

Jurisdictional Annex Town of Amboy

1.0 Contacts

Primary and secondary contacts for the Hazard Mitigation Plan update are listed below. In addition, the Town's website can be accessed at: http://www.townofamboy-ny.us/.

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2.0 Municipal Profile

Population

The 2016 American Community Survey estimated that 1,126 people live in the Town of Amboy. The Town's population has decreased by 14.2% compared with the 2000 Census population (1,312) (U.S. Census Bureau, 2016).

Location

The Town of Amboy is located in the eastern portion of Oswego County and is bordered by the Town of Williamstown to the north, Parish to the west, Constantia to the south, and the Town of Camden (Oneida County) to the east. Amboy is located approximately ten (10) miles east of the Interstate 81 corridor, and the Town is directly accessible from NY State Routes 69 and 183.

Brief History

The Town of Amboy was formed in 1830. European settlers first came to the area in 1805, which was later than neighboring Towns due to the lack of water transportation. While much of Oswego County was originally inhabited by Native Americans, there are no known Native-occupied sites in the Town of Amboy (Town of Amboy, 2003). Sawmills were among the first developments in the Town, and later agriculture became a significant industry. Agricultural production generally declined throughout the 1900s and since then, many farmed areas are now

reforested. Crop production and dairy farming were particularly important, and grist mills and cheese factories were established (Kelley, 2016). Historically, commercial entities were located at the intersections of State Route 69, State Route 183, and County Route 23, which are now primarily residential properties (Town of Amboy, 2003).

Governing Body

The Town of Amboy is governed by a five (5) member Town Board, led by the Town Supervisor. The Town Clerk, Highway Superintendent, Court Justice, Assessor, Tax Collector, Constable, Animal Control Officer, Historian, Building Inspector/Code Enforcement Officer, and Planning Board Chairman are other elected positions.

Future Growth

No significant developments have occurred within the Town of Amboy since the County's 2012 HMP, and no developments have occurred within hazard-prone areas such as floodplains.

3.0 Hazard Vulnerabilities and Ranking

3.1. Risk Assessment

The following scale was developed to determine hazard vulnerability for the jurisdiction. Each event was given a ranking from one (1) through three (3) for the severity of impact based on extent, onset warning, impact in damages and injury, and frequency: three (3) represents the greatest impact (large area, no warning, severe damage, and regular occurrence); two (2) represents moderate impact (several locations, hours of warning, moderate damage, and infrequent occurrence); and one (1) represents low impact (one location, days of warning, minor damage, and rare occurrence). The scores for each of these four (4) categories were used to assign an overall vulnerability for each hazard, as follows:

Low: 5 or lessModerate: 6 to 8High: 9 or greater

Table 1: Hazard Vulnerability by Event								
Hazard Event Extent Onset (Damages and Injury) Frequency Rank Rank								
Transportation Accident	1	3	2	1	Moderate	1		
Extreme Temps	3	1	1	2	Moderate	2		
Severe Winter Storm	3	1	2	3	High	3		
Ice Storm 3		1	3	2	High	4		
Severe T-Storm/Wind/Tornado	3	1	3	2	High	5		

Table 1: Hazard Vulnerability by Event								
Hazard Event	Extent	Onset	Impact (Damages and Injury)	Frequency	Vulnerability Rank	Jurisdiction Rank		
HAZMAT Fixed	2	3	2	1	Moderate	6		
HAZMAT Transit	1	3	2	1	Moderate	6		
Utility Failure	3	3	2	1	High	8		
Flood	3	1	2	3	High	9		
Dam Failure	1	3	3	1	Moderate	10		
Drought	3	1	2	1	Moderate	11		
Earthquake	2	3	2	1	Moderate	12		
Wildfire	2	3	1	1	Moderate	13		
Terrorism	1	3	2	1	Moderate	14		
Epidemic	2	1	1	1	Low	15		

3.2. Critical Facilities

Critical facilities are defined as any facility that is critical for emergency response or that requires special emergency response in the event of hazardous incidents as identified by the Town of Amboy. These facilities are also shown on Figure 1. The Town Hall serves as the emergency communications center. The Town's Emergency Shelters include the Amboy 4-H Environmental Education Center, West Amboy Community Church, Panther Lake Association, Town Hall, and West Amboy Volunteer Fire Department. The Amboy Center Church and West Amboy Community Church also serve as food pantries.

Table 2: Critical Facilities in the Town of Amboy						
Facility Name	Address (Street, Town/Village/Hamlet)	Parcel Located in Floodplain	Structure Located in Floodplain			
	Transportation Network					
Evacuation Routes	-	-	-			
Bridges	-	-	-			
	Municipal Services					
Amboy Town Hall	822 NY-69, Williamstown, NY 13493	No	No			
Town Highway Garage	2391 CR 23, Williamstown, NY 13493	No	No			
	Emergency and Medical Services					
Amboy Fire Dept.	10 Cusson Dr, West Monroe, NY 13167	No	No			
EMS Helipad	Amboy Town Park off of County Rt 23	100YR	No			
Community Services						
Panther Lake Association (Warming Station)	No	No				
Amboy Center United Methodist Church	1 NY-183, Williamstown, NY 13493	No	No			

Table 2: Critical Facilities in the Town of Amboy						
Facility Name	Address (Street, Town/Village/Hamlet)	Parcel Located in Floodplain	Structure Located in Floodplain			
Edu	ucational, Shelter and Evacuation Facilities					
Amboy 4-H Environmental Education Center	748 State Rt 183, Williamstown, NY 13493	100YR	No			
Warming Station- Panther Lake Association	Off of	No	No			
Amboy Center United Methodist Church	1 NY-183, Williamstown, NY 13493	No	No			
West Amboy Community Church	1267 CR 26, Williamstown, NY 13493	No	No			
	Dams					
Chase Dam	Scriba Creek, off of Tanner Rd	-	-			
Carterville Dam	Little River, off of CR 17	-	-			
Daniel F Whitcomb Pond Dam	Little River, off of CR 17A	-	-			
Bryant Dam	Little River, off of Cable Rd	-	-			
Merle Gansert Wildlife Marsh Dam	Trib. to N. Branch Little Salmon River, off of Garcia Rd	-	-			
Harry Bryant Wildlife Pond Dam	Trib. to Wells Brook, off of Mellon Rd	-	-			

4.0 Priority Hazard Events

The following sections detail the priority hazard events identified by the jurisdiction. Additional information about each hazard including frequency, history, and severity within Oswego County is included within Section 5.0 of the main body of the Plan.

The probability of climate-related hazard events is expected to increase in the future within the Town of Amboy. Climate change is expected to cause an increase in weather volatility, rising sea level, and greater temperature extremes. Properties near streams are likely to experience increased flooding occurrences.

Past occurrences of hazard events are indicated in their respective profiles below. Some hazards may not have locally available documentation of past occurrence, but were included in this annex for future mitigation planning consideration.

4.1 Natural Hazards

Natural hazards selected to be profiled for the Town of Amboy are described in detail below. Hazards are presented in order of the Town's ranking.

4.1.1 Extreme Temperatures

For a description of this hazard, please see section 5.1.5 of the main body of the Plan.

Hazard Vulnerability

Historically, extreme cold events have occurred about every other year in Oswego County. These events typically affect most or all of the County. The entire Town of Amboy is susceptible to an extreme temperature event. Vulnerable populations, including people under the age of five (5) or over the age of sixty-five (65), along with low income populations and people with health problems are most vulnerable. The Town was determined to have a moderate vulnerability to extreme temperature events due to their widespread nature, and relatively common occurrence.

Historical Hazard Occurrences and Damage Estimates

The Town of Amboy was affected by the county-wide extreme cold events recorded by the NCDC, which are described in Section 5.1.5. No damage estimates or records related to extreme temperature events are reported specifically for the Town of Amboy. Extreme temperature events are unlikely to cause significant property damage, though crop damage is possible depending on the time of year. Significant injuries or loss of life due to extreme temperature events are possible, but in small numbers.

Future Potential Impacts

The Town of Amboy will continue to experience extreme temperature events in the future, as will the rest of Oswego County. Extreme temperature events are likely to increase in frequency due to climate change. Rural communities such as the Town of Amboy are generally used to extreme temperature events. The Town has emergency shelters established, several of which are designated warming stations that residents may use during extreme cold events.

4.1.2 Severe Winter Storm

For a description of this hazard, please see section 5.1.4 of the main body of the Plan.

Hazard Vulnerability

Severe winter storms typically occur about eleven (11) times annually in Oswego County. These storms typically affect most or all of the County. The entire Town of Amboy is susceptible to damages from a severe winter storm event. The Town Highway Dept. clears Town roadways during heavy snow events, and the Town works with the Oswego County Highway Dept. and NYS Dept. of Transportation for clearing of other roadways. Roadway safety is a major concern during severe winter storm events. The Town was determined to have a high

vulnerability ranking for severe winter storms due to their widespread nature, high frequency of occurrence, and moderate damage potential.

<u>Historical Hazard Occurrences and Damage Estimates</u>

There is no record of any severe winter storms that have explicitly impacted the Town of Amboy, however, the Town has been impacted by many of the recorded occurrences within Oswego County. Information on county-wide severe winter storm records can be found in the main body of the document.

Future Potential Impacts

The Town of Amboy will continue to experience severe winter storm events in the future. Severe winter storms are common throughout Oswego County and occur about eleven (11) times annually.

4.1.3 Ice Storm

For a description of this hazard, please see Section 5.1.3 of the main body of the Plan.

Hazard Vulnerability

Historically, ice storms have occurred about once every seven (7) years in Oswego County. These storms typically affect most or all of the County. The entire Town of Amboy is susceptible to damages from an ice storm event. The Town was determined to have a high vulnerability ranking for ice storms due to this event's widespread nature, high damage potential, and moderate frequency of occurrence.

Historical Hazard Occurrences and Damage Estimates

The Town of Amboy was affected by the three (3) county-wide ice storm events recorded by the NCDC, which are described in Section 5.1.3. No damage estimates or records related to ice storms are reported specifically for the Town of Amboy.

Future Potential Impacts

The Town of Amboy will continue to experience ice storm events in the future, as will the rest of Oswego County. The Town is largely undeveloped. Fallen trees or a buildup of ice could damage overhead utility lines leading to power outages. Ice storms have the potential to cause hundreds of thousands of dollars in property damages, and could cause severe injuries or loss of life due to cascading hazard events (transportation accidents, extreme temperatures).

4.1.4 Severe Thunderstorm, Wind, or Tornado

For a description of this hazard, please see Section 5.1.1 of the main body of the Plan.

Hazard Vulnerability

The entire Town is highly vulnerable to damages from a severe thunderstorm, wind, or tornado event. Fallen trees from severe winds can damage overhead utility lines, resulting in power outages. In addition, these events are likely to result in damages to private and public infrastructure and property.

Historical Hazard Occurrences and Damage Estimates

In addition to the 101 severe storm events reported within Oswego County, the NCDC reports five (5) specific severe storm events that occurred in the Town of Amboy from 2013 to 2017 (a frequency of about once per year). These records included one (1) hail event and four (4) thunderstorm wind events, and estimated damages ranged from \$5,000 to \$20,000 (Table 5). Actual damages were likely greater than those estimated by the NCDC.

Table 3: Severe Storm Event Records for the Town of Amboy							
Event Type	Date	Magnitude	Estimated Property Damage				
Thunderstorm Wind	9/11/2013	50 kts	\$10,000				
Thunderstorm Wind	6/3/2014	50 kts	\$10,000				
Thunderstorm Wind	6/18/2017	50 kts	\$10,000				
Thunderstorm Wind	7/14/2017	100 kts	\$20,000				
Hail	8/12/2017	1.88 inches	\$5,000				
	\$55,000						

Future Potential Impacts

Severe storms are a common event in the Town of Amboy and will continue to occur in the future. The frequency and magnitude of severe storm events may be increased due to climate change.

4.1.5 Flood

For a description of this hazard, please see Section 5.1.2 of the main body of the Plan.

Hazard Vulnerability

For a description of this hazard, please see Section 5.1.2 of the main body of the Plan. The southern and eastern parts of the Town are drained by the West Branch Fish Creek and Scriba Creek, both of which drain to Oneida Lake. The northwest part of the Town drains to

tributaries of the Little Salmon River, which drains to Lake Ontario. FEMA's Flood Insurance Mapping Program designates areas that are at risk for flooding. Low flood risk are areas unlikely to flood, moderate risk are areas within the 500-year floodplain (0.2% likely to flood in any given year), and high risk are areas that frequently flood, up to the 100-year flood risk zone (1% likely to flood in any given year). Table 4 summarizes the amount of land within the Town of Amboy that is located within 100-year and 500-year floodplains and low-risk flood areas. The Town is also susceptible to areal flooding during heavy precipitation events, and flooding along roadways impacted by beaver dams (shown on Figure 1). The Town has repetitive flooding issues along Tanner Road and Little Pond Road due to beaver dams.

Table 4: Summary of Areas in Floodplains (Source: FEMA DFIRM 2011)						
	Percent of Total Area					
Town of Amboy Total Area	100-Year Floodplain	500-Year Floodplain	Area of Minimal Flood Hazard			
24,137 acres	11.06% 0.02% 88.92%					

Table 5 below summarizes the value of properties in the Town of Amboy that are located within the 100-year floodplain and is categorized by land use type. This table was derived from FEMA floodplain mapping and parcel data from the Oswego County Real Property Tax Office.

Table 5: Parcels within to 100-year Flood Events and Their Estimated Structure Values							
Type of Structure	# Parcels in 100-Year Floodplain	Approx. Structure Value* in 100-Year Floodplain	# Parcels in 500-Year Floodplain	Approx. Structure Value* in 500-Year Floodplain			
Agricultural	5	\$0	0	-			
Commercial	1	\$25,200	0	-			
Community Services	2	\$198,800	0	-			
Industrial	0	-	0	-			
Residential	215	\$13,597,100	0	-			
Utility	0	-	0	-			
Other**	139	\$1,090,100	1	\$0			
Total	362	\$14,911,200	1	\$0			

^{*}Structure Value estimated by subtracting parcel's Land Assessed Value from Total Assessed Value (Oswego County Real Property Tax Office, 2018)

^{**}Includes parcels classified as vacant; recreational; and wild forest/conservation land/parks.

<u>Historical Hazard Occurrences and Damage Estimates</u>

According to NOAA's Storm Events Database, in the past ten (10) years, one (1) flood record was noted to specifically impact the Town of Amboy. This event occurred on September 30, 2010 and involved flash flooding. The flash flood was caused by heavy precipitation the day before (3.2 inches fell overnight) and the release of approximately 17,000 CFS of water from two (2) Brookfield Power hydroelectric dams. This event caused approximately \$5,000 in property damages in the Town of Amboy.

Future Potential Impacts

Properties along streams such as Scriba Creek, West Branch Fish Creek, and tributaries to the Little Salmon River will remain vulnerable to flooding. Two (2) critical facilities are located on parcels that intersect a 100-year floodplain, but the structures themselves are outside of a mapped floodplain (Table 2). Future flood events are expected to increase in frequency and magnitude due to climate change.

4.1.6 <u>Drought</u>

Droughts are extended periods of time with unusually low precipitation, which lead to a limited water supply and crop losses. Drought periods progress through stages and drought intensity may vary considerably during the drought period. The time of occurrence and duration can cause significant variations in drought impacts. Droughts are categorized by the U.S. Drought Monitor in five (5) levels based on severity:

- Category D0: Abnormally dry conditions; may lead to a drought.
- Category D1: Moderate drought; some damages to crops and pasture may occur, water levels are low.
- Category D2: Severe drought; crop losses and water shortages are likely to occur.
- Category D3: Extreme drought; major crop losses and widespread water shortages.
- Category D4: Exceptional drought; extreme crop losses and water emergencies result.

Hazard Vulnerability

The entire Town of Amboy is moderately susceptible to a drought due to the widespread extent and potential to cause moderate damages. Agricultural areas and private wells would experience the most significant impacts. The Town does not currently have a municipal water system. Residents rely on private groundwater wells for potable water.

<u>Historical Hazard Occurrences and Damage Estimates</u>

There are no drought records specifically reported for the Town of Amboy. The Town was impacted by a drought in the late summer and fall of 2016, which affected the entire County.

Future Potential Impacts

The entire Town of Amboy remains susceptible to a drought event. While drought events only occur occasionally, they are likely to increase in frequency and magnitude in the future due to climate change.

4.1.7 Earthquake

An earthquake is a sudden motion or trembling that is caused by a release of strain accumulated within or along the edge of Earth's tectonic plates. They usually occur without warning and after just a few seconds can cause massive damage and extensive casualties. The most seismically active regions in New York State are in the Adirondacks and near the Canadian border along the St. Lawrence River followed by the New York City and the Buffalo, Niagara, and Attica regions.

Hazard Vulnerability

Earthquakes are a rare occurrence, and there are no records of earthquakes originating in Oswego County. An inactive fault line runs underneath the county. Earthquakes originating in other portions of the state have been felt in Oswego County. The Town of Amboy is moderately susceptible to a potential earthquake event, due to the lack of warning and moderate extent and damages associated with this hazard.

Historical Hazard Occurrences and Damage Estimates

There is one (1) historical record of an earthquake in the Town of Amboy, which occurred on April 20, 2002. This 5.1 magnitude earthquake originated in Au Sable Forks in northeastern New York and caused structural damage to the Town of Amboy Fire Station, resulting in thousands of dollars in damages.

Future Potential Impacts

The Town of Amboy is susceptible to future earthquake events affecting Oswego County. However, earthquakes are expected to remain a rare event in Oswego County and pose a very low risk to the County and its jurisdictions.

4.1.8 Wildfire

A wildfire is an uncontrollable combustion of trees, brush, or grass involving a substantial land area which may have the potential for threatening human life and property. Wildfires often begin unnoticed and spread quickly and are usually signaled by dense smoke that fills the area for miles around. In Oswego County, past occurrences of wildfires were caused by open burning.

Hazard Vulnerability

The Town of Amboy is moderately susceptible to a wildfire. The Town primarily consists of forested cover and also has a large number of agricultural properties. A wildfire event could impact a moderate amount of the Town and would come with little to no warning. The Town of Amboy experienced 0.9 to 1.3 wildfires per square mile between 2003 and 2017 (see Figure 5.9, Appendix A of the main body of the report).

<u>Historical Hazard Occurrences and Damage Estimates</u>

There are no historical records or damage estimates of wildfires within the Town of Amboy. Previous wildfire events within Oswego County were generally caused by open burning during dry weather. The NYSDEC implemented a statewide open burn ban in 2010, which has helped reduce the number of wildfires throughout the state. Wildfires generally do not cause significant property damages as they tend to occur in undeveloped portions of the County. Crop damage is more likely to occur. However, the jurisdiction or County would likely incur significant costs associated with firefighting and other emergency response needs.

Future Potential Impacts

The Town of Amboy is largely undeveloped and remains susceptible to wildfires, though the risk is relatively low. The statewide open burn ban is expected to remain in effect, which lessens the risk of wildfires.

4.2. Technological Hazards

Technological hazards selected to be profiled by the Town of Amboy are described in detail below. Hazards are presented in order of the Town's ranking.

4.2.1 <u>Transportation Accident</u>

Hazard Vulnerability

For the purposes of hazard mitigation, a transportation accident is defined as an accident on land, water, or in the air resulting in mass casualties or a substantial loss of property. The Town of Amboy contains two (2) main state transportation routes (State Route 69 and State Route 183) that are heavily used by residents and through traffic. State Route 69 runs east to west through the center of the Town. State Route 183 runs north to south in the center of the Town. These roadways are heavily travelled by trucks and there is potential for major accidents to occur, especially as a result of poor road conditions during a winter storm or ice storm. A transportation accident on any of these routes has the potential to impact a portion of the Town of Amboy.

<u>Historical Hazard Occurrences and Damage Estimates</u>

While minor vehicular accidents are relatively common throughout the County, there are no specific records of major transportation accidents in the Town of Amboy (accidents involving mass casualties or substantial loss of property). The Town elected to profile this hazard due to the increased risk of this hazard occurring along major transportation routes, particularly State Route 69.

Future Potential Impacts

Major transportation accidents are infrequent, but the Town remains susceptible to future incidents along heavily trafficked roadways such as State Route 69 and State Route 183, particularly as a result of natural hazards such as a severe winter storm or ice storm.

Transportation accidents do not pose a large risk to infrastructure, however, they are likely to cause injuries or loss of life. Maintaining roadway safety and clearly designating evacuation routes can aid in prevention of transportation accidents.

4.2.2 HAZMAT Fixed Site

Hazard Vulnerability

A fixed-site hazardous materials incident could occur at sites that store petroleum products or other chemicals for industrial or commercial use. The NYSDEC lists two petroleum bulk storage sites in the Town of Amboy (Figure 1). These sites include the Town Highway Garage and a gas station. If a large petroleum spill were to occur at either of these locations, nearby properties may need to be evacuated to prevent human exposure and facilitate cleanup.

Historical Hazard Occurrences and Damage Estimates

There are no available records for explosions specifically in the Town of Amboy. The Town elected to profile this hazard due to the presence of hazardous material storage facilities that store or use hazardous materials.

Future Potential Impacts

The Town remains susceptible to fixed-site hazardous material events, though they are a rare occurrence. Properties close to bulk storage facilities that store petroleum products or chemicals are at the most risk of being affected by a fixed-site hazardous materials incident.

4.2.3 HAZMAT Transit

Hazard Vulnerability

Hazardous materials (HAZMAT) in transit events involve the uncontrollable release of flammable, toxic, corrosive, chemically instable, or combustible materials during transport that can damage infrastructure, pollute the environment, and/or cause injuries or death. The Town of Amboy has two (2) state roadways, State Route 69 and State Route 183. Both roadways are main transportation routes and are used for the transport of hazardous materials. A transportation accident involving hazardous materials on any of these routes has the potential to impact a portion of the Town of Amboy. The Town's vulnerability to a HAZMAT in transit event was determined to be moderate due to the fast onset and potential moderate damages or injuries that could result from such an event.

<u>Historical Hazard Occurrences and Damage Estimates</u>

There are no specific records of HAZMAT in transit events in the Town of Amboy. This hazard has been documented in other portions of the County (see main body of this plan update for details). However, the Town of Amboy elected to include this hazard due to the moderate risk posed by state transportation routes that run directly through the Town.

Future Potential Impacts

Although HAZMAT in transit events are infrequent, the Town remains susceptible to future HAZMAT incidents along state transportation routes.

4.2.4 Utility Failure

Hazard Vulnerability

A utility failure involves the loss of electricity, natural gas supply, phone service, or water supply as a result of an internal system failure. While utility failures are often associated with natural hazard events, this hazard on its own does not include loss of utility access due to other disaster events. The Town of Amboy primarily has overhead utility lines, including electric, phone, and cable networks and also has underground natural gas lines and a public water supply system. A utility failure could impact the developed portion of the Town. The Town's vulnerability to utility failures was determined to be high due to the widespread extent and fast onset of a utility failure.

<u>Historical Hazard Occurrences and Damage Estimates</u>

The Town of Amboy was impacted by a widespread electricity failure in 2003 that impacted much of the northeastern U.S., which resulted in power outages for about one (1) day. No specific utility failure records are available for the Town itself. The Town is more likely to experience utility failures associated with a severe storm, ice storm, or severe winter storm than a purely technologically-caused utility failure.

Future Potential Impacts

The Town will remain susceptible to utility failures in the future. However, the Town is more likely to encounter utility failures due to a natural hazard event than this hazard occurring on its own.

4.2.5 Dam Failure

Hazard Vulnerability

Dam failures can be attributed to natural or man-made hazards. The impoundment of large volumes of water poses a threat; the failure of a dam can lead to catastrophic flooding.

The New York State Department of Environmental Conservation (NYSDEC) maintains a database to classify dams based on the event of a failure. Explanations of dam classifications are noted in Table 5.13 (Appendix A of the main body of the plan).

The Town of Amboy contains six (6) Class A (low hazard) dams. Three (3) dams are located on the Little River, one (1) on Scriba Creek, one (1) on a tributary to North Branch Little Salmon River, and one (1) on a tributary to Wells Brook. All six (6) dams are earthen. Beaver dams also pose a dam failure risk within the Town. Known locations of substantial beaver dams that pose flooding risks if they were to fail are shown on Figure 1.

<u>Historical Hazard Occurrences and Damage Estimates</u>

There are no records of dam failures occurring in the Town of Amboy. The Town elected to include this hazard due to the potential for moderate roadway and property damages to occur should one of the man-made or beaver dams in the Town fail.

Future Potential Impacts

Should any of the dams within the Town fail, properties downstream of the dam would be susceptible to flooding. It is noted that all six (6) man-made dams in the Town are classified as low-hazard and, overall, dam failure poses a relatively low risk within the Town.

4.2.6 Terrorism

Hazard Vulnerability

Terrorism is defined as the threat or use of violence for political or social gain. Terrorism typically causes community disruption and multiple injuries or deaths. The Town of Amboy is moderately susceptible to a terrorist event due to the event's short onset (little to no warning) and moderate potential impact to Town infrastructure or residents.

<u>Historical Hazard Occurrences and Damage Estimates</u>

There are no records of terrorist events in the Town of Amboy or Oswego County. The Town elected to profile this hazard for the HMP update to account for future potential impacts.

Future Potential Impacts

With the recent rise in localized terrorism events throughout the country such as shootings in schools and public places, the Town chose to analyze this hazard for the HMP update. However, terrorism remains a low risk for the Town of Amboy. The Town is mostly rural and does not have any schools or public infrastructure that is likely be the target of a terrorist attack.

4.2.7 <u>Epidemic</u>

Hazard Vulnerability

Epidemics are defined as an outbreak of disease to an unusually large number of individuals or proportion of the population. Epidemics may include both human and animal illnesses. The Town of Amboy was determined to have a low vulnerability risk for an epidemic event, since it has a relatively long onset, very low frequency, low damage potential, and may impact a moderate amount of the Town's population. The most vulnerable populations include

young children under five (5), older adults over sixty-five (65), and those with existing medical conditions.

<u>Historical Hazard Occurrences and Damage Estimates</u>

There are no historical occurrences or impact estimates of epidemics specific to the Town of Amboy. However, the Town elected to include this hazard in order to account for potential widespread illnesses such as influenza.

Future Potential Impacts

The risk of an epidemic occurring in the Town of Amboy remains low, but it is possible and could affect a portion of the Town's population.

5.0 Capability Assessment

5.1. Planning and Regulatory Capability

The Town's HMP update will be incorporated into and referenced by future updates of the plans, policies, ordinances, programs, studies, and reports listed in Table 6, below.

Table 6. Planning Mechanisms and Capabilities								
Planning Mechanism	Town of Amboy	Notes						
Plans								
Comprehensive/Land Use Plan	Х	Town of Amboy Comprehensive Plan (2003)						
Post-disaster Recovery Plan	X	In place.						
Emergency Response Plan	Х	In place.						
Watershed Protection Plan	X	In place.						
Comprehensive Emergency Management Plan	X	In place.						
	Policies/Ordinances							
Building Codes	 2010 Residential Code of NYS 2010 Fire Code of NYS 2010 Building Code of NYS 2010 Exiting Building Code of NYS 2010 Energy Conservation Construction Code of NYS 2010 Plumbing Code of NYS 2010 Mechanical Code of NYS 2010 Fuel Gas Code of NYS 	Town Code Enforcement Officer						
Zoning/Land Use Regulations	X	Local Law						

Table 6. Planning Mechanisms and Capabilities							
Planning Mechanism	Town of Amboy	Notes					
Subdivision Regulations	*	The Town is currently undergoing the process of developing and adopting subdivision regulations.					
Property Set-back Ordinance	Х	In zoning.					
Flood Regulations	Х	In place.					
Site Plan Review Requirements	Χ	Town Planning Board responsible					
Real Estate Disclosure Requirement	Χ	In place.					
	Programs						
NFIP Participant	Χ	Current participant.					
Public Education/Awareness Program	Χ	Fire Dept. responsible					
Stream Maintenance Program	Χ	Highway Dept. responsible					
Mutual Aid Agreements	X	With Oswego County and neighboring jurisdictions.					
	Studies/Reports						
Hazard Analysis/Risk Assessment	X	2012 Oswego County Hazard Mitigation Plan					
Floodplain Maps and/or Studies	Х	2011 FEMA Digital Flood Insurance Rate Maps					
Staff/Development							
Building Code Official	Х	Code Enforcement Officer					
Local Floodplain Administrator	Χ	Code Enforcement Officer					
Engineer/Public Works Official	Χ	Highway Dept.					
Public Information Official	Χ	Town Supervisor					

5.2 Emergency Communications, Routes, and Shelters

The Town of Amboy, along with Oswego County, utilizes the HyperReach emergency communications system. Major transportation routes within the Town include State Route 69, State Route 183, and County Route 17. The Town of Amboy has five (5) established emergency shelters:

- Amboy 4-H Environmental Education Center-- 748 NY-183, Williamstown, NY 13493
- West Amboy Community Church-- 1267 CR 26, Williamstown, NY 13493
- Amboy Town Hall—822 NY-69, Williamstown, NY 13493
- Warming Station- Panther Lake Association—off of County Route 17
- West Amboy Volunteer Fire Dept. 10 Cusson Dr, West Monroe, NY 13167

The Amboy 4-H Environmental Education Center, Town Hall, Volunteer Fire Department, and West Amboy Community Church are ADA-compliant. There are currently no pet sheltering accommodations within the Town.

5.3 Temporary and Permanent Housing Locations

The potential temporary and permanent housing locations listed below were identified for displaced residents in the Town of Amboy based on the 2017 NYS Hazard Mitigation Planning Standards. The following locations were selected for residents in the Town of Amboy. It is noted that formal agreements would need to be established in order to use privately-owned properties.

Potential Temporary Housing Locations

- o Amboy Town Park—off of County Route 23
- o High Acres Campground—25 Cusson Dr, West Monroe, NY 13167
- O Up Country Family Campground—1118 State Rt. 69 Williamstown, NY 13493
- Carterville Acres Family Campground— 93 Birmingham Dr, Camden,
 NY 13316

• Potential Permanent Housing Locations

o Amboy Town Park—off of County Route 23

6.0 National Flood Insurance Program

Long-term mitigation of potential flood impacts can be best achieved through comprehensive floodplain management regulations and enforcement at a local level. The National Flood Insurance Program (NFIP), regulated by FEMA, aims to reduce the impact of flooding on private and public structures by providing affordable insurance for property owners. The program encourages local jurisdictions to adopt and enforce floodplain management regulations in order to mitigate the potential effects of flooding on new and existing infrastructure (FEMA, 2015).

Communities that participate in the NFIP adopt floodplain ordinances. If an insured structure incurs damage costs that are over 50% of its market value, the owner must comply with the local floodplain regulations when repairing or rebuilding the structure. A structure could be rebuilt at a higher elevation, or it could be acquired and demolished by the municipality or relocated outside of the floodplain. Insured structures that are located within floodplains identified on FEMA's Flood Insurance Rate Maps (FIRMs) may receive payments for structure and content losses if impacted by a flood event.

The NFIP and other flood mitigation actions are important for the protection of public and private property and public safety. Flood mitigation is valuable to communities because it:

- Creates safer environments by reducing loss of life and decreasing property damage;
- Allows individuals to minimize post-flood disaster disruptions and to recover quicker (homes built to NFIP standards generally experience less damage from flood events, and when damage does occur, the flood insurance program protects the homeowner's investment); and
- Lessens the financial impacts on individuals, communities, and other involved parties (FEMA, 2015).

The Town of Amboy currently participates in the NFIP. As of November 2017, the Town had three (3) flood insurance policies in-force with a total of \$272,500 in coverage. No NFIP claims have been filed to date, and there are no repetitive loss properties within the Town.

The Town's Code Enforcement Officer serves as the Local Floodplain Administrator, and flood maps are available for viewing and copying at 374 Foil Road, Williamstown, NY 13493. The Town has been maintaining NFIP participation by performing the duties and actions that were listed in the local law adopted by the Town Board. The Town will continue to comply with the NFIP by enforcing floodplain management requirements and regulating new development in Special Flood Hazard Areas, among other required duties. There are no repetitive loss properties in the Town of Amboy.

7.0 Mitigation Strategy and Prioritization

7.1 Past, Completed, and Ongoing Initiatives

The Town proposed seven (7) mitigation actions in the 2012 Oswego County HMP. The details and status of previous actions are summarized in Table 7. None of the 2012 mitigation actions proposed for the Town of Amboy were re-included for the 2018 update. The Town's 2018 mitigation action worksheets are provided in Attachment A.

Table 7. 2012 Hazard Mitigation Actions Town of Amboy							
Proposed Mitigation Action	Hazard(s) Mitigated	2012 Goals & Objectives Met	Implementing Agency	Status			
Review/implement County regulations and insurance regulations on floodplain management requirements	Flood	1-b, 3-a, 4-a, 4-b, 4-d	Amboy Town Board	No progress to date due to limited funding/staff availability.			
Enforce/promote smart development that minimizes impacts from natural hazards	Flood	1-b, 3-a, 4-a, 4-b, 4-d	Amboy Zoning/Code Enforcement Official	No progress to date due to limited funding/staff availability.			
Implement/revise review board regulations and building/zoning codes for potential hazard mitigation updates	Severe storm, ice storm, fire, earthquake, tornado, flood, winter storm, utility failure	1-a, 3-a, 4-a	Amboy Zoning/Code Enforcement Official	No progress to date due to limited funding/staff availability.			
Implement local Land Use Plans to reduce flood impacts (reduce development and promote safe development)	Flood	1-a	Amboy Planning and Code Enforcement	No progress to date due to limited funding/staff availability.			
Assist County with the development and implementation of new public awareness/ education programs for hazard mitigation and preparedness	All hazards	1-b	Amboy Public Information Official	No progress to date due to limited funding/staff availability.			
Attend County zoning training programs focused on hazard mitigation	Severe storm, ice storm, fire, earthquake, tornado, flood, winter storm, utility failure	1-a	Amboy Zoning/Code Enforcement Official	No progress to date due to limited funding/staff availability.			
Establish program and funds for acquisition/ elevation of houses located within Altmar floodplains or with frequent flooding issues	Flood	4-d	Amboy Town Board	No progress to date due to limited funding/staff availability.			

7.2 **Proposed Mitigation Actions**

The Town proposed two (2) new mitigation actions to be included in the HMP update. These actions are described in Table 8, below and on worksheets included in Attachment A.

	Table 8. 2018 Proposed Mitigation Actions Town of Amboy								
Hazard(s) Implementing Agencies Planning New or Existing Estimated Funding Action ID Mitigation Action Mitigated (Lead* & Support) Mechanism Timeframe Development Cost Source(s) Priority							Priority		
Amboy-1	Provide backup power source for Town Hall and Town Barn (shelter locations)	All	Town Supervisor*	Comprehensive Plan	6-12 months	Existing	\$7,000	Justice Court Assistance Program Grant	1
Amboy-2	Tanner Rd Culvert Installation	Flood	Town Highway Superintendent*	Town Highway Plan, Stream Maintenance Program	1 year	Existing	\$15,000	NYSDOT PAVE- NY Grant	2

Potential Funding Sources

NYS Justice Court Assistance Program Grant: http://www.nycourts.gov/courts/townandvillage/index.shtml
NYSDOT PAVE-NY Grant: https://www.dot.ny.gov/paveny

7.3 Cost-Benefit Analysis

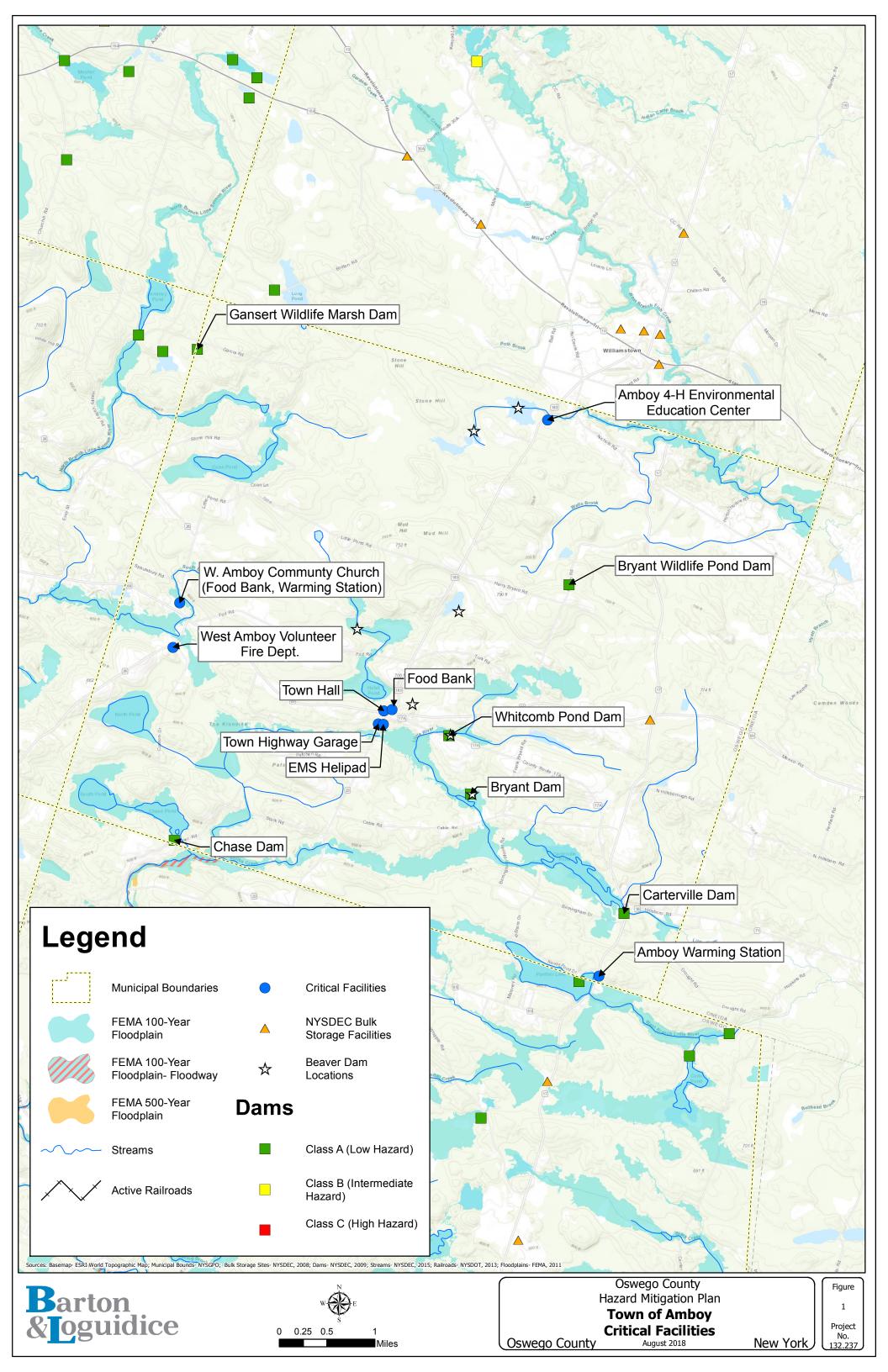
Each of the Town's proposed mitigation actions were evaluated and prioritized using the STAPLEE cost-benefit analysis. The Town's STAPLEE worksheet is provided in Attachment B. The STAPLEE analysis includes the following lenses of evaluation: social, technological, administrative, political, legal, economic, and environmental.

8.0 Works Cited

- Kelley, Tim. 2016. "Town of Amboy". History of Oswego County, New York, Marking the Bicentennial. Eds Shawn Doyle, Roy Reehil, Debra Allen, Justin White, Janet Clerkin, Kelly Jordal, and Kara Alheim. Oswego, NY: Oswego County, New York, 2016. 45-47. Print.
- Town of Amboy Comprehensive Plan Committee. 2003. Comprehensive Plan for the Town of Amboy, Oswego County, New York. Adopted October 27, 2003.
- U.S. Census Bureau. 2016. "Summary File." 2012 2016 American Community Survey. U.S. Census Bureau's American Community Survey Office, 2016. Web. Accessed 5 September 2018. Available from: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

Figure 1

Hazard Area Extent and Location Map – Town of Amboy



Attachment A

Mitigation Action Worksheets – Town of Amboy

Oswego County Multi-Jurisdictional Hazard Mitigation Plan

Name of Jurisdi		Town of Amboy					
Mitigation Action Worksheet							
Project Name:			Provide backup power source	e for To	wn Hall and Town Ba	arn (shelter locations)	
Project Number:			Amboy 1				
				Risk/\	/ulnerability		
Hazard of Concer	n:		All				
Description of the	Problei	m:	The Town Hall and Town need to remain operationa			p power. Both of these	e facilities are shelter locations and
			Action of Proje	ect Int	ended for Imp	lementation	
Description of the	Solutio	on:	Install generator for the To shelter for Town residents		ll and Town Barn t	o ensure continuity of	operations and provide better
			al Facility? Yes protect to the 500-year flood		No or the actual wors	t damage scenario, w	hichever is greater.)
Level of Protectio	n: H	ligh			nated Benefits		f critical operations and emergency
Useful Life:	L	.ong-ter	rm	(loss	es avoided):	shelter availability during a power outage.	
Estimated Cost:	\$	7,000					
			Plai	า for I	mplementation		
Prioritization:			High (#1)		Desired Timefra Implementation	3	
Estimated Time R Project Implemen		l for	6 months to 1 year	Potential Funding		ng Sources:	Justice Court Assistance Program Grant
Responsible Orga	nizatior	n:	Town Supervisor		Local Planning Mechanisms to be used in Implementation, if any:		Comprehensive Plan
	1		Three Alternatives	s Con	sidered (Inclu	ding No Action)	
			Action	Es	timated Cost		Evaluation
Alternatives:	No Ac	tion		\$0		Existing flooding issu	ues remain.
			rtable generator to be een facilities.	\$5,00	00	One facility still potentially unable to continue operation during power outage.	
	Install individual emergency generators at both the Town Hall and Town Barn		\$7,00	00	Maximum protection	for continuity of critical operations.	
	Progress Report (for Plan Maintenance)						
Date of Status Re	port:						
Report of Progres							
	Update Evaluation of the Problem and/or Solution:						

Oswego County Multi-Jurisdictional Hazard Mitigation Plan

Name of Jurisdiction:		Town of Amboy											
			Mitigat	ion A	otion Morks	b o o	.1						
					ction Works	nee)(
Project Name:			Tanner Rd Culvert Installation										
Project Number:			Amboy 2										
				Risk/V	ulnerability								
Hazard of Concern:			Ice Jam										
Description of the Problem:			Tanner Rd has a history of repetitive erosion and flooding issues in a number of locations.										
Action of Project Intended for Implementation													
Description of the Solution:			Install culverts at specific locations (to be determined) along Tanner Road to allow stormwater to flow beneath the road and prevent flooding/erosion of the road.										
Is this project related to a Critical Facility? Yes NoX													
Level of Protection	n: Me	dium			ated Benefits	Dec	crease in flood d	amages and erosion.					
Useful Life: Long ter		m	(losse	s avoided):									
Estimated Cost: \$15,000													
			Plai	n for Ir	mplementation)							
Prioritization:			Medium (#2)		Desired Timefra Implementation:	Desired Timeframe for modes in the median for the mentation:		1-2 years					
Estimated Time Required for Project Implementation:		6 months	Potential Funding			ources:	NYSDOT PAVE-NY Grant						
Responsible Organization:			Town Highway Superintenc	dent	Local Planning Mechanisms to be used in Implementation, if any:			Town Highway Plan, Stream Maintenance Program					
		•		•	·		Ť						
			Three Alternatives	s Cons	sidered (Includ	ing	No Action)						
Action					Estimated Co	ost		Evaluation					
Alternatives: No Action				\$0		Flooding concerns remain.							
Install one cu			lvert		\$7,000		Partial solution.						
	Install mu	ıltiple	culverts		\$15,000			ovide stormwater conveyance in multiple along road, more complete solution.					
			Progress R	eport	(for Plan Maint	tena	ince)						
Date of Status Re	oort:												
Report of Progres	S:												
Update Evaluation													

Attachment B

STAPLEE Table – Town of Amboy Worksheet #6

STAPLEE Criteria Consideration Table Mitigation Action Prioritization and Comparison

Jurisdiction	Town of Amboy

	Action								Can action be	Does action	Can action be				
Action ID									easily	achieve multiple	quickly	Level of action	Level of action	Priority	
ACTION ID	ACTION	S	Τ	Α	Р	L	Ε	Ε	implemented?	plan objectives?	implemented?	benefits	overall costs	ranking	
			+ = Benefit (favorable), - = Cost (unfavorable), 0 = Neutral or N/A										Levels = High, Medium, or Low		
	Provide backup power source for Town Hall and Town Barn (shelter locations)		+	+	-	+	+	0	+	+	-	Low	High	High #1	
Amboy 2	Tanner Rd Culvert Installation		+	+	0	+	+	-	+	+	-	Med	High	Med #2	