

# Jurisdictional Annex Village of Cleveland

#### 1.0 Contacts

The contact regarding this plan are identified as follows:

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## 2.0 Municipal Profile

## **Population**

The 2016 American Community Survey estimated that 708 people live in the Village of Cleveland. The Village's population has decreased by 6.6% since the 2000 Census (total population 758) (U.S. Census Bureau, 2016).

## **Location**

The Village of Cleveland is located in the Town of Constantia, in southeastern Oswego County. The Village is bordered by Oneida Lake to the south and the Town of Vienna (Oneida County) to the east. Cleveland is about fourteen (14) miles east of the Interstate 81 corridor, and State Route 49 provides direct access to the Village.

## **Brief History**

The Village of Cleveland was officially formed in 1857. Beginning in the 1830s, the Village was home to the Eagle Tannery, glass manufacturers, saw mills, a grist mill, a chair factory, and other commercial entities. The plank road along the north shore of Oneida Lake (now State Route 49) was completed in 1849. In addition, the New York Ontario and Western Railway ran through the Village which helped spur development. Glass manufacturing remained the dominant industry in the Village until 1910 (Hinds, 2016).

#### Governing Body

The Village of Cleveland is governed by a five (5) member Village Board, led by the Mayor.

## **Future Growth**

The Village is seeking stable growth. Since the last County HMP (2012), no new commercial or residential developments have been completed in the Village of Cleveland. All potential developments would undergo local site plan review to ensure that all local, state, and federal requirements and regulations are met.

## 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	Impact (Damages Event Extent Onset and Injury) Frequency				Vulnerability Rank	Jurisdiction Rank			
Severe Thunderstorm, Wind, or Tornado	3	1	3	3	High	1			
Severe Winter Storm	3	1	2	3	High	2			
Ice Storm	3	1	3	2	High	3			
Utility Failure	3	3	2	1	High	4			
Transportation Accident	1	3	2	2	Moderate	5			
Water Supply Contamination	3	3	2	1	High	6			
HAZMAT Transit	2	3	2	1	Moderate	7			
Radiological Transit	2	3	2	1	Moderate	8			
Fire	1	3	2	2	Moderate	9			
Explosion	1	3	2	1	Moderate	10			

Table 1: Hazard Vulnerability by Event										
Hazard Event	Extent	Onset	Impact (Damages and Injury)	Frequency	Vulnerability Rank	Jurisdiction Rank				
Terrorism	1	3	2	1	Moderate	11				
Wildfire	1	3	2	1	Moderate	12				
Oil Spill	1	3	2	1	Moderate	13				
HAZMAT Fixed	1	3	2	1	Moderate	14				
Extreme Temps	3	1	1	2	Moderate	15				
Flood	3	2	3	3	High	16				
Epidemic	2	1	2	1	Moderate	17				
Drought	1	1	1	1	Low	18				
Dam Failure	1	3	2	1	Moderate	19				
Structural Collapse	1	3	2	1	Moderate	20				
Ice Jam	2	1	2	2	Moderate	21				
Infestation	2	1	1	1	Low	22				
Earthquake	2	3	1	1	Moderate	23				

## 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 Village of Cleveland. Table 2.0 below denote the number and locations of critical facilities within the Village.

Table 2: Critical Infrastructure in the Village of Cleveland									
Facility Name	Parcel Located in Floodplain	Structure Located in Floodplain							
Transportation Network									
Evacuation Routes									
Bridges	-	-	-						
	Public Utilities								
National Grid property	off of West St	No	No						
Sewage Treatment Plant	off of Sand St	100YR	No						
Verizon Switching Station	Main St- adjacent to Village Hall	No	No						
Water Tower	off of West St	No	No						
	Municipal Services								
Cleveland DPW Garage	off of Sand St	100YR	No						

Table 2: Critical Infrastructure in the Village of Cleveland									
Facility Name	Address (Street, Town/Village/Hamlet)	Parcel Located in Floodplain	Structure Located in Floodplain						
Cleveland Village Hall	No	No							
	Emergency and Medical Services								
Cleveland Volunteer Fire Dept.	31 West St, Cleveland, NY 13042	No	No						
North Shore Ambulance	136 Bridge St, Cleveland, NY 13042	No	No						
	Community Services								
U.S. Post Office	100 NY-49, Cleveland, NY 13042	No	No						
Educ	Educational, Shelter and Evacuation Facilities								
Cleveland Elementary (Closed) 140 Bridge St, Cleveland, NY 13042 No No									
Cleveland United Methodist Church 73 Bridge St, Cleveland, NY 13042 No No									

## 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 Village of Cleveland. 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 Village of Cleveland are described in detail below.

## 4.1.1 Severe Thunderstorm, Wind, or Tornado

For a description of these hazards, please see Section 5.1.1 in the main body of the plan.

#### **Hazard Vulnerability**

The entire Village is susceptible to damages from a severe thunderstorm, wind, tornado, or coastal storm 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 six (6) specific severe storm events that occurred in the Village of Cleveland from 2004 to 2017 (frequency of about once every other year). Five (5) of these records were thunderstorm winds and one (1) was a hail event. Estimated damages ranged from \$5,000 to \$15,000 per event (Table 3). Actual damages were likely greater than those estimated by the NCDC.

Table 3: Severe Storm Event Records for the Village of Cleveland								
Event Type	Estimated nt Type Date Magnitude Property Dama							
Hail	8/29/2004	1 inch	\$10,000	-				
Thunderstorm Wind	11/6/2005	50 kts	\$15,000	-				
Thunderstorm Wind	8/2/2006	50 kts	\$5,000	-				
Thunderstorm Wind	8/25/2007	52 kts	\$15,000	-				
Thunderstorm Wind	9/11/2013	50 kts	\$8,000	-				
Thunderstorm Wind	5/18/2017	52 kts	\$15,000	-				
	Total		\$68,000	-				

#### **Future Potential Impacts**

Severe storms are a common event in the Village of Cleveland and will continue to occur in the future. The frequency and magnitude of severe storm events may be increased due to climate change. Severe storms have the potential to cause significant property damage.

## 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 Village of Cleveland is susceptible to damages from a severe winter storm event. The Village Dept. of Public Works clears Village streets during heavy snow events, and the Village works with the Town of Constantia Highway Dept., 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.

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

The Village of Cleveland has been affected by a number of county-wide severe winter storm events, described in Section 5.1.4 in 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 Village of Cleveland.

There is no record of winter storm-related damage estimates explicitly for the Village of Cleveland, however, the Village 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. Severe winter storms generally cause property damage and can cause injuries and potential loss of life due to spinoff events, such as a transportation accident.

## **Future Potential Impacts**

The Village of Cleveland will continue to experience severe winter storm events in the future. These events occur multiple times per year and generally affect most or all of Oswego County.

## 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 Village of Cleveland is highly vulnerable to damages from an ice storm event due to the hazard's widespread extent, high damage potential, and moderate frequency.

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

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

#### Future Potential Impacts

The Village of Cleveland will continue to experience ice storm events in the future, as will the rest of Oswego County. The Village Dept. of Public Works completes tree maintenance within Village road right of ways 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 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 Village of Cleveland is moderately vulnerable to a wildfire. The Village includes a large amount of undeveloped forest and grassland areas that could be susceptible to wildfires, particularly in the northern and eastern portions of the Village. A wildfire event could impact a moderate amount of the Village and would come with little to no warning. According to the NYSDEC, the Village of Cleveland experienced 1.4 to 3.4 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 Village of Cleveland. Previous wildfire events in 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. However, individual jurisdictions or the County would likely incur significant costs associated with firefighting and other emergency response needs.

#### **Future Potential Impacts**

The Village of Cleveland contains a large amount of undeveloped land 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.

## 4.1.5 Extreme Temps

## **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 Village of Cleveland 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 Village was determined to have a moderate vulnerability to extreme temperature events due to their widespread nature and moderate frequency.

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

The Village of Cleveland 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 Village of Cleveland. 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 Village of Cleveland 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 Village of Cleveland are generally used to extreme temperature events. The Village has an emergency shelter established that residents may use during extreme cold events.

## 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 Village is located on the north shore of Oneida Lake and is drained by several tributaries to the Lake, including Black Creek and Cold Spring Brook. 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 Village of Cleveland 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 2011)							
	Percent of Total Area						
Village of Cleveland Total Area	100-Year Floodplain	500-Year Floodplain	Area of Minimal Flood Hazard				
728 acres	13.29%	0.25%	86.06%				

Table 5 below summarizes the value of properties in the Village of Cleveland 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	0	-	0	-					
Commercial	4	\$352,500	3	\$310,700					
Community Services	3	\$406,100	2	\$406,100					
Industrial	0	-	0	-					
Residential	120	\$8,763,400	50	\$4,521,900					
Utility	2	\$559,700	1	\$400					
Other**	27	\$291,850	7	\$233,650					
Total	156	\$10,373,550	63	\$5,472,750					

<sup>\*</sup>Structure Value estimated by subtracting parcel's Land Assessed Value from Total Assessed Value (Oswego County Real Property Tax Office, 2018)

#### Historical Hazard Occurrences and Damage Estimates

According to NOAA's Storm Events Database, in the past ten (10) years, no flood records specifically impacted the Village of Cleveland. However, the Village has been impacted by County-wide flood events described in Section 5.1.2 of the main body of the Plan. As described in Section 6.0 of this annex, twenty-eight (28) NFIP loss claims have been paid as of November 2017 in the Village of Cleveland totaling \$195,060.65. There are no repetitive loss properties in the Village of Cleveland.

## **Future Potential Impacts**

Properties along Black Creek and Cold Spring Brook, which flow to the south through the eastern half of the Village, and along the shore of Oneida Lake are susceptible to flooding. Two of the Village's critical facilities are located on parcels that intersect the mapped 100-year floodplain of Black Creek, but the structures themselves are outside of a mapped floodplain (Table 2). The Village will continue to enforce local floodplain regulations in order to protect properties from damages as much as possible.

<sup>\*\*</sup>Includes parcels classified as vacant; recreational; and wild forest/conservation land/parks.

## 4.2 Technological Hazards

Technological hazards selected to be profiled by the Village of Cleveland are described in detail below.

## 4.2.1 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 Village of Cleveland 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 all developed portions of the Village. The Village'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 Village of Cleveland 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 Village itself. The Village 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 Village will remain susceptible to utility failures in the future. However, the Village is more likely to encounter utility failures due to a natural hazard event than this hazard occurring on its own.

## 4.2.2 <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 Village of Cleveland contains State Route 49, a major transportation route that runs east to west in the southern portion of the Village, parallel to the shore of Oneida Lake. This roadway is heavily traveled 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 this route has the potential to impact the southern part of the Village of Cleveland.

## <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 Village of Cleveland (accidents involving mass casualties or substantial loss of property). The Village elected to profile this hazard due to the increased risk of this hazard occurring along State Route 49.

#### **Future Potential Impacts**

Major transportation accidents are infrequent, but the Village remains susceptible to future incidents along State Route 49, 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.

## 4.2.3 <u>Water Supply Contamination</u>

## Hazard Vulnerability

The Village of Cleveland would be highly vulnerable to water supply contamination due to the large extent, fast onset, and moderate damage potential for this hazard. The entire village is served by a public water supply system. The Village's water supply system is sourced from two groundwater wells. While unlikely, contamination could be caused due to improper treatment or localized groundwater contamination. Water supply contamination could also result from terrorism.

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

There are no historical records or damage estimates for water supply contamination in the Village of Cleveland. However, if this event were to occur, it has the potential to cause a large number of injuries or loss of life.

#### **Future Potential Impacts**

The Village is susceptible to a water supply contamination event, but the risk is relatively low.

## 4.2.4 HAZMAT Transit and Radiological Transit

#### Hazard Vulnerability

Hazardous Materials (HAZMAT) and Radiological in Transit events involve the uncontrollable release of flammable, toxic, corrosive, chemically instable, or combustible or

radioactive materials during transport that can damage infrastructure, pollute the environment, and/or cause injuries or death. The Village of Cleveland contains one (1) major transportation route (State Route 49) that is used for the transport of hazardous materials. State Route 49 runs east to west along the southern portion of the Village. A transportation accident involving hazardous materials or radioactive materials on this roadway has the potential to impact a portion of the Village of Cleveland. There are no active railroad corridors within the Village.

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

There are no records of a HAZMAT or radiological materials in transit events in the Village of Cleveland.

## **Future Potential Impacts**

Although HAZMAT in transit events are infrequent, the Village remains susceptible to future HAZMAT incidents along State Route 49.

## 4.2.5 Fire

## **Hazard Vulnerability**

The Village of Cleveland 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 southern portion of the Village, which is most densely developed, would be the most vulnerable areas for a fire event.

#### Historical Hazard Occurrences and Damage Estimates

Structural fires occur occasionally within the Village. A fire at United Wire, an industrial facility, on State Route 49 in the Village occurred on May 6, 2012. The fire destroyed the entire operations facility. A total of fifteen (15) fire departments responded to the incident, including the Village of Cleveland Fire Dept.

#### **Future Potential Impacts**

The southern portion of the Village of Cleveland is the most densely developed area in the Village and remains susceptible to structure fires. Much of the remainder of the Village is rural or undeveloped.

## 4.2.6 Explosion, HAZMAT Fixed, Oil Spill

## **Hazard Vulnerability**

Explosions, HAZMAT fixed site, and oil spill events could occur at facilities that store hazardous materials. The NYSDEC lists three petroleum bulk storage sites within the Village of Cleveland (Figure 1). These sites include one gas station, Cleveland Elementary (which is now closed), and St. Mary's Church. An explosion has the potential to occur at any of these sites storing petroleum products or other flammable chemicals. An explosion could also occur due to a transportation accident involving hazardous materials.

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

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

## **Future Potential Impacts**

The Village remains susceptible to explosions, though they are a rare occurrence. Properties close to bulk storage facilities that store combustible materials are at the most risk of being affected by an explosion.

## 4.2.7 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 Village of Cleveland is moderately vulnerable to a terrorist event due to the event's short onset (no warning) and moderate potential impact to Village infrastructure and residents.

#### Historical Hazard Occurrences and Damage Estimates

There are no records of terrorist events in the Village of Cleveland or Oswego County. The Village 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 Village chose to analyze this hazard for the HMP update. Terrorism remains a low risk for the Village of Cleveland. There are no schools

operating within the Village (Cleveland Elementary is currently closed). The Village does operate a public water supply system that could be the target of a terrorist attack.

## **5.0** Capability Assessment

## 5.1 Planning and Regulatory Capability

The Village'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									
Diaming Machaniam	Village of Cleveland	Natao							
Planning Mechanism		Notes							
Plans									
Comprehensive/Land Use Plan	X	Adopted.							
Watershed Protection Plan	Х	In place.							
	Policies/Ordinances	<u></u>							
Building Codes	<ul> <li>2010 Residential Code of NYS</li> <li>2010 Fire Code of NYS</li> <li>2010 Building Code of NYS</li> <li>2010 Exiting Building Code of NYS</li> <li>2010 Energy Conservation Construction Code of NYS</li> <li>2010 Plumbing Code of NYS</li> <li>2010 Mechanical Code of NYS</li> <li>2010 Fuel Gas Code of NYS</li> </ul>	Village Code Enforcement Officer							
Flood Regulations	X	In place.							
Site Plan Review Requirements	X	In place.							
Real Estate Disclosure Requirement	X	In place.							
	Programs								
NFIP Participant	X	Current participant.							
Public Education/Awareness Program	X	Fire dept. responsible.							
Stream Maintenance Program	X	Dept. of Public Works responsible							
Storm Drainage Maintenance Program	X	Dept. of Public Works responsible							
Mutual Aid Agreements	X	Agreements with the Town of Constantia							
	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	X	Code Enforcement Officer							
Public Information Official	X	Mayor							

## 5.2 Emergency Communications, Routes, and Shelters

The Village of Cleveland, along with Oswego County, utilizes the HyperReach emergency communications system. The major transportation route within the Village is State Route 49. The Village of Cleveland has one established emergency shelter location:

• Cleveland United Methodist Church - 73 Bridge St, Cleveland, NY 13042

The church is ADA-compliant. There are currently no pet sheltering accommodations in the Village.

## 5.3 Temporary and Permanent Housing Locations

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

## Potential Temporary Housing Location

 Cleveland Elementary Athletic Field - 140 Bridge Street, Cleveland, NY 13042

## • Potential Permanent Housing Location

- O Village Park off of North Street and Caswell Street
- O Vacant Village property off of Sand Street (adjacent to wastewater treatment plant)

## **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 Village of Cleveland currently participates in the NFIP. As of November 2017, the Village had eight (8) flood insurance policies in-force with a total of \$1,738,600 in coverage. In addition, thirty-three (33) NFIP claims have been filed to date, five (5) of which were closed without payment. The remaining twenty-eight (28) claims were closed with \$195,060.65 in payments. There are no repetitive loss properties in the Village of Cleveland.

The Village's Code Enforcement Officer serves as the Local Floodplain Administrator, and flood maps are available for viewing and copying at 123 State Route 49, Cleveland, NY 13042. The Village has been maintaining NFIP participation by performing the duties and actions that were listed in the local laws adopted by the Village Board. The Village will continue to comply with the NFIP by enforcing floodplain management requirements and regulating new development in Special Flood Hazard Areas, in addition to other required duties.

## 7.0 Mitigation Strategy and Prioritization

## 7.1 Past, Completed, and Ongoing Initiatives

The Village proposed twelve (12) mitigation actions in the 2012 Oswego County HMP. The details and status of previous actions are summarized in Table 7. No progress is reported for any of these actions to date, primarily due to shifts in project priorities and/or budget constraints. None of the 2012 mitigation actions proposed for the Village of Cleveland were re-included for the 2018 update.

Table 7. 2012 Hazard Mitigation Actions Village of Cleveland								
Proposed Mitigation Action	2012 Goals & Implementing							
Establish breakwall on Oneida Lake for safety on waterway	Severe Storm, Coastal Storm		Oswego County DPW & Planning (lead), Cleveland municipal board, US Army Corps	No progress to date due to limited budget/staff availability				
Purchase anti-icing equipment for Town vehicles (especially plows)	Winter Storm, Severe Storm, Ice Storm	3-c	Cleveland DPW (lead), municipal board	No progress to date due to limited budget/staff availability				
Acquire/install dry hydrants in populated areas for fire suppression	Fire, Wildfire	4-b	Cleveland municipal board	No progress to date due to limited budget/staff availability				
Display pre/post hazard awareness and preparedness information on Village website	All Hazards	1-d, 1-b, 1-c, 5-b, 5-e	Cleveland planning board	No progress to date due to limited budget/staff availability				
Purchase portable radios for volunteer and aid worker use to coordinate disaster relief efforts	All Hazards	5-b, 5-c, 5-e	Cleveland municipal board	No progress to date due to limited budget/staff availability				
Complete flooding/ drainage analysis for north shore of Oneida Lake to compile actions that would reduce flooding impacts	Severe storm, flood, winter storm	4-d	Cleveland DPW – in partnership with Town of Constantia	No progress to date due to limited budget/staff availability				
Review/implement County regulations and insurance regulations on floodplain management requirements	Flood	1-b, 3-a, 4-a, 4-b, 4-d	Cleveland Floodplain Administrator	No progress to date due to limited budget/staff availability				
Enforce/promote smart development that minimizes impacts from natural hazards	Flood	1-b, 3-a, 4-a, 4-b, 4-d	Cleveland Zoning/Code Enforcement Official	No progress to date due to limited budget/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	Cleveland Zoning/Code Enforcement Official	No progress to date due to limited budget/staff availability				
Implement local Land Use Plans to reduce flood impacts (reduce development and promote safe development)	Flood	1-a	Cleveland Planning and Code Enforcement	No progress to date due to limited budget/staff availability				
Assist County with the development and implementation of new public awareness/ education programs for hazard mitigation and preparedness	All hazards	1-b	Cleveland municipal board	No progress to date due to limited budget/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	Cleveland zoning/code enforcement official	No progress to date due to limited budget/staff availability				

## **Proposed Mitigation Actions**

The Village 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 Village of Cleveland									
Implementing   Hazard(s)   Agencies   Planning   New or Existing   Estimated   Funding   Action ID   Mitigation Action   Mitigated   (Lead* & Support)   Mechanism   Timeframe   Development   Cost   Source(s)   Pri									Priority	
Cleveland 1	Provide backup power for United Methodist Church (shelter)	All	Mayor*	Comprehensive Plan	3 years	Existing	\$25K	FEMA- PDM; USDA-RD- Community Facilities Grant	High (#1)	
Cleveland 2	Provide backup power for municipal facilities (Village Hall, DPW, WWTP, and Water Treatment Plant) and Cleveland Fire Dept.	All	Village DPW Superintendent*	Comprehensive Plan	5 years	Existing	\$125K	FEMA- PDM; USDA-RD- Community Facilities Grant	High (#2)	

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

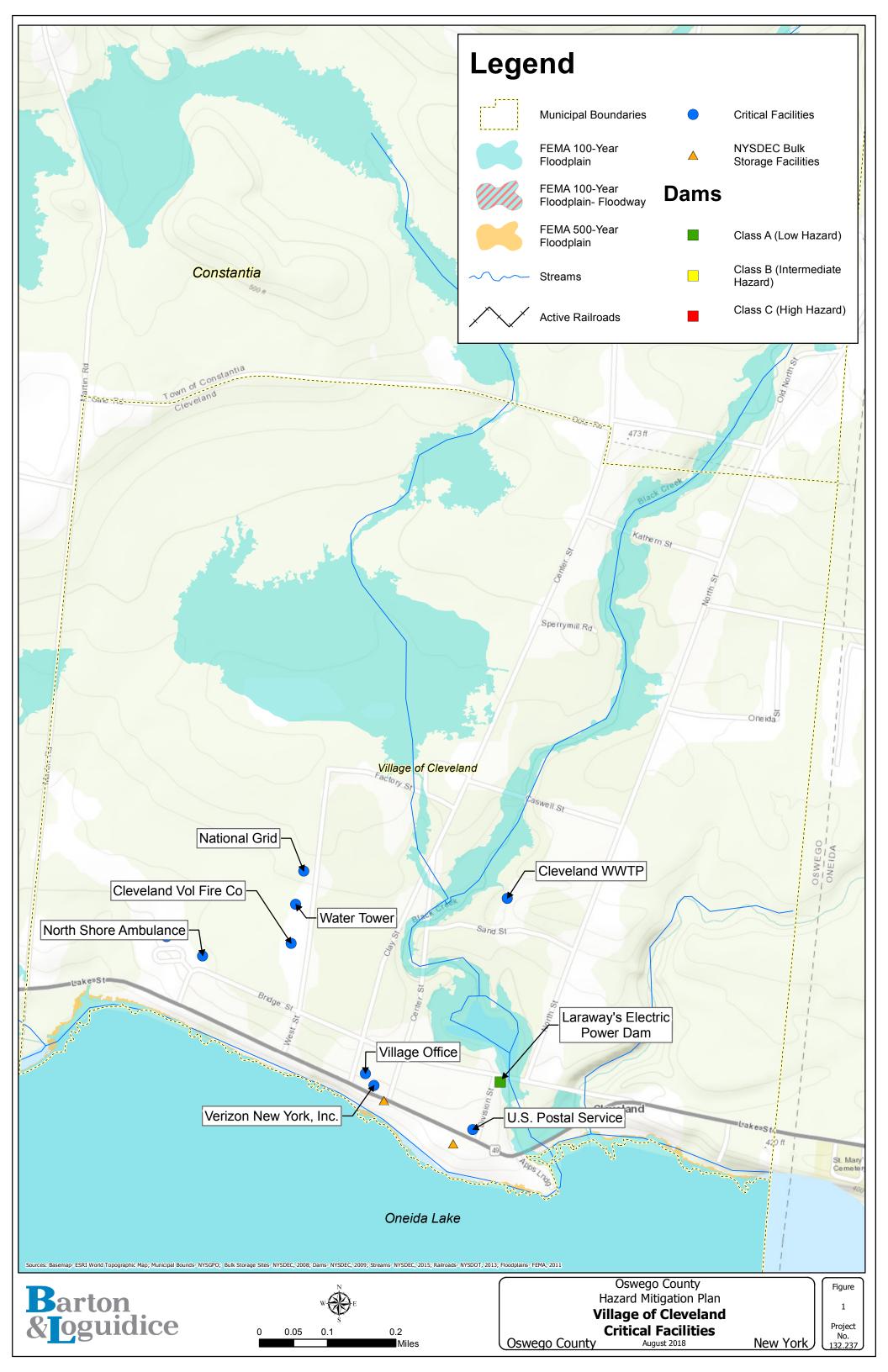
Each of the Village's proposed mitigation actions were evaluated and prioritized using the STAPLEE cost-benefit analysis. The Village's STAPLEE worksheet is provided in Attachment B. The STAPLEE analysis includes the following lenses of evaluation: social, technological, administrative, political, legal,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

## 8.0 Works Cited

- Hinds, Joni. 2016. "Village of Cleveland". 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. 54-58.Print.
- 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 – Village of Cleveland



## **Attachment A**

Mitigation Action Worksheets – Village of Cleveland

## Oswego County Multi-Jurisdictional Hazard Mitigation Plan

Name of Jurisd	liction:	Village of Cleveland								
	Mitigation Action Worksheet									
Project Name:		Provide backup power for United Methodist Church (shelter) and Cleveland Fire Dept.								
Project Number:		Cleveland 1								
	Risk/Vulnerability									
Hazard of Concerr	า:	All								
Description of the	Problem:			United Methodist C abilities during pow			n) lacks backup power. Therefore, this			
		Actio	n of Pro	oject Intended fo	or Impl	ementatio	n			
Description of the	Solution:	Purchase gen	erator for	United Methodist Cl	nurch to	ensure conti	nued shelter availability during hazard events			
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	n: Mediu	n		Estimated Bene			ge to review best options for increasing			
Useful Life:	Long-t	erm		(losses avoided	d):	traffic continuity during hazard events.				
Estimated Cost:	\$25,00	0								
			Pl	an for Impleme	ntation	1				
Prioritization:		High (#1)		I Timeframe for entation:			1-3 years			
Estimated Time R		1 year	Potenti	ntial Funding Sources:			FEMA- PDM; USDA-RD- Community Facilities Grant			
Responsible Orga	nization:	Mayor		lanning Mechanisr entation, if any:	ns to be	e used in	Comprehensive Plan			
		Three Al	ternativ	es Considered	(Includ	ling No Ac	tion)			
		Action		Estimated Cost			Evaluation			
Alternatives:		No Action		\$0	Shelte	ring limitatior	ns persist.			
	Generato	r for United Meth Church	odist	\$25,000	Improv	ved sheltering	g abilities during hazard events			
	agreement	transfer switches s for portable gen Il Village facilities	erators	\$30,000 Partial solution- some benefit but portable generators may not be available for all facilities when needed.						
		rl I	ogress	Report (for Plai	n Main	tenance)				
Date of Status Re	port:									

Report of Progress:
Update Evaluation of the Problem and/or Solution:

## Oswego County Multi-Jurisdictional Hazard Mitigation Plan

Name of Juriso	ne of Jurisdiction: Village of Cleveland									
Mitigation Action Worksheet										
Project Name:	lame: Provide backup power for municipal facilities (Village Hall, DPW, WWTP, and Water Treatment Plant)									
Project Number:			Cleveland 2							
	Risk/Vulnerability									
Hazard of Concer	n:		All							
Description of the	Proble	e <b>m</b> :	Currently the Village's muloperational abilities during			ept. lack backup powe	er. These facilities risk losing			
			Action of Proje	ect Int	ended for Imp	lementation				
Description of the	Soluti	on:					plant, water treatment plant, and ations during hazard events			
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 Protectio	n: l	Medium			nated Benefits		f Village and fire dept. operations			
Useful Life:		Long-ter	rm	(losse	es avoided):		ts. Would offer better protection to re water and sewer services remain			
Estimated Cost:	;	\$125,00	0	available during power outages.						
Plan for Implementation										
Prioritization:			High (#2)		Desired Timeframe for 1-5 years Implementation:					
Estimated Time R Project Implemen			1 year		Potential Fundi	ing Sources:	FEMA- PDM; USDA-RD- Community Facilities Grant			
Responsible Orga	nizatio	on:	Village DPW 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 Action		\$0	Pedestrian danger a	nd flooding issues remain.			
			transfer switches and s for portable generators		\$30,000		e benefit but portable generators for all facilities when needed.			
Individual generators for Fire Dept., Village Hall, DPW building, wastewater treatment plant, and water treatment plant										
			Progress R	eport	(for Plan Main	ntenance)				
Date of Status Re	port:									
Report of Progres	SS:									
	Update Evaluation of the Problem and/or Solution:									

## **Attachment B**

STAPLEE Table – Village of Cleveland

Worksheet #6

## STAPLEE Criteria Consideration Table Mitigation Action Prioritization and Comparison

Jurisdiction Village of Cleveland

									Can action be	Does action	Can action be			
Action ID	Action								easily	achieve multiple	quickly	Level of action	Level of action	Priority
ACTION ID	ACTION	S	Т	Α	Р	L	Ε	Ε	implemented?	plan objectives?	implemented?	benefits	overall costs	ranking
			+ = Benefit (favorable), - = Cost (unfavorable), 0 = Neutral or N/A								N/A	Levels = High, Medium, or Low		
I IEVEIANO I	Provide backup power for United Methodist Church (shelter)	+	+	+	+	0	+	0	+	+	+	High	High	High (#1)
Cleveland 2	Provide backup power for municipal facilities (Village Hall, DPW, WWTP, and Water Treatment Plant) and Cleveland Fire Dept	+	+	+	+	0	+	0	+	+	+	High	High	High (#2)