EM
Technical Appendix

Emergency Management

Local Solutions for the Strafford Region

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Strafford
REGIONAL PLANNING
COMMISSION

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Introduction

Purpose

The purpose of the Emergency Management and Public Safety Appendix is to provide an overview of the interconnected infrastructure network that provides the foundation for emergency management and response to natural and human-caused events.

There are four key steps of emergency management: mitigation, planning, response, and recovery. Three key planning areas that are critical to emergency management include power, water, and transportation. This infrastructure network, in addition to a well-developed communication system, enables the continuation of municipal operations during an emergency and the protection of community members and property. Factors including the interdependence of power, water, and transportation systems; the range of scales at which planning and operation of these systems occurs; and the diversity of stakeholders responsible for the management of these systems, necessitate that local emergency management activities occur within a regional context.

This appendix is intended to serve as an informational resource to support emergency management. The emergency preparation and response guidance included in this appendix supplements local hazard mitigation plans and current emergency management processes. This appendix also provides strategies to increase resiliency and effective emergency management, through collaboration across sectors and the region.

Vision

The Strafford region is well prepared for emergency response and recovery. Regional collaboration and integrated emergency management planning across enables redundancy and increases resiliency during emergency events sectors enables system redundancy and makes communities more resilient to emergency events. Communities and residents have access to resources, tools, and information to enable hazard mitigation, protection of public health and the environment, and recovery.

Resiliency is the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events.
(National Research Council)

Redundancy refers to the resiliency of communications systems that is achieved by alternative means or systems. Redundancy provides for multiple interchangeable components that can perform a common function as well as backup systems that perform a common function in the event of a failure, mishap, or change in operational conditions. (Federal Communications Commission)

Executive Summary

There are four key steps of emergency management: mitigation, planning, response, and recovery. Three planning areas that are critical to emergency management include power, water, and transportation. This infrastructure network and a well-developed communication system enable the continuation of municipal operations and the protection of community members and property during and emergency.

Factors including the interdependence of these infrastructure systems; the range of scales at which planning and operation of theme systems occurs; and the diversity of stakeholders responsible for the management of these systems necessitate that local emergency management occurs within a regional context.

There are four primary utility providers in the region. Public Service Company of New Hampshire serves approximately 70% of the state. The power grid is an interconnected network that delivers electricity from suppliers to consumers. In order for electricity to work, continuity from the generator to the end user is necessary. Breaks in this network result in power outages. When outages occur, the amount of time it takes to return power to residents in a community varies depending on the extent of power loss including the local and extent of disturbance and the

critical facilities impacted. Municipalities, businesses, and public health professional can take steps to minimize risks to residents during outages.

Clearly identified evaluation routes are an important component of emergency planning. Many but not all communities in the region have identified local evacuation routes. The absence of a regional evacuation plan and the lack of standardized, accessible signage of emergency routes would likely be a significant barrier to effective and efficient regional evacuation in an emergency.

Transportation infrastructure is also linked to emergency management because public rights-of-way are a critical component of emergency response and hazard prevention as they provide access to utility infrastructure. Additionally, regulation of the transportation of hazardous materials to minimize risks to public health and the environment is another component of emergency management and prevention.

Drinking water and wastewater utilities are vulnerable to threats, such as natural disasters or human caused incidents, which impact normal operations. These disruptions may have a range of impacts on communities, ranging from reduced water for firefighting sanitation, and health care function to contaminated drinking water.

Planning for an emergency drinking water supply is an important part of local emergency management as power damage to critical water infrastructure, power interruptions, droughts, or contamination can impact the availability of drinking water supplies.

Emergency management occurs at the federal, regional, state, and local level. Coordination across all levels of government and across state agencies is essential to emergency management. Strengthening coordination of local emergency management agencies' risk reduction, preparedness, response, and recovery processes is a key component of minimizing impacts to the health and well-being of individuals, and the infrastructure and economy of communities. Elements that provide the foundation for emergency management planning include: planning, training exercises, and public education.

In addition, communities can increase resiliency before, during, and after emergencies through hazard mitigation planning, identifying sources of alternative energy, and using the best available scientific data when determining design standards for infrastructure.

Emergency Management

Emergency management occurs at the federal, regional, state, and local level. Coordination across all levels of government and across state agencies is essential to emergency management.

At the national level, the Federal Emergency Management Agency (FEMA) conducts hazard preparation, manages response and recovery efforts, and administers the National Flood Insurance Program and the National Incident Management System (NIMS).[1]

National Incident Management System (NIMS) is a standardized structure for the management of large-scale or multi-jurisdictional incidents that is being phased in at the federal, state, and local levels. NIMS will enable more efficient and effective responder collaboration at all levels regardless of the size or complexity. Federal agencies are also required to use the NIMS framework in domestic management and in support of state and local incident response and recovery activities. Functional areas of this system include: command, operations, planning, logistics, and finance/administration. [Source: NH HSEM]

To ensure compliance with NIMS, which provides a standardized set of processes and procedures for emergency responders to use in responding to public emergencies, New Hampshire adopted a statewide incident control system

based on NIMS in 2004. Local and regional plans are also required to comply with this program.

New Hampshire's Homeland Security and Emergency Management (HSEM), part of the state Department of Safety, is responsible for coordinating the State's response to major disasters including hurricanes, floods, and severe winter storms and human-caused disasters such as nuclear power plant accidents or chemical spills. HSEM typically coordinates with the Governor and the Department of Health and Human Services to direct statewide emergency responses.[2] There are nineteen All Health Hazard Regions (AHHR) that develop regional public health emergency response plans, as well as identify emergency facilities and services.

"A *state of emergency* is a condition, situation or set of circumstances deemed to be so extremely hazardous or dangerous to life or property that it is necessary and essential to invoke, require, or utilize extraordinary measures, actions, and procedures to lessen or mitigate possible harm." The Governor of New Hampshire and the legislature have the authority to declare a state of emergency by executive order. (NH Municipal Association)

At a multi-state level, New Hampshire engages in multi-state emergency preparedness planning as part of the Northeast States Emergency Consortium (NSEC), a non-profit organization funded by FEMA and led by state directors of emergency management. NSEC develops, promotes, and coordinates comprehensive all-hazards emergency management activities in the Northeast in partnership with federal, state and local governments, and private organizations.[3]

Under RSA 21-P: 39, municipalities are required to establish a local emergency management organization, the director of which is appointed by the municipality's governing body.[4] Municipalities are granted the authority to implement an emergency plan and exercise emergency powers. In some instances and within constitutional limitations, municipalities may exert power "without regard to time-consuming procedures and formalities prescribed by law.[5] Local emergency management plans should be as comprehensive as possible.

Emergency Services Network

As defined by the Environmental Protection Agency (EPA), the emergency services sector is a network of services that provide functions such as law enforcement, emergency management, fire, and hazardous material services.[6] These services that comprise this sector are connected and dependent on the functioning of one another.

When a power outage occurs, utility providers need to be able to access utility infrastructure in order to return the electricity connection to homes and businesses as rapidly as possible. Because utility line are typically located in the right of way and because utility providers need clear roadways to access and repair broken connections, the ability of the power sector to respond to outages is linked to the transportation sector.

Critical facilities that cannot withstand power loss, such as police and fire stations and hospitals, typically have a backup generator to ensure that their operations are not interrupted. Ensuring that emergency shelters have adequate backup energy supplies is also important to reducing the impact and risks associated with natural or human-caused emergency scenarios.

An alternate energy supply is also critical to ensure proper function of water and wastewater facilities during an emergency. Water sector services are important to emergency management agencies because water and wastewater services are crucial for putting out fires, decontamination, maintaining hospital sanitary hospital operations, and opening shelters. These services are also important to ensuring that safe drinking water is available and that surface water and groundwater are not polluted by untreated wastewater.

These sectors are also important for ensuring public safety and reducing risks to the environment through emergency prevention, such as through:

- Monitoring electricity load to reduce outages
- Maintaining or removing threatening dams
- Regulating water and wastewater treatment
- Regulating the transportation of hazardous materials
- Adopting best management practices for roadway maintenance
- Identifying - educating the public about - evacuation routes
- Establishing diverse communication strategies

Communication

Emergency Alert System

The Emergency Alert System (EAS) is a national public warning system that requires TV and radio broadcasters, cable television systems, wireless cable systems, satellite digital audio radio services providers, direct broadcast satellite services providers, and wireline video service providers to offer the President the communication capability to address the American public during a national emergency and may also be used by state and local authorities to deliver important emergency information. The Federal Communications Committee (FCC), Federal Emergency Management Agency (FEMA), and National Oceanic and Atmospheric Administration's National Weather Service (NWS) implement the EAS at the national level.[7]

Emergency information is information that is intended to protect life, health, safety, or property is emergency information. Examples of Emergency Information include:

- Immediate weather situations: tornadoes, hurricanes, floods, tidal waves, earthquakes, icing conditions, heavy snows, widespread fires, warnings and watches of impending weather changes; and
- Community situations such as: discharge of toxic gases, widespread power failures, industrial explosions, civil disorders, school closings and changes in school bus schedules resulting from such conditions. [Source: FCC]

The state Emergency Alert System (EAS) is operated by the State Emergency Communications Committee. The system has three organization points:

- BEM Communications
- New Hampshire State Police Communications
- The National Weather Service Office in Gray, Maine

From these points, an Emergency Alert System signal is carried via microwave to four relay locations, and then to seven primary locations including WOKQ in Dover. Between the primary stations and additional radio stations and cable TV systems that rebroadcast the signal, a total of five TV stations and 84 radio stations and all the state's cable TV franchises broadcast a statewide message.[8]

Emergency Alert System is designed with multiple alternate sources of warning to ensure that the public receives emergency information in the event that local television, radio tower or studio is damaged during a natural disaster. This redundancy not only helps to ensure that critical information reaches residents, but also reduces the strain on individual components of the communication system.

Wireless Emergency Alerts

Wireless Emergency Alerts allow customers with certain wireless phone models and other enabled mobile devices to receive geographically-targeted, text-like messages alerting them of imminent threats to safety in their area using technology that ensure that emergency alerts will not get stuck in highly congested areas.[9]

Accessibility for Persons with Visual or Hearing Disabilities
Emergency information that is provided in the audio portion of programming must be provided either using closed captioning or other methods of visual presentation. Emergency information that is provided in the video portion of a regularly scheduled newscast or a newscast that interrupts regular programming must be made accessible through the aural description of emergency information in the main audio. For more information see the FCC's Accessibility of Emergency Information on Television guide.

Network Outage Reporting System
The FCC requires that communications providers electronically report information about significant power disruptions or outages, as well as information about communications disruptions affecting Enhanced 9-1-1 facilities and airports, to their communications systems.[10]

The Federal Communications Commission continuously works to improve the Emergency Alert System through streamlining the collection of outage information, improving interoperability among first responders, updating procedures, such as establishing best practices for implementing Text-to-911. For more information, see the Emergency Communications Guide.

Infrastructure

Power

Energy Consumption Overview

Energy consumption for the residential, commercial, industrial and transportation sectors in 2012 in New Hampshire was approximately 283 trillion Btu (Table 1). Nuclear electric power, followed by gasoline and natural gas are the three largest sources of energy consumed in the state (Table 2). Over 3 billion cubic feet of natural gas and 19 thousand short tons of coal were consumed for electricity generation during April of 2014 (Table 3).[11]

Table 1. New Hampshire consumption by end-use sector in 2012

Sector	Energy Consumption (Trillion Btu)
Residential	81
Commercial	66
Industrial	35
Transportation	101
Total	283

[Source: EIA. New Hampshire State Energy Profile]

Table 2. New Hampshire energy consumption estimates in 2012

Source	Trillion Btu
Nuclear Electric Power	85.8
Motor Gasoline excl. Ethanol	81.4
Natural Gas	74.4
Distillate Fuel Oil	34.0
Biomass	32.6
LPG	15.2
Coal	14.2
Hydroelectric Power	12.3
Other Petroleum	3.7
Other Renewables	2.2
Jet Fuel	2.1
Residual Fuel	1.7
Net Interstate Flow of Electricity	-75.5

[Source: EIA. State Energy Data System]

Table 3. New Hampshire consumption for electricity generation in April 2014

Source	Consumption
Petroleum	NM
Natural Gas	3,369 million cubic feet
Coal	19 thousand short tons

[Source: EIA. New Hampshire State Energy Profile]

Renewable Energy

In 2013, 16% of the state's net electricity generation came from renewable energy. New Hampshire's Renewable Portfolio Standard requires that 24.8% of electricity sold comes from renewable energy resources by 2025.

[Photo Credit: Revision Energy]

Compared to other states, New Hampshire generally ranks low in terms of energy consumption per capita as well as energy production. The price of both natural gas ($16.83/thousand cubic feet) and electricity ($0.01754/kWh) in the state rank high compared to other states (Table 4)[12].

Table 4. New Hampshire summary energy statistics and rank

	Amount	State Rank
Total Energy Consumption Per Capita†	215 million BTU	42
Total Energy Expenditures Per Capita†	$4,447	23
Production†	128 trillion BTU	45
Total Net Electricity Generation*	992 thousand MWh	45
Price Natural Gas*	$16.83/thousand cubic feet	5
Price Electricity	$0.01754/kWh	8

†2012, *April 2014
[Source: EIA]

Electricity Supply

Electricity is bought and sold across state lines. While some energy is produced regionally or locally in New Hampshire, most electricity is imported.[13] New England's wholesale electricity market is administered by New England Independent System Operator (ISO-NE). ISO-NE is responsible for the day to day reliable operation of New England's bulk power generation system and oversees the movement or transfer of electric energy at high voltage levels into, within, and out of New England.

New England's Net Energy for Load (NEL), (the electric energy produced by generation and imports to satisfy all residential, commercial, and industrial customer demand), is displayed in the table below.[14]

Energy Mix

Energy comes from a variety of sources. The specific mix of energy ISO-NE transfers to utilities depends on which generators have bid into the market for a specific hour. For more information, see the Fuel Mix Chart and ISO-NE's annual mix data.

Table 5. 2013 Net Energy for Load in New England by Source

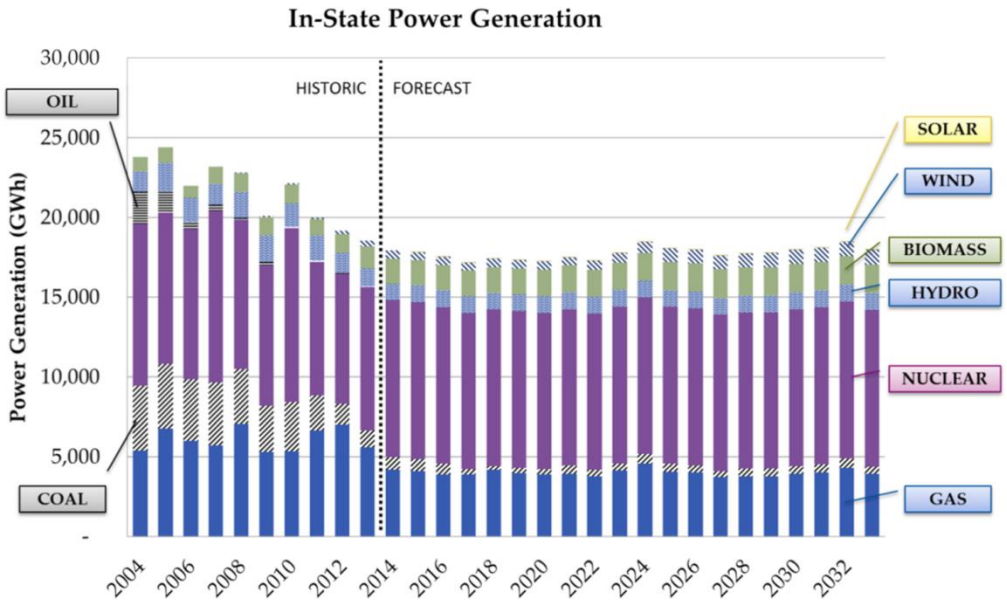
2013	GWh	Percent of Generation (%)	Percent of NEL (%)
Total Generation (GWh)(a)	**112,041**	**100**	86.6
Gas	41,542	37.1	32.1
Nuclear	37,183	33.2	28.7
Oil/Gas	9,575	8.5	7.4
Total Renewables	8,752	7.8	6.8
Wood/Refuse	3,554		
Refuse	2,732		
Under 5 MW	0		
Wind	1,766		
Solar	120		
Steam	144		
Landfill Gas	377		
Methane/Refuse	36		
Steam/Refuse	22		
Hydro: Run River & Pondage	7,141	6.4	5.5
Coal	6,259	5.6	4.8
Hydro: Pump Storage	1,211	1.1	0.9
Oil	379	0.3	0.3
Net Flow Over External Ties(b)	**-18,961**		-14.7
Total Imports	-23,048		

2013	GWh	Percent of Generation (%)	**Percent of NEL (%)**
Total Exports	-4,087		
New Brunswick	-3,711		
Keswick	-1,739		
Pt LaPrue	-1,972		
Hydro-Quebec	-13,928		
Highgate	-1,815		
Phase II	-12,113		
NEW YORK	-1,322		
Northport	758		
Cross Sound Cable	2,137		
PLEASANTVY	-299		
N SCOTLAND	-2,181		
BS-NM TIE	-813		
SAL-F VILG	-33		
NY PV20 TI	-697		
NY K6 TIE	-187		
NY K37 TIE	-6		
Pumping Load (c)	**1,624**		**-1.26**
Net Energy for Load (d)	**129,377**		**100**

(a) Data are not available for the amount of generation by individual fuels in dual fuel units such as oil/gas.
(b) Imports are negative; exports are positive.
(c) The energy used to operate pumped storage plants.
(d) Generation + net interchange - pumping load.
[Source: ISO-NE Energy Sources in New England. 2013 (http://www.iso-ne.com/nwsiss/grid_mkts/enrgy_srcs/)]

In-state power generation for the electric sector has declined over the last 10 years as use of coal as an energy source has diminished. Over the next 20 years, in-state power generation for the electric sector is projected to remain fairly constant (Figure 1)[15]. For more information about forecasts for the electric, thermal, and transportation sectors, as well as a vision, policy evaluation, and strategy recommendations for energy in New Hampshire, see the New Hampshire State Energy Strategy Draft.

Figure 1. Baseline forecast of in-state power generation



[Source: Navigant. New Hampshire State Energy Strategy Draft. 2014]

Major Power Generators

There are approximately 60 power generators in New Hampshire, including six plants in the region. The largest utility plant in the state is the Seabrook nuclear facility, which is owned by the independent company Nextera Energy Resources. The Seabrook nuclear power reactor is the largest in New England and provided 55% of NH's net electricity generation in 2013. Table 6 displays the largest plants in New Hampshire.

Table 6. Ten largest plants in New Hampshire by generation capacity (2012)

Plant	City/Town	Primary Energy Source	Utility Name	Net Summer Capacity (MW)
Seabrook	Seabrook	Nuclear	NextEra Energy Seabrook LLC	1,246
Granite Ridge	Londonderry	Natural Gas	Granite Ridge Energy LLC	678
EP Newington Energy LLC	Newington	Natural Gas	EP Newington Energy LLC	525
Merrimack	Bow	Coal	Public Service Co of NH	472
Newington	Newington	Petroleum	Public Service Co of NH	400
S C Moore	Littleton	Hydroelectric	TransCanada Hydro Northeast Inc.,	191
Comerford	Monroe	Hydroelectric	TransCanada Hydro Northeast Inc.,	160
Schiller	Portsmouth	Coal	Public Service Co of NH	156
Granite Reliable Power	Dummer	Wind	Granite Reliable Power	99
Groton Wind LLC	Groton	Wind	Iberdrola Renewables Inc	48

[Source: U.S. Energy information Administration, Form EIA-860. Annual Electricity Generator Report]

Electric Utilities in the Region

There are four primary utility providers in New Hampshire (Table 7). Serving approximately 500,000 homes and businesses, Public Service of New Hampshire (PSNH) is the state's largest electric utility. PSNH's three fossil fuel-fired generating plants, one wood-burning power plant, and nine hydroelectric facilities generate more than 1,100 MW of electricity. Through a combination of power plants and purchase agreements with other suppliers, approximately 21% of the energy supplies come from renewable sources.[16]

Public Service Company of New Hampshire (PSNH) serves a majority of the Strafford region (see Figure 2). These utilities supply electricity from a regional pool of available electricity that is fed by power plants throughout New England and distributed by ISO-NE. Independent power producers (IPPs) also own and generate electricity at plants throughout the region. This is sold to utilities before entering the grid. Utilities and IPPs also generate a small amount of electricity from a range of renewable sources.

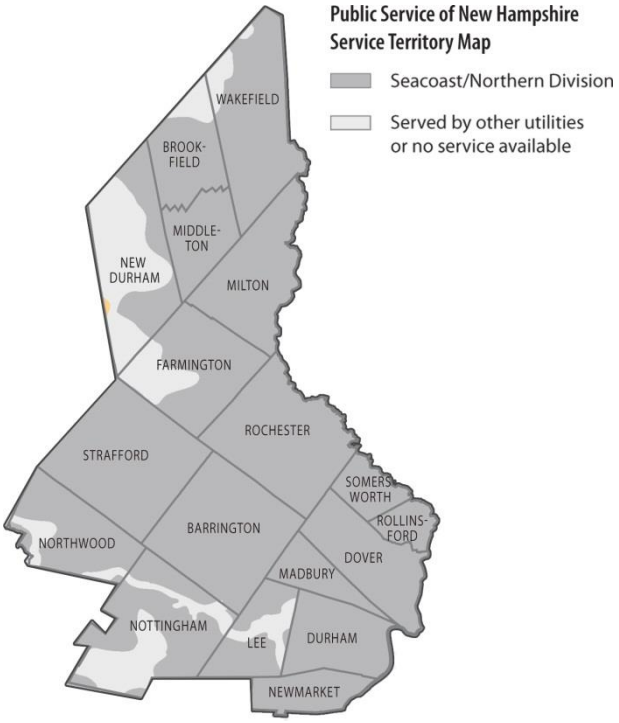
Table 7. Primary utility companies in New Hampshire

Utility	Service Area	Percent Served
Public Service Company of New Hampshire (PSNH)	Urban, southern areas and rural, northern areas	70%
Granite State Electric Company (GSEC)	Western and southern areas of the state	6%
Unitil Energy Systems, Inc. (UES)	Seacoast and Capital areas	11%
New Hampshire Electric Cooperative, Inc. (NHEC)	Central area of the state	11%

[Source: Public Utilities Commission. Electric.]

Since the 1990s, electric customers in New Hampshire have had the opportunity to choose to buy energy from the electric utility (also known as an electric distribution company) that delivers electricity to all customers within the electric utility's defined services area, or to buy energy from a competitive energy supplier. Prior to selling electricity to customers in New Hampshire, competitive energy suppliers must register with the Public Utilities Commission (PUC). The PUC website maintains a list of supplies that are registered to market electricity in the state. A list of utilities by city/town is also available through PUC's website. Table 8 displays utilities that serve the Strafford region.

Figure 2. PSNH Service Territory within the region



[Source: modified from PSNH Service Territory Map]

Table 8. Utilities serving the region by community

Community	Electric Utilities
Barrington	PSNH
Brookfield	PSNH / NHEC / Wolfeboro Electric
Dover	PSNH
Durham	PSNH / NHEC
Farmington	PSNH / NHEC
Lee	PSNH / NHEC
Madbury	PSNH
Middleton	PSNH
Milton	PSNH
New Durham	NHEC / PSNH
Newmarket	PSNH
Northwood	PSNH / NHEC
Nottingham	PSNH / NHEC
Rochester	PSNH
Rollinsford	PSNH
Somersworth	PSNH
Strafford	PSNH
Wakefield	PSNH / NHEC

*note: this list may not represent all companies providing service in the state. [Source: NH Public Utilities Commission. Utilities by city/town. 2014.]

Power Outages

The power grid is an interconnected network that delivers electricity from suppliers to consumers. In order for electricity to work, continuity from the generator to the end user is necessary. Breaks in this network result in power outages. Power outages or loss of electric power can be caused by faults at power stations or damage to infrastructure including electric transmission lines, substations, or other critical elements. When one part of a system triggers another failure elsewhere a cascading failure occurs. Cascading failures that cause large blackouts are the result of overloads, hidden failures, oscillations, control or operator error, etc.[17] Although large blackouts are rare, there are high impacts and significant risks associated with widespread power loss.

Power Outage Maps:

Unitil Real Time Outage Map

PSNH Outage Map

Figure 3. Energy flow from generation to user

Power Restoration Process

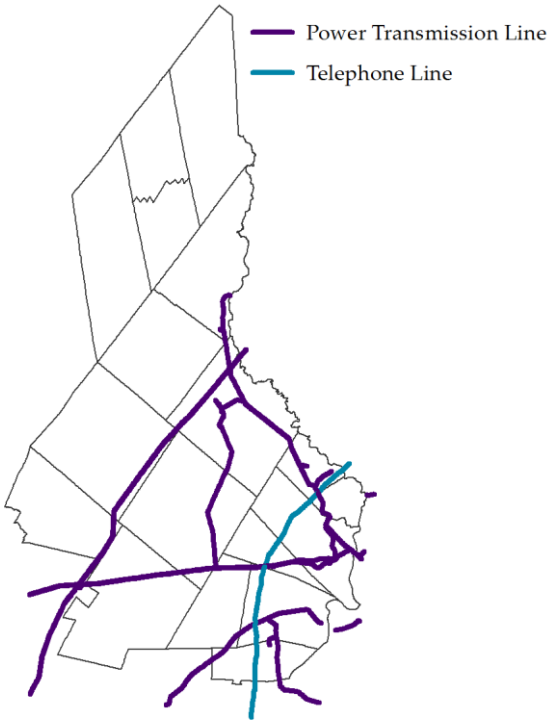
When power outages occur, repairs to the power network are made sequentially, beginning at the substation and the generation source or ending at the location furthest from the energy sources. For safety purposes, priority is given to cutting down and clearing downed wires. Critical municipal facilities including police and fire stations as well as hospitals are given priority. After power has been restored at critical facilities, utility companies continue repairing power to the greatest number of customers in the shortest period of time.[18] Consequently, the amount of time it takes to return power to residences in a community may vary greatly depending on the extent of power loss.

Planning Challenges

The transition of a regional power system based on traditional, large infrastructure to one that incorporates a rapidly changing fuel mix, new technologies, and smaller, distributed resources is a challenge for utilities serving the region.[19]

Factors that affect this transition range from inadequate infrastructure and evolving regulations for coal fired power plants, to the existing design of the wholesale electricity markets, which is a barrier to implementing incentives for renewables.[20] In addition, the availability of natural gas in the region is impacted by inadequate infrastructure, unreliable fuel arrangements, limited storage, and out-of-sync markets.[21] The impacts of these challenges on communities include an increase in electricity prices and reliability risks.

Figure 4. Major power transmission lines and telephone lines in the region



[Source: GRANIT]

To ensure the right amount of electricity is available, ISO-NE's portfolio includes resources that offer a range of capabilities under a variety of conditions including:

- Power plants that can run regularly to meet the required minimum amount of generation
- Resources that can start up or dial back quickly in response to sudden changes in consumer demand driven by weather or to unexpected events, including equipment failures or sudden changes in production by generators that run on renewable sources of energy (http://www.iso-ne.com/aboutiso/fin/annl_reports/2000/2014_reo.pdf)

Load Forecast

Total capacity is projected to decline slightly over the next decade in New England (Table 9). While New Hampshire's population is not growing rapidly, it is projected to increase about 8.4% by 2040.[22] The increase in population paired with a decline in total capacity has implications for the ability of New England providers to meet regional electricity demands, as well as the price of electricity. Small scale renewable energy generation may become an increasingly important supplement to the region's energy supply.

Table 9. Current and projected load forecast

Total Capacity	2013*	2023*	% Change
Summer	32,756 MW	32,572 MW	-0.5%
Winter	32,963 MW	32,881 MW	-0.25%

*Winter season includes 2013/2014 and 2023/2024
[Source: ISO-NE. CELT Report]

Climate Change and Energy Supply and Demand

The projected increase in summer temperatures and heat wave expected in the region will result in additional stress on power grids and may lead to more frequent power outages. Increases in temperature will also likely impact electricity production and delivery. A temperature increase of 6.3 to 9°F may increase the need for additional electric generating capacity by approximately 100-20% by 2050, requiring significant investment in new infrastructure.[23]

Power Outage Risk Management

Prolonged power outages can threaten public health, cause economic hardship, and impact environmental quality. Factors including the presence of vulnerable populations, the season, and infrastructure impacted influence the level of risk associated with short and long term outages. The following strategies for municipal, public health, and business risk management are examples of some steps communities and individuals can take to reduce the impact of outages.

Municipal

Preparation and planning can lead to a more coordinated response to power outages at the community level and reduce impacts to the environment and public safety. Examples of emergency risk management steps communities can take include:

- Identify evacuation routes and emergency shelters and the extent of financial or logistical municipal assistance with evacuation
- Establish emergency communications, alert systems, and operation centers
- Identify and prioritize power-dependent functions, operations and equipment
- Provide guidance on developing emergency kits
- Identify backup power at critical facilities, including water treatment facilities, police and fire stations, emergency shelters, and telecommunication facilities
- Post links to utility outage maps and updates on website
- Provide public education about emergency procedures, risks, resources, and preparedness, including creating emergency kits
- Establish arrangements with neighboring communities, such as individuals to contact.[24]

Business

Preventative measures to reduce the economic impacts associated with power outages include:

- Create a business continuity plan and establish alternate work sites
- Make sure employee contact information is up-to-date
- Establish meeting points for staff and volunteers
- Inventory property with photos or video
- Back up important documents and computer files
- Create an emergency kit.[25]

For more information on risk management before, during, and after a power outage, see the RCAB Office of Risk Management.

Public Health

Depending on the duration of a power outage, the loss of electricity – and associated loss of heat or air conditioning and access to clean water and refrigeration - may have a range of public health impacts.

Center for Disease Control recommends the following measures for reducing risks during power outages include:

- Prevent carbon monoxide poisoning by using generators, pressure washers, grills, and similar items outdoors only.
- If the power is out longer than two hours, throw away food that has a temperature higher than 40°F.
- Check with local authorities to be sure water is safe.
- In hot weather, stay cool and drink plenty of fluids to prevent heat-related illness.
- In cold weather, wear layers of clothing, which help to keep in body heat
- Avoid downed power lines, if a power line falls on a car, stay inside the vehicle.[26]

For more information about responding to unexpected power outages, visit: http://www.bt.cdc.gov/disasters/poweroutage/needtoknow.asp

The New Hampshire Health Officers Association (NHHA) also has a number of online resources to guide the protection of public health. NHHA's mission is "to assist and support local health officials in meeting their responsibilities to the public tough programs of education, technical assistance, representation, and resource development; and assisting the local health officials in providing educational and informational programs to the general public on environmental and public health topics."[27]

America's Emergency Care Environment State of New Hampshire Report Card, 2014, Disaster Preparedness Rating

DISASTER PREPAREDNESS	C+
Per capita federal disaster preparedness funds	$9.90
State budget line item for health care surge	Yes
ESF-8 plan shared with all EMS and essential hospital personnel	Yes
Emergency physician input into the state planning process	No
Public health and emergency physician input during an ESF-8 response	Yes
Drills, exercises conducted with hospital personnel, equipment, facilities per hospital	3.2
Accredited by the Emergency Management Accreditation Program	No
Special needs patients in medical response plan	Yes
Patients on medication for chronic conditions in medical response plan	No
Medical response plan for supplying dialysis	No
Mental health patients in medical response plan	No
Medical response plan for supplying psychotropic medication	No
Mutual aid agreements with behavioral health providers	State-level
Long-term care and nursing home facilities must have written disaster plan	Yes
State able to report number of exercises with long-term care or nursing home facilities	No
"Just-in-time" training systems in place	Statewide
Statewide medical communication system with one layer of redundancy	Yes
Statewide patient tracking system	Yes
Statewide real-time or near real-time syndromic surveillance system	Yes
Real-time surveillance system in place for common ED presentations	Statewide
Bed surge capacity per 1M pop.	650.4
ICU beds per 1M pop.	273.3
Burn unit beds per 1M pop.	0.0
Verified burn centers per 1M pop.	0.0
Physicians in ESAR-VHP per 1M pop.	22.0
Nurses in ESAR-VHP per 1M pop.	312.7
Behavioral health professionals in ESAR-VHP per 1M pop.	16.7
Strike teams or medical assistance teams	Yes
Disaster training required for essential hospital, EMS personnel	No
Liability protections for health care workers during a disaster (range 0-4)	3
% of RNs received disaster training	38.5

[Source: America's Emergency Care Environment. A State-by-State Report Card. 2014]

Transportation

Critical Transportation Network

Local Evacuation Routes

Clearly identified evacuation routes are an important component of emergency planning. Many but not all communities within the region have identified local evacuation routes. These evaluation routes are identified within local multi-hazard mitigation plans and are displayed in the following map (Figure 5). Major transportation routes in communities that have not identified evacuation routes within their multi-hazard mitigation plans are also included in Figure 5. Regional coordination of existing local evacuation routes would reduce disconnection between evacuation routes of adjacent communities and help ensure efficient and effective evacuation in an emergency situation.

NHDOT road closures: http://www.nhtmc.com/

Although there are no communities within the region within the radius of evacuation from the Seabrook Nuclear Plant in Seabrook, seven communities have evacuation routes directing residents to Dover and Rochester. Figure 6 displays these evacuation routes.

The absence of a regional evacuation plan and the lack of standardized, accessible signage of emergency routes would likely be a significant barrier to effective and efficient regional evacuation in an emergency. Communities should also identify alternative routes to utilize in the event of road closures due flooding, accidents, or construction.

Due to the projected increase in precipitation and potential for flooding, communities should consider establishing evacuation routes that minimize bridge crossings and avoid hazardous dams. For information about dams in the region, see the Dams section of the Water Infrastructure Appendix.

For more information on hazard mitigation, see the Federal Emergency Management's Hazard Mitigation Planning Resources.

Critical Facilities

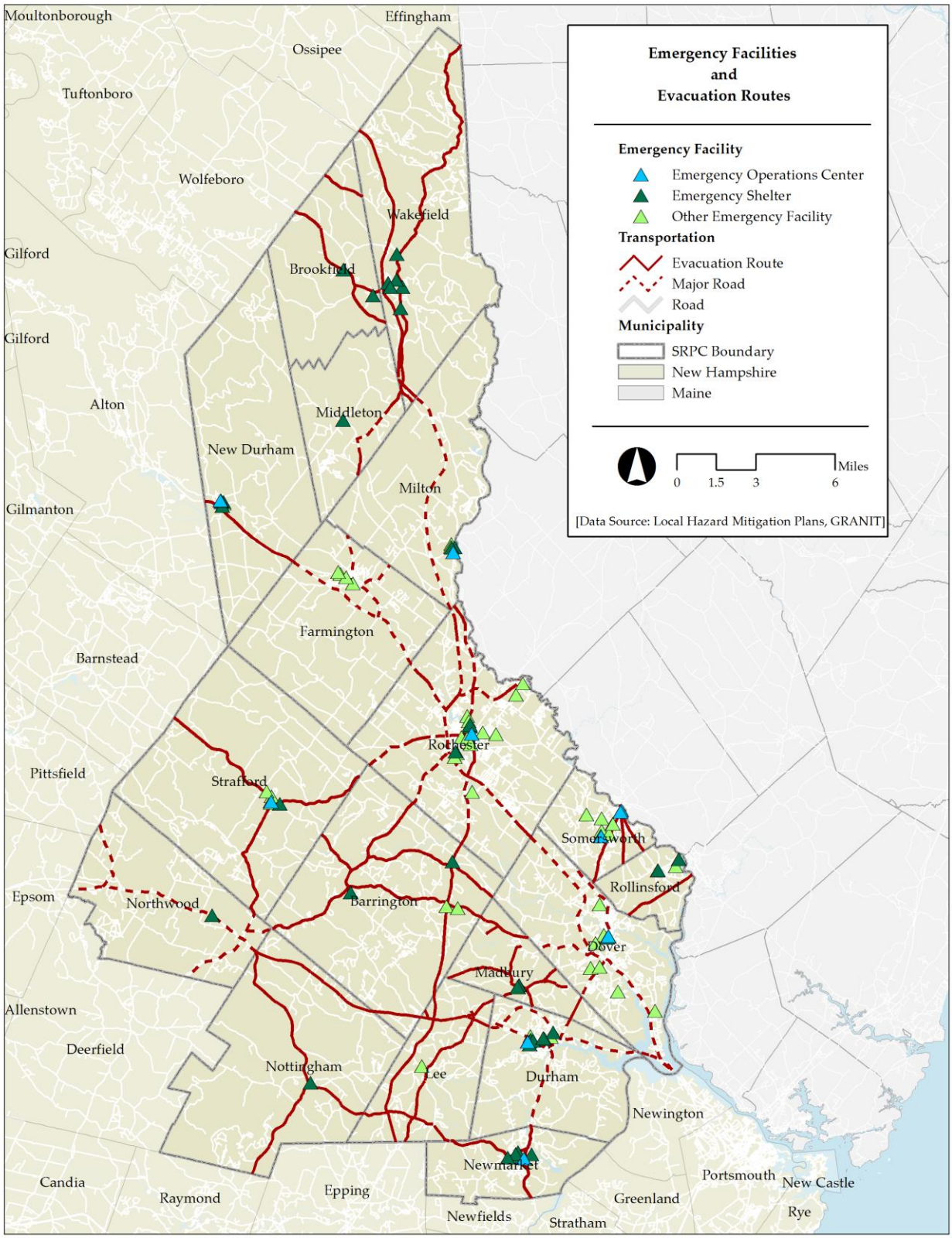
In order to be eligible for federal hazard mitigation project funding, state and local governments are required to develop compliant hazard mitigation plans. The critical facilities tables below list the emergency operation centers and emergency shelters communities in the region have identified in their Multi-Hazard Mitigation Plans. The State has allocated Pre-Disaster Mitigation funds for regional planning commissions to work with communities to develop local hazard mitigation plans.

Refer to community Local Hazard Mitigation Plans for more information about critical facilities and vulnerable facilities and areas. These plans are available on SRPC's website at http://www.strafford.org/services/hazard.php.

Table 10. Local Multi-Hazard Mitigation plans and year updated

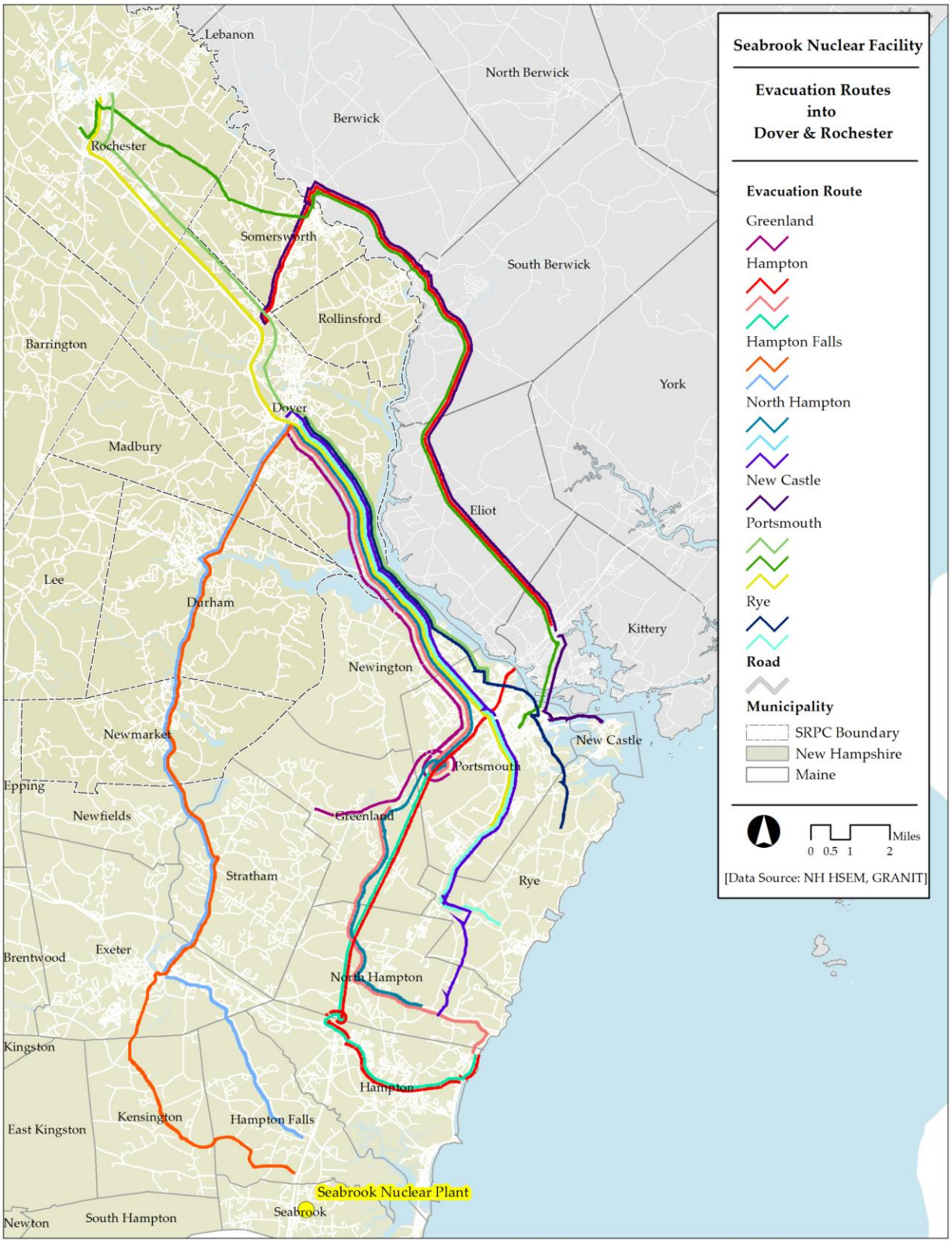
Community	Year of Update	Community	Year of Update
Barrington	2011	New Durham	2010
Brookfield	2014	Newmarket	2013
Durham	2012	Northwood	2014
Dover	2013	Nottingham	2012
Farmington	2012	Rochester	2013
Lee	2013	Rollinsford	2011
Madbury	2014	Somersworth	2010
Middleton	2012	Strafford	2012
Milton	2012	Wakefield	2011

Figure 5. Emergency facilities and local evacuation routes within the region



[Data Source: Local Multi-Hazard Mitigation Plans, GRANIT]

Figure 6. Nuclear Power Plant Seabrook Station Nuclear Power Plant Evacuation Routes



[Data Source: NH HSEM, GRANIT]

Table 11. Emergency operation centers in the region

Community	Facility Name	Address
Barrington	Public Safety Building	774 Franklin Pierce Highway (Rte. 9)
	Town Offices	333 Calef Highway (Rte. 125)
Brookfield	Town Office Building	267 Wentworth Road
	Fire Station	2017 Wakefield Road
	Police Station	2017 Wakefield Road
Dover	City Hall (backup)	288 Central Avenue
	Dover Northside Fire Station	262 Sixth Street
Durham	Fire Station	51 College Road
Farmington	Farmington Fire & Rescue	381 Main Street
Lee	Town Hall/Town Hall Annex	7 Mast Road (Rte. 155)
Madbury	Fire Station (Public Safety Building	334 Knox Marsh Road
Middleton	Town Hall	182 King's Highway
Milton	Fire Station #1	460 White Mountain Hwy
New Durham	Town Hall	4 Main Street
	Fire Station	6 Main Street
	Police Station	4 Main Street
Newmarket	Police Station	70 Exeter Road
Northwood	Ridge Fire Station	499 First NH Turnpike
	Town Hall (backup)	818 First NH Turnpike
	Police Station (backup)	1020 First NH Turnpike
	Narrow's Fire Station (backup)	85 Main Street
Nottingham	Fire Station	235 Stage Road (Route 152)
	Police Station	139 Stage Road (Route 152)
Rochester	No facility designated in HazMit plan	
Rollinsford	Police Station	667 Main Street
Strafford	Police Department	34 Roller Coaster Road
Wakefield	Wakefield Public Safety Building	207 Wakefield Road

[Source: Local Multi-Hazard Mitigation Plans]

Table 12. Emergency shelters in the region

Community	Facility Name	Address
Barrington	Barrington Elementary School	570 Calef Highway
	Barrington Middle School	51 Haley Drive
Brookfield	Town House	265 Wentworth Road
Dover	No facility designated in HazMit plan	
Durham	Whittemore Center	128 Main Street
	Fire Station	51 College Road
	Oyster River Middle/High School	1 Coe Drive
	Dimond Library*	18 Library Way
Farmington	Farmington High School	40 Thayer Drive
Lee	No facility designated in HazMit plan	
Madbury	Whittemore Center	128 Main Street, Durham
	Field House	145 Main Street, Durham
	McConnell Center	61 Locust Street, Dover
Middleton	Town House	265 Wentworth Road, Brookfield
Milton	Nute High/Milton Middle School*	22 Elm Street
	Milton Elementary School*	8 School Street
New Durham	New Durham School	7 Old Bay Road
	First Freewill Baptist Church	20 Depot Road
	Prospect Mt. High School	242 Suncook Valley Road
Newmarket	Middle/High School	213 Main Street
Northwood	Elementary School	511 First NH Turnpike
Nottingham	Nottingham School	245 Stage Road. (Route 152)
Rochester	Rochester Community Center**	150 Wakefield Street
	Spaulding High School**	130 Wakefield Street
	Middle School**	47 Brock Street
Rollinsford	Town Hall	667 Main Street
	Fire Station	17 Roberts Road
	Rollinsford Grade School	487 Locust Street
Somersworth	Share with Rochester	150 Wakefield Street
Strafford	Town Hall	12 Mountain View Road
	Strafford School	22 Roller Coaster Road
	Third Baptist Church-Christian Ed. Building	30 Strafford Road
	National Guard Training Center	Academy Avenue
Wakefield	Town Food Pantry (Town Office)	1500 Wakefield Road
	Wakefield Public Safety Building	2017 Wakefield Road
	Paul School (Grades 1-8)	60 Taylor Way
	St. Anthony's Catholic Church	Rt. 109 Meadow Street
	Saint John the Baptist	118 High Street
	First Congregational Church of Wakefield	2718 Wakefield Road
	East Wakefield Fire Station	21 Sanborn Road
	Greater Wakefield Resource Center	245 Main Street

*daytime shelter
**Proposed as of 2005 plan
[Source: Local Multi-Hazard Mitigation Plans]

It is important that communities take into consideration the importance of reopening schools and 'returning to normal' as soon as possible after an emergency event. If a school is a local evacuation center, communities should prepare a strategy for ensuring that classrooms or alternative locations for school are available given that evacuees may still be in need of a shelter. Additionally, communities should identify a location(s) to house the National Guard.

Table 13. Emergency fuel facilities

Community	Facility Name	Address
Barrington	Public Works Garage	
Brookfield	NH DOT Highway Dept.	1540 Wakefield Road
Dover	State Shed	Indian Brook Drive
	Dover Public Works Garage (diesel)	271 Mast Road
Durham	State Fuel Dump	
Farmington	Highway Department	14 Baldwin's Way
	Irving Circle-K	449 Route 11
Lee	Robert L. Keniston Jr. Transfer Station and Recycling Center	11 Recycling center Road
	Highway Department	6 Recycling Center Road
Madbury	Emergency Fuel	Route 155A, Durham
	State Fuel Shed	Weeks Crossing (Rt.9), Dover
	Emergency Fuel	Epping, NH
Middleton	Highway Departments	203 King's Highway
Milton	State Highway Department	White Mountain Highway
New Durham	Highway Department	
	Marina	
Newmarket	Public Works Garage	2 Young's Lane
	Transfer Station	Ash Swamp Lane
Northwood	Narrow's Fire Station	85 Main Street
Nottingham	Highway Dept. – Public Works	3 Flutter Street
Rochester	Eastern Propane Corporation Headquarters	28 Industrial Way
Rollinsford	Highway Department	
Strafford	NH DOT, Division 6 Shed (diesel)	Parker Mountain Road
Wakefield	Irving Gas	Wakefield Road
	Dunn Deal	3365 Province Lake Road, East Wakefield
	Mobil Gas Station	Meadow Street

[Source: Local Multi-Hazard Mitigation Plans]

Public Rights-of-Way

Because public rights-of-way provide access to utility infrastructure they are a critical component of emergency response and hazard prevention.

Urban tree pruning is essential to ensure reliable service and access to public rights-of-way. According to the American Planning Association, trees and debris from the destruction of trees are a number one cost to emergency management. Utility companies, who maintain public easements to ensure utility services are not interrupted as well as to protect infrastructure in rights-of-way corridors, are not consistently involved in emergency planning.[28] To improve emergency management, communities should engage local and regional arborists in local comprehensive disaster planning, preparedness, response, recovery, and mitigation efforts.

The American Public Works Association has a resource center for Utility and Public Right-of-Way: Rights of Way Management.

In order to regulate the accommodation of utilities within highway and railroad right-of-way, NHDOT established a Utility Accommodation Manual.[29]

Alternative Modes of Transportation

Public, aviation, and maritime transportation systems are an important component of emergency management. In the event that evacuation from a community is necessary, shuttles and busses are an essential and effective method of transporting people to safety. See Seabrook Station Nuclear Power Plant Emergency Buses for information about bus transportation to reception centers in Dover, Rochester, and Manchester. Helipad locations within the region are displayed in Table 14.

Public Transportation Services:
COAST Public Transit
UNH Wildcat Transit
C&J
Amtrak Downeaster

Airports:
Skyhaven Airport
Portsmouth international Airport at Pease
Manchester
Logan International

Ports:
Port of New Hampshire

Table 14. Airport/Helipad

Community	Helipad or Airport
Barrington	Elementary School (field)
	Middle School (field)
	Public Safety Building (field)
	Town Hall (field)
	Boodey Farm
	BarnZ's Cinema
	Downeast Drilling
	Private Helipad
Dover	Liberty Mutual Helipad
	Wentworth Douglass Helipad
	Industrial Park Drive
	Dover High School (softball field)
	Bellamy Fields
Lee*	George Bennet Road (Firehouse) Soccer Field
	Transfer Station Back Lot
	Mast Way School/Town Field
	Market Basket Plaza Parking Lot – Pizza Spinner
	Concord Road (Route 4) Barrington Town Line
	Toys Manufacturing Parking Lot – Calef Highway
	Concord Road (Route 4) Sullivan Tire
	Concord Road (Route 4) Durham Town Line
	Davis land – North River Road
	Calef Highway (Route 125) – Epping Town Line
	Lee USA Speedway Front Parking Lot
	Lee USA Speedway Back Parking Low
Madbury	Moriarty Landing Strip
	Tibbet's Field

Community	Helipad or Airport
Middleton	Baseball field considered a potential helipad site
New Durham	Lions Camp Pride
	Ballfields
	Bickford's Farm
	Berry Road
	Birch Hill
	Golf Course
	Route 11
Newmarket	Leo Landroche Field
	Rockingham Golf Course
	Fire Station
Northwood	Coe Brown Academy
	Wallmans Field
	Northwood Elementary School
	Camp Yevneh
	Briggs Field
	Grant Field
Nottingham	393 Stage Road (Helipad/Airstrip)
	Community Center Field
	Nottingham Square/Ledge Farm Road
	Pawtuckaway State Park Administration Building Parking Lot
	Elementary School Parking Lot
	Higher Ground Baptist Church
	Pond Road at Case Road
Rochester	Sky Haven Airport
Rollinsford	Wentworth Douglas Hospital Heliport Pad
Strafford	National Guard Training Center

[Source: Local Multi-Hazard Mitigation plans]

Sidewalks and Public Safety

Sidewalks are a critical element of a balanced transportation system. Sidewalks provide for public safety, influence development patterns in a community, and promote residents' health and well-being. Because they foster walkability, sidewalks also promote interaction among community members and can increase property value. A lack of sidewalks can be detrimental to economic vitality as it is challenging to ensure pedestrian safety and walkability in downtowns or community centers.

Complete Streets – streets that are designed and operated to enable safe access for all users - reduce risks by calming traffic and providing safe places for pedestrians and bicyclists to share the road system. The National Highway Traffic Safety Administration found that over 40% of pedestrian deaths in 2007 and 2008 occurred where no crosswalk was available.[30] Complete Streets make it easier for people to walk and bike, reduce vehicles on the road, and facilitate public transportation commutes. For more information about Complete Streets, see the Smart Growth America website.

Transportation and Hazardous Materials

New Hampshire Department of Transportation (NHDOT)'s Contamination Program:

- Assesses contamination material constraints

Freight Lines
Claremont Concord Railroad
Vermont Rail System
Pan Am Railways
Genessee & Wyoming, Inc.
New England Central Railroad

- Provides guidance to NHDOT regarding contamination issues
- Recommends and administers remedial activities
- Assures compliance with all rules and regulations relative to contamination issues and the handling of hazardous or regulated materials associated with NHDOT actions.[31]

For information about hazardous materials issues associated with NHDOT projects, see the Risk Assessment Survey for Contamination & Appraisal of Land (RASCAL) database.[1]

Transportation of Hazardous Materials

The transportation of hazardous materials is regulated to reduce risks to the public and the environment. The Hazardous Materials Transportation Act (HMTA) authorizes the Secretary of the Department of Transportation to regulate transportation of hazardous materials. Hazard material regulations are applicable to the transportation of hazardous materials in commerce and their offering to:

- Interstate, intrastate, and foreign carriers by rail car, aircraft, motor vehicle and vessel.
- The representation that a hazardous material is present in a package, container, rail car, aircraft, motor vehicle or vessel.
- The manufacture, fabrication, marking, maintenance, reconditioning, repairing or testing of a package or container which is represented, marked, certified or sold for use in the transportation of hazardous materials (49 CFR 171.1(a))[32]

The Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 was created to help communities plan for emergencies involving hazardous substances and requires hazardous chemical emergency planning and industry reporting on the storage on the storage, use and releases of hazardous chemicals to federal, state, and local governments.

The State Emergency Response Commission is responsible for implementing the EPCRA provisions within New Hampshire. Responsibilities include:

- Establishing procedures for receiving and processing public requests for information collected under EPCRA
- Reviewing local emergency response plans
- Designating local emergency planning districts
- Appointing a Local Emergency Planning Committees (LEPC) for each district
- Supervising the activities of the LEPC[33]

New Hampshire SERC Contacts
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EPA Region 1 SERC Liaison
Len Wallace
SERC Liaison (MA, NH, VT), LEPC Liaison, CAMEO/Landview, One Plan/Integrated Contingency Plan, Electronic Tier II Submission, RMP Coordinator, EPCRA Coordinator
Phone: 617-918-1835

Between 2005 and August 21, 2014, the U.S. DOT Pipeline and Hazardous Material Safety Administration reported 309 hazardous material incidents in New Hampshire. Sixteen incidents occurred in the region (Table 15).

[1] Contact Dale O'Connell, Contamination Program Manager (doconnell@dot.state.nh.us) for access to RASCAL.

Table 15. Hazardous material incident reports from 2005-2014 in the region.

Commodity Long Name	Hazardous Class	Quantity Released (liquid gallons)	Date	Origin City	Origin State	Mode of Transportation
Incident City: Dover						
Corrosive Liquid Acidic Inorganic N.O.S.	Corrosive Material	0.26418	12/2/2005	Denver	PA	Highway
Hexanes	Flammable - Combustible Liquid	0.2	11/27/2006	Seabrook	NH	Highway
Resin Solution Flammable	Flammable - Combustible Liquid	0.26418	2/13/2007	Seabrook	NH	Highway
Isopropanol or Isopropyl Alcohol	Flammable - Combustible Liquid	0.007812	4/20/2007	Elmhurst	IL	Highway
Resin Solution Flammable	Flammable - Combustible Liquid	0.078125	10/4/2007	Seabrook	NH	Highway
Di-N-Butylamine	Corrosive Material	0.03125	10/18/2007	Agawam	MA	Highway
Polyamines Liquid Corrosive N.O.S.	Corrosive Material	0.25	10/26/2007	Hampton	NH	Highway
Resin Solution Flammable	Flammable - Combustible Liquid	0.125	5/21/2008	Seabrook	NH	Highway
Hydrofluoric Acid Solution	Corrosive Material	0.007813	8/12/2008	Valencia	CA	Highway
Aerosols Flammable (each not exceeding 1 L capacity)	Flammable Gas	0.273438	10/4/2010	Great Bend	KS	Highway
Aerosols Flammable (each not exceeding 1 L capacity)	Flammable Gas	0.039062	4/8/2011	Fort Lauderdale	FL	Highway
Aerosols Poison Packaging Group III (each not exceeding 1 L capacity)	Nonflammable Compressed Gas	0	11/4/2011	Hampton	NH	Air
Paint Including Paint Lacquer Enamel Stain Shellac Solutions Varnish Polish Liquid Filler and Liquid Lacquer Base	Flammable - Combustible Liquid	0.25	9/28/2012	Brighton	TN	Highway
Sulfuric Acid (>more than 51%)	Corrosive Material	0.26418	6/24/2013	Rochester	NH	Highway
Argon Compressed	Nonflammable Compressed Gas	0	12/26/2013	Hampton	NH	Air
Incident City: Farmington						
Sodium Hydroxide Solution	Corrosive Material	20	1/12/2007	Merrimack	NH	Highway

[Source: Hazmat Intelligence Portal, U.S. Department of Transportation. Data as of 8/21/2014]

Resources:

Emergency Response Guidebook
Developed in 2012 by US DOT, Transport Canada, and the Transportation Secretariat of Mexico for use by all emergency service personnel who respond to transportation incidents involving hazardous materials.

Environfacts Master Chemical Integrator (EMCI) Chemical References includes information about identifying characteristics, health hazards, ecological effects, and methods to reduce exposure to chemicals.

Measuring Progress in Chemical Safety: A Guide for Local Emergency Planning

Hazardous Materials Identification

Toxic Release Inventory Program

Toxic chemicals that may pose a threat to human health and the environment are tracked and managed under the EPA's Toxic Release Inventory (TRI) Program. Facilities that dispose of or transfer these chemicals are required to report how much of each chemical is released to the environmental and/or managed through recycling, energy recovery, and treatment. There are 16 TRI facilities within the region (see Table 16).

Table 16. TRI On-site and Off-site Reported Disposed of or Otherwise Released (2012)

Community	Facility / Chemical(s)	Total On-site Disposal or Other Releases (lbs)	Total Off-site Disposal or Other Releases (lbs)	Total On- and Off-site Disposal or Other Releases (lbs)
Dover	Agility Manufacturing Inc	0	0	0
	Lead	0	0	0
Rochester	Bacon Felt Co Inc	0.001142	.	0.001142
	Benzo(G,H,I)Perylene	0.000142	.	0.000142
	Polycyclic Aromatic Compounds	0.001	.	0.001
Rochester	Bronx Industries Inc	0	.	0
	Benzo(G,H,I)Perylene	0	.	0
	Polycyclic Aromatic Compounds	0	.	
Milton	Easter Boats Inc	15,639	.	15,639
	Styrene	15,639	.	15,639
Somersworth	GE Co	21	195	216
	Copper	10	20	30
	Lead Compounds	1	101	102
	Zinc Compounds	10	74	84
Rollinsford	Janco Electronics Inc.	0	0.1152	0.1152
	Lead Compounds	0	0.1152	0.1152
Rochester	Lars Heating Systems	1.1	0	1.1
	Chromium	0	0	0
	Copper	0	0	0
	Manganese	1.1	0	1.1
	Nickel	0	0	0

Community	Facility / Chemical(s)	Total On-site Disposal or Other Releases (lbs)	Total Off-site Disposal or Other Releases (lbs)	Total On- and Off-site Disposal or Other Releases (lbs)
Rochester	Lydall Filtration/Separation Inc.	0	1.84	1.84
	Lead Compounds	0	1.84	1.84

Table 16. TRI On-site and Off-site Reported Disposed of or Otherwise Released (2012)

Dover	Pace Industries	0.022	0	0.022
	Copper	0.022	0	0.022
	Lead	0	0	0
Farmington	Pike Industries Inc	2.3	0	2.3
	Benzo(G,H,I)Perylene	0	.	0
	Lead	0	0	0
	Polycyclic Aromatic Compounds	2.3	.	2.3
Dover	Redimix Cos Inc	0	0	0
	Mercury	0	0	0
Gonic	Textile Tapes Corp	2,960.00	.	2,960.00
	Tolune	2,960.00	.	2,960.00
Rochester	Thompson Investment Casting	807.45	1,505.45	2,312.90
	Cromium	30.9	752.9	783.8
	Nickel	776.55	752.55	1,529.10
Barrington	Turbocam Int	0	0	0
	Aluminum (Fume or Dust)	0	.	0
	Chromium	0	0	0
	Copper	0	0	0
	Lead	0	0	0
	Manganese	0	0	0
	Nickel	0	0	0
	Zinc (Fume or Dust)	0	.	0
Dover	Uraseal Inc	0	6.7506	6.7506
	Diisocynates	NA	NA	NA
	Mercury Compounds	0	6.7506	6.7506
Dover	Vishay-Hirel Systems LLC	7.572	0	7.572
	Lead	7.572	0	7.572
	Total	**19,438.45**	**1,709.16**	**21,147.60**

Note: A decimal point (.) denotes that the facility left that particular cell blank in its Form R submission (a zero in a cell denotes either that the facility reported 0 or NA in its Form R submission). NA in a cell denotes that the facility has submitted only Form A and thus the data for release, waste transfers or quantities of TRI chemicals in waste are not applicable. By submitting a Form A the facility has certified that its total annual reportable amount is less than 500 pounds, and that the facility does not manufacture, process, or otherwise use more than 1 million pounds of the toxic chemical.[Source: EPA TRI Explorer. Releases: Facility Report]

New Hampshire ranks 49 out of 56 states/territories nationwide based on pounds of toxic materials released or transferred (Rank1=highest releases).[34] The table below displays air, water, and land toxic releases in the state in 2012. A brief discussion of the impact of toxic releases on water resources is included in the following section and in the Water Infrastructure Appendix.

Table 17. New Hampshire TRI Information for 2012

On-site Releases and Off-Site Transfers	Pounds
Total On-site Releases	725,745
Air	623,778
Water	979
Land	101,169
Total Off-Site Transfers	104,307
Total On-site Releases and Off-site Transfers	**830,052**

Note: released in March 2014
[Source: EPA TRI Explorer]

Chlorine

Transportation of harmful chemicals can be hazardous for people who live or work near railroads and highways used for delivery. Converting facilities to safer, more secure alternative technologies can reduce risk associated with a number of highly dangerous chemicals.[35]

Chlorine, which is typically shipped in railcars, is one of the most dangerous chemicals. Acute exposure to chlorine can cause severe burns, throat irritation, tearing, coughing, nose bleeds, chest pain, pulmonary edema, and death. Chronic exposure can damage teeth and lungs. Chlorine is commonly used as a disinfectant in drinking water and wastewater treatment.[36] Water utilities can reduce risk by converting from chlorine gas or sulfur dioxide gas to alternatives such as liquid bleach or ultraviolet light. Already, approximately two-thirds of large wastewater utilities in the U.S. use a disinfectant alternative to chlorine gas. Within southeast New Hampshire, Aquarion (Hampton), Dover, Durham, Newmarket, Portsmouth, Rochester, Rollinsford, Seabrook, and Somersworth water treatment plants use chlorine as a primary and secondary disinfectant.[37]

JCI Jones Chemicals, Inc., located in Merrimack, NH, is listed as one of the highest risk facilities in the country. The facility uses bulk shipments of chlorine gas in producing liquid bleach and repackaging to smaller containers. A safer alternative would be to produce bleach on-site from salt and electricity without shipping or storing chlorine gas as well as phase out distribution of chlorine gas. There are over 1.2 million residents within this facility's vulnerability zone or within range of a worst-case toxic chemical release.[38]

For more information on chemical hazards see The Center for American Progress's Chemical Security 101 report.

Stormwater Runoff

Stormwater discharges from hazardous waste treatment, storage, or disposal facilities (TSDF) can impact water quality.[39] Factors that influence the impact of industrial activities and materials on water quality include:

- Type of hazardous material
- Procedure for controlling runoff at a particular waste treatment, storage, or disposal facility (TSDF)
- Geographic location
- Topography
- Extent of impervious surfaces
- Type of ground cover
- Outdoor activities
- Size of the operation
- Type, duration, and intensity of precipitation events.[40]

NHDOT operates industrial facilities that can produce pollutants that may be transported by stormwater runoff into storm sewer systems and water bodies.[41] These facilities are regulated through NPDES requirements to reduce potential impacts to waterbodies. There are 11 categories of stormwater discharges associated with industrial activity that require a Multi-Sector General Permit (MSGP). Facilities operated by NHDOT must obtain a MSGP unless

otherwise exempt. For more information about MSGP industrial facilities, see NHDES's Information on Best Management Practices.

For more information about stormwater runoff see the Water Infrastructure Appendix.

Road Salt

Sodium chloride (road salt) is the primary agent used for de-icing roadways in New Hampshire. Road salt is composed of 40% sodium ions (Na+) and 60% chloride ions (Cl-). Ferrocyanide, an anti-caking agent, as well as impurities such as phosphorus and iron can account for as much as 5% of the total weight of road salt. Impacts of road salt include:

- Water quality impacts
- Human health impacts
- Pet impacts
- Wildlife impacts
- Aquatic life impacts
- Vegetation impacts
- Soil impacts
- Infrastructure impacts
- And groundwater impacts.[42]

For more information, see the New Hampshire Road Salt Reduction Initiative and the Water Infrastructure appendix. A brief summary of the new salt facility on Route 16 is also included in the Water Infrastructure appendix.

Water

Drinking Water

Drinking water and wastewater utilities are vulnerable to threats such as natural disasters or human caused incidents that impact normal operations. These disruptions may have a range of significant impacts on communities, ranging from reduced water for firefighting, sanitation, and health care functions to contaminated drinking water.[43]

Availability, Access, and Supply

Planning for an emergency drinking water supply is an important part of local emergency management as power damage to critical water infrastructure, power interruptions, drought, or contamination can impact the availability of drinking water supplies. To ensure that an adequate potable water supply is available following an emergency event, collaboration and shared responsibility is important.[44] EPA's review of legislative language covering emergency water supply planning showed local, state, and federal government have some responsibility for emergency water supply planning.[45]

In 2002 the Public Health Security and Bioterrorism Preparedness and Response Act amended the Safe Drinking Water Act to address emergency water supplies. To learn more about the Safe Drinking Water Act, see the Water Infrastructure Appendix. In coordination with the Secretary of Defense, the EPA Administrator is responsible for developing plans to assure the provision of potable water supplies under national security emergency conditions. During national disasters, this responsibility falls to the state if the EPA Administrator determines that the state has adopted and can implement a plan for the provision of water during an emergency. In the event of a large system or regional outage, states typically turn to the federal government for support under the Robert T. Strafford Disaster Relief and Emergency Assistance Act (Strafford Act), which allows federal agencies to provide bottled water and public works engineering.[46] Community water systems serving over 3,300 people are required to have an emergency response plan and should coordinate with existing Local Emergency Planning Committees established under the Emergency Planning and Community Right-to-Know Act when preparing this plan.[47]

Sources of emergency potable water supplies may include water from a neighboring water utility (interconnectivity), bottled water, and locally produced water (packaging pre-treated water). See the Water Infrastructure Appendix for more information about interconnectivity studies in the region.

The EPA recommends that utilities should develop plans that consider the:

- Vulnerability to reasonably expected events
- Number of people affected for the duration of an event
- Point when local capacity to respond would be exhausted
- Most feasible potable water alternatives for the event
- Resources needed from others
- Communication process for requesting resources from others
- Implementation of the delivery of needed resources[48]

The faster water utility services can be returned to normal, the lesser the consequences of an incident to a community will be.

In addition, the EPA indicates that a state-level aggregation of the resource gaps identified at the local level would be beneficial for all planning partners.[49] For more information see Planning for an Emergency Drinking Water Supply.

Administrative Rule Env-Dw 503.21, adopted by NHDES in 2002, requires all community systems to have an maintain and emergency plan. The next scheduled six-year plan update is March 31, 2015. Plans are also updated annually. For more information, see NHDES's Emergency Planning Guide and resources.

Contamination

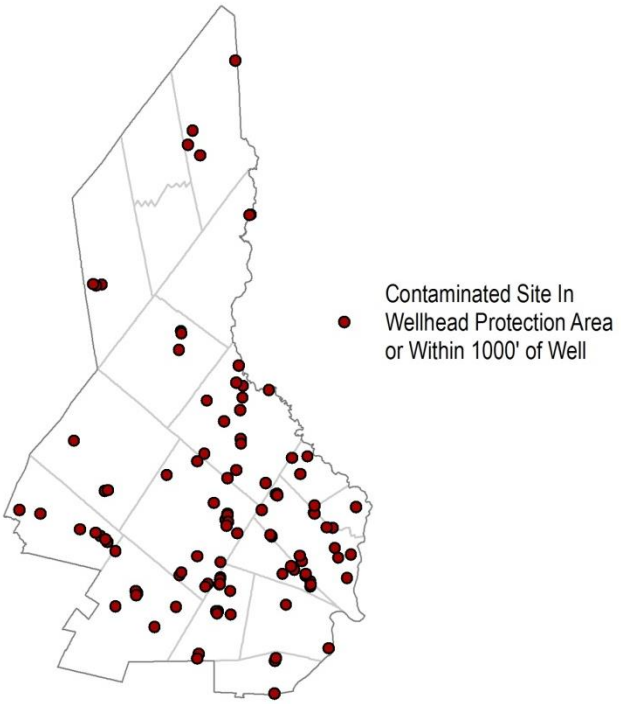
Both manmade and naturally occurring contaminants impact water quality. Common human-made contaminants include oil, gas, and other chemicals. Fecal matter from septic tanks and sewage tanks that are transported during flood events can contaminate water.

The NH DES Water Division Spill Response and Complaint Investigation Section (SRCIS) handles complaints related to:

- Illegal disposal of oil and hazard materials
- Illegal dumping of solid waste and household refuse
- Automobile accidents
- Road side spills involving oil, chemical, and other waste
- Spills onto surface water of the state

SRCIS manages petroleum and hazardous materials spills to the ground or surface water and toxic air releases (NHDES)

Figure 7. Contaminated sites located in wellhead protection areas or within 1000' of a well



[Source: NH DES. 2013 csite layer]

Naturally Occurring Contaminants

Arsenic and radon are two contaminants that are commonly present in groundwater in New Hampshire. Both are public health concerns. Arsenic in drinking water has been associated with cancer, reproductive problems, diabetes, a weakened immune system, and developmental delays in children.[50] In January of 2001, EPA established a goal of zero arsenic in drinking water and adopted an enforceable maximum contaminant limit (MCL) of 10 parts per billion. For information about reducing arsenic in drinking water through whole-house (or point of entry) and point-of-use treatments see NH DES's Fact Sheet: Arsenic in New Hampshire Well Water. Within the State, southeast NH has the largest potential for arsenic concentrations above 5 and 10 ug/L in bedrock groundwater.[51]

NH DES Resources:

Drinking Water Advisory

Resources for Storm & Flood Readiness, Cleanup & Recovery

Inhalation of radon-laden air in a home increases the risk of lung cancer. An estimated 100 residents die each year due to long-term exposure to radon. The EPA has established an advisory action level of 4 picocuries per liter (pCi/L) for radon gas in indoor air.

NH DES's recommended action level for radon in drinking water is 2,000 pCi/L. Approximately 55% of the 3,400 samples from public water systems in the state that were submitted over a six-year period had radon levels that were higher than the state recommended level of action. For more information on radon occurrence and exposure see NH DES's Fact Sheet: Radon in Air and Water An Overview for the Homeowner.

Contacts:

Toxic Air Releases
NH Air Programs – (603) 271-1370

Water Supplies
NHDES Drinking Water and Groundwater Bureau – (603) 271-2513
All other times, nights-weekends-holidays, contact DES via the NH State Police at (603) 223-4381.

Wastewater Treatment Plant Operations
NHDES Wastewater Engineering Bureau – (603) 271-2001

Lake Issues
NHDES Limnology Center – (603) 271-3414 (weekdays) or (603) 419-9325

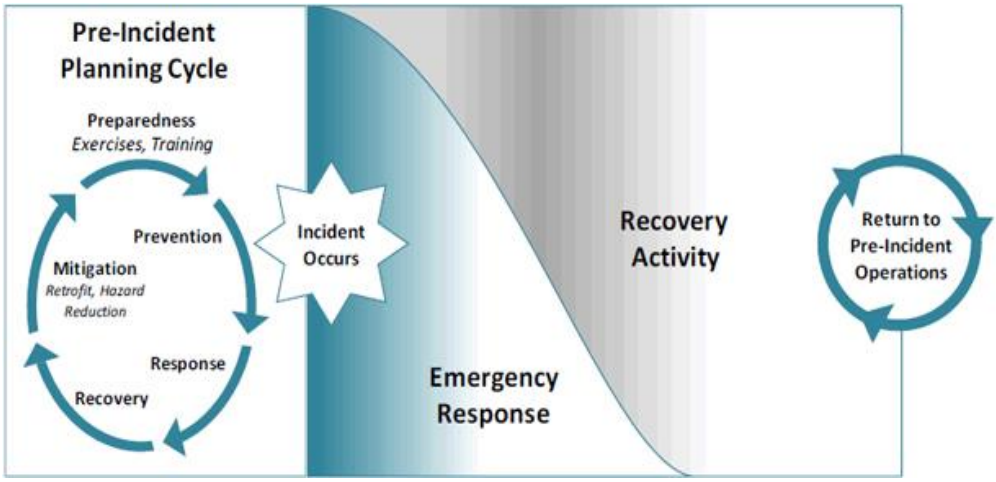
NH DES recommends testing wells at least annually for acute contaminants including bacteria and nitrates and every three years for chronic contaminants including arsenic, radon, uranium, lead, and copper.

Environmental Protection Agency's Role

EPA's emergency response program responds to chemical, oil, biological and radiological releases and large-scale national emergencies, including homeland security incidents. EPA funds response actions, such as clean up and removal, directly as well as oversees and enforces actions conducted by potentially responsible parties. During emergency responses, EPA reaches out to communities in three main ways:

- Community Right-to-Know. Perhaps the most important area of outreach, the Emergency Planning and Community Right-to-Know Act (EPCRA) protects the safety of frontline emergency responders and keeps communities informed about the local presence and use of hazardous substances.
- Community Relations. Good communication fosters greater cooperation and can even save lives. Through EPA's Emergency Response program, EPA places trained personnel in position to help local officials and citizens understand the circumstances of a release incident.
- Recognizing Releases. Due to the prevalence of contaminants, EPA provides guidance on how to recognize when a hazardous substance might be present and what individuals can do to respond. EPA also trains local emergency responders to help them identify and respond to hazardous substance emergencies.[52]

Figure 8. Conceptual pre-incident, response, and recovery model.



[Source: US EPA]

The EPA has a number of guidance documents and resources to support drinking water and wastewater utility preparedness, response, and recovery.

The EPA recommends that state agencies encourage utilities to join their state's Water/Wastewater Agency Response Network (WARN). In addition, communities should conduct educational and awareness campaigns before a disaster to improve resilience at the individual household level.[53]

Strategies to facilitate recovery process include:

- Conduct a pre-incident infrastructure assessment to help expedite recovery and assessment and reimbursement. See Reimbursement Tips for Water Sector Emergency Response and Recovery for more information.
- Standardize reimbursement forms for all utilities that can be prepopulated prior to an event may expedite

recovery.

- Become familiar with the resource request process and procedures at the local, state, and federal level
- Prepare to request emergency power resources, including identifying start up and operational power requirements, becoming familiar with generator installation, and maintaining adequate fuel supplies.

Best Practices

Utilities should reach out to local emergency planning committees and emergency management agencies to discuss preparedness and response to incidents that may affect the water and wastewater sector.

In 2009, 2010, and 2011, EPA and state drinking water and wastewater programs co-sponsored water sector emergency response tabletop exercises to raise awareness of the importance of water and wastewater services and the need for coordinated emergency response across state borders. The primary objective of the exercises was to examine the roles and responsibilities of utilities, local, state, federal, and other water sector stakeholders and response partners. One major lesson learned was the importance of planning and coordinating with response partners before an incident. See: Coordination of the Water and Emergency Services Sectors: An Important Step to Better Response for more information.

Fire Aid Infrastructure

An adequate, uninterrupted source of water is important for suppressing fires. There are two types of systems: pressurized systems, such as fire hydrants, which are connected to a municipal water supply, and non-pressurized systems such as dry hydrants and ponds that rely on rainfall. Regular maintenance schedules and accurate mapping of fire aid infrastructure is important. The following table lists auxiliary fire aid infrastructure identified by fifteen communities in the region in their Multi-Hazard Mitigation Plans.

Table 18. Fire aid infrastructure in the Strafford region

Community	Water Body	Cistern Locations	Tower	Dry Hydrant	Well
Barrington	Medums Pond	Route 125			
	North River Lake	Scruton Pond Road			
	Ayer's Lake	Domenic			
	Swain's Lake	Stone Farm Drive			
	Nippo Pond	Middle School Annex			
	Long Pond	Elementary School			
	Round Pond	Public Works Garage			
	Winkley Pond				
	Drew's Pond				
	Isinglass River				
	Boodey Farm Pond				
	Bellamy River				
	Fire Pond				
	Christmas Dove Pond				
	Nippo Lake Golf Course				
Dover	Willand Pond	Upper Factory	Garrison Water Tower		
		115 Industrial Park	Long Hill Road Water Tower		
Durham		Pine Crest		Bennett Road	
				Bennett Road	
				Fox Hill Road	
				Ross Road	
				220 Newmarket Road	
				300 Durham Point Road	
				Little John Road	
Famington			Water Tower – Bay Road		Well #4 – between Henry Wilson Highway and Hancock St

Community	Water Body	Cistern Locations	Tower	Dry Hydrant	Well
			Water Tower – Paulson Road		Well #5 – Between Henry Wilson Highway and Hancock St.
					Well #6 – Henry Wilson Highway
Lee*		Wednesday Hill Road/Toon Lane		Calef Highway/Concord Road	
		Thurston Road		Calef Highway/Harvey Mill Road	
		Piper Lane		Caverno Drive	
		Davis Lane		Darby Field Common	
		Elder Osborne Drive		Hayes Road	
		Captain Parker Drive		Hobbs Road	
		Caverno Drive		James Farm Road	
		Langley Drive		Randall Road	
		Durgin Drive		Wheelwright Drive	
		Whittier Lane		Whittier Lane	
		Wendy's on Calef Highway		Whittier Lane	
		Depot Cistern		Market Basket – Concord Rd West	
		Steppingstone/Route 125		Packers Falls Road – Route 155	
				Concord Road West	
				Riverside Farm Drive	
Madbury	Nute Road Fire Pond	Moharimet School Cistern		Moharimet Drive	
		Hoyt Pond Road Cistern		Perkins Drive	
		Champernown Cistern		Raynes Farm Road	
Middleton	Sunrise Lake – Access from: Jones Beach Route 153; Lake Road; Tanglewood Beach; Beach 1; Beach 2				Well #1 – Harold Road (The Estates)
	Old Tate Lane – Silver Street near Town Line on west side of road				Well #2 & #3 – Beech Tree Drive & Jordan Drive
Milton		Industrial Park	Silver Brook Drive	Across from Farm Museum	
		Shortridge Academy		Row Dam	

Community	Water Body	Cistern Locations	Tower	Dry Hydrant	Well
		Ashwood Road		Applebee Road – Branch Hill farm and Seimon Access Road (defunt)	
		Briar Ridge Road		Waumebek Dam	
		Lord Lane		Thurston Hill/Gilman Farm	
		Yankee Way			
New Durham		3 Cisterns		Main Street	
				Meyer's Farm	
				Kennel	
				Maggie Lane	
				Gold Course	
				Merrymeeting Dam	
				Birch Hill	
				Davis Crossing	
				Tash and Route 11	
Newmarket	River Access from: Ash Swamp Road; Piscassic Street; Crow and Eagle Falls; River street		Water Tower – access from Great Hill Dr.	Schanda Road	Sewall Town Well
				Hamel Farm Pond	Bennet Town Well
				Gonet Drive	Wade Farm Well
				Ash Swamp	Schanda Well
					Moody Point Well
Northwood		19 Davlynn Drive		30 Old Mountain Road	
		49 Knowles Way		100 Green Street	
		79 Oakwood Drive		50 Temperance Hill Drive	
		5 Meadow Land		59 Bennett Bridge Road	
		617 1st NH Turnpike		430 Bow Lake Road	
				35 Bow Lake Road	
				893 1st NH Turnpike	
				280 Jenness Pond Road	
				100 Catamount Road	
				160 Old Pittsfield Road	
				School Street	
				171 Lake Shore Drive	
				53 Cole Road	
				740 1st NH Turnpike	

Community	Water Body	Cistern Locations	Tower	Dry Hydrant	Well
				27 Angela Drive	
Nottingham	Cooper Hill (Northwood)	85 Freeman Hall Road		Sunrise Lane	
	Lucas Pond Road, across from Demmons	Route 4 and Sophia Way		110 Kennard Road	
	Nottingham Lake Dam	Francesca Way/Michela Way		139 Stage Road, Lower Parking Lot	
	South Pawtuckaway Lake/Dollof Dam	26 Francesca Way		245 Stage Road, Across from school	
		Shannon Drive		44 McCrillis Road	
		129 Deerfield Road		Smoke Street/Little River	
		Kelsey Road/East Lane		Stage Road, East Side of 156 merge	
		Roaymond Road, North of Barderry Lane		Ledge Farm Road	
		Route 4 East of Mendums Landing Road			
Rollinsford	Janco Fire Pond		Water Tower-Jesse Doe Road	Janco – Rollins Road	Well – Scoutland Road
	Fire Pond off Robert's Road			Mills – Rollins Road	Well – General John Sullivan Way
	Fire Pond off Pinch Hill Road			Whitehouse – Rollins Road	Well – Foundry Street
				Lavin – Moses Carr Road	
Somersworth	Fire Pond – Piper Penderhill Road				
Strafford	Fire Pond – Parker Mtn. Rd./Old Upper Cross Road			Drakes Hill Road	
	River Access –Wingate Road			Water Street (2)	
				Browns Road	
				Province Road	
				Irvine Rd./First Crown Point Road	
				Tasker Road**	

Community	Water Body	Cistern Locations	Tower	Dry Hydrant	Well
				On Island in Bow Lake	
				On northwest edge of Bow Lake	
				Mt. Misery Road	

*10 pressure hydrants on Old Concord Turnpike and 7 on Thurston Road in Lee

**Active Hydrant

***Mutual aid system for fire – Ossipee Valley Mutual Aid Association

Misc. Emergency backup power generators located at public safety and pump station in Wakefield, plan identifies the need for a generator at School, Resource Center, East Wakefield Fire Station

Emergency Planning Resources

Integrated Planning

Local emergency management agencies that coordinate risk reduction, preparedness, response, and recovery from emergencies and disaster are a key component of minimizing impacts to the health and wellbeing of individuals and the infrastructure and economy of communities. Elements including planning, training, exercises, and public education provide the foundation for emergency management planning.[54]

Establishing relationships with the emergency services sector has benefited water utilities around the country in a number of ways including:

- Funding security improvements
- Funding training
- Locating resources and support when emergency generators fail
- Building relationships
- Helping the community

For example, after establishing relationships across city operations, an east coast city wastewater treatment plant provided drivers, radios, and 4x4 vehicles to follow, direct, and report on the contracted snowplows during a snowstorm to support the highway division.[55]

FEMA offers a course on Integrated Emergency Management to build awareness and skills needed to develop and implement policies, plans, and procedures in an emergency operations center to protect life and property through applications of sounds emergency management principals in all phases of emergency management.

Utilities and state and local agencies should collaborate to improve response and recovery through planning for alternative water supplies. This may include conducting follow up interconnectivity studies (see the Water Infrastructure Appendix to learn more about drinking water interconnectivity in the region).

Communities should coordinate local hazard mitigation with state hazard mitigation and incorporate recommendations from the state as appropriate. Homeland Security and Emergency Management (HSEM) provides technical assistance to regional planning commissions, contracted planners, and local communities that request support when developing plans. See the State of New Hampshire Multi-Hazard Mitigation Plan for more information about state hazard mitigation planning and a summary of funding sources for local mitigation.

Public Education and Awareness

Public education and awareness play an important role in disaster risk reduction. Public education has resulted in significant changes in human behavior that impact health including areas such as potable water, road safety, waterborne and airborne diseases, and wearing seat belts.[56] In addition, education has been shown to influence policy controls on hazardous materials, safe and renewable energy, and water conservation, as well as awareness of natural hazards. Public education and awareness are also critical to the effectiveness of emergency alert systems.[57]

The International Federation of Red Cross and Red Crescent Societies' Public Awareness and Public Education for Disaster Risk Reduction: A Guide includes four key strategies for educating the public about hazards and risk: campaigns, participatory learning, informal education, and formal school-based interviews.

Emergency management education can be incorporated into the school system. The US Department of Education Readiness and Emergency Management For Schools program improves emergency management at the district and school-building levels through training school personnel on emergency management procedures; communicating with parents about emergency plans and procedures; and coordinating with local law enforcement, public safety, or emergency management, public health, and mental health agencies.[58] Resources available through the Department of Education include:

- Guide to School Vulnerability Assessments
- Readiness and Emergency Management for Schools Technical Assistance Center
- School Emergency Supplies and "Go Kits"
- Office of Safe and Healthy Students Emergency Planning

Resiliency

Hazard Mitigation Planning

Between July of 1953 and August of 2013, New Hampshire experienced 12 federal emergency declarations and 34 major disaster declarations. Over half of these declarations occurred since 2005.[59] Communities increase their ability to respond and recover to natural disasters and severe weather through hazard mitigation planning. Examples of mitigation actions include:

- Promoting effective land use planning based on identified hazards
- Adopting, and enforcing building codes and standards
- Buying flood insurance to protect personal property and belongings
- Securing shelves and water heaters to walls
- Elevating structures above the floodplain
- Retrofitting structures to withstand earthquakes
- Acquisition and demolition of flood prone structures
- Replacing Culverts damaged by flooding to increase capacity to prevent future damage.[60]

For more information about increasing resiliency to natural hazards, see the Climate Change Impacts and Adaptation and Water Infrastructure Appendices.

Pre-Event Recovery Model Ordinance

Recovery Ordinances can serve as a primary recovery plan or a supplement to an existing plan. The American Planning Association's Model Recovery Ordinance is a tool and guide for communities that are interested in using this mechanism to efficiently manage short- and long-term recovery in advance of and after a declared disaster.

Alternative Energy

Alternative sources of energy such as solar or wind will likely play an increasingly significant role in supplementing conventional fuel sources. Diversifying the energy mix and including more renewable sources of energy can increase capacity, improve reliability, reduce costs, and reduce unexpected failures during both extreme and normal conditions.[61] For more information about energy efficiency and alternative energy in the region, see the Energy Efficiency Appendix.

Infrastructure

Public works, transportation, and engineering departments in our communities should incorporate current extreme temperature, flooding, and sea level rise projections into design standards for new infrastructure or infrastructure modifications. For more information and resources about infrastructure, climate change, and resiliency, see the Climate Change Impacts and Adaptation Appendix.

To facilitate response in an emergency, communities should consider identifying contractors for sand, snow, or debris removal pre-disaster. Having a plan and resources in place can simplify the recovery process and allow personnel to allocate their limited time and resources to other aspects of recovery and response.

Local and Regional Sources of Emergency Information

Examples of sources of emergency information are included below. This list is not intended to be comprehensive.

- City and town webpages
- Radio Stations: NHPR (104.3 FM, 103.9 FM), WRSN (88.1 FM), WUNH (93.1 FM), WOKQ (97.5), WQSO (96.7 FM), MPBN (90.1)
- Television Stations: WMRU, local channels
- Strafford County Hew Hampshire Live Audio Feeds
- Ready Strafford and Ready Strafford Facebook page
- WebEOC – A crisis-disaster management system for large scale events, disasters, and support and increasing public safety information sharing. WebECO User Guide.
- Follow local police and emergency managers on Twitter.
  Ex. Dover NH Police
- Visit community and county Facebook pages
  Ex: Health and Safety Council of Strafford County
- UNH Emergency and Storm Information
- UNH Alert
- Reverse 911 (about)
- CodeRED Emergency Communications Network
- School systems
- Local emergency management or police homepages Ex. Barrington Police
- Local Newspapers/Online News
  Seacoast Online – Portsmouth Herald, Exeter News-Letter, Fosters Daily Democrat
- National Weather Service Office Gray/Portland, ME

Additional Resources

HSEM Emergency Planning Municipalities
FEMA National Incident Management System
Red Cross Flood Safety Checklist
Northeast States Emergency Consortium Resources
New Hampshire Health Officers Association Online Resources
New Hampshire Municipal Association Municipal Levels of Emergency Preparedness
NH DES Disaster Preparedness and Response Information and Links
NH DES Carbon Monoxide Information For New Hampshire
NH DES GREENWorks – Power Outage Safety
Town of Lee Emergency Planning Checklist
ReadyNH
Health and Safety Council of Strafford County
EPA Climate Ready Utilities Tool

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