

Town of Williamstown

Jurisdictional Annex

Town of Williamstown

1.0 Contacts

The contacts for the Town of Williamstown regarding this plan were identified as follows:

- John Hamblin – Town Supervisor
Address: 2910 County Route 17, Williamstown, NY 13493
Phone: (315) 964-0144
Email: wtownsupv@frontier.com
- Henry Allen – Highway Superintendent
Address: 2910 County Route 17, Williamstown, NY 13493
Phone: (315) 964-0144
Email: townofwilliamstown1967@gmail.com

Town Website: <http://www.tughillcouncil.com/member-towns/town-of-williamstown/>

2.0 Municipal Profile

Population

The 2016 American Community Survey estimated that 1,148 people live in the Town of Williamstown. The Town's population has decreased since the 2000 Census population (1,350) by 15% (U.S. Census Bureau, 2016).

Location

The Town of Williamstown is located in the central portion of Oswego County and is bordered by the Town of Albion to the west, Orwell and Redfield to the north, Amboy to the south, and the Town of Florence (Oneida County) to the east. Williamstown is located approximately ten (10) miles east of the Interstate 81 corridor, and the Town is directly accessible from NY State Routes 13, 104, and 183.

Brief History

The Town of Williamstown was formed in 1804. The area was first settled in 1801. Early industry included a grist mill and carding mill along Fish Creek. A post office and tavern were located at the intersection of Route 13 and Route 30. The Rome, Watertown, and Ogdensburg Railroad was completed in 1851 and had two (2) stations in the Town of Williamstown-

Williamstown and Kasoag. The Williamstown and Redfield Railroad was constructed in 1860 to transport lumber, which was the dominant industry at the time. This railroad was abandoned in the mid-1870s as the lumber industry declined. A tannery was built in 1850 and was destroyed in a fire in 1873, but was rebuilt. The tannery was then the largest in New York State, and spurred development within Williamstown. As the tannery business declined, agriculture became the dominant industry by the late 1800s, particularly dairy farming. In 1935, a fire destroyed most of the Town's business district, and that coupled with the Great Depression led many of the Town's farms and commercial businesses to go out of business (Gorski, 2016).

Governing Body

The Town of Williamstown is governed by a five (5) member Town Board, led by the Town Supervisor.

Future Growth

The Town of Williamstown is seeking stable growth. No new commercial or residential developments have been completed in the Town since the 2012 County HMP.

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 less
- Moderate: 6 to 8
- High: 9 or greater

Table 1: Hazard Vulnerability by Event						
Hazard Event	Extent	Onset	Impact (Damages and Injury)	Frequency	Vulnerability Rank	Jurisdiction Rank
Severe Winter Storm	3	1	3	3	High	1
Fire	1	3	2	1	Moderate	2
HAZMAT in Transit	1	3	1	1	Moderate	3
Severe Thunderstorm, Wind, or Tornado	2	1	3	3	High	4
Structural Collapse	1	3	1	1	Moderate	5
Ice Storm	3	1	2	2	Moderate	6
Drought	3	1	2	1	Moderate	7
Wildfire	2	3	1	1	Moderate	8
Flood	2	2	2	2	Moderate	9
Coastal Storm	3	1	3	2	High	10
Infestation	2	1	2	1	Moderate	11
Extreme Temps	3	1	1	3	Moderate	12
Utility Failure	3	3	1	1	Moderate	13
Ice Jam	1	2	2	2	Moderate	14
Earthquake	2	3	2	1	Moderate	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 Williamstown. The tables below denote the number and locations of critical facilities within the Town.

Table 2: Critical Facilities in the Town of Williamstown			
Facility Name	Address (Street, Town/Town/Hamlet)	Parcel Located in Floodplain	Structure Located in Floodplain
Transportation Network			
Evacuation Routes	-	-	-
Bridges	-	-	-
Emergency and Medical Facilities			
Williamstown Volunteer Fire Dept.	575 NY-13, Williamstown, NY 13493	No	No
Public Utilities			
Citizens Telecom of NY property	Off of Grant Rd	No	No

Table 2: Critical Facilities in the Town of Williamstown			
Facility Name	Address (Street, Town/Town/Hamlet)	Parcel Located in Floodplain	Structure Located in Floodplain
Municipal			
Town Highway Garage	2916 CR 17, Williamstown, NY 13493	No	No
Williamstown Community Center	2916 CR 17, Williamstown, NY 13493	No	No
Industrial			
Hardwood Flood Manufacturing	off of CC Road	No	No
International Wire Group Inc.	572 NY-13, Williamstown, NY 13493	No	No
Dams			
Kasoag Lake Dam	CR 30	-	-
Long Pond Dam	off of Britton Road	-	-

4.0 Priority Hazard Events

The following sections detail the priority hazard events identified by the jurisdiction. Additional information about County-selected hazards including frequency, history, and severity 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 Williamstown. Climate change is expected to cause an increase in weather volatility, rising sea level, and greater temperature extremes.

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 Williamstown are described in detail below.

4.1.1 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 Williamstown is susceptible to damages from a severe winter storm event. The Town of Williamstown Highway Dept. clears Town and Town streets during heavy snow events, and works with the Oswego County Highway Dept. for clearing of County roadways. Roadway safety is a major concern during severe winter storm events.

Historical Hazard Occurrences and Damage Estimates

The Town of Williamstown has been affected by a number of county-wide severe winter storm events, described in Section 5.1.4 of the main body of the plan. Severe winter storms typically occur several times annually in Oswego County. These storms typically affect most or all of the County. The NCDC does not report any winter storm records or damage estimates specific to the Town of Williamstown. The Town of Williamstown is located on the Tug Hill Plateau which receives 300 or more inches of snow each year.

Future Potential Impacts

The Town of Williamstown 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.

4.1.2 Severe Thunderstorm, Wind, or Tornado and Coastal Storm

For a description of severe thunderstorm, wind, or tornado events, please see Section 5.1.1 of the main body of the Plan. Coastal storms can cause increases in tidal elevations (called storm surge), wind speed, and erosion, caused by both extratropical events and tropical cyclones. Extratropical events including Nor'easters and severe winter low-pressure systems are more applicable to Oswego County. These non-tropical storms produce strong winds and heavy rain or snow, and can last for several days and affect a very large area.

Hazard Vulnerability

The entire Town is highly susceptible to damages from a severe thunderstorm, wind, or tornado or coastal storm event due to its moderate extent, high damage potential, and high frequency. 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 eight (8) records for the Town of Williamstown between 1993 and 2017. Seven (7) of these events were severe thunderstorm winds and one was a hail event. Estimated property damages for the Town of Williamstown ranged from \$10,000 to \$50,000 (Table 3). Actual damages were likely greater than those estimated by the NCDC.

Table 3: Severe Storm Event Records for the Town of Williamstown				
Event Type	Date	Magnitude	Estimated Property Damage	Estimated Crop Damage
Thunderstorm Wind	8/24/1993	-	\$50,000	-
Thunderstorm Wind	3/9/2000	-	\$20,000	-
Thunderstorm Wind	5/16/2009	50 kts	\$10,000	-
Hail	7/7/2009	0.75 inches	\$0	\$12,000
Thunderstorm Wind	6/24/2014	50 kts	\$15,000	-
Thunderstorm Wind	5/30/2015	50 kts	\$15,000	-
Thunderstorm Wind	10/17/2016	50 kts	\$10,000	-
Thunderstorm Wind	7/8/2017	50 kts	\$15,000	-
Total			\$135,000	\$12,000

Future Potential Impacts

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

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 Williamstown is moderately susceptible to damages from an ice storm event due to its large extent and moderate damage potential and frequency.

Historical Hazard Occurrences and Damage Estimates

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

Future Potential Impacts

The Town of Williamstown will continue to experience ice storm events in the future, as will the rest of Oswego County. The Town of Williamstown Highway Dept. completes tree maintenance within Town and Town roadways to minimize potential damages to overhead utility lines, which is common during ice storms. Private utility right of ways are generally maintained by the individual utility companies.

4.1.4 Drought

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 Williamstown 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. All properties within the Town obtain potable water from private wells.

Historical Hazard Occurrences and Damage Estimates

There are no drought records specifically reported for the Town of Williamstown. The Town was impacted by a drought in the late summer and fall of 2016, which affected the entire County. During this drought, many residents had to purchase potable water because private wells went dry. The drought also caused significant crop losses throughout the County.

Future Potential Impacts

The entire Town of Williamstown 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.

4.1.5 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 Williamstown is moderately susceptible to a wildfire. The Town primarily consists of forested cover and also has multiple agricultural properties. A wildfire event could impact a moderate amount of the Town and would come with little to no warning. The Town of Williamstown experienced 0.4 to 0.8 wildfires per square mile between 2003 and 2017 (see Figure 5.9, Appendix A of the main body of the report).

Historical Hazard Occurrences and Damage Estimates

There are no historical records or damage estimates of wildfires within the Town of Williamstown. 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 Williamstown 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.

4.1.6 Flood

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

Hazard Vulnerability

The Town is generally drained by Kasoag Lake and its tributaries. 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 Williamstown that is located within 100-year and 500-year floodplains and low-risk flood areas.

Table 4: Summary of Areas in Floodplains (Source: FEMA DFIRM 2013)			
Town of Williamstown Total Area	Percent of Total Area		
	100-Year Floodplain	500-Year Floodplain	Area of Minimal Flood Hazard
25,056 acres	5.08%	0%	94.88%

Table 5 below summarizes the value of properties in the Town of Williamstown 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	9	\$282,000	0	-
Commercial	4	\$283,600	0	-
Community Services	3	\$137,000	0	-
Industrial	0	-	0	-
Residential	190	\$10,650,700	0	-

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
Utility	0	-	0	-
Other**	138	\$416,000	0	-
Total	344	\$11,769,300	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.				

Historical Hazard Occurrences and Damage Estimates

According to NOAA's Storm Events Database, in the past fifteen (15) years, no flood records were noted to specifically impact the Town of Williamstown. Local records report that a beaver dam break on May 17, 2017 resulted in significant roadway erosion and flooding in the Towns of Amboy and Williamstown. Impacted roadways included Nichols Rd, Little Pond Rd, Smith Dr, and County Route 17. The Town has also been impacted by numerous county-wide events described in Section 5.1.2 of the main body of the Plan.

As described in Section 6.0 of this annex, the Town does not currently participated in the NFIP and no claims have been filed to date. There are no repetitive loss properties in the Town of Williamstown.

Future Potential Impacts

Properties along Kasoag Lake and its tributaries are vulnerable to flooding. Approximately 5% of the Town of Williamstown is within a mapped 100-year floodplain. None of the Town's critical facilities are within a mapped floodplain.

4.1.7 Infestation

An infestation is defined as an excessive population of insects, rodents, or other animals requiring control measures due to their potential to carry diseases, destroy crops, or harm the environment.

Hazard Vulnerability

The Town of Williamstown is moderately vulnerable to an infestation due to this hazard's moderate extent and moderate impact potential. Emerald ash borer is of primary concern. The majority of the Town of Williamstown consists of forested land. Ash trees comprise approximately 7-15% per total basal area of forests in the area according to the

NYSDEC (Figure 5.8, Appendix A of the main body of the plan), which are susceptible to emerald ash borer infestation.

Historical Hazard Occurrences and Damage Estimates

The Town of Williamstown, is outside of the current emerald ash borer restricted zone defined by the NYSDEC. The restricted zone in NYS generally encompasses the currently infested area (as of May 2017). However, southern Oswego County is within the restricted zone and it is plausible that emerald ash borer could migrate to jurisdictions north of the current infested area. The transport of ash tree materials (wood, logs, untreated firewood, nursery stock, and wood chips) outside of the restricted zone is prohibited to prevent the spread of emerald ash borer. In addition, the NYSDEC prohibits the import of firewood into NY State unless it has been heat-treated to kill emerald ash borer and other pests. In addition, untreated firewood originating anywhere in NY State cannot be transported more than fifty (50) miles from its origin.

Future Potential Impacts

Emerald ash borer is likely to continue to spread throughout Oswego County. The Town of Williamstown has a large amount of forested land, and is likely to be susceptible to increased tree damage from the emerald ash borer.

4.1.8 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 Williamstown 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 Williamstown was affected by the county-wide extreme cold events recorded by the NCDC, which are described in Section 5.1.5 of the main body of the Plan. No damage estimates or records related to extreme temperature events are reported specifically for the Town of Williamstown. Extreme temperature events are unlikely to cause significant

property damage, though crop damages are 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 Williamstown 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 Williamstown 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.

4.1.9 Ice Jam

An ice jam is described as a large accumulation of ice in rivers or streams that interrupts the normal flow of water and often leads to flooding conditions and/or damage to nearby structures. Ice jam events typically occur from the early winter to late spring months and are often short-lived and often affect only a localized reach or area of a body of water. Freeze-up jams occur when waterbodies are beginning to freeze over during the early winter and do not typically result in significant floods. Break-up jams typically occur later in the spring when built up ice breaks or moves as it begins to melt or when water levels rise due to precipitation or snowmelt. Break-up jams often result in flooding and property damages.

Hazard Vulnerability

In the Town of Williamstown, an ice jam could occur on Kasoag Lake or its tributaries (Figure 1). Areas that may incur damages due to an ice jam generally include properties within a 100-year or 500-year floodplain, as shown in Table 4 in Section 4.1.6 of this annex. In the Town of Williamstown, these areas primarily consist of residential properties and vacant land.

Historical Hazard Occurrences and Damage Estimates

No historical records of ice jams have been reported for the Town of Williamstown. The Town elected to include this hazard due to its potential to occur on any of the Town's many waterways, such as Kasoag Lake and its tributaries.

Future Potential Impacts

Kasoag Lake and its tributaries will continue to pose risks of ice jams in the Town of Williamstown. In the future, ice jams may occur more frequently due to climate change.

4.1.10 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 Williamstown 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 are no historical records of earthquakes occurring in the Town of Williamstown. The Town of Amboy, which borders the Town of Williamstown to the north, experienced damages to their fire station due to an earthquake originating in Au Sable Forks, NY on April 20, 2002. An earthquake has the potential to cause hundreds of thousands of dollars in damages.

Future Potential Impacts

The Town of Williamstown 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.

4.2 *Technological Hazards*

Technological hazards selected to be profiled for the Town of Williamstown are described in detail below.

4.2.1 Fire

Hazard Vulnerability

The Town of Williamstown had a moderate vulnerability ranking for fires. These events tend to be more localized, affecting one to several structures at a time. However, there is little to no warning and substantial structural damages and injuries or deaths are likely to occur. The

most developed portion of the Town, centered along State Route 13 and County Route 17, would be the most vulnerable area for a fire event.

Historical Hazard Occurrences and Damage Estimates

Structural fires occur occasionally within the Town. A fire reported in October 2009 at an abandoned trailer caused significant property damage but no injuries were reported. A house fire in December 2009 caused property damage but no injuries were reported.

Future Potential Impacts

The Town of Williamstown is largely undeveloped. The more densely developed portions of the Town along State Route 13 and County Route 17 are most susceptible to structure fires.

4.2.2 HAZMAT in 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 Williamstown contains several major roadways, State Route 13 and County Route 17. State Route 3 runs east to west in the southern portion of the Town. County Route 17 runs north to south through the eastern half of the Town. A transportation accident involving hazardous materials on any of these roadways has the potential to impact a portion of the Town of Williamstown.

Historical Hazard Occurrences and Damage Estimates

There are no specific records of HAZMAT in transit events in the Town of Williamstown. This hazard has been documented in other portions of the County (see main body of this plan update for details). However, the Town of Williamstown elected to include this hazard due to the moderate risk posed by major roadways 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 Route 13 and County Route 17.

4.2.3 Structural Collapse

Hazard Vulnerability

A structural collapse involves a structural failure of a building, bridge, or other infrastructure that threatens human life and health. The Town of Williamstown is moderately vulnerable to a structural collapse. Though this event would only affect a small area within the Town, there is little to no warning and it presents significant damages and injury risks. Approximately 21% of housing units in the Town were built in 1939 or earlier (U.S. Census Bureau, 2016). Older structures are more vulnerable to structural collapse than newer structures.

Historical Hazard Occurrences and Damage Estimates

There are no specific structural collapse records for the Town of Williamstown. However, the Town elected to profile this hazard due to the presence of vulnerable infrastructure.

Future Potential Impacts

Structural collapse is not a high-risk hazard for the Town, but it could occur particularly during a natural hazard event such as a winter storm, severe storm, or ice storm resulting in hundreds of thousands of dollars in damages and potentially injuries or loss of life.

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 Williamstown primarily has overhead utility lines, including electric, phone, and cable networks. 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.

Historical Hazard Occurrences and Damage Estimates

The Town of Williamstown 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.

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 Boyston	Notes
Plans		
Post-Disaster Recovery Plan	X	In place.
Policies/Ordinances		
Building Codes	<ul style="list-style-type: none"> • 2010 Residential Code of NYS • 2010 Fire Code of NYS • 2010 Building Code of NYS • 2010 Existing 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 or Land Use Codes/Restrictions	X	Land use restrictions in place. Town looking to implement zoning.
Flood Regulations	X	Adopted.
Real Estate Disclosure Requirement	X	In place.
Programs		
Public Education/Awareness Program	X	Fire Dept. responsible
Stream Maintenance Program	X	Town of Williamstown Highway Dept. Responsible
Mutual Aid Agreements	X	Agreements with neighboring jurisdictions and Oswego County
Studies/Reports		
Hazard Analysis/Risk Assessment	X	Oswego County HMP- 2012
Floodplain Maps and/or Studies	X	FEMA- 2013
Staff/Development		
Building Code Official	X	Town Code Enforcement Officer
Local Floodplain Administrator	X	Town Code Enforcement Officer
Environmental Conservation Specialist	X	Town position.
Public Information Official	X	Town Supervisor

5.2 Emergency Communications, Routes, and Shelters

The Town of Williamstown, along with Oswego County, utilize the HyperReach emergency communications system. Major transportation routes within the Town include State Route 13 and County Route 17. The Town of Williamstown has three (3) established emergency shelters:

- Williamstown Fire Dept. - 575 NY-13, Williamstown, NY 13493
- William Britton Community Center - 2910 B CR 17, Williamstown, NY 13493
- American Legion Post 1128 - 8 Vida Drive, Williamstown, NY 13493

All three of the Town's shelter locations are ADA-compliant. The Town currently does not have emergency sheltering accommodations in place for pets.

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 Williamstown based on the 2017 NYS Hazard Mitigation Planning Standards.

- **Potential Temporary and Permanent Housing Location**
 - Former elementary school property - 55 Cox Road, Williamstown, NY 13493

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 Williamstown does not currently participate in the NFIP, and no flood loss claims have been filed within the Town as of July 2018. In addition, there are no repetitive loss properties in the Town.

7.0 Mitigation Strategy and Prioritization

7.1 Past, Completed, and Ongoing Initiatives

The Town of Williamstown proposed two (2) mitigation actions in the 2012 Oswego County HMP. The details and status of those actions are described in Table 7 below.

Table 7. 2012 Hazard Mitigation Actions <i>Town of Williamstown</i>				
Proposed Mitigation Action	Hazard(s) Mitigated	2012 Goals & Objectives Met	Implementing Agency	Status
Improve public education and awareness – possibly through creation of a Public Information Official position	All hazards	1-b, 1-c	Town of Williamstown Town Board	Complete. The Town Supervisor is also the Town's Public Information Official, and works with the Fire Dept. through the "I Am Responding" notification service.
Join the NFIP	Flood, severe storm	4-a, 4-b	Town of Williamstown Town Board	No progress to date.

7.2 Proposed Mitigation Actions

The Town proposed four (4) 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 Williamstown									
Action ID	Mitigation Action	Hazard(s) Mitigated	Implementing Agencies (Lead* & Support)	Planning Mechanism	Timeframe	New or Existing Development	Estimated Cost	Funding Source(s)	Priority
Williamstown 1	Provide backup power for Community Center (shelter)	All	Town Highway Dept.*	Town Capital Project Plan	5 years	Existing	\$10,000	FEMA- PDM; USDA-RD Community Facilities Grant	1 (High)
Williamstown 2	Provide backup power for the Town Highway Garage	All	Town Highway Dept.*	Town Capital Project Plan	5 years	Existing	\$50,000	FEMA- PDM; USDA-RD Community Facilities Grant	2 (High)
Williamstown 3	Implement public outreach program to better inform residents before and during hazard events	All	Town Supervisor	Comprehensive Emergency Management Plan	5 years	N/A	Low	FEMA- PDM; Local budget	3 (High)
Williamstown 4	Develop and distribute property resilience brochure to all Town residents	Severe Thunderstorm/Wind/ Tornado, Flooding, Severe Winter Storm, Ice Storm	Town Supervisor	None	1 year	Existing	\$500-2,000	Town budget	4 (High)
Potential Funding Sources FEMA PDM: https://www.fema.gov/pre-disaster-mitigation-grant-program USDA-RD Community Facilities Grant: https://www.rd.usda.gov/programs-services/community-facilities-direct-loan-grant-program									

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.

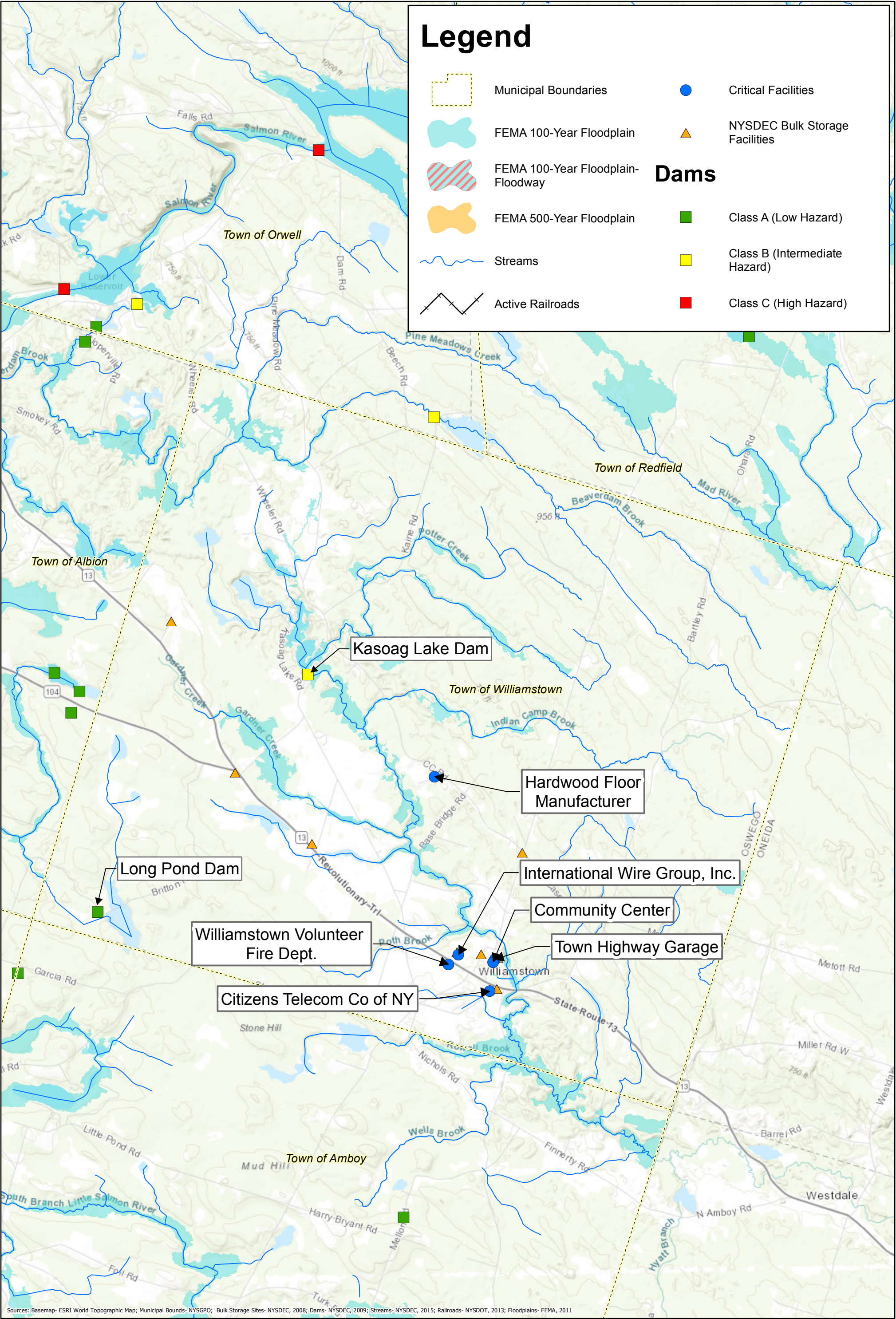
8.0 Works Cited

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<https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

Figure 1

**Hazard Area Extent and Location Map –
Town of Williamstown**



Legend

- Municipal Boundaries
- FEMA 100-Year Floodplain
- FEMA 100-Year Floodplain-Floodway
- FEMA 500-Year Floodplain
- Streams
- Active Railroads
- Critical Facilities
- NYSDEC Bulk Storage Facilities
- ## Dams

Class A (Low Hazard)

Class B (Intermediate Hazard)

Class C (High Hazard)

Sources: Basemap- ESRI World Topographic Map; Municipal Bounds- NYSGPO; Bulk Storage Sites- NYSDEC, 2008; Dams- NYSDEC, 2009; Streams- NYSDEC, 2015; Railroads- NYSDOT, 2013; Floodplains- FEMA, 2011



Attachment A

**Mitigation Action Worksheets –
Town of Williamstown**

Oswego County Multi-Jurisdictional Hazard Mitigation Plan

Name of Jurisdiction:	Town of Williamstown
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Mitigation Action Worksheet	
Project Name:	Provide backup power for Community Center (shelter)
Project Number:	Williamstown 1
Risk/Vulnerability	
Hazard of Concern:	All
Description of the Problem:	Community Center (emergency shelter location) lacks backup power and would not be able to stay open during hazards with prolonged power outages.
Action of Project Intended for Implementation	
Description of the Solution:	Install generator at Community Center to maintain shelter availability during hazard events with prolonged power outages.

Is this project related to a Critical Facility? Yes X No

(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater.)

Level of Protection:	High	Estimated Benefits (losses avoided):	Guaranteed backup power for Community Center during hazard events with prolonged power outages. Allows Town to keep this facility open as a shelter for residents.
Useful Life:	Long-term- 15-20 years		
Estimated Cost:	\$10,000		

Plan for Implementation			
Prioritization:	#1 (High)	Desired Timeframe for Implementation:	1-5 years
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	FEMA- PDM; USDA-RD-Community Facilities Grant
Responsible Organization:	Town Highway Dept.	Local Planning Mechanisms to be used in Implementation, if any:	Town Capital Project Plan

Three Alternatives Considered (Including No Action)			
	Action	Estimated Cost	Evaluation
Alternatives:	No Action	\$0	Community Center still at risk of power outage during hazard events - limited shelter benefit
	Purchase a portable generator for use at various Town facilities	\$5,000	Requires additional coordination to use, may not be available when needed at a particular facility, would not power entire facility.
	Install generator at Community Center	\$10,000	Guaranteed backup power for Community Center-maintain shelter operations

Progress Report (for Plan Maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Oswego County Multi-Jurisdictional Hazard Mitigation Plan

Name of Jurisdiction:	Town of Williamstown
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Mitigation Action Worksheet	
Project Name:	Provide backup power for the Town Highway Garage
Project Number:	Williamstown 2
Risk/Vulnerability	
Hazard of Concern:	All
Description of the Problem:	The Town Highway Garage currently lacks a source of backup power. During a long-term power outage, the Town Highway Department would have no electricity or heat to operate garage doors, provide necessary maintenance, and keep key vehicles warm, which would be critical for emergency operations.
Action of Project Intended for Implementation	
Description of the Solution:	Installing a generator at the Town Highway Garage would provide 24/7 backup power for the garage, enabling emergency operations to continue uninterrupted.

Is this project related to a Critical Facility? Yes X No

(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater.)

Level of Protection:	High	Estimated Benefits (losses avoided):	Guaranteed backup power for Town Highway Garage during hazard events with prolonged power outages. Further damage to Town roads and facilities after a storm would be mitigated.
Useful Life:	Long-term- 15-20 years		
Estimated Cost:	\$50,000		

Plan for Implementation			
Prioritization:	#2 (High)	Desired Timeframe for Implementation:	1-5 years
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	FEMA- PDM; USDA-RD- Community Facilities Grant
Responsible Organization:	Town Highway Dept.	Local Planning Mechanisms to be used in Implementation, if any:	Town Capital Project Plan

Three Alternatives Considered (Including No Action)			
	Action	Estimated Cost	Evaluation
Alternatives:	No Action	\$0	Town Highway Garage remains at risk of power outage during hazard events
	Portable generator secured during emergency	\$5,000 to \$10,000	Availability of a generator, or one of appropriate size, could be an issue; facility may be only partially powered
	New highway garage with built-in generator	\$1 million+	Benefits would be high but cost may be unmanageable

Progress Report (for Plan Maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Oswego County Multi-Jurisdictional Hazard Mitigation Plan

Name of Jurisdiction:	Town of Williamstown
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Mitigation Action Worksheet	
Project Name:	Implement public outreach program to better inform residents before and during hazard events
Project Number:	Williamstown 3
Risk/Vulnerability	
Hazard of Concern:	All
Description of the Problem:	Lack a designated protocol for public notification/education related to emergency situations and preparedness.
Action of Project Intended for Implementation	
Description of the Solution:	Develop public information and educational program to communicate with residents about emergency preparedness, hazardous conditions, and resources they can use. This will involve increasing the Town's social media presence to share emergency preparedness resources, distributing printed materials, and encouraging residents to sign up for the County's Hyper-Reach notification program.

Is this project related to a Critical Facility? Yes _____ No X

(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater.)

Level of Protection:	High	Estimated Benefits (losses avoided):	Better informed public
Useful Life:	Long-term (ongoing)		
Estimated Cost:	\$1,000		

Plan for Implementation			
Prioritization:	#3 (High)	Desired Timeframe for Implementation:	1-5 years
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	FEMA- PDM; Town budget
Responsible Organization:	Town Fire Dept.	Local Planning Mechanisms to be used in Implementation, if any:	Comprehensive Emergency Management Plan

Three Alternatives Considered (Including No Action)			
	Action	Estimated Cost	Evaluation
Alternatives:	No Action	\$0	Information limitations continue to pose a risk.
	Mail out flyers about Hyper Reach program and other emergency preparedness resources	\$500	Improvement on current conditions but may not reach all residents, such as those who have seasonal residences
	Increase social media presence and create online links to emergency preparedness resources, in addition to distributing printed resources. Notify residents of hazard conditions.	\$1,000	Reaches greater number of people – anyone can obtain emergency related information even if they don't reside in the Town

Progress Report (for Plan Maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Oswego County Multi-Jurisdictional Hazard Mitigation Plan

Name of Jurisdiction:	Town of Williamstown
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Mitigation Action Worksheet	
Project Name:	Develop and distribute property resilience brochure to all Town residents
Project Number:	Williamstown 4
Risk/Vulnerability	
Hazard of Concern:	Severe Thunderstorm/Wind/Tornado, Flooding, Severe Winter Storm, Ice Storm
Description of the Problem:	Many residents throughout Oswego County, including the Town of Williamstown, may lack knowledge regarding how to make their properties more resilient to flooding and storm events. Storm damages could be minimized or avoided if residents had access to practical methods for hardening their properties.
Action of Project Intended for Implementation	
Description of the Solution:	Modify County-wide property resiliency brochure to include additional information regarding Town codes, contact information, and other Town-specific information. Distribute the brochure to each Town resident, either by mailing or making the document available on the Town website and at the Town Hall.

Is this project related to a Critical Facility? Yes _____ No X

(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater.)

Level of Protection:	Medium	Estimated Benefits (losses avoided):	Town residents would be better informed about ways to protect their properties during flooding and storm events, which would help to lessen property damages in the future.
Useful Life:	Long-term		
Estimated Cost:	\$500-2,000		

Plan for Implementation			
Prioritization:	#4 (High)	Desired Timeframe for Implementation:	1 year
Estimated Time Required for Project Implementation:	3 months	Potential Funding Sources:	Town budget
Responsible Organization:	Town Supervisor	Local Planning Mechanisms to be used in Implementation, if any:	None

Three Alternatives Considered (Including No Action)			
	Action	Estimated Cost	Evaluation
Alternatives:	No Action	\$0	No change in public awareness regarding property resilience.
	Distribute property resiliency brochure developed by Oswego County	\$500-2,000	Partial solution. The property resiliency techniques likely would be the same as those identified for the County, but this option lacks Town-specific information.
	Distribute Oswego County property resiliency brochure modified with Town-specific information	\$500-2,000	Most comprehensive approach, gives Town residents more complete information regarding Town-specific codes and contacts.

Progress Report (for Plan Maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment B

**STAPLEE Table –
Town of Williamstown**

Worksheet #6

STAPLEE Criteria Consideration Table

Mitigation Action Prioritization and Comparison

Jurisdiction	Town of Williamstown
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Action ID	Action								Can action be easily implemented?	Does action achieve multiple plan objectives?	Can action be quickly implemented?	Level of action benefits	Level of action overall costs	Priority ranking
		S	T	A	P	L	E	E						
		+ = Benefit (favorable), - = Cost (unfavorable), 0 = Neutral or N/A												
Williamstown 1	Provide backup power for Community Center (shelter)	+	+	+	+	+	+	0	+	+	-	High	Med	High (#1)
Williamstown 2	Provide backup power for the Town Highway Garage	+	+	+	+	+	+	0	+	+	+	High	Med	High (#2)
Williamstown 3	Implement public outreach program to better inform residents before and during hazard events	+	+	+	+	+	+	0	+	+	+	High	Low	High (#3)
Williamstown 4	Develop and distribute property resilience brochure to all Town residents	+	+	+	+	+	+	0	+	+	+	Medium	Low	High (#4)