

5.2 IDENTIFICATION OF NATURAL HAZARDS OF CONCERN

To provide a strong foundation for mitigation strategies considered in Sections 6 and 9, Saratoga County considered a full range of natural hazards that could impact the area, and then identified and ranked those hazards that presented the greatest concern. The natural hazard of concern identification process incorporated input from the County and participating jurisdictions; review of the 2008 New York State Hazard Mitigation Plan (NYS HMP) and previous hazard identification efforts; research and local, state, and federal information on the frequency, magnitude, and costs associated with the various hazards that have previously, or could feasibly, impact the region; and qualitative or anecdotal information regarding natural hazards and the perceived vulnerability of the study area’s assets to them. Table 5.2-1 documents the process of identifying the natural hazards of concern for further profiling and evaluation.

Hazards of Concern is defined as those hazards that are considered most likely to impact a community. These are identified using available data and local knowledge.

For the purposes of this planning effort, the Planning Committee chose to group some natural hazards together, based on the similarity of hazard events, their typical concurrence or their impacts, consideration of how hazards have been grouped in Federal Emergency Management Agency (FEMA) guidance documents (FEMA 386-1, “Understanding Your Risks, Identifying Hazards and Estimating Losses; FEMA’s “Multi-Hazard Identification and Risk Assessment – The Cornerstone of the National Mitigation Strategy”), and consideration of hazard grouping in the NYS HMP.

The “Flood” hazard includes riverine, flash, ice jam, man-made dam and beaver dam flooding (overtopping or breaching from natural causes). Other types of flooding such as coastal or urban drainage do not generally occur within the County; therefore, they were not further considered for inclusion within this HMP. Inclusion of the various forms of flooding under a general “Flood” hazard is consistent with that used in FEMA’s “Multi-Hazard Identification and Risk Assessment” guidance. In addition, the local phenomenon of sporadic elevated groundwater has been included in this hazard although it is not traditionally addressed by the flood hazard. The existence of this was indicated toward the end of the planning process, and hence has been included in this plan as a concern to the County. Future investigation of this phenomenon and its historical and future impacts are the subject of proposed mitigation actions in the areas affected by this sporadic hazard.

The “Severe Storm” hazard includes windstorms that often entail a variety of other influencing weather conditions including thunderstorms, hail, lightning and tornados. Since tropical disturbances are identified as a type of severe storm event, this hazard also includes tropical cyclone events (hurricanes, tropical storms and tropical depressions). Tropical cyclones were not grouped as a separate hazard, because the County felt that these types of events do not directly impact the County on a frequent basis and that exposure and risk of such events are minimal in comparison to communities along the New York coastline.

The “Severe Winter Storm” hazard includes heavy snowfall, blizzards, freezing rain/sleet, ice storms and extra-tropical cyclones (Nor’Easters and severe winter low-pressure systems). Extra-tropical events generally occur during winter weather months; therefore, for the purpose of this HMP, all such events are to be grouped within this hazard. Although not all extra-tropical events, such as nor’easters, occur during the winter, they will remain grouped within this hazard category to avoid duplication of events in hazard profiles. Also, since extreme cold temperatures are generated during winter weather months and/or accompany winter storms, extreme cold events have also been grouped with this hazard. This grouping is consistent with that used in the NYS HMP, as well as the “Severe Winter Storm” hazard used in FEMA’s “Multi-Hazard Identification and Risk Assessment” guidance.

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These groupings do not change the definition of the included specific events/hazards, as defined within FEMA guidance and other risk assessment documents, and does not affect the hazard analysis conducted through the use of HAZUS-MH, either directly or as a risk assessment support tool.

Please note that technological (for example, hazardous material incidents) and man-made hazards (for example, terrorism) are not being addressed in this planning process. The DMA 2000 regulations do not require consideration of such hazards and due to limited funding; these were not chosen for inclusion in this plan by the County and planning participants. The County may attempt to expand the scope of this HMP to include other less frequent natural hazards and/or technological (hazardous material incidents) and man-made (terrorism, man-made dam breaches/failures) hazards as resources permit.

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Table 5.2-1. Identification of Natural Hazards of Concern for Saratoga County, New York

Hazard	Step 1	Step 2	Step 3	
	Is this a hazard that may occur in Saratoga County?	If yes, does this hazard pose a significant threat to Saratoga County?	Why was this determination made?	Source(s)
Avalanche	No	No	<ul style="list-style-type: none"> The NYS HMP does not identify avalanche as a hazard of concern for New York State. The topography and climate of Saratoga County does not readily support the occurrence of an avalanche event. New York State in general has a very low occurrence of avalanche events based on statistics provided by National Avalanche Center – American Avalanche Association (NAC-AAA) between 1950 and 2006. 	<ul style="list-style-type: none"> NYSDPC Review of NAC-AAA database between 1950 and 2006
Coastal Erosion / Coastal Storm	No	No	<ul style="list-style-type: none"> Saratoga County is not bounded by coastal waters; therefore, not directly impacted by coastal storms that result in coastal erosion. 	<ul style="list-style-type: none"> NYSDPC
Drought (including Extreme Heat)	Yes	No	<ul style="list-style-type: none"> The NYS HMP identifies drought and extreme heat events as hazards of concern for New York State. Saratoga County is located within the Hudson Valley Climate Division. Between 1908 and 2002, 15 severe and extreme droughts struck this climate division. These events include: <ul style="list-style-type: none"> April – May 1985 August – September 1995 December 2001 – February 2002 Various sources indicated that many drought events or periods impacted large regions of the State, including Saratoga County. Such events include: <ul style="list-style-type: none"> August through December 1993 – resulting in over \$50 M in crop damages throughout the Mid-Hudson Valley August 1995 – Drought watch was in affect for 20 New York State counties, including Saratoga County. Spring 1997 – Drought conditions in Clifton Park May - August 1999 – Exceptional Drought conditions August / September 2002 – Abnormally to moderately dry conditions in the vicinity of Saratoga County. Record extreme heat events during the summer months of May through September in Saratoga County occurred on: <ul style="list-style-type: none"> September 1973 – Temperatures averaged 94°F throughout County July 1988 - Temperatures averaged 97°F throughout County July 1995 - Temperatures averaged 97°F throughout County August 1996 - Temperatures averaged 96°F throughout County 	<ul style="list-style-type: none"> NYSDPC NYSEMO CEMP USGS NOAA-NCDC Drought Reporter SHELDUS NY Times U.S. Drought Monitor Archive The Weather Channel

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	Is this a hazard that may occur in Saratoga County?	If yes, does this hazard pose a significant threat to Saratoga County?	Why was this determination made?	Source(s)
			<ul style="list-style-type: none"> o August 2001 - Temperatures averaged 96°F throughout County • Saratoga County was unable to locate further local information with their available resources regarding this hazard of concern, including significant losses to the County and/or municipalities from historic events. Therefore, the County decided not to analyze the drought hazard. 	
Earthquake	Yes	Yes	<ul style="list-style-type: none"> • The NYS HMP identifies earthquake as a hazard of concern for New York State. Areas within the State with a higher seismic risk include; The North and Northeast third (1/3) of the State (The North Country/Adirondack Region including a portion of the Greater Albany-Saratoga region), the Southeast corner (including the greater New York City area and western Long Island), and the Northwest corner (including the City of Buffalo and vicinity) of the State, in that order from higher to lower. • According to the USGS online seismic hazard maps, the peak ground acceleration with a 10% probability of exceedance over 50 years for Saratoga County is between 3 and 5% g. FEMA guidance recommends earthquakes are evaluated further if an area has a 3% g peak acceleration or more. 	<ul style="list-style-type: none"> • NYSDPC • NOAA – Review of NGDC Earthquake Database from 1800 to present • USGS – Earthquake Hazards Program, Review of USGS Seismic Maps
Expansive Soils	No	No	<ul style="list-style-type: none"> • The NYS HMP identifies expansive soils as a hazard of concern for New York State. • USGS indicated that Saratoga County has little or no clays with swelling potential or have less than 50 percent of soils with abundant clays of slight to moderate swelling potential. • Based on all sources reviewed, no known historical occurrences are reported for Saratoga County. 	<ul style="list-style-type: none"> • NYSDPC • USGS 1989 Swelling Clays Map of the Conterminous United States.
Extreme Temperature	Yes	Yes	Please see Drought for Extreme Heat Events Please see Severe Winter Storms for Extreme Cold Events	
Flood (Riverine, Flash, Ice Jam Dam/Beaver Dam Flooding, Elevated Groundwater)	Yes	Yes	<ul style="list-style-type: none"> • The NYS HMP identifies flooding as the main hazard of concern for New York State. • Saratoga County is bordered to the south by the Mohawk River and to the north and east by the Hudson River; two major rivers that experience flooding on an annual basis. • Saratoga County has been issued 3 FEMA Disaster Declarations for flood-related events, each event resulting in extensive damages. 	<ul style="list-style-type: none"> • NYSDPC • NYSEMO • FEMA • Hazards & Vulnerability Research Institute



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			<ul style="list-style-type: none"> ○ FEMA DR-1095 (January 1996) - Flooding in Saratoga County was most severe in Waterford, Stillwater and Halfmoon, resulting in approximately \$10 M in damages. Flooding resulted in evacuations, inundated homes, closed and washed out roads, and damages to local businesses throughout the County. ○ FEMA DR-1196 (January 1998) - Saratoga County experienced between \$125 K and \$745 K in flood damages. Many roads were flooded or washed out and hundreds of evacuations occurred throughout the County, A two thousand foot section of Wilton Mountain Road was washed out. ○ FEMA DR-1534 (May / June 2004) - In Saratoga County, the Town of Providence reported 10 inches of water on Clark Road. The Hudson River exceeded its flood stage in Mechanicville and Schuylerville. Estimated losses in Saratoga County are unknown. ● NOAA's NCDC storm events database indicates that Saratoga County was impacted by approximately 69 flood events between 1950 and 2008. Other major flood events that affected the County include, but are not limited to, the following: <ul style="list-style-type: none"> ○ March 1913: Record flood crest event along the Sacandaga River at Stewards Bridge in Hadley and along the Hudson River in Hadley. ○ June 1972 (Tropical Storm Agnes): Saratoga County experienced approximately \$1.6 M in property and crop damages. ○ March 1977: Produced near record floods in Kaydeross/Saratoga area ○ November 1996: Saratoga County experienced approximately \$404 K in property damage. ○ May/September 2000: Saratoga County experienced approximately \$80 K in property damages from this event. ○ December 2000: Saratoga County experienced approximately \$190 K in property losses. ○ July/August 2003: Saratoga County experienced between \$100 and \$160 K in property losses. ○ June/July 2006: Significant flooding, power outages, and Erie and Champlain Canal closings within Saratoga County. ○ April 2008: A sod farm near Schuylerville suffered estimated losses of \$225 K due to prolonged submersion of sod in Hudson River flood waters. 	<p>(SHELDUS)</p> <ul style="list-style-type: none"> ● NOAA-NCDC ● NPDP ● NYS DEP ● NFIP ● Lent ● Town of Wilton



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			<ul style="list-style-type: none"> The 2008 NYS HMP indicated that Saratoga County has been ranked as the 23rd most flood vulnerable county in New York State based on potential flood exposure and vulnerability to loss. Over 6.27-percent of the County is located in a 100-year floodplain. NFIP identifies that Saratoga County has made 371 flood claims between 1978 and 2008, receiving \$3 M in total payments. Saratoga County’s FIS indicates that principle flooding sources in the County are the Hudson and Mohawk Rivers; Kayaderoseras, Mount Anthony, Sturdevant, Slade, Rowland Hollow, Ballston, Fish, Gordon, and Schuyler Creeks; Plum, Geyser and Putnam Brooks; Anthony, Dwaas, Alpaus, Snook and Morning Kills and along the shorelines of Saratoga, Ballston, and Round Lakes; and occasionally, Spring Run County officials indicated that Beaver Dam problems and associated flooding is a problem throughout the County. A beaver dam in May 2006 caused approximately \$200 K in damages in the Town of Greenfield. Ice Jams are mentioned separately in this Table but are grouped with the Flood hazard in this plan (see below). Elevated groundwater was introduced as an additional flooding hazard towards the end of this planning process. This type of flooding has been occurring in the Towns of Wilton and Moreau. Specific loss information was not available at the time this plan was submitted. 	
Ground Failure (Landslide, Land Subsidence)	Yes	Yes	<p>Landslide</p> <ul style="list-style-type: none"> The NYS HMP identifies landslide as a hazard of concern for New York State, with Saratoga County located in low and high landslide incidence areas. The NYS HMP indicates that Saratoga County has had five landslide occurrences from 1837 to 2007. The NYS HMP listed Saratoga County as the 17th County in the State most threatened by and vulnerable to landslides and landslide losses. The Pleistocene clay deposits of the upper Hudson River Valley that extend north into the Champlain River Valley are highly susceptible to slumps and earth flows. Saratoga County officials indicated that Landslides are a concern in the County. <p>Land Subsidence</p> <ul style="list-style-type: none"> The NYS HMP indicates that New York State is vulnerable to land 	<ul style="list-style-type: none"> NYS DPC USGS National Atlas.gov (USGS) USGS Fact Sheet 165-00 (Dec. 2000) Radbruch-Hall et al. (USGS)



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			<p>subsidence; however, this hazard is “extremely localized” and poses a “very low risk to population and property.” The NYS HMP does not identify Saratoga County as a community that has experienced land subsidence in the past.</p> <ul style="list-style-type: none"> • According to USGS, Saratoga County is not made up of unconsolidated aquifer systems, hence it is unlikely that there will be permanent subsidence and related ground failures. 	
Hailstorm	Yes	Yes	Please see Severe Storm	
Hurricane (and other Tropical Cyclones)	Yes	Yes	Please see Severe Storm	
Ice Jams (categorized as a Flood hazard in this HMP)	Yes	Yes	<ul style="list-style-type: none"> • The NYS HMP identifies ice jam flooding as a hazard of concern for New York State (grouped as a type of flood). New York State ranks 2nd in the Nation for total number of ice jam events, with over 1,435 incidents documented between February 1, 1867 and March 16, 2007. • The USACE CRREL Ice Jam Database, NYS HMP and various other sources, indicates that 32 reported ice jam events have occurred within Saratoga County between 1900 and 2007. Major events include those that occurred on: <ul style="list-style-type: none"> ○ February/March 1910 - During the flood, water backed up due to the formation of a large ice gorge near the town of Crescent (downstream of Lock 7) ○ March 1914 - Rexford Bridge gave way from the pressure of the ice jam. ○ January 1996 - Ice blocks at the Crescent were measured at 8 feet by 30 feet square. Significant ice jamming occurred between Lock 7 and Lock 8. ○ February 1997 – Ice jams caused low-land flooding between Crescent and the Waterford/Troy area. ○ February 2000 - Flooding was reported along Canal Road, River Road, River View Road and Rosendale Road. The worst flooding from this event occurred in the Town of Halfmoon between Lock 6 and Lock 7 of the Erie Canal. ○ March 2004 - The ice that had broken out of Schenectady had jammed in the Rexford Gorge upstream of the Vischer Ferry Dam causing the 	<ul style="list-style-type: none"> • NYSDPC • Review of USACE CRREL Ice Jam Database • NY Times



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			<p>river to overflow into a low lying neighborhood just downstream of Rexford. Flooding was confined to the south side of the river. Several homes were flooded in that area.</p> <ul style="list-style-type: none"> o March 2007 - Ice jam that occurred in the Mohawk River in Schenectady and Saratoga Counties. Flooding occurred between Halfmoon and Clifton Park leading to several road closures, including Riverview Road between Boyack Road and Van Vranken Road. 	
Ice Storm	Yes	Yes	Please see Severe Winter Storm	
Infestation	No	No	<ul style="list-style-type: none"> • The NYS HMP does not identify infestation as a hazard of concern for New York State. • Based on all sources reviewed, no known significant occurrences are reported for Saratoga County 	<ul style="list-style-type: none"> • NYSDPC
Land Subsidence	Yes	No	Please see Ground Failure	
Landslide	Yes	Yes	Please see Ground Failure	
Nor'Easters (and other extra tropical storms)	Yes	Yes	Please see Severe Winter Storm	
Severe Storm (Windstorms, Thunderstorms, Hail, Lightning, Tornadoes and Hurricanes)	Yes	Yes	<ul style="list-style-type: none"> • The NYS HMP identifies all types of severe storms as hazards of concern for New York State. Saratoga County is identified as a high risk area for tornadoes and has experienced eight tornado events. NYS HMP listed Saratoga County as the 31st County in the State most threatened by and vulnerable to extreme wind and wind losses. • The NYS HMP, NYSEMO, FEMA indicate that Saratoga County has been issued three FEMA Disaster Declarations for severe storm events (some also identified as flooding events). <ul style="list-style-type: none"> o FEMA DR-1095 (January 1996) – See Flood o FEMA DR-1222 (May 1998) - Significant F3 tornado occurred in Saratoga and northern Rensselaer counties. This tornado touched down at Ushers Road in the Town of Halfmoon and moved due east into the City of Mechanicville. In Saratoga County approximately 55 homes were destroyed and 230 were damaged. A State of Emergency was 	<ul style="list-style-type: none"> • NYSDPC • FEMA • Hazards & Vulnerability Research Institute (SHELDUS) • NOAA-NCDC



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			<p>declared in Saratoga County. The County experienced approximately \$60 M in property damages and 68 injuries.</p> <ul style="list-style-type: none"> ○ FEMA DR-1534 (May / June 2004) – See Flood ● Other severe storm events that specifically impacted Saratoga County, include, but are not limited to: <ul style="list-style-type: none"> ○ November 1989 (Tornado) – The County experienced approximately \$250 K in property damages and one injury. ○ July 1994 (TSTM / Winds) - The County experienced approximately \$5.0 M in property damages. ○ July 1995 (TSTM / Winds) - The County experienced approximately \$500 K in property damages. ○ July 1997 (TSTM / Hail) - The County experienced approximately \$100 K in property damages and one injury. In South Glens Falls, a male was struck by lightning while on the phone. ○ July 1999 (TSTM / Winds) - A microburst estimated at 80-90 mph downed hundreds of trees resulting in closed roads in Clifton Park, Saratoga County. The worst damage was in the vicinity of Ashley Drive and Huckleberry Lane. The swath was 1.6 miles long and fanned out 0.8 miles wide. Thunderstorm winds knocked trees onto a mobile home, crushing it, in the Town of Halfmoon. The County experienced approximately \$300 K in property damages. ○ June 2000 (TSTM / Winds) - Saratoga county was especially hard hit with many communities reporting widespread damage estimated at \$1.5 M, particularly in Ballston Spa, Milton Center and Galway. ○ September 2000 (TSTM / Winds) – Ballston Spa experienced approximately \$250 K in property damages. ○ May 2001 (Hail) - Hail from thunderstorms produced significant damage in two apple orchards in Southern Saratoga County, one in Clifton Park, and the other in Rexford. Crop damage was estimated at \$200 K. ○ June 2002 (TSTM / Winds) – Areas between Round Lake and Stillwater experienced approximately \$172 K in property damages. ○ June / July 2006 (Severe Storm and Flooding) – See Flood ○ August 2007 (Lightning) - Lightning struck a house in Mechanicville causing over \$130 K in damage to the second floor and attic. ● NOAA’s NCDC storm events database indicates that Saratoga County was impacted by approximately 513 severe storm events between 1950 and 	



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			2008.	
Severe Winter Storm (Heavy Snow, Blizzards, Freezing Rain/Sleet, Ice Storms, Nor'Easters and Extreme Cold)	Yes	Yes	<ul style="list-style-type: none"> • The NYS HMP identifies all types of severe winter storms as hazards of concern for New York State. The NYSDPC and NYSEMO listed Saratoga County as the 20th County in the State most threatened by and vulnerable to snow and snow loss, with an annual average snowfall 68.7 inches. Saratoga County is also listed as the 40th County in New York State most threatened by and vulnerable to ice storms and ice storm loss. • Saratoga County was declared a disaster areas for 4 FEMA Disaster Declarations (DR) or Emergencies (EM) for severe storm events, including: <ul style="list-style-type: none"> ○ FEMA DR-801 (October 1987) - Three inches up to about 2 feet of extremely wet snow fell across eastern New York and western New England resulting in many deaths and injuries and an enormous amount of property damage. ○ FEMA EM-3107 (March 1993) - Statewide Blizzard resulting in \$8.4 M in eligible losses to the State. Saratoga County received between 10 to 30 inches of snow. Clifton Park received over 27 inches of snow. ○ FEMA DR-1196 (January 1998) - Saratoga County experienced between \$125 and \$745 K in property damages. ○ FEMA EM-3173 (December 2002 / January 2003) - In December 2002, Saratoga County received between 10 to 30 inches of snow. A transformer malfunction left 2,600 customers in the dark in the Ballston Spa area with spotty power outages noted elsewhere. FEMA indicated that Saratoga County received approximately \$559 K in disaster aid from this event. • Various sources indicated that many other severe winter storm events impacted Saratoga County: <ul style="list-style-type: none"> ○ March 1888 (Blizzard) - 58 inches of snow fell in Saratoga Springs. ○ February 1910 (Blizzard) - Snowdrifts were 20-foot deep in Saratoga County. ○ February 1961 (Snowstorm) - Saratoga County experienced over \$81 K in property damages and received between 10 and 30 inches of snow from this event. ○ January 1983 (Snowstorms) – Two snowstorms created \$238 K in property damages (for each event) in Saratoga County. ○ February 1984 (Snowstorm) - Created \$238 K in property damages in 	<ul style="list-style-type: none"> • NYSDPC • NYSEMO • FEMA • NOAA-NCDC Hazards & Vulnerability Research Institute (SHELDUS) • Kocin and Uccellini • The Weather Channel • NCDC Snow Climatology • NWS



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			<p>Saratoga County.</p> <ul style="list-style-type: none"> ○ February 1990 (Snowstorm) - Created \$545 K in property damages in Saratoga County. ○ March 1991 (Freezing Rain) - Created \$833 K in property damages in Saratoga County. ○ February 1995 (Snowstorm) - Created \$500 K in property damages in Saratoga County. ○ March 1995 (Snowstorm - Created \$100 K in property damages in Saratoga County. ○ March / April 1997 - Created \$709 K in property damages in Saratoga County. ○ December 1998 – Caused a six car pile-up on Union Avenue in Saratoga Springs in Saratoga County. The accident forced twenty cars off the road. ○ February 2003 - Snow totals in Saratoga County ranged from 10.3 inches in Harmony Corner to 12 and 14 inches in Jonesville, Malta and Round Lake. ○ December 2003 (Snowstorm) - Snow totals in Saratoga County ranged from 12.9 inches in Malta to 22 inches in Saratoga Springs. ○ February 2007 - Snow totals in Saratoga County ranged from 18 inches in Mechanicsville to 30 inches in Greenfield Center and Porter Corners. <ul style="list-style-type: none"> ● Extreme cold events during the winter months of December through March in Saratoga County occurred on: <ul style="list-style-type: none"> ○ January 1961 - Temperatures averaged -30°F throughout County. ○ January 1994 - Temperatures ranged between -23°F and -35°F throughout County. ○ February 1979 - Temperatures ranged between -17°F and -30°F throughout County. ○ February 1994 - Temperatures averaged -30°F throughout County. ○ March 1948 – Temperatures ranged between -16°F and -21°F throughout County. ○ March 1950 - Temperatures averaged -24°F throughout County. ○ November 1938 - Temperatures averaged -11°F throughout County. ○ December 1950 - Temperatures averaged -23°F throughout County. ○ December 1955 - Temperatures averaged -23°F throughout County. ○ December 1980 - Temperatures ranged between -15°F and -29°F 	



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			throughout County. • NOAA’s NCDC storm events database indicates that Saratoga County was impacted by approximately 116 winter storm events and 8 extreme cold / windchill events between 1950 and 2008. However, most events are of a regional extent rather than localized to just one county or community.	
Tornado	Yes	Yes	Please see Severe Storm	
Tsunami	No	No	• Tsunami is not identified as a hazard of concern in the NYS HMP	• NYSDPC
Volcano	No	No	• Volcanoes are not identified as a hazard of concern in the NYS HMP, because there are no known volcanoes located in the state.	• NYSDPC
Wildfire	Yes	No	• The NYS HMP identifies wildfires as hazards of concern for New York State. • The NWPD indicates that no records of wildfire incidences have been recorded for Saratoga County. • GeoMac indicates that portions of Saratoga County are located within the Wildland-Urban Interface. • USGS indicates that no wildfires greater than 250 acres were experienced in Saratoga County between 1980 and 2003. • GeoMAC indicates that no wildfires were experienced in Saratoga County between 2001 and 2008.	• NYSDPC • NWPD • USGS • GeoMAC
Windstorm	Yes	Yes	Please see Severe Storm	

CEMP	Comprehensive Emergency Management Plan	NRMC	Northeast Regional Climate Center
CRREL	Cold Regions Research and Engineering Laboratory	NWS	National Weather Service
DPC	Disaster Preparedness Commission	NWPD	National Wildfire Programs Database
DR	Presidential Disaster Declaration Number	NYCEM	New York City Area Consortium For Earthquake Loss Mitigation
EM	Presidential Emergency Declaration	NYS	New York State
EMO	Emergency Management Office	NYSDEC	New York State Department of Environmental Conservation
FEMA	Federal Emergency Management Agency	NYSDPC	New York State Disaster Preparedness Commission
HAZNY	Hazards New York	NYSEMO	New York State Emergency Management Office
HMP	Hazard Mitigation Plan	SHELDUS	Spatial Hazard Events and Losses Database for the United States
NCDC	National Climatic Data Center	USACE	U.S. Army Corp of Engineers
NGDC	National Geophysical Data Center	USEPA	U.S. Environmental Protection Agency
NID	National Inventory of Dams	USGS	U.S. Geologic Survey
NOAA	National Oceanic and Atmospheric Administration		
NPDP	National Performance of Dams Program		



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According to input from Saratoga County, and review of all available resources, a total of five natural hazards of concern were identified as significant hazards affecting the County, to be addressed within this plan:

- Earthquake
- Flooding (riverine, flash, ice jam, beaver dam and elevated groundwater flooding)
- Ground Failure (Landslides)
- Severe Storm (windstorms, thunderstorms, hail, tornadoes and hurricanes/tropical storms)
- Severe Winter Storm (heavy snow, blizzards, ice storms, Nor'Easters) / Extreme cold

Other natural hazards of concern have occurred within the County, but typically have a low potential to result in significant impacts. The County deemed other natural hazards as minor in comparison to those bulleted above; therefore, additional natural hazards will not be further addressed within this version of the Plan. However, if deemed necessary by the County, these hazards may be considered in future versions of the Plan.