,071,244 to $90,142,487 (high) based on the 2023 Belmont Town valuation. Table 1 provides more detail on these estimated economic losses.

Table 1: Economic Loss Data

Local Assessed Valuation *(Bldgs Only)*	**Total Assessed Value (2023)**	Economic Loss		
		Low 1% Damage	**Medium 5% Damage**	**High 10% Damage**
Residential	$683,135,412	$6,831,354	$34,156,771	$68,313,541
Manufactured Housing	$103,207,200	$1,032,072	$5,160,360	$10,320,720
Commercial Industrial	$91,806,565	$918,066	$4,590,328	$9,180,657
Utilities	$23,275,689	$232,757	$1,163,784	$2,327,569
Total	$901,424,866	$9,014,249	$45,071,243	$90,142,487

Source: Belmont 2023 Town Report

Development Trends

In the past five to ten years, development has occurred along Daniel Webster Highway (US 3) and Laconia Road (NH 106). The majority of residential development continues the trend of occurring in the Brown Hill Road and Province Road and Laconia Road areas. It is important that emergency services access and availability remain viable in these areas. In terms of industrial/commercial development, quarrying to produce aggregate is a recent trend as easily mined gravel becomes scarcer.

Residential Building Permits Issued	
Time Period	**# of Single Family Permits**
2019	5
2020	25
2021	30
2022	15
2023	26

Population Patterns and Land Use:

The Town of Belmont has seen a negligible increase in population in the last 5 years. Any new development has not pressured hazard prone or vulnerable areas, as subdivision regulations minimize that risk; therefore, there is no need to address the impacts from changes in population patterns.

Belmont Population Growth

Year	Population
2023	7,426
2020	7,312
2010	7,331
2000	6,796
1990	5,677
1980	4,026

Source: https://www.nhes.nh.gov/elmi/products/cp/profiles-htm/Belmont.htm

Current projections from the New Hampshire Office of Planning and Development show the population growth rate will have a minor increase (~6%) over the next 25 years, where the year-round population in 2050 is projected to be 8,049.

Belmont Population Projections

Year	Population
2025	7,620
2030	7,880
2035	8,022
2040	8,079
2045	8,076
2050	8,049

The Hazard Mitigation Planning Committee utilized the Master Plan and local knowledge to review and incorporate development changes. However, due to no substantial changes in development, there were no changes in priorities made to the Plan. Consequently, the Town's overall vulnerability to the identified hazards has remained the same. Many of the programs identified in Chapter 5 address the impact of changes in land use and development, specifically the Town's Master Plan and Subdivision Regulations.

FUTURE DEVELOPMENT

The Town's Master Plan has not been updated since 2002. The Capital Improvements Plan is updated annually. No permanent Growth Management Plan was adopted by the Town as a result of the fast-paced growth of the 1980s and 1990s and it is evident that the growth rate of the 1980s and 1990s was not carried forward into the first decade of the 21st century. Areas of potential future development in the next five years include Daniel Webster Highway (US 3), Laconia Road (Rt.106), Jamestown Road and Mile Hill Road.

POTENTIAL IMPACTS ON THE COMMUNITY AND ASSETS

Climate Change: Although not identified as a specific natural hazard in this Plan, no Plan can be considered complete today without some discussion of the impact that climate change has had on weather patterns. Climate change impacts the frequency and intensity of many of the natural hazards identified in this Plan, such as flooding, drought, wildfire and extreme heat. As FEMA States in the *Local Mitigation Planning Policy Guide 2023*[2], climate change", increases the frequency, duration and intensity of natural hazards, such as wildfires, extreme heat, drought, storms, heavy precipitation and sea level rise." Communities in New Hampshire, such as Belmont, should become increasingly aware of the effects of climate

[2] *https://www.fema.gov/sites/default/files/documents/fema_local-mitigation-planning-policy-guide_042022.pdf*

change on the natural hazards that are already being experienced. The greatest impact to the Town's assets from climate change would be the frequent and intense flooding events and damage to culverts and roads.

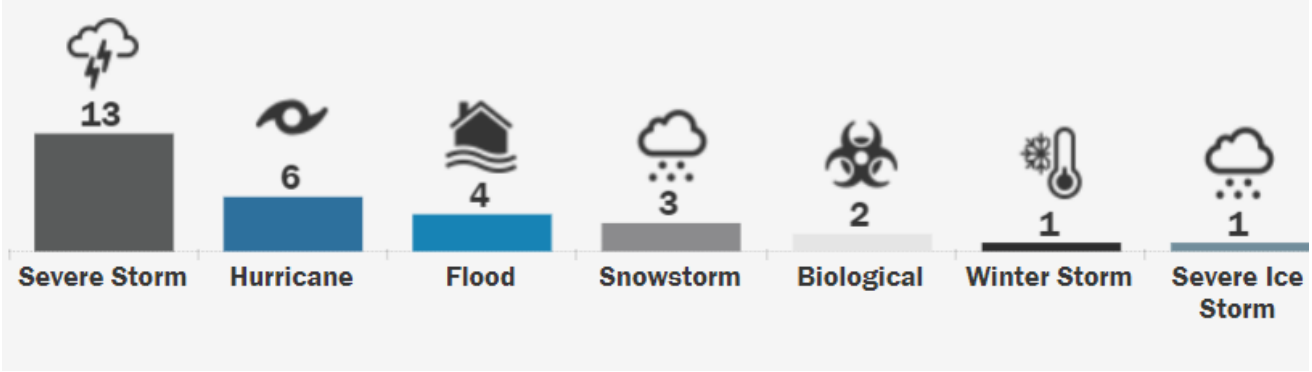
Chapter 3
HAZARD IDENTIFICATION

This Chapter includes a description of the natural hazards that the Committee considered to be a risk to the Town. They are ranked in accordance with their overall risk, as identified in the Risk Matrix in Chapter 2 of this Plan. In addition, Federally Declared Disasters are mentioned below but there have been no State Declared Disasters during this same time period.

FEDERALLY DECLARED DISASTERS 2019-2024 - BELKNAP COUNTY

DR#	Date	Description
4516	January 20, 2020 – May 11, 2023	Covid-19 Pandemic
4693	December 22-25, 2022	Severe Storms and Flooding
4740	July 9-17, 2023	Severe Storms and Flooding
4799	April 3-5, 2024	Severe Winter Storm and Flooding

Belknap County Disasters by Incident Category[1] 1953-2024



SEVERE WIND (Tornado/Downburst)

Probability: Highly Likely

Definition:
A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud. These events are spawned by thunderstorms and occasionally by hurricanes. They may also occur singularly or in multiples. A downburst is a severe, localized wind blasting down from a thunderstorm. These “straight line” winds are distinguishable from tornadic activity by the pattern of destruction and debris. Downbursts fall into two categories: Microburst which covers an area less than 2.5 miles in diameter; and Macroburst which covers an area at least 2.5 miles in diameter.

[1] https://www.fema.gov/data-visualization/disaster-declarations-states-and-counties

Location:
Severe wind events (downburst, tornadoes or high winds associated with thunderstorms) can occur anywhere in Belmont. Generally, the higher elevations are more susceptible as well as more vulnerable due to the fact that they are home to emergency response/mutual aid towers. Due to the sporadic nature of tornados and severe wind events, they could occur anywhere in the Town of Belmont.

Impact:
Depending on the size and location of these events, the destruction to property may be devastating. Several of the more significant and recent events within southern New Hampshire have caused several millions of dollars in damage and at least 5 fatalities. An F-2 Tornado, according to the Fujita scale, maintains wind speeds from 13-157 mph. A tornado occurring in Belmont would cause considerable damage. Roofs could be torn off frame houses; mobile homes demolished; large trees snapped or uprooted; and light object missiles would be generated as a result of an F-2 Tornado.

Extent:
According to the Enhanced Fujita scale[2], which rates tornado intensity, an EF-2 tornado maintains wind speeds from 111-135 mph and can cause considerable damage. Roofs could be torn off frame houses; mobile homes demolished; large trees snapped or uprooted; and light object missiles would be generated as a result of an EF-2 Tornado. There has been 1 EF2 tornado recorded for Belknap County. The highest magnitude tornado anticipated by the Belmont Hazard Mitigation Committee would be an EF1.

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

Previous Occurrence:

Date	Location	Magnitude	/Description
7/4/2012	Belknap County	50 kts	Thunderstorm Wind
7/17/2012	Belknap County	50 kts	Thunderstorm Wind
8/5/2012	Belknap County	52 kts	Thunderstorm Wind
10/30/2012	Belknap County	50 kts	Thunderstorm Wind
6/30/2013	Belknap County	50 kts	Thunderstorm Wind
11/24/2013	Belknap County	43 kts	Thunderstorm Wind
7/3/2014	Belknap County	50 kts	Thunderstorm Wind
7/24/2014	Belknap/Center Harbor	EF0	Tornado / Waterspout on Lake Winnipesaukee
7/28/2014	Belknap County	50 kts	Thunderstorm Wind
10/08/2014	Belknap County	50 kts	Thunderstorm Wind
7/19/2015	Belmont	50 kts	Severe storm downed trees in Belmont
8/3/2015	Belmont	50 kts	Severe storm downed trees in Belmont
6/7/2016	Belknap County	50 kts.	Thunderstorm Wind
6/7/2016	Belknap County	50 kts.	Thunderstorm Wind
7/1/2016	Belknap County	50 kts	Thunderstorm Wind

[2] *https://www.spc.noaa.gov/faq/tornado/ef-scale.html*

7/23/2016	Belknap County	50 kts	Thunderstorm Wind
10/30/2017	Belknap County	61 kts	50-60 mph winds/ 2 to 5 inches of rain
8/3/2018	Belmont	50 kts	Sever storm downed trees and wires on Clark Street in Belmont
8/7/2018	Belknap County	50 kts	Thunderstorm Wind
Dec 23-25, 2022	Belmont	53 kts	This was a wind and precipitation event. With snow changing to rain and ice at temps hovering around freezing. There were trees and wires down along Rt. 106 and Rt. 107.
April 3-5, 2024	Belmont	35 kts	The Town DPW was plowing trees on roads. Some roads were shut down due to trees and wires down.

WINTER WEATHER

Probability: Highly Likely

Definition:
Heavy Snow Storms: A winter storm can range from moderate snow to blizzard conditions. Blizzard conditions are considered blinding wind-driven snow over 35 mph that lasts several days. A severe winter storm deposits four or more inches of snow during a 12-hour period or six inches of snow during a 24-hour period. **Ice Storms**: An ice storm involves rain that freezes upon impact. Ice coating at least one-fourth inch in thickness is heavy enough to damage trees, overhead wires and similar objects.
Blizzard: A blizzard is a violent snowstorm with winds blowing at a minimum speed of 35 miles (56 kilometers) per hour and visibility of less than one-quarter mile (400 meters) for three hours. **Nor'Easter**: A Nor'easter is a large weather system traveling from south to north, passing along the coast. As the storm's intensity increases, the resulting counterclockwise winds impacted the coast and inland areas in a Northeasterly direction. Winds from a Nor'easter can meet or exceed hurricane force winds.

Location:
There is a town-wide vulnerability to severe winter weather. Nor'easters (wind), Ice Storms, Heavy Snow Accumulations and Severe Cold can occur at any place within the town and generally affect the entire town when it happens. The higher elevations are more likely to experience snow or ice before the lower terrain.

Impact:
Heavy snow accumulations (generally considered one that deposits six or more inches of snow in a 12-hour period) especially those associated with nor'easters can have a significant affect on the Town, including extended power outages, road closures, collapsed roofs and increased snow removal costs. During ice storms, ice forms on cold surfaces, such as trees and power lines, and may continue to form until the ice is quite deep, as much as several inches thick. Ice damage results in power outages, road closures and forest damage. Ice on the roads can be the most difficult for a rapid emergency response.

Private roads are difficult for emergency response vehicles due to restricted access during winter.

Extent:

NOAA's National Climatic Data Center produced the Regional Snowfall Index [3](RSI) for significant snowstorms that impact the eastern two thirds of the U.S. The RSI ranks snowstorm impacts on a scale from 1 to 5, similar to the Fujita scale for tornadoes or the Saffir-Simpson scale for hurricanes. In addition, the National Weather Service developed and utilizes the Sperry-Piltz Ice Accumulation Index (SPIA) [4]to forecast the impact of an ice storm. The 'Ice Damage Index' ranges from an ice storm rated as "0" which has little impact, to a index rating of 5 that has catastrophic damage to exposed utility systems.

CATEGORY	RSI VALUE
1	1–3
2	3–6
3	6–10
4	10–18
5	18.0+

ICE DAMAGE INDEX	DAMAGE AND IMPACT DESCRIPTIONS
0	Minimal risk of damage to exposed utility systems; no alerts or advisories needed for crews, few outages.
1	Some isolated or localized utility interruptions are possible, typically lasting only a few hours. Roads and bridges may become slick and hazardous.
2	Scattered utility interruptions expected, typically lasting 12 to 24 hours. Roads and travel conditions may be extremely hazardous due to ice accumulation.
3	Numerous utility interruptions with some damage to main feeder lines and equipment expected. Tree limb damage is excessive. Outages lasting 1 – 5 days.
4	Prolonged & widespread utility interruptions with extensive damage to main distribution feeder lines & some high voltage transmission lines/structures. Outages lasting 5 – 10 days.
5	Catastrophic damage to entire exposed utility systems, including both distribution and transmission networks. Outages could last several weeks in some areas. Shelters needed.

Previous Occurrence:

Date	Location	Magnitude	Description
3/1/2012	Belknap County	8 to 14 inches	Heavy snow
2/8/2013	Belknap County	4 to 18 inches	Heavy Snow Southeastern part of county experienced blizzard conditions for 3 to 10 hours
2/23/2013	Belknap County	6 to 14 inches	Heavy snow
3/19/2013	Belknap County	6 to 10 inches	Heavy snow
12/14/2013	Belknap County	8 to 14 inches	Heavy snow
1/2/2014	Belknap County	6 to 14 inches	Heavy snow
2/5/2014	Belknap County	6 to 12 inches	Heavy snow
2/13/2014	Belknap County	6 to 14 inches	Heavy snow
2/18/2014	Belknap County	6 to 14 inches	Heavy snow
3/19/2014	Belknap County	6 to 18 inches	Heavy snow
1/26/2015	Belknap County	6 to 14 inches	Heavy snow
2/2/2015	Belknap County	8 to 14 inches	Heavy snow
2/7/2015	Belknap County	6 to 15 inches	Heavy snow
2/14/2015	Belknap County	6 to 12 inches	Heavy snow

[3] *https://www.ncei.noaa.gov/access/monitoring/rsi/*

[4] *https://spia-index.com/*

2/5/2016	Belknap County	4 to 10 inches	Heavy snow
12/29/2016	Belknap County	6 to 16 inches	Heavy snow
2/9/2017	Belknap County	6 to 15 inches	Heavy snow
2/12/2017	Belknap County	6 to 16 inches	Heavy snow
2/15/2017	Belknap County	4 to 12 inches	Heavy snow
3/14/2017	Belknap County	12 to 20 inches	Heavy Snow Laconia observed 3 hours of blizzard conditions 3:05 PM till 6:10 PM Presidential Major Disaster Declared (DR-4316)
3/31/2017	Belknap County	6 to 12 inches	Heavy snow
4/1/2017	Belknap County	6 to 12 inches	Heavy snow
12/22/2017	Belknap County	3 to 10 inches	Heavy snow
1/4/2018	Belknap County	10 to 15 inches	Heavy snow
2/7/2018	Belknap County	6 to 10 inches	Heavy snow
3/7/2018	Belknap County	10 to 18 inches	Heavy snow
3/13/2018	Belknap County	12 to 24 inches	Heavy snow
11/20/2018	Belknap County	6 to 10 inches	Heavy snow
11/27/2014	Statewide	4 to 15 inches 10 to 15 in	Heavy snow
1/7/1998	Statewide	$12.4m in damages statewide, 1 injury	Ice Storm
12/11/2008	Belknap County	$359,000 Ice Storm	Ice
12/17/2020	Belknap County	18 to 24 inches	Snowfall totals were generally between 18 and 24”, with locally up to 3’. The 24hr county snowfall record was broken.
Dec 22, 2023			Snow, melt and then froze and wind. See wind
4/3-5/2024	Belknap County	12 to 18 inches	Given the late season nature of the storm, much of the Lakes Region observed temperatures at or just above freezing in addition to the heavy snow. As a result much of the snow was wet and sticky, and numerous power outages occurred. Snowfall totals ranged from 12 to 18 inches. Key Impacts: Heavy snow, numerous power outages, motor vehicle accidents transportation delays.

HURRICANE/TROPICAL STORM

Probability: Likely

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

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

Impact:
New Hampshire's exposure to direct and indirect impacts from hurricanes is real, but modest, as compared to other states in the region. That being said, the probability of hurricanes occurring in Belmont is possible. The largest impact is on the floodplain areas due to heavy rains. High winds cause trees to fall down thereby causing power outages, structural damage to buildings, road closures and debris management issues.

Extent:
Wind speeds within hurricanes may reach 250 miles per hour in a Category 5 hurricane, as measured on the Saffir-Simpson Hurricane Scale[5]. Tropical depressions are considered to be of hurricane force when winds reach 74 miles per hour. Damage resulting from winds of this force can be substantial, especially considering the duration of the event, which may last for many hours.

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

Previous Occurrence:
The NOAA National Climatic Data Center's Storm Events database (NCDC 2018) does not list any Hurricanes as directly affecting Belknap County from January 1, 2008 to July 31, 2018; however, Belknap County did experience impacts from Hurricane Sandy and Tropical Storm Irene. **Hurricane Sandy** was the last hurricane to hit the region during the period of October 26 to November 8, 2012. Local impacts included periods of heavy rain and short-term power outages. **Tropical Storm Irene** (August 28, 2011) - brought a prolonged period of strong and gusty winds and heavy rain to the state. The high winds snapped or uprooted numerous trees throughout the state causing more than 160,000 customers to lose electrical and/or communication services. The heavy rains caused rivers and streams throughout the state to flood causing damage to bridges, roads, and property.

[5] *https://www.nhc.noaa.gov/aboutsshws.php*

August 4, 2020: Tropical Storm Isaias brought moderate impacts to Belknap County with scattered reports of trees and branches down leading to scattered power outages. Some damage occurred within an outer feeder band during the early and middle afternoon across the western half of the county. Isolated wind damage occurred during the evening hours when Isaias made its closest approach. Overall impacts to the power grid were limited.

LIGHTNING

Probability: Highly Likely

Definition:
By definition, all thunderstorms contain lightning. Lightning is a giant spark of electricity that occurs within the atmosphere, or between the atmosphere and the ground. As lightning passes through the air, it heats the air to a temperature of 50,000 F, considerably hotter than the surface of the Sun.

Location:
The entire town is at moderate risk to lightning hazard. The higher elevation areas have an increased probability, however lightning strikes can occur anywhere in the Town.

Impact:
Residents and visitors to the New Hampshire area are more vulnerable to being struck by lightning because of the activities with which they are involved, particularly on those warm summer days when lightning is most likely to occur. Often, many people are outside enjoying the variety of recreational activities that attract people to New England during the summer when the vulnerability to lightning strike is highest. More likely to be affected are structures and utilities, often resulting in structure fires and power outages.

Extent:
The National Oceanographic Atmospheric Administration (NOAA) defines the extent of lightning activity with a LAL scale as shown in the table below.

LAL 1	No Thunderstorms
LAL 2	Isolated thunderstorms. Light rain will occasionally reach the ground. Lightning is very infrequent. 1 to 5 cloud ground strikes in a 5 minute period.
LAL 3	Widely scattered thunderstorms. Light to moderate rain will reach the ground. Lightning is infrequent, 6 to 10 cloud to ground strikes in a 5 minute period.
LAL 4	Scattered thunderstorms. Moderate rain is commonly produced. Lightning is frequent, 11 to 15 cloud to ground strikes in a 5 minute period.
LAL 5	Numerous thunderstorms. Rainfall is moderate to heavy. Lightning is frequent and intense, greater than 15 cloud to ground strikes in a 5 minute period.
LAL 6	Dry lightning (same as LAL 3 but without rain). This type of lightning has the potential for extreme fire activity and is normally highlighted in fire weather forecasts with a Red Flag Warning.

Previous Occurrence:

Date	Location	Remarks/Description	Source
6/24/2013	West Alton/Gilmanton	30 people were injured by lightning at a Boy Scout camp in Gilmanton. Large hail and wet microbursts were main concerns.	NOAA
7/18/2013	Melvin Village (Tuftonboro, Carroll County)	Lightning struck two sailboats causing them to catch fire and sink in Lake Winnipesaukee. Wind damage and heavy rain were the main concerns as the storm moved through the region.	NOAA
		Farrville Road lightning strike burned couple acres and boats.	Fire Chief

WILDFIRE

Probability: Occasional

Definition:
Any free burning uncontainable wild land fire not prescribed for the area which consumes the natural fuels and spreads in response to its environment.

Location:
The Ice Storms of 1998 and 2008 left a significant amount of woody debris in the forests of the region and may fuel future Wildfires similar to the debris caused by the Hurricane of 1938. Fires in New Hampshire are predominantly human-caused, and roughly half of the total fire activity is in the most populous three southern counties. The proximity of many populated areas to the forested lands (including Bear Brook State Park) exposes these areas and their populations to the potential impact of wildfire. In addition, the potential for wildfires increases during a prolonged drought. Finally, it can be implied that the 3 acre minimum building lots "promote" structures to be surrounded by 3 acres of forest and trees which increases the risk to those structures.

Impact:
Fires in New Hampshire are predominantly human-caused, and roughly half of the total fire activity is in the most populous three southern counties. The proximity of many populated areas to the forested lands exposes these areas and their populations to the potential impact of wildfire. The estimated impact to structures could be derived from the information included in the critical facilities in Chapter 4. In addition, climate change has and will continue to increase the intensity, frequency and duration of wildfire incidents.

Value	Description
A	Up to .25 acres
B	0.26 to 9.9 Acres
C	10.0 to 99.9 Acres
D	100 to 299 Acres
E	300 to 999 Acres
F	1000 to 4999 Acres
G	5000 to 9999 Acres
H	10000 to 49999 Acres
I	50000 to 99999 Acres
J	100000 to 499999 Acres
K	500000 to 999999 Acres
L	1000000 + Acres

Extent:
The extent of damage to structures and the general populations will vary depending on climate, warning, and the time of year. Even the time of day could affect

the extent, as there is an increase of recreational hikers and tourists during the daytime. The National Wildfire Coordinating Group (NWCG) classifies a wildfire into one of several ranges of fire, based upon the number of acres burned. The table above provides NWCG's scale for wildfire values:

Previous Occurrence:
According to Belmont Fire Department records, brush fires were reported in April 2015 near Depot Street and Union Road, and from May 6 to May 9, 2015 numerous brush fires were reported in Belmont and nearby Northfield, Canterbury, and Franklin. The latest to occur was on May 21 of 2020 where there was a brush fire on South Road at Wareing Road. A third alarm was called for several acres burned.

DROUGHT

Probability: Likely

Definition:
Drought is a deficiency in precipitation over an extended period, usually a season or more, resulting in a water shortage causing adverse impacts on vegetation, animals, and/or people.

Location:
Droughts are difficult to define geographically. Due to their widespread nature a drought would affect the entire Town. However, a drought can affect fire suppression in those areas that do not have access to water.

Impact:
A drought is defined as a long period of abnormally low precipitation, especially one that adversely affects growing or living conditions. Droughts are not as damaging to the Town as floods or winter weather. However a severe drought can affect public water supply, increase the probability of fires, and impede fire suppression. Those areas with minimal fire protection are at a higher risk as a result of a prolonged drought. In addition, climate change has and will continue to increase the intensity, frequency and duration of drought incidents.

Extent:
The Palmer Drought Severity Index (PDSI) [6]was devised in 1965, and was the first drought indicator to assess moisture status comprehensively. It uses temperature and precipitation data to calculate water supply and demand, incorporates soil moisture, and is considered most effective for un-irrigated cropland. The U.S. Drought Monitor provides a consistent big-picture look at drought conditions in the United States. The Drought Monitor map identifies areas of drought and labels them by intensity. D1 is the least intense level and D4 the most intense.

[6] *https://climatedataguide.ucar.edu/climate-data/palmer-drought-severity-index-pdsi#:~:text=The%20Palmer%20Drought%20Severity%20Index%20%28PDSI%29%20uses%20readily,to%20%2B4%2C%20but%20more%20extreme%20values%20are%20possible.*

			Ranges				
Category	Description	Possible Impacts	Palmer Drought Severity Index (PDSI)	CPC Soil Moisture Model (Percentiles)	USGS Weekly Streamflow (Percentiles)	Standardized Precipitation Index (SPI)	Objective Drought Indicator Blends (Percentiles)
D0	Abnormally Dry	Going into drought: • short-term dryness slowing planting, growth of crops or pastures Coming out of drought: • some lingering water deficits • pastures or crops not fully recovered	-1.0 to -1.9	21 to 30	21 to 30	-0.5 to -0.7	21 to 30
D1	Moderate Drought	• Some damage to crops, pastures • Streams, reservoirs, or wells low, some water shortages developing or imminent • Voluntary water-use restrictions requested	-2.0 to -2.9	11 to 20	11 to 20	-0.8 to -1.2	11 to 20
D2	Severe Drought	• Crop or pasture losses likely • Water shortages common • Water restrictions imposed	-3.0 to -3.9	6 to 10	6 to 10	-1.3 to -1.5	6 to 10
D3	Extreme Drought	• Major crop/pasture losses • Widespread water shortages or restrictions	-4.0 to -4.9	3 to 5	3 to 5	-1.6 to -1.9	3 to 5
D4	Exceptional Drought	• Exceptional and widespread crop/pasture losses • Shortages of water in reservoirs, streams, and wells creating water emergencies	-5.0 or less	0 to 2	0 to 2	-2.0 or less	0 to 2

Previous Occurrence:

2020-2021: Dry conditions developed rapidly across New Hampshire starting in the middle of May, 2020. The period May 16 to June 25 was exceedingly dry. By the middle of August, dry conditions set in again with September being exceedingly dry with some locations reporting their driest September on record. The drought peaked in intensity during the first week of October before beneficial widespread rains impacted the state towards the middle of October, 2020. An estimated 1000 private residents in NH had dry wells with state agencies reporting over 100 applicants fore well assistance. Corn, potatoes, barley fruit crops and forage crops were the most affected. Farmers were concerned about having enough forage for their livestock to get through the winter. Dairy industry was especially impacted due to low grass yields.

July-August 2022: At the end of July, 100% of the county was at level D1 drought. The deterioration was the result of spotty shower activity with most of the county receiving between 1 and 2 inches of rainfall. Most of the reported water quantity issues were from southern and coastal areas. Farmers without irrigation experienced stressed vegetation from a lack of rain and above normal temperatures in July. Most streamflow stations in central and southern rivers with 30+ years of record were between the 10th-25th percentiles compared to normal.

No big issues on either. Buildings and grounds stopped irrigation for town facilities.

Belknap County Drought Monitor (2019-2024) Categories[7]

[7] https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx



https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx

FLOODING

Probability: Occasional

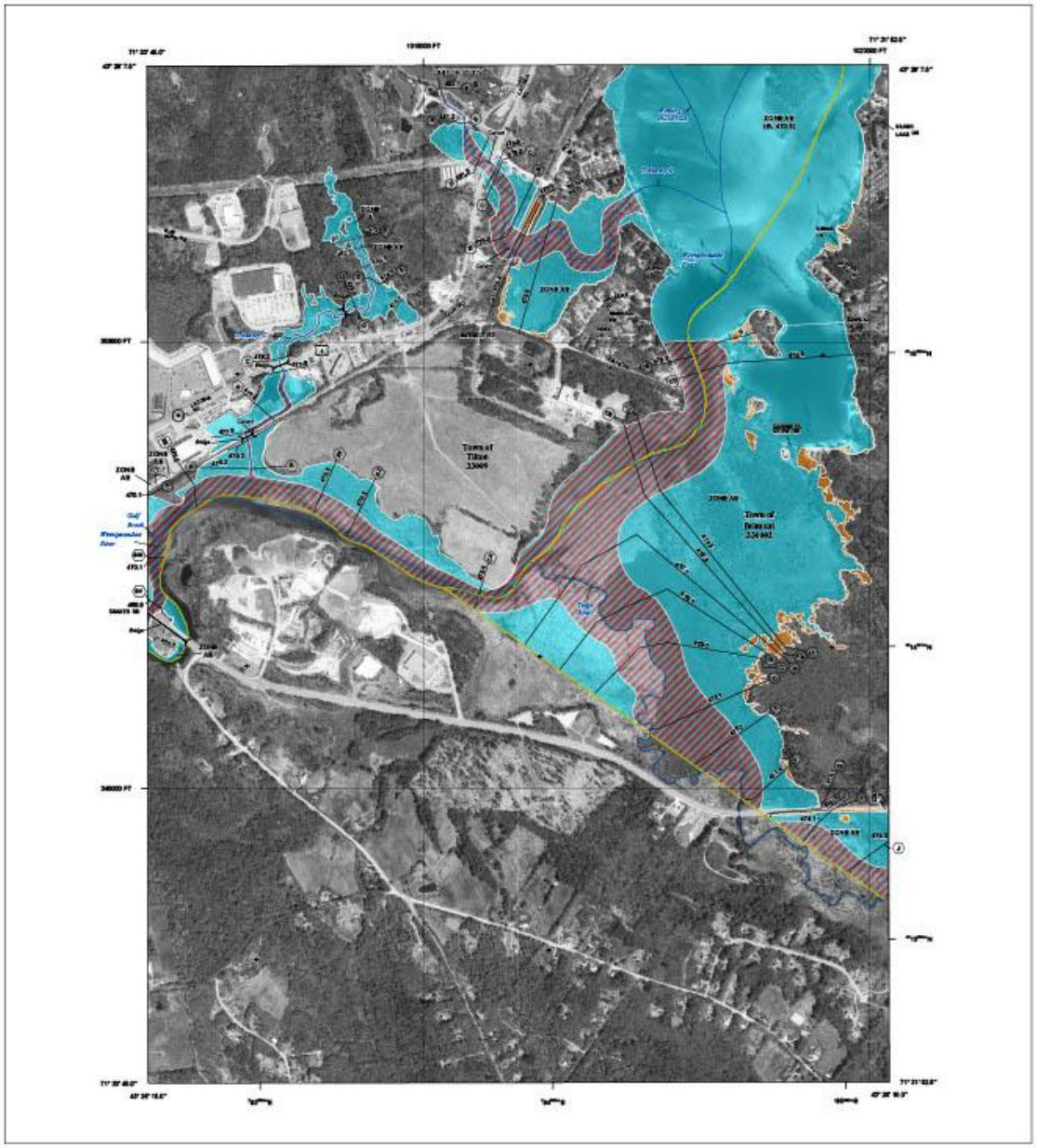
Definition:
Flooding is the temporary overflow of water onto land that is not normally covered by water. Flooding results from the overflow of major rivers and tributaries, storm surges, and/or inadequate local drainage. Flooding events considered in this Plan include 100-year and 500-year floodplain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

Location:
Committee members said flooding is more likely in the Route 140 area and around Jamestown Road, Gardners Grove Road, and South Road. Areas near Silver Lake react to changes in the Lakeport dam on the Winnipesaukee River, the major outlet for Lake Winnipesaukee. Resulting damages have included washouts and flooding of residences. Sargent Lake dam, classified as a High hazard dam, is located near the Gilmanton town line. The lake feeds Badger Brook which flows into Belmont Village. Failure of the Lochmere or Lakeport (Laconia) dams could lead to flooding of properties along Silver Lake that are in the Special Flood Hazard Area.

Impact:
The extent of damage caused by any flood depends on the depth and duration of flooding, the topography of the area flooded, velocity of flow, rate of rise, and the amount and form of development in the floodplain. Most of the past flooding events result in erosion and damage to culverts and roads throughout town. However, climate change has and will continue to increase the intensity, frequency and duration of flooding incidents.

Extent:
FEMA defines flood hazards by the 100-year and 500-year flood events. A 100-year flood event is defined as flood event having a 1% chance of being equaled or exceeded in any given year. The 500-year flood event is defined as flood event having a .2% chance of being equaled or exceeded in any given year. The Town of Belmont Flood Insurance Rate Maps (FIRM) identify both an A and AE zones. The current official Flood Insurance Rate Maps (FIMR) maps only delineate AE Zones. The AE zones are subject to the 100-year

flood but have no Base Flood Elevations (BFE) delineated on the FIRM. There are preliminary FIRMs, dated 1/26/2024 that have A zones, AE zones, and regulatory floodways, as shown on the following pages.


Town of Tilton
Town of Belmont
FLOOD HAZARD INFORMATION
NOTES TO USERS
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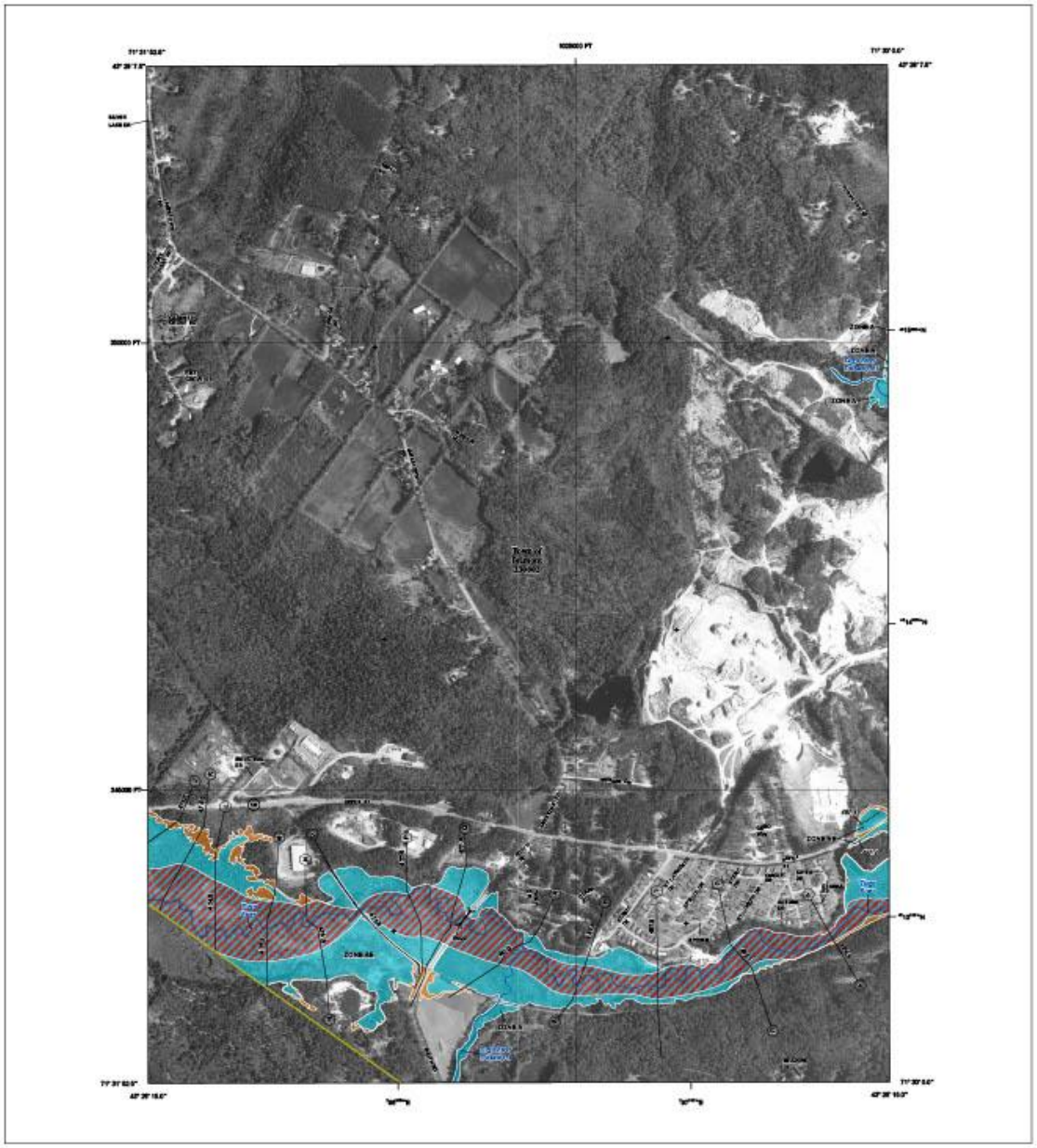


FLOOD HAZARD INFORMATION

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT HTTPS://MSC.FEMA.GOV

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE)
- With BFE or Depth
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Flood Risk due to Levee
- Area with Flood Risk due to Levee

OTHER AREAS
- Area of Minimal Flood Hazard
- Area of Undetermined Flood Hazard

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall
- Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature
- Base Flood Elevation Line (BFE)

OTHER FEATURES
- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

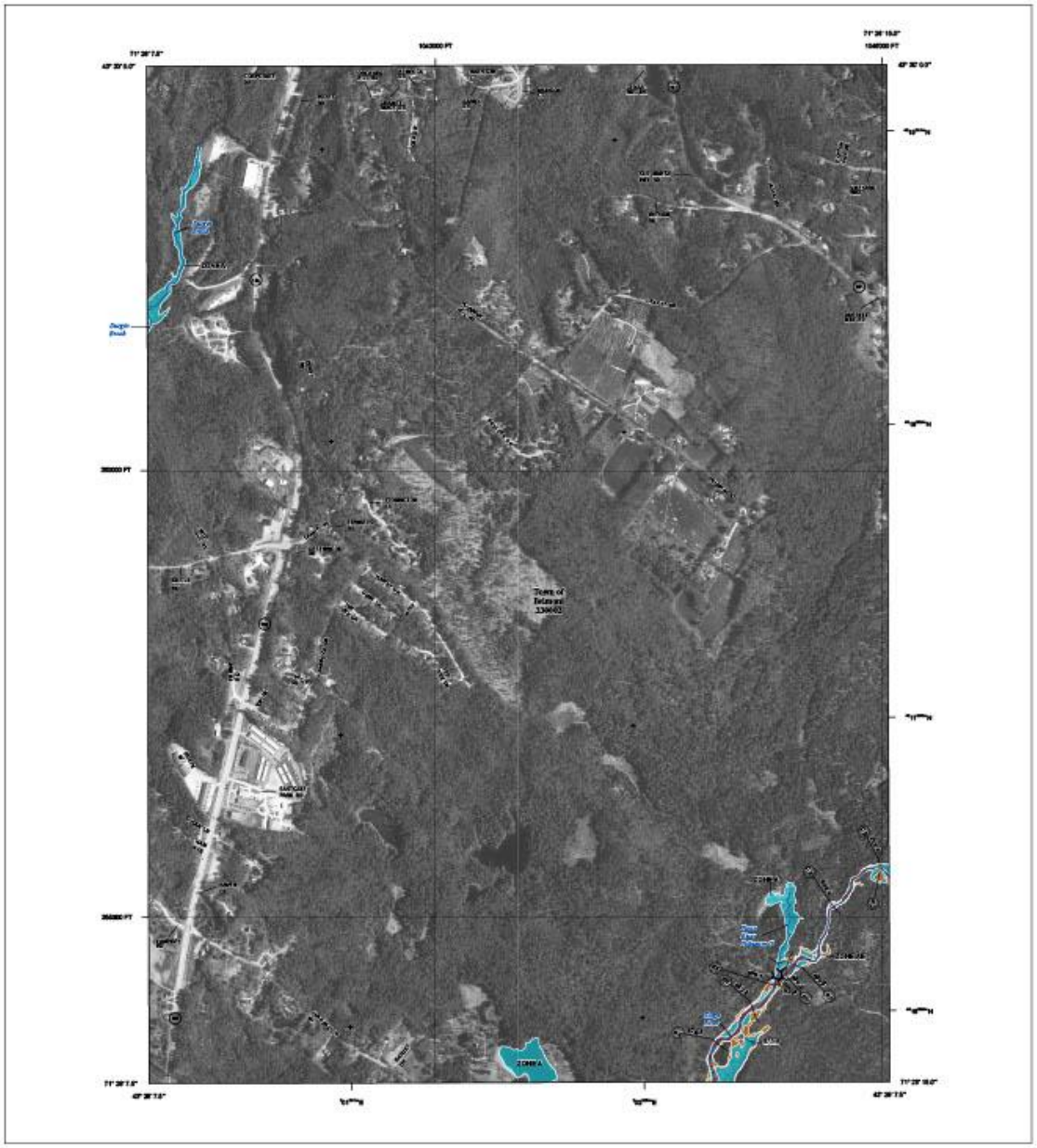
SCALE

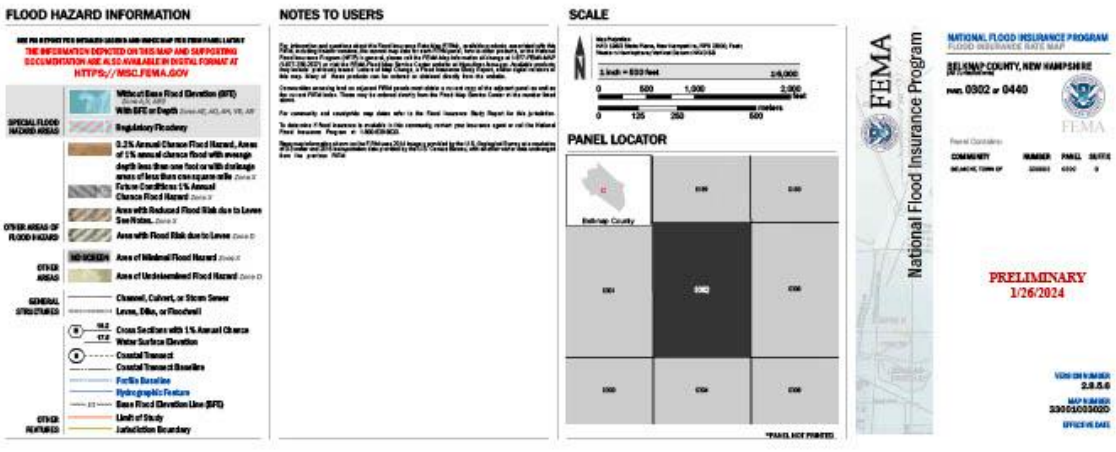
PANEL LOCATOR

FEMA National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP
BELKNAP COUNTY, NEW HAMPSHIRE
PANEL 0284 OF 0440

PRELIMINARY
1/26/2024

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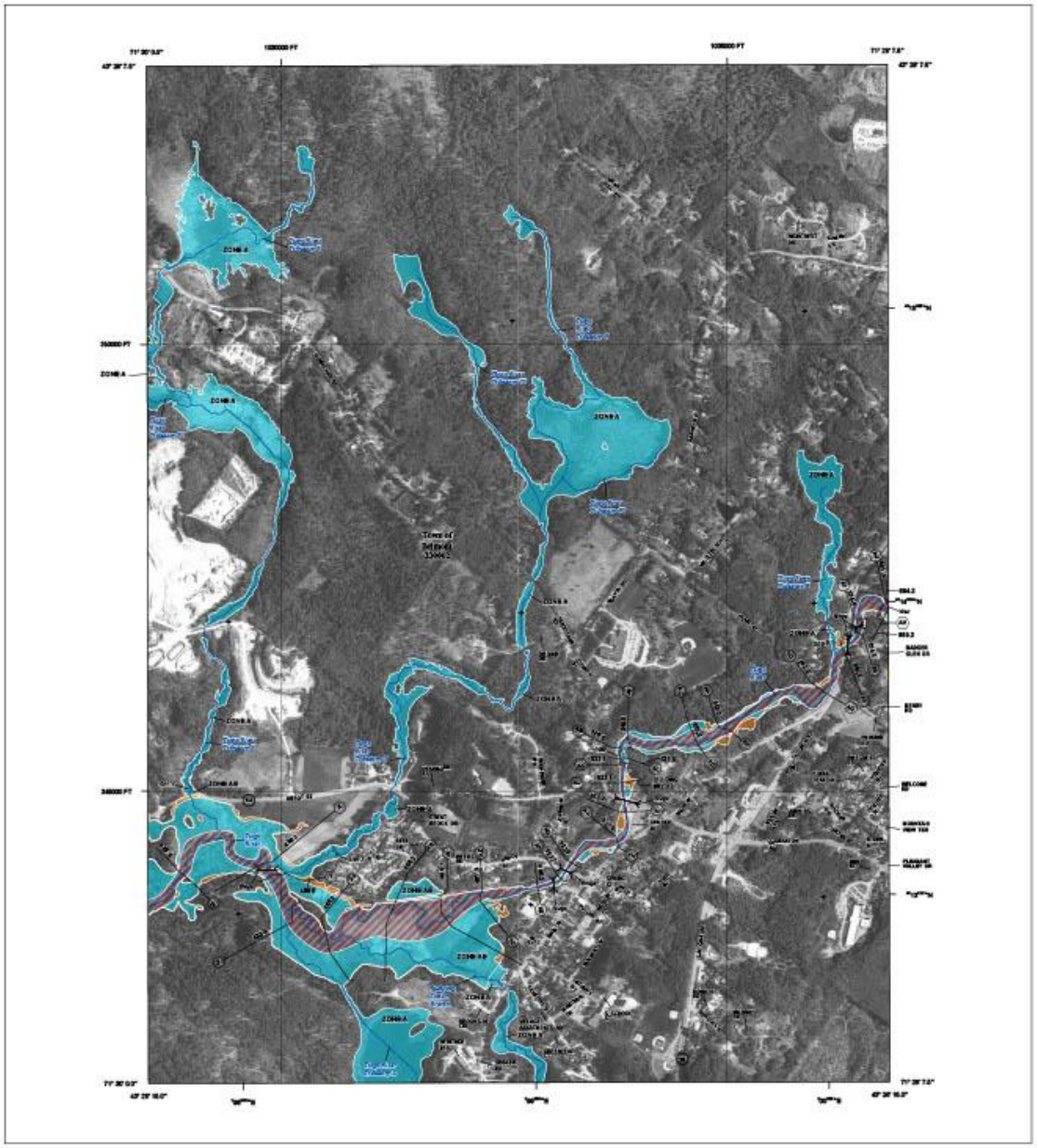

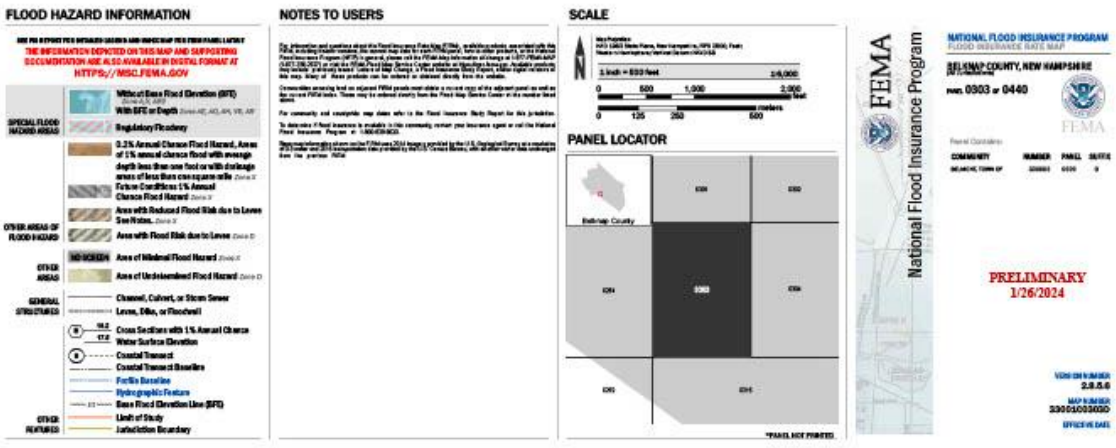
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NATIONAL FLOOD INSURANCE PROGRAM
BELKNAP COUNTY, NEW HAMPSHIRE
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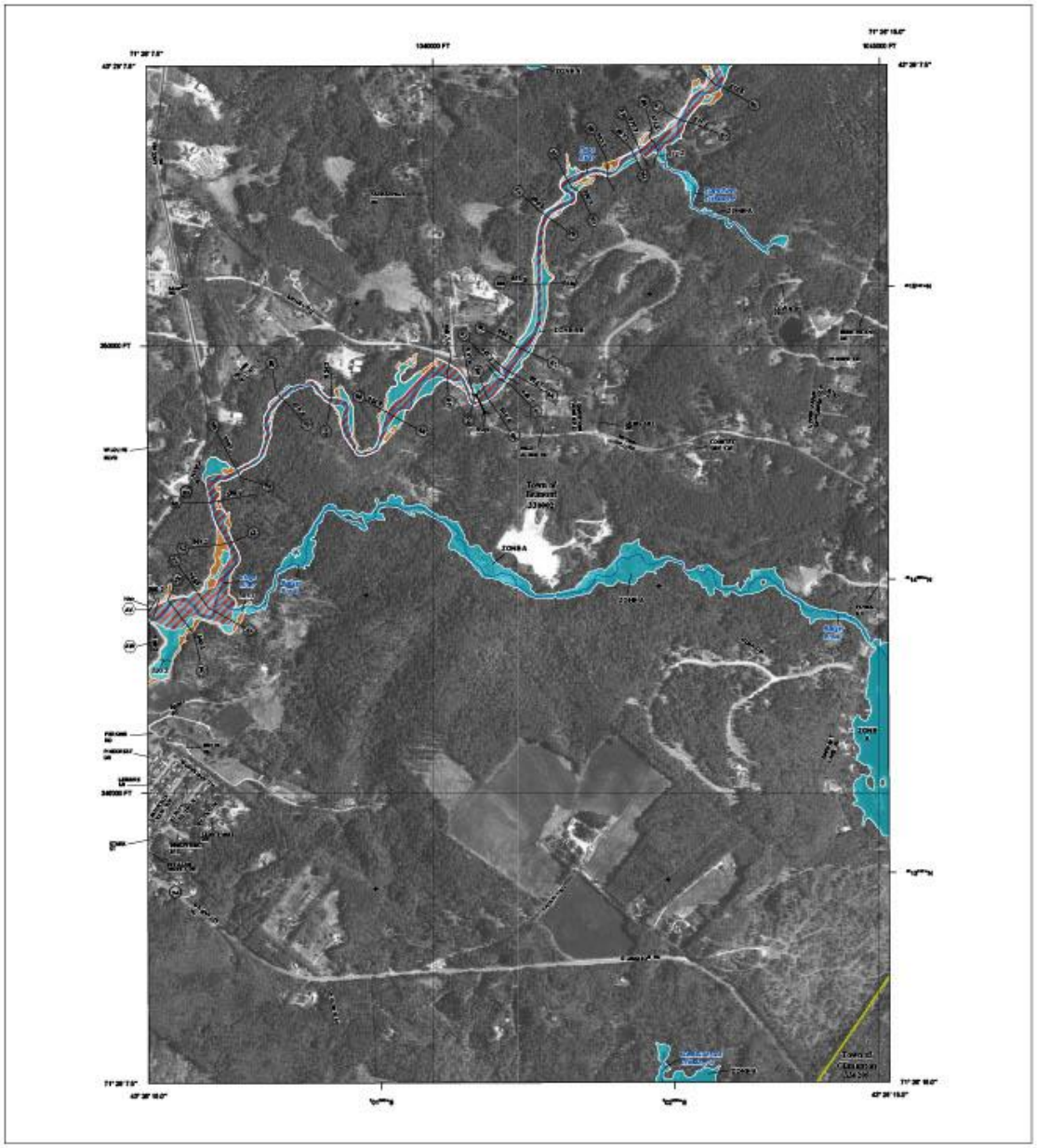
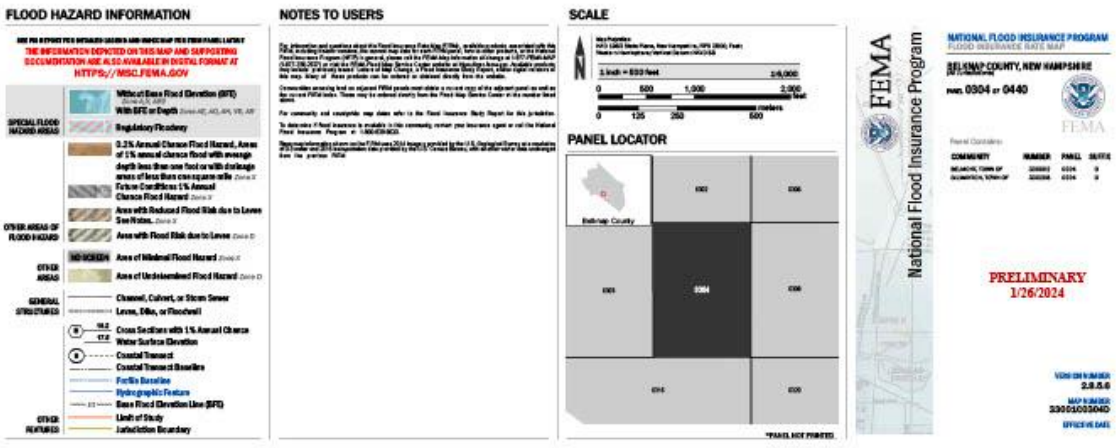
1/26/2024

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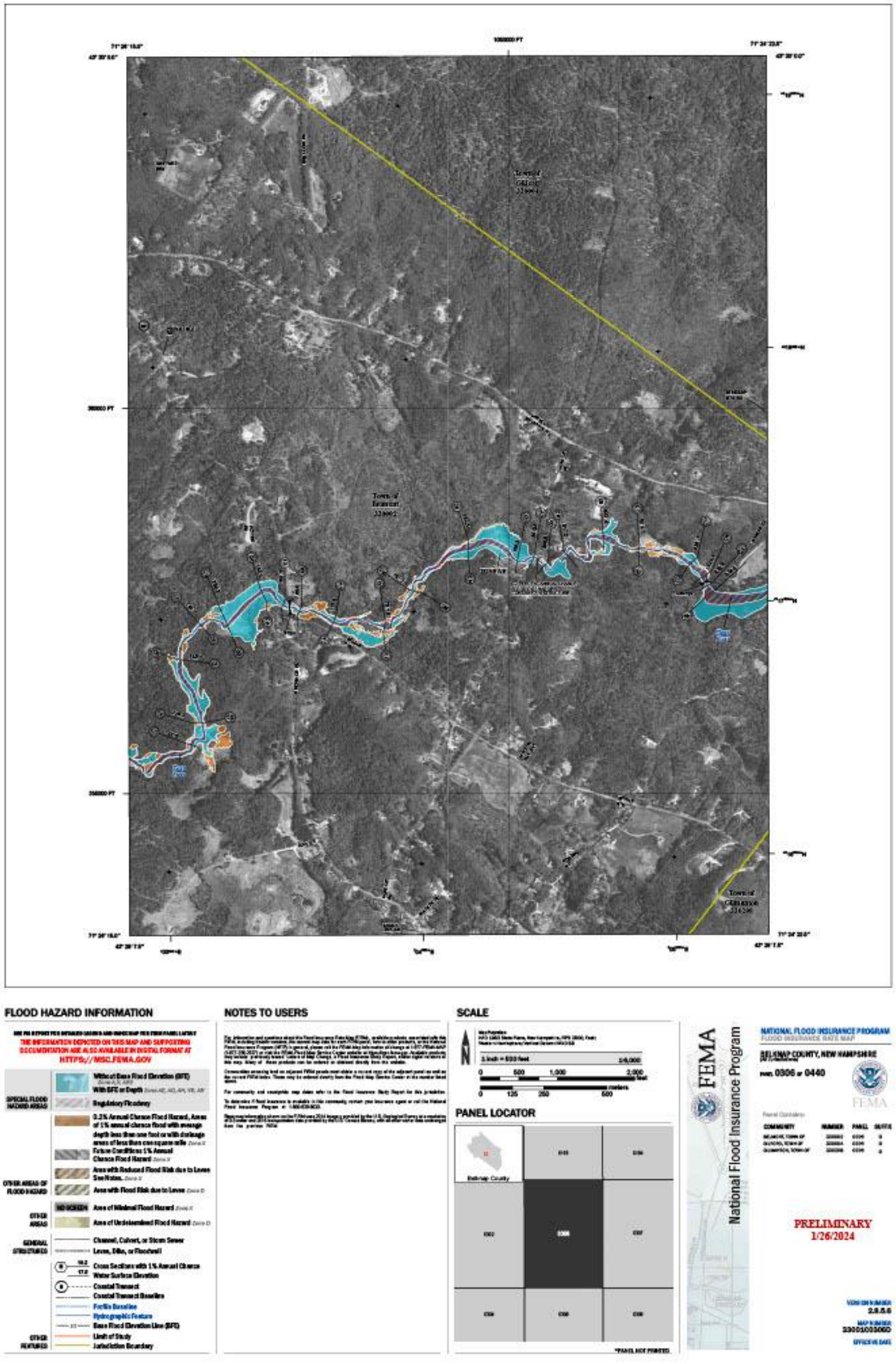
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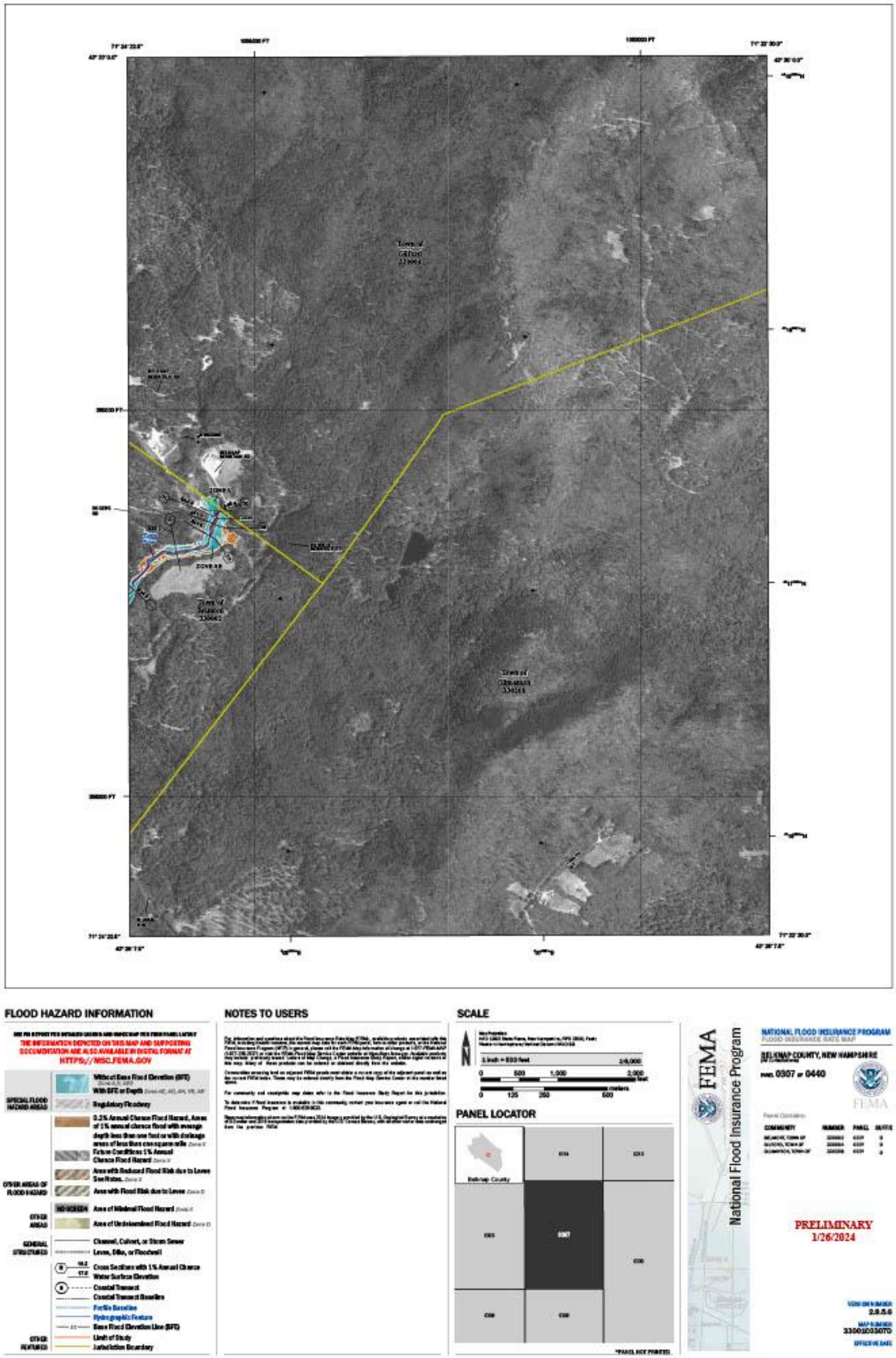
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NATIONAL FLOOD INSURANCE PROGRAM
BELKNAP COUNTY, NEW HAMPSHIRE
PRELIMINARY
1/26/2024

Previous Occurrence:

Date	Location	Magnitude/ Description	
10/30/2017	Statewide	2 to 5 inches 50 to 60 mph	Heavy rain (2 to 5 inches in a 10-hour period) was reported statewide and wind speeds statewide were reported as 50 mph to 60 mph in southern and central regions. Presidential Major Disaster Declared for this event (DR-4335).
6/19/2017	Laconia	2 to 3 inches in 3-hour period	$10,000 Property Damage Estimate
6/19/2017	Gilford	2 to 3 inches in 3-hour period	$35,000 Property Damage Estimate
12/22/2022	Belmont	Snow changing to 2 inches rain and wind.	The Town received $27,718 in FEMA Disaster money Roads were closed, trees and wires down. Nothing really snow related. There were areas without power for a couple days. The Generator at the School didn't work at the school because it was too cold.
7/16/2023	Belmont	2 to 3 inches	Flood issue for bad drainage here at The Mill Building had some flooding due to drainage issues. A drainage pipe was crushed and couldn't divert rainwater away from the building. The first floor had 4 offices that were flooded.

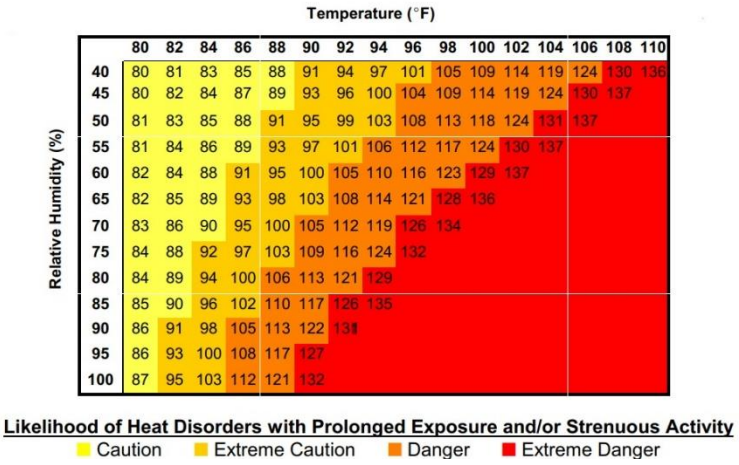
EXTREME TEMPERATURES

Probability: Likely

Definition:
Extreme Heat: A Heat Wave is a "Prolonged period of excessive heat, often combined with excessive humidity." Heat kills by pushing the human body beyond its limits. In extreme heat and high humidity, evaporation is slowed and the body must work extra hard to maintain a normal temperature.
Extreme Cold: Low temperatures and wind chill can reduce the body's core temperature. Cold disorders can include frostbite and hypothermia. Extreme cold can also damage or kill crops and animals (wild, farm, or domesticated), potentially presenting a risk to the economy.

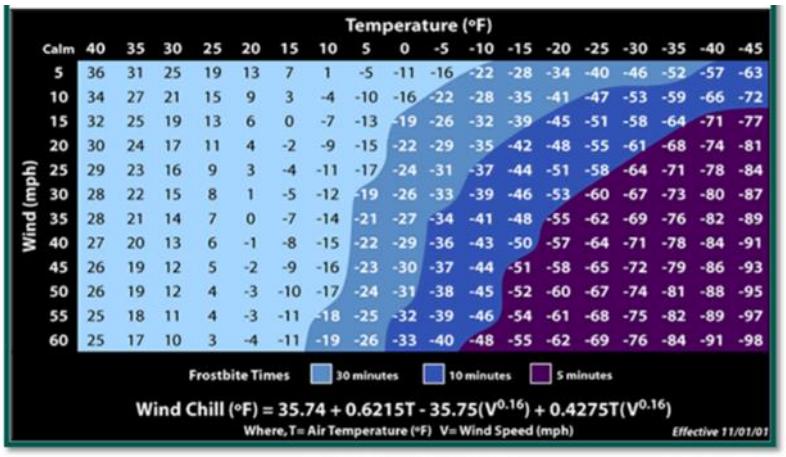
Location:
Extreme temperature events are difficult to define geographically. Due to their widespread nature, periods of extreme heat or cold could affect the entire town.

Impact:
Extreme heat conditions may impact the health of residents and visitors. Facilities without generators and air-conditioners that house the elderly and disabled are very susceptible to human health issues. Transportation infrastructure and utilities are also vulnerable as the demand for air-conditioning rises. Extreme cold conditions may also impact the health of residents and visitors. Facilities without generators and back-up sources of heat are very susceptible to human health issues. Transportation infrastructure and energy utilities are also vulnerable. In addition, climate change has and will continue to increase the intensity, frequency and duration of extreme temperature incidents.



Extent:
According to OSHA, the risk of heat-related illness becomes greater as the weather gets hotter and more humid. This situation is particularly serious when hot weather arrives suddenly early in the season, before workers have had a chance to adapt to warm weather. This table provides guidelines for the risk related to extreme heat. The neighboring City of Laconia has a record high of 100 degrees in 1987 and -24 degrees in 1994 for a record low.[8]

[8] https://www.plantmaps.com/en/us/climate/extremes/f/new-hampshire-record-high-low-temperatures



Wind chill chart. *(Source-NOAA)*

Previous Occurrence:
According to a 2014 study of climate change by Climate Solutions New England, Climate Change in Southern New Hampshire, from 1970 to 1999, southern New Hampshire experienced an average of seven days per year above 90°F each year. This is projected to increase to 22 days per year under a low emissions scenario to nearly 50 days per year under a high emissions scenario. Between 1980 and 2009, an average of one day per year reached 95°F in southern New Hampshire. By the end of the century, the number of days per year over 95°F is expected to increase as much as six to 22 days per year. Additionally, the average daytime maximum temperature on the hottest day is expected to increase to as much as 98°F to 102°F (depending on the emissions scenario), compared to the historical average of 93°F.21 Between 1960 and 2012, there was an average of 8.3 days per year (or 0.8 days/decade) greater than 90°F recorded in Durham (the closest of four stations to Belmont included in the study). During this time the hottest day of the year averaged 95.0°F.22 During prolonged heat waves, the public safety complex is opened as a cooling station. In recent years, there has not been much attendance from residents.

Date	Description	Impacts	Location	Additional Info
March 2012	Heat Wave	Record high temps set in Concord	Statewide	Record temps were set on five consecutive days in Concord (Max: 84°F)
September 2017	Heat Wave	Record high temps set statewide	Statewide	Locations around the state including Mount Washington set record high temps on four consecutive days
December 2017	Cold Wave	Record low temps set statewide	Statewide	Many locations saw record lows. Wind chill warnings and advisories were posted through the state
February 2018	One Day Winter Heat Wave	Record high temps set statewide	Statewide	Exceptionally strong high- pressure ridge in place across the region setting temp records
February 4, 2023	Extreme Cold	Record low temps set statewide		The region experienced a severe cold snap with below freezing windchill. The Town of Belmont opened a warming shelter opened for 3-4 days at the Safety Complex.

May 18, 2023	Hard Freeze	Record low temps set statewide	Statewide	Temperatures ranged from freezing to the mid-20s. Tilton reported a low of 28 degrees. The temperatures were some of the coldest this late in spring in over the past 30 years based on official records. The hard freeze impacted blooming fruit trees and berries the most. Stone Mt and Smith orchards lost most of their crops due to the freeze.
July 6-18, 2024	12 day Heat Wave	Record high temps set statewide	Statewide	Many communities throughout New Hampshire saw temperatures at or above 90 degrees. Belmont notified the public to call town if shelter was needed, but no one needed shelter. The Recreation Department kept the children inside at the Middle School.

INFECTIOUS DISEASE

Probability: Occasional

Definition:
Infectious diseases are illnesses caused by organisms—such as bacteria, viruses, fungi or parasites. Some infectious diseases can be passed from person-to-person, some are transmitted by bites from insects or animals, and others are acquired by ingesting contaminated food or water or being exposed to organisms in the environment. Signs and symptoms vary depending on the organism causing the infection, but often include fever and fatigue. Mild infections get better on their own without treatment, while some life-threatening infections may require hospitalization.

Location:
The entire State of New Hampshire, including the entire Town of Belmont, is at risk for Infectious Diseases, including Covid-19. The prevalent diseases can change based on the time of year, such as the influenza virus in the winter and foodborne disease in the summer.

Impact:
Public health incidents and infectious diseases may occur suddenly or with a slow onset. Incidents that occur suddenly may have extraordinary and/or overwhelming medical resource needs. Incidents may occur with a slow onset and/or with advance warning will allow for a more coordinated response. During sudden onset incidents, many victims may reach healthcare facilities on their own without the use of Emergency Medical Services (EMS), which means that victims may arrive to find unprepared or inadequate facilities. According to NH DHHS's 2007 Influenza Pandemic Public Health Preparedness and Response Plan, it is estimated that an influenza pandemic will cause nearly 16,000 hospitalizations and nearly 4,000 deaths. The direct and indirect impacts of Covid-19 will continue for months and years to come.

Extent:
The magnitude and severity of infectious diseases is described by its speed of onset (how quickly people become sick or cases are reported) and how widespread the infection is. Some infectious diseases are inherently more dangerous and deadly than others, but the best way to describe the extent of infectious diseases relates to the disease occurrence:

- Endemic – Constant presence and/or usual prevalence of a disease or infection agent in a population within a geographic area
- Hyperendemic – The persistent, high levels of disease occurrence
- Cluster – Aggregation of cases grouped in place and time that are suspected to be greater than the number expected even though the expected number may not be known
- Epidemic – An increase, usually sudden, in the number of cases of a disease above what is normally expected
- Outbreak – The same as epidemic, but over a much smaller geographical area

Previous Occurrence:
January 20, 2020 to May 11, 2023 (DR-4516): The State of New Hampshire declared a State of Emergency on March 13, 2020 due to Covid-19. From March 1 through November 1, 2020, the State had 11,290 cases of Covid and by March 1, 2021 there were 75,504 cases of Covid-19. As of August 2022, the State has had over 339,766 cumulative cases. There were a total of 2074 reported official cases in Town.

Town Impacts: The Town Office was closed to the public but set up drop box for residents and met people outside with masks on. Online services were expanded and meetings were held via zoom. The Town meeting was held with social distancing and PPE.

Fire/EMS maintained day to day business. Implemented PPE but did eliminate a live in student program. Fire Department staffed an ambulance that offered vaccine for home bound and worked with the Lakes Region Public Health Network on this.

Police stopped going to some calls, implemented PPE and switched up schedules to have less people together at once.

The School District went fully remote in March of 2020. Then in the fall of 2020 the District implemented a hybrid model (virtual and in person) through spring of 2021. The fall of 2022 started normally with some families still going hybrid. By 2023 the District was back to full time.

DAM FAILURE

Probability: Unlikely

Definition:
According to the NH Department of Environmental Services (DES), a dam is any artificial barrier which impounds or diverts water which: has a height of 6 feet or more; or is located at the outlet of a great pond, regardless of height or storage; or is an artificial barrier which impounds liquid Industrial or liquid commercial wastes, or septage or sewage, regardless of height or storage.

Location:
There is one High Hazard dam located in Belmont that would cause flooding beyond the 100-year floodplain. A list of all the classified active dams is included in the table below.

Hazard Class	NAME
H (High)	Sargent Lake Dam
L (Low)	Lochmere Dam
NM (Non-Menace)	Tioga River Dam
NM	Clough Pond
NM	Bean Dam
NM	Badger Brook
NM	Bourque Dam
NM	Wildlife Dam
NM	Wildlife Pond
NM	Wildlife Pond Dam
NM	Water Supply Pond
NM	Farm Pond
NM	Bbi Park Detention Pond

Impact:
A dam failure or breech could occur due to extreme rainfall amounts and/or a human caused incident. A failure or breech would result in rapid loss of water that is normally held by the dam resulting in an inundation downstream. If the Sargent Lake Dam were to fail, outflow would travel a mile through fairly undeveloped land, joining the Tioga River prior to crossing under NH Route 106 and flowing into Belmont Village. Some damage may occur, but because there is limited development in the initial outflow area and most of the Village is above the floodplain, the structural damage would be limited. There may be some impact to roadways, limiting emergency access. Failure of the Lochmere or Lakeport dams could lead to flooding of structures near Silver Lake; how much damage would depend on how readily the dams downstream could accommodate the extra flow. The impact to the town from a dam failure would be moderate. The approximate dollar value is not known without conducting a detailed engineered study on the specific dam sites as well as measuring potential downstream impact. An Emergency Action Plan (EAP) for Sargent Lake Dam is on file at NHDES.

Extent:
NH Department of Environmental Services categorizes Dams into one of four classifications, which are differentiated by the degree of potential damages that a failure of the dam is expected to cause. The classifications are designated as non-menace, low hazard, significant hazard and high hazard. A **Non-Menace** structure is a dam that is not a menace because it is in a location and of a size that failure or mis operation of the dam would not result in probable loss of life or loss to Property. A **Low Hazard** structure is a dam that if failure or misoperation of the dam occurred it would result in any of the following: No possible loss of life; Low economic loss to structures or property; Structural damage to a town or city road or private road accessing property; The release of liquid industrial, agricultural or commercial wastes, septage or contaminated sediment if the storage capacity is less than 2 acre-feet and is located more than 250 feet from a water body or water course; and Reversible environmental losses to environmentally sensitive sites. A **High Hazard** structure is a dam that if failure or misoperation of the dam it would result in probable loss of human life as a result of: Water levels and velocities causing the structural failure of a foundation of a habitable residential structure or commercial or industrial structure, which is occupied under normal conditions; Water levels rising above

the first floor elevation of a habitable residential structure or a commercial or industrial structure, which is occupied under normal conditions when the rise due to dam failure is greater than one foot; Structural damage to an interstate highway, which could render the roadway impassable or otherwise interrupt public safety services; The release of a quantity and concentration of material, which qualify as “hazardous waste” as defined by RSA 147-A:2 VII; and any other circumstance that would more likely than not cause one or more deaths.

Previous Occurrence:
There have been no dam failures recorded in Belmont.

EARTHQUAKE

Probability: Occasional

Definition:
An earthquake is a rapid shaking of the earth caused by the breaking and shifting of rock beneath the earth’s surface. 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 magnitude and intensity of an earthquake is determined by the use of scales such as the Richter scale and Mercalli scale.

Location:
According to the State of New Hampshire Multi-Hazard Mitigation Plan Update 2013, New Hampshire is considered to lie in an area of "Moderate" seismic activity with respect to other areas of the United States and is bordered to the North and Southwest by areas of "Major" activity. Generally, the entire Town is at risk to earthquakes.

Impact:
Earthquakes can cause buildings and bridges to collapse, disrupt gas, electric and phone lines, and often cause landslides, flash floods, fires, and avalanches. It is assumed that all of the buildings in the Town have not been designed to withstand seismic activity. More specifically, the older historic buildings that are constructed of non-reinforced masonry are especially vulnerable to any moderate sized earthquake. In addition, utilities (water, gas, etc) are susceptible to earthquake damage. Belmont has experienced the effect of small to moderate earthquakes that had minor to no effect on the town’s infrastructure.

Extent:
Earthquakes with a magnitude of 2.0 to 4.9 on the Richter scale are considered minor to light, and those 5.0 to 6.9 are considered moderate to strong. However, if a large (6+ on the Richter Scale) occurred in or around the town, it is assumed that structural damage would be moderate to severe.

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

Previous Occurrence:
The following table summarizes earthquakes of 2.5 magnitude or greater that have occurred in New Hampshire and New England:

Location	Date	Magnitude[9]
Ossipee, NH	December 20, 1940	5.5
Ossipee, NH	December 24, 1940	5.5
Dover-Foxcroft, ME	December 28, 1947	4.5
Kingston, RI	June 10, 1951	4.6
Portland, ME	April 26, 1957	4.7
Middlebury, VT	April 10, 1962	4.2
Near NH Quebec Border, NH	June 15, 1973	4.8
West of Laconia, NH	Jan. 19, 1982	4.5
Ontario-Quebec Border	June 23, 2010	5.0
Boscawen, NH	September 26, 2010	3.1
Virginia	August 23, 2011	5.8
Southern Maine	October 16, 2012	4.0
Contoocook, NH	March 21, 2016	2.9
East Kingston, NH	February 15, 2018	2.7
Gorham, NH	February 4, 2022	2.9
Chichester, NH	December 23, 2023	2.7

LANDSLIDE

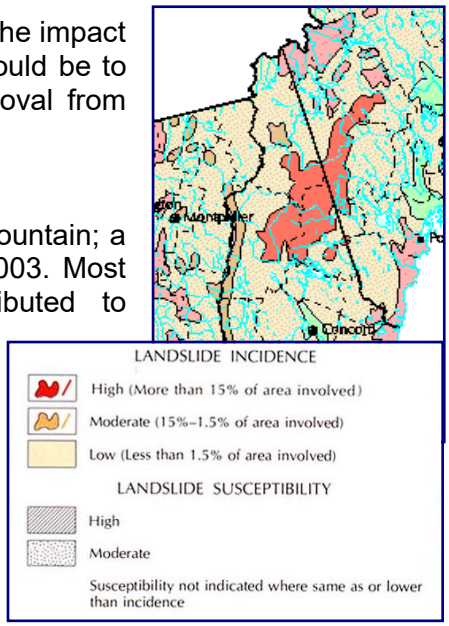
Probability: Unlikely

Definition: A Landslide is the downward or outward movement of slope forming materials reacting under the force of gravity. These include mudflows, mudslides, debris flows, rockslides, debris avalanches, debris slides and earth flows. Landslides may be formed when a layer of soil atop a slope becomes saturated by significant precipitation and slides along a more cohesive layer of soil or rock.

Location: Slopes in excess of 25% are susceptible to landslides, especially where soils are thin or highly erodible. These areas are generally located near mountain peaks and along the sides of ridges. In addition, the increase of single residential homes on steep slopes will create higher risk. The steepest slopes in Belmont are near Murray Park, Badger Brook Estates and Route 140, as well as just east of Silver Lake Park Campground.

[9] https://earthquake.usgs.gov/earthquakes/map/

Impact:
Due to the limited area that is susceptible to landslides, the impact is minimal. At the moment the only potential impact would be to recreational trails and possibly the cost of debris removal from roads.



Extent:
The most well-known landslide is the Old Man of the Mountain; a symbol of the State of New Hampshire that collapsed in 2003. Most other events of this hazard type are often attributed to corresponding flood events. The Table to the right shows the incidence and susceptibility of landslides throughout the State, which shows that the Town of Belmont is in a low risk of landslide incidence.

Previous Occurrence:
There are no significant landslide incidents that have occurred in Belmont.

2022: Brought slope back and added rip rap…..it was not a natural landslide it was due to development. It has been mitigated to decrease the slope and riprap.

SOLAR STORMS

Probability: Unlikely

Definition:
Solar activity (solar storms) refers to solar flares, coronal mass ejections, high-speed solar wind, and energetic solar particles. Any of these events may occur for a few minutes to several hours, have the ability to affect Earth for days to weeks. All solar activity is driven by the solar magnetic field. A solar flare is an intense burst of radiation resulting from the release of sunspot magnetic energy, which can occur for minutes to hours. Solar prominence is a large, bright feature that extends outward from the sun's surfaces. Solar wind travels at 800,000 to 5 million miles per hour and carries mass the size of Utah's Great Salt Lake into space every second; however, solar wind is 1000 million times weaker than the winds that we experience on Earth.

Location:
The entire State, including the entire Town of Belmont, is at risk for solar storms.

Impact:
As society becomes increasingly reliant on electronics and technology, the hazards presented by space weather are not to be underestimated. The magnetic disturbances that solar storms can bring can disrupt communications, dispatch centers, damage or destroy electronic components, corrode gas and oil pipelines, and cause significant damage to spacecraft and satellites outside the Earth's protective atmosphere.

Extent[10]:

Scale	Description	Effect	Avg Frequency (1 cycle = 11 yrs)
S 5	Extreme	**Biological**: Unavoidable high radiation hazard to astronauts on Extra Vehicular Activity; passengers and crew in high-flying aircraft at high latitudes may be exposed to radiation risk. **Satellite operations**: Satellites may be rendered useless, memory impacts can case loss of control, may caused serious noise in image data, star trackers may be unable to locate sources; permanent damage to solar panels possible. **Other systems**: Complete blackout of High Frequency (HF) communications possible through the polar regions, and position errors make navigation operations extremely difficult.	Fewer than 1 per cycle
S 4	Severe	**Biological**: Unavoidable radiation to astronauts on EVA; passengers and crew in high-flying aircraft at high latitudes may be exposed to radiation risk. **Satellite operations**: May experience memory device problems and noise on imaging systems, star tracker problems may cause orientation problems and solar panel efficiency can be degraded.. **Other systems**: Blackout of HF radio communications through the polar regions and increase navigation errors over several days are likely.	3 per cycle
S 3	Strong	**Biological**: Radiation avoidance recommended for astronauts on EVA; passengers and crew in high-flying aircraft at high latitudes may be exposed to radiation risk. **Satellite operations**: Single-event upsets, noise in imaging systems and slight reduction of efficiency in solar panel are likely. **Other systems**: Degraded HF radio propagation through the polar regions and navigation position errors likely.	10 per cycle
S 2	Moderate	Biological: Passengers and crew in high-flying aircraft at high latitudes may be exposed to radiation risk. Satellite operations: Infrequent single event upsets possible. Other systems: Small effects on HF propagation through the polar regions and navigation at polar cap locations possibly affected.	25 per cycle
S 1	None	Biological: None Satellite operations: None Other systems: Minor impacts on HF radio in the polar regions.	50 per cycle

Previous Occurrence:

While no significant, damaging solar storms or space weather have impacted the State of New Hampshire, or the Town of Belmont, in recent years, HF radio communications routinely experience minor impacts or disruptions. Occasionally, when there is a particular large storm where the aurora borealis is visible in areas of New Hampshire. Nearby events include Quebec, Canada, which experienced a 9-hour blackout in March of 1989 when solar winds caused a fluctuation in the Earth's magnetic field and caused Hydro-Quebec's transmission to go down. There have been no occurrences of solar storm impact to the Town of Belmont since the last Plan update.

[10] https://www.swpc.noaa.gov/noaa-scales-explanation

CLIMATE CHANGE

Although not identified as a specific natural hazard in this Plan, no Plan can be considered complete today without some discussion of the impact that climate change has had on weather patterns. Climate change impacts the frequency and intensity of many of the natural hazards identified in this Plan, such as flooding, drought, wildfire and extreme heat. As FEMA States in the *Local Mitigation Planning Policy Guide 2023*[11], climate change", increases the frequency, duration and intensity of natural hazards, such as wildfires, extreme heat, drought, storms, heavy precipitation and sea level rise." Communities in New Hampshire, such as Belmont, should become increasingly aware of the effects of climate change on the natural hazards that are already being experienced.

[11] *https://www.fema.gov/sites/default/files/documents/fema_local-mitigation-planning-policy-guide_042022.pdf*

Chapter 4
CRITICAL FACILITIES

The list of critical infrastructures for the Town of Belmont was updated by the committee. The critical infrastructure list is divided into three categories, 1) Emergency Response Facilities; 2) Not Necessary for Emergency Response Facilities; 3) Facilities and Populations to Protect. The first category contains facilities essential in a hazard event, including the Emergency Operation Centers. The second contains valuable resources that would become vital to disaster recovery. The third category is a list of facilities and populations that could require protection during and following a disaster. The following Table provides a list of the critical facilities.



Facility	Name/Location	Owner	Category 1	Category 2	Category 3	Comment	Assessed Value (2023)	Map & Lot Number
			✓	✓	✓			
Town Office	Belmont Town Office, 143 Main Street	Municipal	✓				575,200	122-001-000-000
EOC Primary	Fire Station, 14 Gilmanton Road	Municipal	✓			Generator	656,300	122-082-000-000
Secondary	Police Station, 16 Fuller Street	Municipal	✓			Generator	780,500	122-138-000-000
Police Station	Police Station, 16 Fuller Street	Municipal	✓			Generator	780,500	122-138-000-000
Fire Station	Fire Station, 14 Gilmanton Road	Municipal	✓			Generator	656,300	122-082-000-000
Emergency Medical Service	Belmont Fire Dept, 14 Gilmanton Road	Municipal	✓			Generator	656,300	122-082-000-000
	Convenient MD, 77 Daniel Webster Highway	Private	✓				1,234,400	201-029-001-000
	Clear Choice MD, 96 Daniel Webster Highway	Private	✓				3,232,300	201-009-000-000
	Belmont Medical Center, 8 Corporate Drive	Private	✓				1,061,400	205-005-004-000
Public Works	Belmont Public Works Dept., 149 Hurricane Road	Municipal	✓			Generator	626,300	223-058-000-000
Evacuation Routes	NH Route 106 (Laconia Road)	State	✓					n/a
	NH Route 140 (Depot Street)	State	✓					n/a
	NH Route 140 (Gilmanton Road)	State	✓					n/a
	NH Route 107 (Province Road)	State	✓					n/a
	US/NH Routes 3/11 (Daniel Webster Highway)	State						n/a
Shelters	Belmont High, 255 Seavey Road (Primary Shelter)	SAU 80	✓			Generator	14,557,700	237-014-000-000
	Belmont Middle, 38 School Street	SAU 80	✓				5,256,500	125-019-000-000
	Belmont Elementary, 26 Best Road	SAU 80	✓				5,121,200	121-117-000-000
Communications	Cell Tower, Laconia Rd/Gilmanton Rd	Private	✓				225,100	122-075-000-001
	Cell Tower, 73 Bishop Road	Private					216,400	205-009-000-001
	Comcast, Old Prescott Hill Road	Private					137,400	204-008-000-000
	Police Repeater, Liberty Hill	Municipal					413,600	241-020-000-000
Water	Pump Station, 19 Fruite Street	Municipal		✓			n/a	217-111-000-000
	Water Distribution Center, Shaker Road near Pout Pond	Municipal		✓		Generator	37,800	242-031-000-000
	Water Tank (1 mil. Gal.), Gilmanton Rd.	Municipal		✓			(located in Gilford)	n/a

Facility	Name/Location	Owner	Category 1	Category 2	Category 3	Comment	Assessed Value (2023)	Map & Lot Number
			✓	✓	✓			
Sewer	Sewer Pump Station, Coons Point Road	Municipal		✓		Generator	3,100	119-072-000-001
	Sewer Pump Station, Gardner's Grove Road	Municipal		✓			333,600	120-020-000-000
	Sewer Pump Station, Jefferson Road East	Municipal		✓			65,600	116-021-000-000
Sewer Cont.	Sewer Pump Station, Nancy Drive	Municipal		✓		Generator	58,000	107-050-000-000
	Sewer Pump Station, Shaker Rd. near Main Street	Municipal		✓		Generator	284,900	242-031-000-000
Schools	Belmont Elementary, 26 Best Road	SAU 80			✓		5,121,200	121-117-000-000
	Belmont Middle, 38 School Street	SAU 80			✓		5,256,500	125-019-000-000
	Belmont High, 255 Seavey Road	SAU 80			✓	Generator	14,557,700	237-014-000-000
Library	Belmont Public Library 146 Main Street	Municipal			✓		269,300	122-009-000-000
Elderly & Adult Congregate Living	Heritage Terrace 9 Heritage Terrace	Private			✓		1,868,000	124-021-000-000
	Lakeview Care Center 87 Horne Road	Private			✓		551,500	110-006-000-000
	Genera Corp 246 South Road	Private			✓		283,500	243-017-000-000
	Genera Corp 240 South Road	Private			✓		575,300	243-018-000-000
Places of Religious Worship	St. Joseph Church 96 Main Street	Private			✓		1,126,600	122-045-000-000
	First Baptist Church 47 Church Street	Private			✓		972,700	122-022-000-000
Historic Landmarks	Province Road Mtg House 229 Province Road	Municipal			✓		85,200	212-064-000-000
	Belmont Mill 14 Mill Street	Municipal			✓		930,100	123-004-000-000
	Belmont Library 146 Main Street	Municipal			✓		269,300	122-009-000-000
	Gale School 60 Concord Street	Municipal			✓		454,100	126-026-001-000
	1908 Bandstand 14 Mill Street	Municipal			✓		4,600	122-007-000-000

Chapter 5
CAPABILITY ASSESSMENT

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

The Town of Belmont maintains a full complement of Town Departments, Town personnel and a comprehensive budgeting process that supports its ability to expand on and improve these existing tools. The 'Recommended Changes' column in the table below includes recommendations for improving on these capabilities, as necessary.

Integration of Mitigation Priorities into Planning and Regulatory Tools

The Town should conduct periodic review of these regulations and this Hazard Mitigation Plan. Reviewing these plans on a regular basis will ensure the integration of mitigation strategies. This review will continue to be a priority of the Belmont Emergency Management Director and will likely include yearly requests in the annual budget process. Moreover, as suggested in the onset of this document, this *Plan* is a planning tool to be used by the Town of Belmont, as well as other local, state, and federal governments, in the effort to reduce future losses from natural and/or man-made hazardous events before they occur. Under the Prioritized Mitigation Projects *Action Plan* (found in Chapter 6), all parties listed under the Responsibility/Oversight category shall also review this listing annually and consider the listed (and updated) mitigation projects within their annual budget requests.

Since the 2019 Plan update, the Town of Belmont integrated information from the mitigation plan into the Emergency Operations Plan, Capital Improvement Planning (CIP). This was accomplished by reviewing and referencing the Hazard Mitigation Plan during meetings when developing or updating the EOP and CIP.

Existing Protection Matrix Belmont, NH				
Existing Protection	**Description**	**Responsible Agent**	**Effectiveness*** ***Poor/Fair/Good/Exc.***	**Status**
Belmont Public Water System Emergency Plan	Plan identifying responsible parties and establishing appropriate procedures for responding to various water system emergencies. Pennichuck Water provides 24-hour emergency services from SCADA.	Belmont DPW	Excellent	No Changes Needed
Building Code	The Town has adopted the International Building Code (IBC) and International Residential Code (IRC).	Building Official/Code Enforcement	Good	No Changes Needed
Dam Emergency Actions Plan	Lochmere and Sargent Dams have Emergency Action Plan which include notification of residents in the inundation pathway.	Emergency Management Director	Good	No Changes Needed
Dam Maintenance Plan	NH DES inspections of dams occur on a regular bases.	NH DES	Good	No Changes Needed
Data Retention	Daily backup of Town Hall data TO THE CLOUD; surge protection at Town Hall.	Town Administrator	Good	No Changes Needed
Elevation Certificates Maintained	Elevation certificates are maintained for new and substantially built structures in the 100-year floodplain.	Building Official	Good	No Changes Needed
Emergency Alerting	NH Alerts/Code Red, Genasys Protect School Notification System, and Social Media for Police, Fire and the Board of Selectmen.	Fire & Police	Good	Follow up on the State Genesis Project
Emergency Management & Response	The Town owns and maintains an enclosed emergency management/command trailer with communications. The Fire Department maintains a utility trailer and UTV to access the more difficult areas in town.	Fire and Police Departments	Excellent	No changes needed.
Emergency Operations Plan	The Town maintains an EOP that meets the recommendations by the NH Homeland Security Emergency Management. This plan	Emergency Management Director	Good	Updated in 2022

Existing Protection Matrix Belmont, NH				
Existing Protection	**Description**	**Responsible Agent**	**Effectiveness*** ***Poor/Fair/Good/Exc.***	**Status**
	identifies the response procedures and capabilities of the Town in the event of a natural or man-made disaster.			
Emergency Power	The town has back up generators at the Fire Station, Police Station (new) and the Highway Department. Belmont High School has a generator.	Fire / Police / DPW	Good	Generator at the Mill Building for future Town Office.
Fire Protection	Mutual Aid Agreement with Lakes Region and Capital Area Complex. Have established agreements for the giving and receiving of assistance in an emergency. Site Plan and Subdivision Fire Protection Regulations. Fire Dept. maintains an extensive list of chemicals housed and managed by local businesses	Fire Department / Land Use Office	Good	No changes needed.
Floodplain Ordinance	The minimum National Flood Insurance Program (NFIP) requirements have been adopted as part of the Town's Zoning Ordinance. This regulates all new and substantially improved structures located in the 100-year floodplain, as identified on the FEMA Flood Maps.	Land Use Office / Building Official	Fair	Floodplain maps for Town/Belknap Co. are inadequate (limited accuracy and not in electronic format).
Lakes Region Public Health Network	The Lakes Region Public Health Network works to assure coordinated and comprehensive delivery of essential public health services and serves as a local liaison with state agencies involved in the public's health and safety.	Lakes Region Partnership for Public Health	Good	No Changes Needed

Existing Protection Matrix Belmont, NH				
Existing Protection	**Description**	**Responsible Agent**	**Effectiveness*** ***Poor/Fair/Good/Exc.***	**Status**
Master Plan	The Master Plan serves as the guiding document for future development in Belmont. It also serves as the guiding document to assist the Planning Board as it updates the Town Zoning Ordinance, Subdivision and Site Plan Review Regulations and other regulations that fall under its jurisdiction.	Planning Board	Fair	In Process of Updating
Mutual Aid	The Fire, Police and Highway Departments all participate in Mutual Aid.	Fire / Police / DPW	Good	No Changes Needed
School Emergency Plans	The Shaker Regional School District maintains emergency Plans for all the schools and is tested 10 times a year. The Town of Belmont participates in their updates and emergency training.	SAU 80 / Police / Fire	Excellent	No Changes Needed
Site Plan Review Regulations	Minimum development standards within the aquifer. Implemented and enforced by Planning Board, Land Use Department, and Code Enforcement Officer.	Planning Board / Land Use /Code Enforcement	Good	No Changes Needed
Tree Maintenance Program	Conducted as needed by DPW and power companies to limit damage due to downed trees, limbs, and wires.	DPW	Good	No Changes Needed
Tri-Town Aquifer BMPs	Best Management Practices for development in the vicinity of the aquifer. Implemented and enforced by Planning Board, Land Use Department, and Code Enforcement Officer.	Planning Board / Land Use Dept. / Code Enforcement	Good	No Changes Needed

Existing Protection Matrix Belmont, NH				
Existing Protection	**Description**	**Responsible Agent**	**Effectiveness*** ***Poor/Fair/Good/Exc.***	**Status**
Wetland Ordinance	Establishes minimum setbacks for development near wetlands. Implemented and enforced by Planning Board, Land Use Department, and Code Enforcement Officer.	Planning Board / Land Use Dept. / Code Enforcement	Good	No Changes Needed
Zoning Ordinance	Includes an aquifer protection ordinance for the protection of drinking water. Implemented and enforced by Planning Board, Land Use Department, and Code Enforcement Officer.	Planning Board / Land Use Dept. / Code Enforcement	Good	No Changes Needed

*****Effectiveness terms are defined as:

Poor	*The policy, plan or mutual aid system does* not work as well as it should *and* often *falls short of meeting its goals.*
Fair	*The policy, plan or mutual aid system does* not work as well as it should *and* sometimes *falls short of meeting its goals.*
Good	*The policy, plan or mutual aid system* works well *and* is achieving its goals.
Excellent	*The policy, plan or mutual aid system* works very well *and* often exceeds its goals.

Chapter 6
MITIGATION PROJECTS

Hazard Identification

The Committee utilized the *Hazard Identification Worksheet*, as shown in Appendix B, to identify potential hazards, the historical occurrence, locations, assets at risk and the probability of each hazard. The results of this process can be found in Chapters 2 and 3.

Problem Statements

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

Goals Identified

During the 2024 update, the Committee reviewed the 2019 Belmont Hazard Mitigation Plan goals and made no revisions. The Goals were not modified for any substantial content, as there has not been any substantial change in development.

Project Identification

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

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

Hazard	Problem Statement	**Mitigation Project** *(Objectives: Prevention /Property Protection/ Public Educ./ Nat.Resource /Emerg.Serv / Structural)*	Social	Technical	Administrative	Political	Legal	Economic	Environments
Extreme Temps	There are functional needs populations without air-conditioning or heat that may need assistance during prolonged periods of extreme heat or cold.	Ensure that adequate shelters are in place and maintained.	+	+	+	+	+	+	+

Completed Projects since 2019
The Town of Belmont completed the latest version of this plan in 2019. Since that time, the town has completed several projects and that list can be found in Appendix B. These completed projects are not included in the 2024 edition of the Hazard Mitigation plan. In addition, the Committee added new projects to the Mitigation Action Plan, all of which are included in the Action Plan. The 'Mitigation Project Status Crosswalk' Table in Appendix B describes what projects were completed, deleted, reworded or continued.

2024 Prioritized Mitigation Projects:
In 2024, each committee member reviewed the updated list of Mitigation Projects. After careful evaluation, the committee ranked the projects by voting for half of the projects. The project that received the most votes was ranked as the highest priority and the project receiving the least amount of votes received the lowest priority. (See Prioritized Mitigation Projects in Appendix B.) The committee was able to determine a basic benefit/cost by using the STAPLEE method. For each project identified, the committee considered the STAPLEE Criteria (Social, Technical, Administrative, Political, Legal, Economic and Environmental) to guide their decision in prioritizing the projects. The prioritized projects are identified in the Mitigation Action Plan.

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

Incorporating Mitigation Into Local Planning
In order for the requirements of this plan to be effective, it is essential that the Town of Belmont incorporates the strategies and actions into its planning process. Educating employees working within the Town Agencies along with members of the various Boards on the provisions of the plan is critical for ensuring that disaster preparedness and risk mitigation become part of their planning process when holding discussions, making decisions, and developing plans and Standard Operating Procedures (SOPs). As noted above, information outreach is a high priority action item that will impact more than just Town employees and Board members. Since interested citizens attend various Town meetings where decisions are made, having a community base that understands the importance of disaster mitigation planning will also assist in ensuring that future plans and actions integrate the requirements found in this plan.

The Board of Selectmen will instruct the Town Agency Heads to review their SOPs and ensure that where appropriate, the requirements of this plan are integrated into those procedures. They will also coordinate with both the Land Use Office and the Planning Board to ensure that risk mitigation planning continues to be a

part of their recommendation/decision process in order to fulfill the goals and objectives outlined in this plan.

Since the last update of this Plan in 2019, the Town incorporated Hazard Mitigation Planning into the Emergency Operation Plan update in 2022.

Mitigation Action Plan

The mitigation projects are compiled in the Mitigation Action Plan found on the following page, which identifies Responsibility, Funding, Time frame, Hazards Addressed and the Priority for each mitigation project.

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Mitigation Action Plan - Belmont, NH						
Mitigation Action	**Responsibility/ Oversight**	**Funding/ Support**	**Timeframe***	**Hazards Addressed**	**Estimated Cost**	**Priority**
1. Cut back trees on town road on a regular basis so that roads will be less likely to be blocked and power lines taken down by falling limbs.	DPW	Town Budget	Short Term	Hurricane, Sever Wind, Winter Weather	$15,000/year	High
2. Ensure that adequate shelters are in place and maintained.	EMD / School Administration	Town Budget	Short Term	Extreme Temps, Flooding, Hurricane, Severe Wind, Winter Weather	Generator Maintenance Cost.	High
3. Ensure that the proper equipment and training is available for best management practices for a mass casualty accident.	Fire/Police	Town Budget/Grants	Short Term	Human Caused	$100,000	High
4. Replace existing Police repeater on Liberty Hill.	Police	Town Budget	Short Term	Hurricane, Severe Wind, Winter Weather	$26,000	High
5. Replace portable radios for police and fire to meet industry standards.	Police/Fire	Town Budget/ Grants	Medium Term	Human Caused, Hurricane, Severe Wind, Solar Storms, Winter Weather	$5-6,000 per radio	High
6. Relocate Town Hall operations based on feasibility study.	Board of Selectmen	Town Budget/ Bond	Medium Term	All Hazards	2.8 million	High
7. Investigate grant opportunities to harden the communications infrastructure.	Fire/Police	Town Budget/ Grant	Long Term	Human Caused, Hurricane, Severe Wind, Solar Storms, Winter Weather	TBD	Medium

Mitigation Action Plan - Belmont, NH						
Mitigation Action	**Responsibility/ Oversight**	**Funding/ Support**	**Timeframe***	**Hazards Addressed**	**Estimated Cost**	**Priority**
8. Ensure sufficient personnel, equipment and materials are available to meet future demands placed on municipal services resulting from increased growth. It is essential to maintain protection for existing development while planning for new development.	Board of Selectmen	Town Budget	Short Term	All Hazards	$100,000 - $200,000 / year	Medium
9. Educate employees on emergency procedures, including panic button procedures.	Fire/Police	Town Budget	Short Term	Human Caused	Staff Time	Medium
10. Establish additional mapping data in GIS format for the town's public water and sewer lines.	DPW / Land Use Office	Town Budget/ Grants	Long Term	Drought, Flooding	$50,000+	Medium
11. Develop public outreach to encourage residents to sign up for NH Alerts.	EMD	Town Budget	Short Term	All Hazards	Staff Time	Medium
12. Continue Warm Zone training for emergency responders.	Fire/Police	Town Budget/ Grants	Short Term	Human Caused	Staff Time	Medium
13. Continue training and exercising with the schools and attending their emergency team meetings.	Fire/Police	Town Budget/ Grants/HSEM	Short Term	Human Caused	Staff Time	Medium
14. Explore implementing cyber security software and coordinate with existing IT consultant.	Town Administrator/ BOS	Town Budget/ Grants	Medium Term	Cyber Incident	$10,000 – 30,000	Medium
15. Continue to work with the Lakes Region Partnership for Public Health, including education about immunization clinics, air pollution, opiate epidemic, Hepatitis A and Lyme Disease and other Zoonotic diseases; and coordinate on providing immunization clinics.	EMD	Town Budget	Short Term	Infectious Disease	Staff Time	Medium

Mitigation Action Plan - Belmont, NH						
Mitigation Action	**Responsibility/ Oversight**	**Funding/ Support**	**Timeframe***	**Hazards Addressed**	**Estimated Cost**	**Priority**
16. Install lighting grounding/protection systems at the Belmont Mill.	Buildings & Grounds	Town Budget	Long Term	Lightning	$40,000+	Medium
17. Carry out a culvert maintenance program, ensuring that debris is cleared. This reduces the number of washouts along roads.	DPW	Town Budget	Short Term	Flooding	Staff Time	Low
18. Upgrade the culvert on Church Street, which has deteriorated due to a change in amount and speed of water flow of the river.	DPW	Town Budget/ Grants	Long Term	Flooding	TBD	Low
19. Incorporate information from the Hazard Mitigation Plan into the next update of the Master Plan.	Land Use Office	Town Budget	Medium Term	All Hazards	$100,000 - $150,000	Low
20. Educate the public about severe weather impacts, including but not limited to dam failure, drought, earthquake, extreme temperatures, flood, hurricane, infectious disease, landslide, lightning, severe wind, wildfire and winter weather. Distribute hazard information on the town website, social media, email list serve monthly newsletter, town clerk monitor at the town hall, electronic road signage.	EMD/Police/Fire /DPW	Town Budget	Short Term	All Hazards	$1,000	Low
21. Work with State Floodplain Coordinator and other partners on FEMA flood mapping projects underway to update the Belknap County Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRMs).	Land Use	Town Budget	Medium Term	Flooding	Staff Time	Low

*Timeframe: Short Term=1 year or less Medium Term=2-3 years Long Term=4-5 years

Chapter 7
ADOPTION, IMPLEMENTATION, MONITORING

Adoption

The Belmont Selectmen by majority vote officially adopted the *Belmont Hazard Mitigation Plan 2024 Update* on _____. This plan identified Mitigation Actions to be implemented as outlined in Chapter 6.

Implementation

For each mitigation project the Committee identified who, when and how they would be implemented. Please refer to the "Action Plan" in Chapter 6 for a description of the timeframe and persons or departments responsible for implementation of the Prioritized Projects.

It will be the responsibility of the Emergency Management Director and associated Departments to ensure implementation of these Prioritized Projects.

Plan Updates

The *Belmont Hazard Mitigation Plan 2024 Update* must be reviewed, evaluated and updated at least once every five years. The Emergency Management Director is responsible for initiating this review and needs to consult with members of the Belmont Emergency Management Committee, in order to track progress and update the Prioritized List in Chapter 6.

The Emergency Management Director will be responsible for updating the plan every five years and incorporating the results of the town's plan monitoring and evaluation procedures. The next anticipated update of the plan is scheduled to begin 2029. A first meeting, initiated by the EMD, is anticipated in 2029. The plan update may begin earlier following a significant natural hazard event within the town and region, such as a federally declared disaster.

The public meetings of the planning team shall be publicized through legal notices in local newspapers, posted fliers, and on the town and regional planning commission websites. Written and email comments shall be directed to the EMD. The updated plan will incorporate input from the public, other municipalities and government agencies. The Board of Selectmen is responsible for approving the plan submission to FEMA and for adoption of the plan.

The update will likely follow a similar planning process and outline to the current planning process, making deviations when needed, and will be expanded to better address existing goals.

Plan Evaluation

The Town's Emergency Management Director will call meetings of all responsible town parties to review plan progress annually on the anniversary of plan adoption and as needed, based on occurrence of hazard events, and report outcomes to the Select Board. The public will be notified of these meetings in advance through a posting of the agenda at Town Hall. Responsible parties identified for specific mitigation actions will be asked to submit their reports in advance of the meeting. Meetings will entail the following actions:

- Review previous hazard events to discuss and evaluate major issues, effectiveness of current mitigation, and possible mitigation for future events.
- Assess how the mitigation strategies of the plan can be integrated with other Town plans and operational procedures, including the Zoning Bylaw and Emergency Management Plan.
- Review and evaluate progress toward implementation of the current mitigation plan based on reports from responsible parties.
- Amend current plan to improve mitigation practices.
- Meetings will involve evaluation and assessment of the plan, regarding its effectiveness at achieving the plan's goals, stated purpose, and priorities. The following questions will serve as the criteria that is used to evaluate and update the plan:

Plan Mission and Goal

- Is the Plan's stated goal and mission still accurate and up to date, reflecting any changes to local hazard mitigation activities?
- Are there any changes or improvements that can be made to the goal and mission?

Hazard Identification and Risk Assessment

- Have there been any new occurrences of hazard events since the plan was last reviewed? If so, these hazards should be incorporated into the Hazard Identification and Risk Assessment.
- Have any new occurrences of hazards varied from previous occurrences in terms of their extent or impact? If so, the stated impact, extent, probability of future occurrence, or overall assessment of risk and vulnerability should be edited to reflect these changes.
- Is there any new data available from local, state, or Federal sources about the impact of previous hazard events, or any new data for the probability of future occurrences? If so, this information should be incorporated into the plan?

Existing Mitigation Strategies

- Are the current strategies effectively mitigating the effect of any recent hazard events?
- Has there been any damage to property since the plan was last reviewed?
- How could the existing mitigation strategies be improved upon to reduce the impact from recent occurrences of hazards?

Proposed Mitigation Strategies

- What progress has been accomplished for each of the previously identified proposed mitigation strategies?
- How have any completed mitigation strategies reduced the Town's vulnerability and impact from hazards that have occurred since the strategy was completed? If not and if they have been tested, what changes need to make them more effective?
- Should the criteria for prioritizing the proposed strategies be altered in any way?

- Should the priority given to individual mitigation strategies be changed, based on any recent changes to financial and staffing resources, or recent hazard events?

Review of the Plan and Integration with Other Planning Documents

- Is the current process for reviewing the Hazard Mitigation Plan effective? How could it be improved?
- Are there any Town plans in the process of being updated that should have the content of this Hazard Mitigation Plan incorporated into them or integrated with other Town planning tools and operational procedures, including the zoning bylaw, the Comprehensive Emergency Management Plan, and the Capital Improvement Plan?

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

The EMD will be responsible for identifying and using unique and meaningful ways to engage the public in the Tasks listed above. This can include but are not limited to: periodic presentations on the plan's progress to elected officials, schools or other community groups; annual questionnaires or surveys; public meetings; postings on social media; and interactive websites

The Hazard Mitigation Committee shall oversee the development, update, and implementation of the Town's Hazard Mitigation Plan (HMP). The HMP must be maintained by the Committee to ensure the Town remains eligible for federal mitigation grant funding opportunities. The Town intends to update its HMP with current information to ensure conformity with the latest standards and to receive new approvals. The Plan update and development will be a public processes where multiple perspectives are valued and encouraged. The following positions should be considered for participation on the Committee.

Municipal Positions:
Emergency Management Director
Town Administrator
Town Planner
Fire Department
Police Department
Highway Department
Land Use Office
Planning Board
Recreation Department
Conservation Commission
School

Community Stakeholder Positions:
Safety and Security.
Food, Water, Shelter
Health and Medical.
Energy
Communication
Transportation
Hazardous Material
Business Community
Populations at Risk
Citizen Groups

State/Quasi-Governmental Positions:
NH Homeland Security and Emergency Management
NH Office of Planning & Development
Regional Planning Commission
Public Health Network

CERTIFICATION OF ADOPTION

Town of Belmont, NH
Board of Selectmen
Date: _____

A RESOLUTION ADOPTING THE TOWN OF Belmont, NH HAZARD MITIGATION PLAN UPDATE 2024

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

WHEREAS, the Town of Belmont, NH, has developed and received Approved Pending Adoption from the NH Homeland Security and Emergency Management for its Hazard Mitigation Plan Update 2024 under the requirements of 44 CFR 201.6; and

WHEREAS, public and committee meetings were held between September 2024 and October 2024 regarding the development and review of the Hazard Mitigation Plan Update 2024; and

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

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

WHEREAS, adoption of this Plan will make the Town of Belmont, NH eligible for funding to alleviate the impacts of future hazards; now therefore be it RESOLVED by the Board of Selectmen: The Plan is hereby adopted as an official plan of the Town of Belmont, NH

1. The respective official identified in the mitigation strategy of the Plan are hereby directed to pursue implementation of the recommended actions assigned to them;
2. An annual report on the progress of the implementation elements of the Plan shall be presented to the Board of Selectmen by April 1st of each year.

Adopted this day: _____

_____ Chair, Board of Selectmen

_____ Board of Selectmen

_____ Board of Selectmen

_____ Board of Selectmen

_____ Board of Selectmen

_____ Notary Public

ACRONYMNS

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

BIBLIOGRAPHY

2018 NH State Hazard Mitigation Plan
https://prd.blogs.nh.gov/dos/hsem/wp-content/uploads/2015/11/State-of-New-Hampshire-Multi-Hazard-Mitigation-Plan-Update-2018_FINAL.pdf

FEMA Flood Maps
https://msc.fema.gov/portal/advanceSearch

Federal Emergency Management Agency (FEMA)
http://www.fema.gov

Belmont, NH Hazard Mitigation Plan 2019

National Flood Insurance Program (NFIP)
http://www.fema.gov/national-flood-insurance-program

NH Homeland Security and Emergency Management (HSEM)
http://www.nh.gov/safety

NOAA National Weather Service
http://www.websites.noaa.gov

NOAA National Climactic Data Center
http://lwf.ncdc.noaa.gov/oa/ncdc.html

APPENDICES

Appendix A Hazard Mitigation Resources
Appendix B Documentation of Planning Process
Appendix C Approval Letter from FEMA

APPENDIX A

Hazard Mitigation Resources

Type	Resource	Link
Hazard Assessment	FEMA Disaster Declarations	https://www.fema.gov/disasters
	National Oceanic and Atmospheric Administration Storm Events Database	https://www.ncdc.noaa.gov/stormevents/
	United States Geological Survey (USGS) Earthquake Archives	http://earthquake.usgs.gov/earthquakes/search
	National Geophysical Data Center / World Data Service (NGDC/WDS): Significant Earthquake Database	https://www.ngdc.noaa.gov/nndc/struts/form?t=101650&s=1&d=1
NESEC	The Northeast States Emergency Consortium (NESEC) provides free assistance for local, state, regional and organizations	http://nesec.org/mapyourrisk/
Funding Possibilities	Hazard Mitigation Grant Program (HMGP)	http://www.fema.gov/hazard-mitigation-grant-program
	Flood Mitigation Assistance Grant Program (FMA)	https://www.fema.gov/flood-mitigation-assistance-grant-program
	Pre-Disaster Mitigation Grant Program (PDM)	http://www.fema.gov/pre-disaster-mitigation-grant-program
	HMA grant programs – eligible activities by grant program	https://www.fema.gov/hazard-mitigation-assistance-mitigation-activity-chart
	Flood Mitigation Assistance (FMA) Grant Program	https://www.fema.gov/flood-mitigation-assistance-grant-program
	U.S. Economic Development Administration: Road and water infrastructure upgrades and potential projects.	http://www.eda.gov/funding-opportunities/
	FEMA; USGS National Earthquake Hazards Reduction: Technical program assistance under grants to states and local jurisdictions	http://www.fema.gov/national-earthquake-hazards-reduction-program
Technical Assistance	State Hazard Mitigation Officers	http://www.fema.gov/state-hazard-mitigation-officers
	USDA, Natural Resources Conservation Service (NRCS) Conservation Technical Assistance	http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/technical/cta
Publications	FEMA Region I Webliography	http://www.fema.gov/about-region-i/about-region-i/hazard-mitigation-planning-webliography
	Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards	http://www.fema.gov/media-library/assets/documents/30627?id=6938
	FEMA B-797, Hazard Mitigation Field Book – Roadways	http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=4271
	Flood Hazard Mitigation Handbook for Public Facilities	http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=3724
	FEMA 386-6, Mitigation Planning How To #6: Integrating Historic Property & Cultural Resource into Hazard Mitigation Planning	http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1892
	FEMA P-787 Catalog of FEMA Building Science Branch: Publications and Training Courses (2015)	http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=3184
	Integrating Hazard Mitigation Into Local Planning: Case Studies and Tools for Community Officials (2013)	http://www.fema.gov/media-library/assets/documents/31372
	Local Mitigation Planning Handbook (2013)	https://www.fema.gov/media-library/assets/documents/31598

APPENDIX B

Documentation of Planning Process

Including:

Agendas
Attendance Sheets
Public Notices
Problem Statements
Mitigation Project Identification Matrix
Prioritized Mitigation Projects

Belmont, NH
Hazard Mitigation Plan

September 10, 2024
Committee/Public Meeting
AGENDA

1. Introductions

2. Overview of Hazard Mitigation

3. Review/Update Goals

4. Review/Update Hazard History

5. Review/Update Risk Matrix

6. Review/Update Problem Statements

7. Review for next meeting:
   Update Critical Facilities (Chap. 4)
   Update Capability Assessment (Chap.5)
   Distribute Sample Mitigation Projects

Name	Title/Affiliation
Alicia Jipson	Belmont Town Administrator
Becky Beaulac	Belmont Fire Department
John Beland	Lakes Region Public Health Network
Danielle St. Onge	Belmont Parks & Recreation Director
Deborah Black	Belmont Fire Chief / EMD
Donald Pickowicz	Belmont Asst. Fire Chief
Glenn Caron	Belmont Building Official
Jane Hubbard	Hubbard Consulting LLC
Karen Santoro	Belmont Town Planner
Patrick Golden	Belmont Buildings & Grounds
Stephen Forster	Belmont Finance Director
Steve Akerstrom	Belmont Police Captain

Belmont, NH
Hazard Mitigation Plan

September 17, 2024

Committee/Public Meeting
AGENDA

1. Update Chapter 4 and 5

2. Update completed mitigation projects

3. Sample Mitigation Projects

4. Review for next meeting:

   Identify NEW Mitigation Projects

Name	Title/Affiliation
Alicia Jipson	Belmont Town Administrator
Becky Beaulac	Belmont Fire Department
Brian Jackes	Belmont Public Works Asst. Director
Craig Clairmont	Belmont DPW Director
Danielle St. Onge	Belmont Parks & Recreation Director
Deborah Black	Belmont Fire Chief / EMD
Donald Pickowicz	Belmont Asst. Fire Chief
Glenn Caron	Belmont Building Official
Jane Hubbard	Hubbard Consulting LLC
Karen Santoro	Belmont Town Planner
Patrick Golden	Belmont Buildings & Grounds
Stephen Forster	Belmont Finance Director

Belmont, NH
Hazard Mitigation Plan

May 22, 2024

Committee/Public Meeting
AGENDA

1. Identify NEW mitigation projects

2. Review for next meeting:

   Prioritize Mitigation Projects
   Complete the Mitigation Action Plan

Name	Title/Affiliation
Alicia Jipson	Belmont Town Administrator
Brian Jackes	Belmont Public Works Asst. Director
Danielle St. Onge	Belmont Parks & Recreation Director
Deborah Black	Belmont Fire Chief / EMD
Donald Pickowicz	Belmont Asst. Fire Chief
Glenn Caron	Belmont Building Official
Jane Hubbard	Hubbard Consulting LLC
Karen Santoro	Belmont Town Planner
Patrick Golden	Belmont Buildings & Grounds
Steve Akerstrom	Belmont Police Captain

Belmont, NH
Hazard Mitigation Plan

October 29, 2024

Committee/Public Meeting
AGENDA

1. Review and Confirm Prioritized Projects

2. Complete the Mitigation Action Plan

3. Review Draft of Plan and prepare for submittal to HSEM

4. Next Steps:

   Submit to HSEM

Name	Title/Affiliation
Alicia Jipson	Belmont Town Administrator
Becky Beaulac	Belmont Fire Department
Brian Jackes	Belmont Public Works Asst. Director
Craig Clairmont	Belmont DPW Director
Danielle St. Onge	Belmont Parks & Recreation Director
Deborah Black	Belmont Fire Chief / EMD
Donald Pickowicz	Belmont Asst. Fire Chief
Glenn Caron	Belmont Building Official
Jane Hubbard	Hubbard Consulting LLC
Karen Santoro	Belmont Town Planner
Ruth Mooney	Belmont Board of Selectmen, Chair
Michael Tursi	Superintendent of Schools
Steve Akerstrom	Belmont Police Captain

The Town placed public notices (shown below) were posted at the Town Office and Town Website. These notices reach local residents, business, and organizations. This public notice was used as the opportunity for community leaders, stakeholders and members of the public to be involved.

PUBLIC NOTICE

BELMONT HAZARD MITIGATION PLAN UPDATE

September 10, 2024 at 10:00am

At Belmont Mill, 14 Mill Street, Belmont, NH

The Town of Belmont, with the Hazard Mitigation Planning Committee, is currently working to update Belmont's *Hazard Mitigation Plan.* The Plan identifies potential natural, and human caused hazards throughout the town and various projects and/or strategies to mitigate their effects. All residents, neighboring communities, businesses, and interested parties are formally invited to participate in the update process and publicly comment on their concerns regarding the *Plan*. In addition, the Town has a 'Weather Incident & Hazard Survey' that provides an opportunity for any Town of Belmont stakeholders to share information and comments on hazards in town. Interested parties can take the survey online at: https://www.surveymonkey.com/r/PSCC9KN

For more information please visit the Town Hall or contact Jane Hubbard, Hubbard Consulting LLC at Janehubbardconsulting@gmail.com or at 603-848-8801.

COMMUNITY INVOLVEMENT NOTES FOR THE TOWN:

A successful planning effort includes active participation and buy-in from community leaders, stakeholders and the public. Examples of sectors with mitigation capabilities are those agencies and stakeholders responsible for:

- Emergency management.
- Economic development.
- Land use and development.
- Housing.
- Health and social services.
- Infrastructure (including transportation and other community lifelines).
- Natural and cultural resources.

FEMA's National Response Framework, 4th Edition identifies critical community lifelines, which are the most fundamental services in the community that, when stabilized, enable all other aspects of society to function. Community lifelines include the following:

- Safety and Security.
- Food, Water, Shelter.
- Health and Medical.
- Energy.
- Communications.
- Transportation.
- Hazardous Material.

In addition, the following email invitation was sent to individuals listed below.

The Town of Belmont, NH is in the process of updating its Hazard Mitigation Plan. This Plan is a tool to be used by the Town, as well as other local, state and federal governments, to reduce the effects of natural and man-made hazards. Our communities and organizations share common hazards which do not respect governmental boundaries. Therefore, we are personally inviting you to participate in the planning process to update the Town's Hazard Mitigation Plan. In addition, the Town has a 'Weather Incident & Hazard Survey' that provides an opportunity for any Town of Belmont stakeholders to share information and comments on hazards in town. Interested parties can take the survey online at: https://www.surveymonkey.com/r/HDDCGZM

We encourage you to attend the next Committee meeting on September 10, 2024 at 10:00 am the Campton-Thornton Fire Department. If you are unable to attend this meeting you may access a copy of the planning documents and/or comment on hazard mitigation issues by emailing Jane Hubbard with Hubbard Consulting LLC at janehubbardconsulting@gmail.com or at 603-848-8801

The above email was sent to the following individuals:

Canterbury Fire Chief/EMD, Michael Gamache
Gilford Fire Chief/EMD, Stephen Carrier
Gilmanton Fire Chief/EMD, Joe Hempel
Laconia Fire Chief/EMD, Timothy Joubert
Northfield Police Chief/EMD, John Raffaelly
Sanbornton Fire Chief/EMD, Paul Dexter
Tilton Police Chief/EMD, Abraham Gilman
Lakes Region Planning Commission, Dave Jeffers
Lakes Region Chamber of Commerce, K Gifford
Winnipesaukee Regional Public Health Network, John Beland
NH HSEM Liaisons, Paul Hatch and Kevin Partington
NH HSEM Hazard Mitigation Planner, Lynne Doyle
Office of Planning & Development, Sarah Thunberg, Principal Planner

Hazard	Problem Statements	Vulnerable Assets
Dam Failure	Sargent Lake dam, classified as a High hazard dam, is located near the Gilmanton town line. The lake feeds Badger Brook which flows into Belmont Village. Failure of the Lochmere or Lakeport (Laconia) dams could lead to flooding of properties along Silver Lake that are in the Special Flood Hazard Area.	Road infrastructure, structures, loss of life.
Drought	Private wells dry up during periods of drought. An extended drought increases the probability of fires and may hinder fire suppression to those areas relying on dry hydrants in local waterbodies.	All structures in the wildland urban interface. Large Conservation Areas: Sanborn Farm (150ac), Mile Hill Farm (90ac).
Earthquake	While all structures in Belmont are susceptible to damage by an earthquake, those that are taller, older, and constructed of masonry are most susceptible to damage.	Unreinforced masonry buildings, including critical facilities.
Extreme Temperatures	There are functional needs populations without air-conditioning or heat that may need assistance during prolonged periods of extreme heat or cold.	At-risk populations (elderly, medical), recreational populations.
Flood	Heavy rains and heavy snow melt cause damage to structures, roads, culverts and ditches, especially culverts that are older and undersized.	Roads, bridges, dams. Route 140 area and around Jamestown Road, Gardners Grove Road, and South Road.
Human Caused Hazards	There are several areas in town susceptible to terrorism (Belmont Mall, Town Office, utilities, public water supply). Increased volume of traffic from large scale events in neighboring City of Laconia (Bike week) and Loudon (NH International Speedway) have the potential for transportation accidents. Blasting at Nutter Sand and gravel pit have 2 locations on Stone Rd and Pikes140…causes phone calls from residents.	Municipal buildings, general population. IT infrastructure. Large population special events have a moderate potential for mass casualty incidents.
Hurricane/ Tropical Storm	Power outages from downed utilities, minor structural damage and flooding can affect the town as a result of a hurricane.	At-Risk populations (medical) are at risk during power outages. Business and Property Impact would be high. Communication could be cut off town-wide if the Route 107 area were hard hit.
Infectious Disease	Continue to work with the Lakes Region Partnership for Public Health, including education about immunization clinics, air pollution, opiate epidemic, Hepatitis A and Lime Disease.	All community members. Emergency response.
Landslides	There are several areas in town susceptible to landslide activity.	Murray Park, Badger Brook Estates and Route 140, as well as just east of Silver Lake Park Campground. Across from Belknap Mall at Convenient Medical has embankment that is coming down again (private)
Lightning	Structural and forest fire can result from frequent lightning strikes. Critical facilities are at risk to lightning strikes.	Critical facilities and utilities. Possibility of wildfires.

Severe Wind ***(Tornado/ Downburst)***	Wind damage can result in downed utilities causing power outages. Severe winds can cause structural damage to critical facilities and other structures.	High population areas Communication could be cut off town-wide if the Route 107 area were hard hit.
Solar Storms	Solar storms can affect space-borne and ground-based technological systems, including communications and navigation.	Communications and IT infrastructure.
Wild/Forest Fire	In the eastern section of town firefighters have limited access to potential wildfire areas but fires in this section would have limited impact on structures. There are some water resources, including dry hydrants, in this area.	Wildland-Urban Interface. Conservation lands. Rt.140
Winter Weather	All structures a susceptible to collapse due to heavy snow loads. Resulting power outages result in increased emergency response calls and could require opening the shelter. Creates difficult emergency access to remote residential homes.	Access for emergency responders to remote residential homes. Road and communication infrastructure. Public and private residences. Major roads, Populations to Protect, Emergency Response Facilities, Essential Services, and flat-roofed buildings. communication could be cut off town-wide if the Route 107 area were hard hit.

2019 MITIGATION ACTIONS	Completed	None or Some Done - KEEP	Delete (Reason why)
1. Incorporate information from the Hazard Mitigation Plan into the next update of the Master Plan.		x	
2. Establish additional mapping data in GIS format for the town's public water and sewer lines.		Some done. Sewer just completed.	
3. Develop plans for additional water supply sites.	New well being installed.		
4. Update Emergency Operations Plan (EOP) to include a warming and cooling shelter plan and a populations at risk plan.	Complete		
5. Cut back trees on a regular basis so that roads will be less likely to be blocked and power lines taken down by falling limbs.		Keep	
6. Work with State Floodplain Coordinator and other partners on FEMA flood mapping projects underway to update the Belknap County Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRMs).		Keep	
7. Investigate grant opportunities to harden communications infrastructure.		PD wants to upgrade repeater.	
8. Lobby/encourage public utilities to upgrade and improve maintenance of communications infrastructure.	Fiber in process		
9. Maintain Belmont's priority status with its communications service provider to allow immediate access to communications.			Verizon give priority to emergency responders
10. Engage a discussion about obtaining a generator for Belmont Elderly Housing (Heritage)			Individual apartments with separate AC units.
11. Ensure/encourage publicly subsidized elderly housing community access to emergency utilities for critical services, including heat and air conditioning			Delete same as above
12. Develop public outreach to encourage residents to sign up for NH Alerts.		Keep	
13. Continue Warm Zone training for emergency responders.		Keep	

2019 MITIGATION ACTIONS	Completed	None or Some Done - KEEP	Delete (Reason why)
14. Apply for additional grant funding for emergency management and hazard mitigation.			Delete – too generic
15. Explore cyber security software.		Keep - ongoing	
16. Work with State of New Hampshire to develop cyber security resources.			Same as #15
17. Upgrade the culvert on Church Street, which has deteriorated due to a change in amount and speed of water flow of the river.		Keep	
18. Enforce fire ordinances to reduce the spread of fire and loss of life and property.			Delete –building and fire officials do this already
19. Carry out a culvert maintenance program, ensuring that debris is cleared. This reduces the number of washouts along roads.		Keep	
20. Develop a public information distribution plan for sharing fact sheets that inform homeowners and business owners about steps to take to reduce their risk of exposure to natural hazards and providing sources of information and community contacts.		Keep	
21. Upgrade Police Department and Fire Department generators.	Done		
22. Upgrade rescue equipment.	Done		
23. Upgrade internet access and provide sufficient backup systems to harden communications infrastructure.	Fiber is coming		
24. Investigate improved communications service provider options.			Delete- repeated project
25. Adopt stormwater management regulations that are separate from both subdivision and site plan regulations that will allow regulation of land disturbance that does not trigger either.			Not Necessary – Site plan or Subdiv Regs will trigger stormwater mgmt.

2019 MITIGATION ACTIONS	Completed	None or Some Done - KEEP	Delete (Reason why)
26. Relocate Town Hall operations based on feasibility study.		Work in progress	
27. Relocate or construct a new Police Department facility based on feasibility study.	Done		
28. Maintain and expand early warning system.			Delete – covered in the existing emergency alert system. Genasis
29. Ensure that adequate shelters are in place and maintained.		Keep	
30. Ensure that the proper equipment and training to handle a wildfire is available.			It is just maintaining what they have already
31. Ensure that the proper equipment and training is available for best management practices for a mass casualty accident.		Keep	
32. Ensure sufficient personnel, equipment and materials are available to meet future demands placed on municipal services resulting from increased growth. It is essential to maintain protection for existing development while planning for new development.		Keep	

Hazard	Problem Statements	Projects *BOLD are existing projects from last edition of plan. RED are new projects.*	Social	Technical	Administrative	Political	Legal	Economic	Environment
Dam Failure	Sargent Lake dam, classified as a High hazard dam, is located near the Gilmanton town line. The lake feeds Badger Brook which flows into Belmont Village. Failure of the Lochmere or Lakeport (Laconia) dams could lead to flooding of properties along Silver Lake that are in the Special Flood Hazard Area.	**Develop public outreach to encourage residents to sign up for NH Alerts.**	+	+	+	+	+	+	+
		Educate the public about severe weather impacts, including but not limited to dam failure, drought, earthquake, extreme temperatures, flood, hurricane, infectious disease landslide, lightning, severe wind, wildfire and winter weather. Distribute hazard information on the town website, social media, email list serve monthly newsletter, town clerk monitor at the town hall, electronic road signage.	+	+	+	+	+	+	+
	The beaver dam on Jamestown Road would take out Jamestown Road and Rt. 140. Some houses and near Rt.140 intersection could be impacted. Working with Belmont DPW to mitigate and release some of the water. Working to breach it.	This project is underway already.							
Drought	Private wells dry up during periods of drought.	In the process of drilling a new well. The water ordinance has the right to restrict water use.							
	An extended drought increases the probability of fires and may hinder fire suppression to those areas relying on dry hydrants in local waterbodies.								

Hazard	Problem Statements	Projects *BOLD are existing projects from last edition of plan. RED are new projects.*	Social	Technical	Administrative	Political	Legal	Economic	Environment
Earthquake	While all structures in Belmont are susceptible to damage by an earthquake, those that are taller, older, and constructed of masonry are most susceptible to damage.	Public education project here							
Extreme Temps	There are functional needs populations without air-conditioning or heat that may need assistance during prolonged periods of extreme heat or cold.	**REPETE: Develop public outreach to encourage residents to sign up for NH Alerts.**							
		Ensure that adequate shelters are in place and maintained.	+	+	+	+	+	+	+
Flooding	Heavy rains and heavy snow melt cause damage to structures, roads, culverts and ditches, especially culverts that are older and undersized.	**Work with State Floodplain Coordinator and other partners on FEMA flood mapping projects underway to update the Belknap County Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRMs).**	+	+	-	+	+	+	+
		Carry out a culvert maintenance program, ensuring that debris is cleared. This reduces the number of washouts along roads.	+	+	+	+	+	+	+
		Upgrade the culvert on Church Street, which has deteriorated due to a change in amount and speed of water flow of the river.						-	-
		REPETE: Develop public outreach to encourage residents to sign up for NH Alerts.							
Human Caused	Increased volume of traffic from large scale events in neighboring City of Laconia (Bike week) and Town of Loudon (NH International Speedway) have the potential for transportation (MCI) accidents.	**Ensure that the proper equipment and training is available for best management practices for a mass casualty accident.**	+	+	+	+	+	+	+

Hazard	Problem Statements	Projects *BOLD are existing projects from last edition of plan. RED are new projects.*	Social	Technical	Administrative	Political	Legal	Economic	Environment
	There are several areas in town susceptible to terrorism (Belmont Mall, Town Office, utilities, public water supply).	**Continue Warm Zone training for emergency responders.**	+	+	+	+	+	+	+
		Continue training and exe3rcisin with the schools and attending their emergency team meetings.	+	+	+	+	+	+	+
		Explore cyber security software.	+	+	+	+	+	+	+
		Educate employees on emergency procedures, including panic button procedures.	+	+	+	+	+	+	+
Hurricane/ Tropical Storm	Power outages from downed utilities, minor structural damage and flooding can affect the town as a result of a hurricane.	**Cut back trees on a regular basis so that roads will be less likely to be blocked and power lines taken down by falling limbs.**	+	+	+	+	+	-	+
		Replace existing LE repeater on Liberty Hill.	+	+	+	+	+	+	+
		REPETE: Ensure that adequate shelters are in place and maintained.							
Infectious Disease	Public health emergencies have and will continue to occur and impact the Town, region and State.	**Continue to work with the Lakes Region Partnership for Public Health, including education about immunization clinics, air pollution, opiate epidemic, Hepatitis A and Lime Disease and other Zoonotic diseases.**	+	+	+	+	+	+	+
Landslide	There are several areas in town susceptible to landslide activity.	N/A *Daniel Webster Hwy health center (convenient MD) has a steep slope. IT was sliding every week but has since been mitigated with rip rap. Naughty Way subdivision with steep slopes but regs cover it.*							
Lightning	Structural and forest fire can result from frequent lightning strikes.	**REPETE: Ensure that adequate shelters are in place and maintained.**							

Hazard	Problem Statements	Projects *BOLD are existing projects from last edition of plan. RED are new projects.*	Social	Technical	Administrative	Political	Legal	Economic	Environment
	Critical facilities are at risk to lightning strikes.	**Belmont Mill lighting ground installations.**	+	+	+	+	+	+	+
Severe Wind (*Downburst)*	Wind damage can result in downed utilities causing power outages. Severe winds can cause structural damage to critical facilities and other structures.	**REPETE: Cut back trees on a regular basis so that roads will be less likely to be blocked and power lines taken down by falling limbs.** **See police repeater project**							
Solar Storms	Solar storms can affect space-borne and ground-based technological systems, including communications and navigation.	**Investigate grant opportunities to harden communications infrastructure.**	+	+	+	+	+	+	+
		Replace portables for police and fire.	+	+	+	+	+	-	+
Wild/Forest Fire	In the eastern section of town firefighters have limited access to potential wildfire areas but fires in this section would have limited impact on structures. There are some water resources, including dry hydrants, in this area.	**REPETE: Ensure that adequate shelters are in place and maintained.**							
Winter Weather	All structures a susceptible to collapse due to heavy snow loads. Resulting power outages result in increased emergency response calls and could require opening the shelter. Creates difficult emergency access to remote residential homes. DEAD END ROADS AT SOME TRAILER PARKS, LIKE ON LAKE VIEW	**REPETE: Cut back trees on a regular basis so that roads will be less likely to be blocked and power lines taken down by falling limbs.**							
		REPETE: Ensure that adequate shelters are in place and maintained.							

Hazard	Problem Statements	Projects *BOLD are existing projects from last edition of plan. RED are new projects.*	Social	Technical	Administrative	Political	Legal	Economic	Environment
MISC.		**Incorporate information from the Hazard Mitigation Plan into the next update of the Master Plan.**	+	+	+	+	+	+	+
		Establish additional mapping data in GIS format for the town's public water and sewer lines.	+	+	+	+	+	+	+
		Relocate Town Hall operations based on feasibility study.	+	+	+	+	+	+	+
		Ensure sufficient personnel, equipment and materials are available to meet future demands placed on municipal services resulting from increased growth. It is essential to maintain protection for existing development while planning for new development.	+	+	+	+	+	+	+

For purposes of prioritizing the mitigation projects listed in the table below, each committee member should **vote for HALF (10) of the projects by placing a check mark in the "# of votes" column.** ALL OF THE PROJECTS WILL BE PRIORITIZED BASED UPON THE TOTAL NUMBER OF VOTES RECEIVED FOR EACH PROJECT.

PRIORITZED MITIGATION PROJECTS	***VOTES***
1. Develop public outreach to encourage residents to sign up for NH Alerts.	3
2. Educate the public about severe weather impacts, including but not limited to dam failure, drought, earthquake, extreme temperatures, flood, hurricane, infectious disease, landslide, lightning, severe wind, wildfire and winter weather. Distribute hazard information on the town website, social media, email list serve monthly newsletter, town clerk monitor at the town hall, electronic road signage.	1
3. Ensure that adequate shelters are in place and maintained.	6
4. Work with State Floodplain Coordinator and other partners on FEMA flood mapping projects underway to update the Belknap County Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRMs).	1
5. Carry out a culvert maintenance program, ensuring that debris is cleared. This reduces the number of washouts along roads.	2
6. Upgrade the culvert on Church Street, which has deteriorated due to a change in amount and speed of water flow of the river.	2
7. Ensure that the proper equipment and training is available for best management practices for a mass casualty accident.	6
8. Continue Warm Zone training for emergency responders.	3
9. Continue training and exercising with the schools and attending their emergency team meetings.	3
10. Explore implementing cyber security software and coordinate with existing IT consultant..	3
11. Educate employees on emergency procedures, including panic button procedures.	4
12. Cut back trees on a regular basis so that roads will be less likely to be blocked and power lines taken down by falling limbs.	7
13. Replace existing Police repeater on Liberty Hill.	6
14. Continue to work with the Lakes Region Partnership for Public Health, including education about immunization clinics, air pollution, opiate epidemic, Hepatitis A and Lime Disease and other Zoonotic diseases; and coordinate on providing immunization clinics.	3
15. Install lighting grounding/protection systems at the Belmont Mill.	3
16. Investigate grant opportunities to harden the communications infrastructure.	5
17. Replace portable radios for police and fire to meet industry standards.	6
18. Incorporate information from the Hazard Mitigation Plan into the next update of the Master Plan.	2
19. Establish additional mapping data in GIS format for the town's public water and sewer lines.	4
20. Relocate Town Hall operations based on feasibility study.	6
21. Ensure sufficient personnel, equipment and materials are available to meet future demands placed on municipal services resulting from increased growth. It is essential to maintain protection for existing development while planning for new development.	5

Priority: 0-2 Low 3-5 Medium 6-8 High

8 voters total:

APPENDIX C

Approval Letter from FEMA