


Recent Past Hazard Events and Locations 2020

ALLENSTOWN

Identifying Severe Weather Impacts or Hazard Events on Allenstown Locations 2014-2020

MEETING 1
2/25/2020
CNHRPC Email your file to Stephanie Alexander at salexander@cnhrpc.org

 **TASK: Describe your brief anecdotal recollections about RECENT PAST Severe Weather or Hazard Events in Town by Month & Year (2014-2020). They may be your personal experiences or impacts noted during your employment in Town.**

LIST RECENT PAST HAZARD EVENTS & LOCATIONS in Town								
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Natural Hazards	2014 Events (Month)-	2015 Events (Month)-	2016 Events (Month)-	2017 Events (Month)-	2018 Events (Month)-	2019 Events (Month)-	2020 Events (Month)-	Use Cell as Needed	CONSIDER HAZARD IMPACTS ON THESE PLACES <u>List the Places requested (ID) by NAME and STREET/LOCATION in any blank cell within the Hazard's row.</u>
DAM FAILURE Water Overtop, Breach, Beaver, etc.									<ul style="list-style-type: none"> High Hazard (H) dam is the ID HIGH HAZ DAM. Low Hazard (L) dams are ID LOW HAZ DAMS. Other active Non-Menace (NM) dams are in Town are more likely to experience dam failure. Beaver dams have a high probability of flooding and potential to break. ID BEAVER DAMS OF CONCERN ID DAM IN ANOTHER TOWN?
DROUGHT									<ul style="list-style-type: none"> Areas susceptible to drought and dry conditions include agricultural operations such as forests, farms, orchards and nurseries: ID FORESTS, FARMS AND NURSERIES. Water Supplies: Residences with private dug wells and Town or community water supplies more susceptible. ID WATER SUPPLIES. All fire ponds will be low or dry during drought times: ID FIRE PONDS. Drought means increased risk of brush fire with dry vegetation (see Wildfire for areas). Gravel roads affected because can't grade them when water is low. Higher elevations and ledgy locations tend to run dry first. ID OTHER AREAS/ISSUES
EARTHQUAKE									<ul style="list-style-type: none"> The Central NH Region is seismically active and earthquakes are regularly felt from area epicenters, some very close to or within Town. Locations with high density population or potential gathering sites to evacuate include: ID SCHOOLS, VULNERABLE POPS, SENIOR HOUSING. Earthquake damage to electric utility poles and wires, roadways and infrastructure (dams, water lines, bridges) could be significant. Areas with underground utilities, community water systems, and the old, historic buildings are more vulnerable to earthquake damage: ID SITES
EXTREME TEMPERATURES Excessive Heat, Heat Wave, or Cold, Wind Chill, etc									<ul style="list-style-type: none"> Groups most susceptible to excessive heat include: ID SCHOOLS, VULNERABLE POPS, SENIOR HOUSING. Town buildings can be opened as cooling centers during extended heat conditions or warming centers during cold snaps: ID TEMP SHELTERS. Vulnerable land areas most susceptible to extreme heat include the farms and nurseries (see Drought): ID FARMS AND NURSERIES. People may be subject to cold temperature, snow isolation, transportation accidents, power failure and communications failure during winter storm events.
HIGH WIND EVENTS Wind, Thunderstorms, Hail, Downbursts, Tornadoes, Debris, etc									<ul style="list-style-type: none"> Most High Wind -vulnerable areas include populated buildings, high-density locations, and utilities serving residents and businesses: ID HIGH DENSITY AREAS. ID LOCATIONS OF TELECOMM TOWERS. ID VULNERABLE POPS. ID UTILITIES Much of the Town is wooded and forested and sections would be difficult to access with trees and power lines down on the residential roads. They could be difficult to access with treefall and power lines down from Wind events. ID MOST REMOTE LOCATIONS/SUBDIVISIONS. ID CUL-DE-SACS. Agricultural areas are vulnerable to damage from High Winds: ID FARMS Older, or historical buildings are vulnerable to high wind damage: ID OLD BUILDINGS Floods are also possible with severe storm events (see Inland Flooding). ID ESPECIALLY VULNERABLE LOCATIONS
INLAND FLOODING Rains, Snow Melt, Flash Floods, etc									<ul style="list-style-type: none"> Floodplains of ID RIVERS. ID BROOKS. ID MEADOWS. ID HIGH HAZ DAMS. Other recreation ponds and several dams can flood, leaving businesses and motorists along ID LOCAL NH OR US ROUTES. Runoff from roadways or heavy rain can cause floods over the Entire Town. ID FLOOD LOCATIONS Roads, bridges, drainage systems and areas of past, repaired, or existing. ID ROAD FLOOD SITES

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LANDSLIDE Soil, Rockslide, Excavation Areas, etc									<ul style="list-style-type: none"> Slopes greater than 25%, including roads with steep ditching or embankments are most vulnerable to landslide. Roads with steep ditching or embankments are most vulnerable to landslide include: ID ROADS WITH STEEP SLOPES/LEDGE. ID PRIVATE LOCATIONS. Landslide is a fairly uncommon hazard but one that can have devastating effects, including property damage and in some cases, loss of life. The excavation sites in Town are potential sites of landslide: ID EXCAVATION SITES.
LIGHTNING									<ul style="list-style-type: none"> Areas of particular concern to lightning include critical facilities, high density areas, high elevation such as ID HIGH DENSITY AREAS. ID LOCATIONS OF TELECOMM TOWERS. ID VULNERABLE POPS. ID TALL BUILDINGS Old, historic or wooden structures and those structures without lightning rods would be more susceptible to damage from a strike than those buildings with the rods. ID OLD BUILDINGS Remote, forested areas, parks, public Town Forests, conservation areas, open recreation fields, points of higher elevation than surrounding area can be dangerous to people and property: ID CONSERVATION LANDS. ID HILLS. ID POPULAR TRAILS. ID HIGH ELEVATION SPOTS. Other aboveground utilities, transformers, water towers are vulnerable to lightning: ID UTILITIES
PUBLIC HEALTH Infectious Diseases, Air & Water Quality, Biological, Addiction, Arboviral, Tick-borne, etc									<ul style="list-style-type: none"> Congregate populations more vulnerable to infectious diseases: ID SCHOOLS, VULNERABLE POPS, SENIOR HOUSING. ID RESTAURANTS, STORES, VENUES. Sites listed in APPENDIX A - increase the risk of exposure to and transfer of illness, causing potential public health concerns. The many forests, conservation areas, agriculture, wooded areas, and ponds can host ticks (Lyme, Anaplasmosis, etc) and mosquitos (arboviral- West Nile, EEE, Equine Infectious Anemia, etc) which carry diseases. ID CONSERVATION LANDS. ID HILLS. ID POPULAR TRAILS. Wheelabrator in Penacook and the Merrimack Power Station are considered the largest source of local air pollution in addition to vehicular traffic of Concord and the highways. ID OTHER POLLUTION SOURCES, CONCERNS
RIVER HAZARDS Ice Jams, Scouring, Erosion, Channel Movement, Debris, etc									<ul style="list-style-type: none"> ID RIVERS. ID BROOKS and their Floodplains, meadows. Because of the high volumes and swift moving Rivers, bank erosion, scouring and channel movement are hazards of potential concern. Erosion of banks is presently occurring here: ID EROSION SITES. Ice jams could endanger the dams and nearby facilities and have the potential to recur: ID ICE JAM SITES
SEVERE WINTER WEATHER Snow, Ice, Blizzard, etc									<ul style="list-style-type: none"> Particular areas of concern during winter weather include: D HIGH DENSITY AREAS. ID LOCATIONS OF TELECOMM TOWERS. ID VULNERABLE POPS. ID UTILITIES The entire road network is susceptible to winter conditions, including the state roads. Local Town roads are also often difficult to travel. Accidents are most frequent on: ID PROBLEM ROADS. ROAD is a sharp incline/decline and cars have trouble traveling the road during winter conditions. ID NH OR US ROUTES are major travel ways for residents and commuters through the Town. Wooded and forested sections of Town are vulnerable to snow, ice effects and power failure. Much of the Town is wooded and forested and sections would be difficult to access with trees and power lines down on the residential roads. ID MOST REMOTE LOCATIONS/SUBDIVISIONS. ID CUL-DE-SACS. Local government operations are susceptible to winter weather interruption or staff safety when commuting. See also previously listed Wind and Flood vulnerability sites. ID CRITICAL FACILITIES

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SOLAR STORMS AND SPACE WEATHER Solar Winds, Geomagnetic Storms (Aurora Borealis), Solar Radiation, Radio									<ul style="list-style-type: none"> Should a solar event impact the Region, it is likely most electrical and radio systems will become unavailable. The Town's critical facilities must be operational to support residents: ID TOWN ESSENTIAL FACILITIES. The Town's technology is most vulnerable to space weather, especially communications systems and electrical grid. ID TECHNOLOGY LOCATIONS: Alternate support or communications systems available in the event of blackout or equipment failure include: ID LAST RESORT SYSTEMS.
TROPICAL AND POST-TROPICAL CYCLONES Hurricanes, Tropical Storms, Tree Debris									<ul style="list-style-type: none"> Most High Wind -vulnerable areas include populated buildings, high-density locations, and utilities serving residents and businesses: ID HIGH DENSITY AREAS. ID LOCATIONS OF TELECOMM TOWERS. ID VULNERABLE POPS. ID UTILITIES Much of the Town is wooded and forested and sections would be difficult to access with trees and power lines down on the residential roads. They could be difficult to access with treefall and power lines down from Wind events. ID MOST REMOTE LOCATIONS/SUBDIVISIONS. ID CUL-DE-SACS. Agricultural areas are vulnerable to damage from High Winds: ID FARMS Older, or historical buildings are vulnerable to high wind damage: ID OLD BUILDINGS
WILDFIRE Brushfire, Outdoor Fires, Accidental, etc									<ul style="list-style-type: none"> Locations most susceptible include vulnerable populations and buildings as identified in Lightning. ID DIFFICULT AREAS TO REACH Much of the Town is wooded and forested and sections would be difficult to access in case of wildfire. Most remote roads/areas of Town include: ID REMOTE ROADS. Inaccessible locations are more vulnerable to wildfire impacts because fire crews and emergency personnel have greater difficulty responding quickly to fires in these locations. Remote, forested areas, parks, public Forests, conservation areas, open recreation fields, points of higher elevation than surrounding area can be dangerous during wildfire: ID CONSERVATION LANDS. ID HILLS. ID POPULAR TRAILS. ID HIGH ELEVATION SPOTS.
SECONDARY TECHNOLOGICAL AND HUMAN HAZARDS	2014 Events (Month)-	2015 Events (Month)-	2016 Events (Month)-	2017 Events (Month)-	2018 Events (Month)-	2019 Events (Month)-	2020 Events (Month)-	Use Cell as Needed	CONSIDER HAZARD IMPACTS ON THESE PLACES List the Places requested (ID) by NAME and STREET/LOCATION in any blank cell within the Hazard's row.
AGING INFRASTRUCTURE Bridges, Culverts, Roads, Pipes, Underground Lines, Debris, etc									<ul style="list-style-type: none"> Most dams, culverts, and bridges could experience impacts of infrastructure. ID OTHER AGING INFRASTRUCTURE, BRIDGES, DAMS, CULVERTS, ETC Roads with culverts that regularly washout are listed above under Flooding. Box culverts as replacements for failing culverts have been recently installed as a result of recurring flooding events. The Town's roads are becoming more difficult to maintain and rehabilitate. Problems are found on: ID PROBLEM ROADS
FIRE Vehicle, Structure, Arson, Conflagration, etc									<ul style="list-style-type: none"> Several locations around Town are potential sites for explosions and serious fires and numerous other sites that have the potential for prolonged burning. They include above ground fuel tanks on farms, high tension power lines, manufacturing and industrial businesses, areas away from fire ponds; vacant buildings, foreclosed homes or seasonal buildings; or buildings in densely populated areas. ID SPECIFIC ISSUES/SITES Vehicle fires could occur anywhere, parking lots, driveways, roadways. Human-started fires could occur in the Forests and other wooded or popular conservation areas. ID CONSERVATION LANDS. ID HILLS. ID POPULAR TRAILS.

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HAZARDOUS MATERIALS Haz Mat Spills, Brownfields, Trucking, etc									<ul style="list-style-type: none"> Railroad ID LOCATIONS, ID INTERSTATES, ID US & NH ROUTES and some local roads are the most realistic routes taken where vehicular and railcar traffic transport hazardous waste. Serious transportation accidents involving hazardous materials have the greatest possibility here. Vulnerable areas for targeted evacuation include ID SCHOOLS, SENIOR COMMUNITIES, NEIGHBORHOODS. Largest or most dangerous stationary sites that store and/or handle haz mat on site (fertilizer, pesticides, fuel, etc). Occupational haz mat sites where spills could occur include schools, manufacturing, industry, of which there are many in Town. ID KEY HAZ MAT SITES Possible brownfields sites to be aware of include: ID BROWNFIELDS
LONG TERM UTILITY OUTAGE Power, Water, Sewer, Gas, Internet, Communications, Live Wire Danger, etc									<ul style="list-style-type: none"> Electrical outages are often town wide, but high density areas or vulnerable populations are of greatest concern: ID SCHOOLS, VULNERABLE POPS, SENIOR HOUSING. Power outages may last for several days before service is restored from a large event. ID ELECTRIC PROVIDERS. Systems failures could affect Town businesses and local government on an isolated scale. The internet enables alternative communication options. ID PRIMARY INTERNET PROVIDER Communications failure would be worse if it occurred during a holiday or inhibited emergency dispatch and EOC operations. Most Town radios are interoperable, and they are used in more than one location. Communications systems are detailed in the APPENDIX A Facility Vulnerability Assessment tables. ID TELECOMM TOWERS are the primary towers in Town. ID REPEATER LOCATIONS. The Town is serviced by the Capital Area Mutual Aid Compact, which does all the emergency medical service and Fire dispatching. They have redundant capabilities and are currently upgrading their systems. The Town has other utility systems, such as gas, water, sewer, tanks and more. ID UTILITY PROVIDERS. These systems are confined to smaller areas, such as: ID LOCATIONS WHERE FOUND. Much of the Town is wooded and forested and sections would be difficult to access with excessive power lines down (See also High Wind). ID MOST REMOTE LOCATIONS/SUBDIVISIONS. ID CUL-DE-SACS. The agricultural farms (feeding or dairy animals) should be monitored too: ID ANIMAL FARMS
TRANSPORTATION CRASH Vehicle, Airplane, Helicopter, Rail, Interstate, Pedestrian, Bicycle, etc									<ul style="list-style-type: none"> ID INTERSTATES, ID US & NH ROUTES US 3/NH 28 and on/off ramps are the main highways through Town. Rerouting traffic can be dangerous with potentially severe transportation accidents. Dangerous locations and intersections include: ID CRASH LOCATIONS. In addition to accidents at these locations, transportation accidents occur throughout the community at rural intersections, along hills and s-curves as shown on Maps 1-4. Accidents increase during hazard events, winter weather and wind storms. In addition, the Town may also have alternative crash potential, such as railroad or airplanes. ID ALT TRANS & LOCATIONS
MASS CASUALTY INCIDENT As a result of any hazard event									<ul style="list-style-type: none"> A Mass Casualty event is unlikely but as a possible secondary effect of a large scale event, such as Terrorism/Violence, Public Health, or High Wind Event. These could occur throughout the Town. Any Mass Casualty event could be localized. Occasions of potential public unrest include: Town & School Meetings, voting day, local board meetings, during visits from political candidates, large events such as Old Home Day, Veteran's Parade, School sports events or graduations. ID HIGHEST RISK EVENTS & LOCATIONS The Town has a Town shelter at ID SHELTER and is a member of the Central NH Public Health Network and other regional emergency groups.

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TERRORISM/ VIOLENCE Active Shooter, Hostage, Public Harm, Civil Disturbance/ Unrest, Politically Motivated Attacks, Incendiary Devices, Sabotage, Vandalism, etc									<ul style="list-style-type: none"> • Unlikely, but terrorism could possibly occur anywhere in Entire Town and result in Mass Casualty. Most susceptible sites could include: ID PUBLIC BUILDINGS, ID SCHOOLS, ID VULNERABLE POPS. • All other governmental or state facilities in Town (ID OTHER), political offices or rallies, churches, ID TELECOMM TOWERS, ID LARGE HAZ MAT manufacturing or industrial businesses with large quantities of hazardous materials, ID STORES, RESTAURANTS, could be possible terrorism targets. • Actual Sabotage would be most likely to occur at Town or Governmental Facilities: ID PUBLIC BUILDINGS, ID SCHOOLS, Municipal Water or Wastewater systems (ID LOCAL UTILITY SYSTEMS). • Vandalism could occur at dams, under bridges, other public water supplies or towers, cemeteries, vacant buildings, beaver dams, recreation areas, etc. ID AREAS EXPERIENCING VANDALISM • Hostage and active shooter situations could most likely occur domestically anywhere in the Town or in buildings and schools: ID PUBLIC BUILDINGS, ID SCHOOLS. • Sites of local significance, such as key bridges, historical sites or monuments, dams, or other public places etc could become potential sites of Terrorism/ Violence: ID GATHERING SITES, ID KEY BRIDGES, ID KEY DAMS, ID KEY HISTORICAL SITES.
CYBER EVENT Municipal Computer Systems Attack, Website Overtake, Cloud Data Breach, Telephone Rerouting, Identity Theft, Phishing,									<ul style="list-style-type: none"> • Cyber attack is a likely event to occur in Town, whether targeting Town websites, computer systems, cloud data systems, archival records, email phishing, etc. ID MAIN STATE, TOWN & SCHOOL FACILITIES • Businesses that rely on technology may be vulnerable to cyber events (local economics). ID TECH BUSINESS, PRIVATE • Email scams and identity fraud are likely regular problems for residents. Towns often post known attempts on websites. ID OTHER

This Hazard Mitigation Plan purposefully reduces redundancy of hazards by combining them into single categories where possible and reduces the number of hazards examined when they are not especially relevant to the Town or Central NH Region. The hazards list is now more efficient and streamlined, echoing the the new NHHSEM's State Multi-Hazard Mitigation Plan 2018. Snow Avalanche and Coastal Flooding hazards are not pertinent to the Town or Central NH Region and are therefore excluded from incorporation. Radiological hazard evaluation is not considered relevant since the Town is not within a 10-mile Emergency Planning Zone (EPZ) but could be considered within the context of Mass Casualty or Hazardous Materials if required. The former Human hazards of Civil Disturbance/ Public Unrest, Sabotage/ Vandalism, and Hostage Situation are absorbed into the Terrorism/ Violence hazard category.

Please add new information and email Excel file to Stephanie at salexander@cnhrpc.org before Work Session 1.