

Village of Phoenix

Jurisdictional Annex

Village of Phoenix

1.0 Contacts

The contacts for the Village of Phoenix regarding this plan are identified as follows:

- James Lynch – Village Administrator
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2.0 Municipal Profile

Population

The 2016 American Community Survey estimated that 2,460 people live in the Village of Phoenix. The Village's population has increased since the 2000 Census population (2,251) by 9.3% (U.S. Census Bureau, 2016).

Location

The Village of Phoenix is located in southern Oswego County and is bordered by the Town of Schroepel to the north, east, and west, and the Town of Lysander (Onondaga County) to the south. The Village is just west of the Interstate 481 corridor, and the Oswego River flows along the Village's southern border.

Brief History

The Village of Phoenix was officially formed in 1848. The area was first settled in 1801 around a portage on the Oswego River, which borders the Village to the south. The completion of the Oswego Canal (completed in 1828) brought more development to the area, as well as the railroad (completed in 1885). Early industries in the Village included shipbuilding, barrel making, and later paper and silk mills. A catastrophic fire in 1916 destroyed all of the Village's industrial facilities, and one paper mill rebuilt and operated until it closed in 1978. The Sweet Memorial Building, a community center, was completed in the late 1920s that is still used today (Dix, 2016).

Governing Body

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

Future Growth

The Village of Phoenix last completed a draft update of their Comprehensive Plan in January 2013. The focus is on beautifying the downtown Canal District as well as neighborhood revitalization utilizing resources such as Community Development Block Grants (CDBG), New York Main Street Program (NYMS) and the Rural Area Revitalization Projects (RARP) among others.

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	2	3	High	1
Ice Storm	3	1	3	2	High	2
Severe T-Storm/Wind/Tornado	3	1	3	3	High	3
Water Supply Contamination	3	3	2	1	High	4
Fire	1	3	2	2	Moderate	5
Dam Failure	1	3	3	1	Moderate	6
Utility Failure	3	3	2	1	High	7
HAZMAT Transit	1	3	2	1	Moderate	8
Extreme Temps	3	1	1	3	Moderate	9
Coastal Storm	2	1	2	2	Moderate	10
Flood	2	2	2	2	Moderate	11
Transportation Accident	1	3	2	2	Moderate	12
Oil Spill	2	3	2	1	Moderate	13
Terrorism	1	3	2	1	Moderate	14

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 Phoenix. The table below denote the number and locations of critical facilities within the Village.

Table 2: Critical Facilities in the Village of Phoenix			
Facility Name	Address	Parcel Located in Floodplain	Structure Located in Floodplain
Public Utilities			
Windstream NY Inc. property	91 State St, Phoenix, NY 13135	500YR	500YR
National Grid Substation	corner of State St and Culvert St	100YR, 500YR	100YR, 500YR
Water System Booster Pump Station	off of CR 12	No	-
Water Tower	off of Elm St	No	-
Wastewater Treatment Plant	off of North St	100YR, 500YR	100YR, 500YR
State Street Pump Station	off of State St	100YR, 500YR	100YR
Chestnut St Pump Station	off of Chestnut St	No	-

Table 2: Critical Facilities in the Village of Phoenix			
Facility Name	Address	Parcel Located in Floodplain	Structure Located in Floodplain
Emergency Services			
Phoenix Fire Station 2	42 Elm St, Phoenix, NY 13135	100YR	100YR
Phoenix Fire Dept.	457 Main St, Phoenix, NY 13135	No	-
Village of Phoenix Police Dept.	455 Main St, Phoenix, NY 13135	No	-
Phoenix Medical Center	7 Bridge St, Phoenix, NY 13135	500YR	No
Schools			
Michael A. Maroun Elementary School	11 Elm Street, Phoenix, NY 13135	No	-
Emerson J. Dillon Middle School	116 Volney Rd, Phoenix, NY 13135	No	-
Bus Garage	116 Volney St, Phoenix, NY 13135	No	-
John C. Birdlebough High School	552 Main Street, Phoenix, NY 13135	No	-
Municipal Services			
Phoenix Village Office	455 Main St, Phoenix, NY 13135	No	-
Lock Island Park	off of Culvert Street	100YR, 500YR	100YR, 500YR
U.S. Post Office	99 Jefferson St, Phoenix, NY 13135	No	-
Dams			
Phoenix Dam- Lock #1	Oswego River	-	-

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 Village of Phoenix. 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 Phoenix 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 Village of Phoenix is susceptible to damages from a severe winter storm event. The Village Highway Dept. clears Village streets during heavy snow events, and the Village 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.

Historical Hazard Occurrences and Damage Estimates

The Village of Phoenix 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 Village of Phoenix.

Future Potential Impacts

The Village of Phoenix 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 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 Phoenix 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 Village of Phoenix 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 Village of Phoenix.

Future Potential Impacts

The Village of Phoenix will continue to experience ice storm events in the future, as will the rest of Oswego County. The Village Highway Dept. 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.

4.1.3 Severe Thunderstorm, Wind, Coastal Storm, or Tornado

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

Hazard Vulnerability

The entire Village is moderately susceptible to damages from a severe thunderstorm, wind, or tornado or coastal storm event due to its moderate extent, hours of warning, 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) specific severe storm events that occurred in the Village of Phoenix between 1994 and 2017, denoted in the table below.

Table 3: Severe Storm Event Records for the Village of Phoenix				
Event Type	Date	Magnitude	Estimated Property Damage	Estimated Crop Damage
Thunderstorm Wind	5/22/2013	50	\$10,000	-
Hail	5/18/2017	1.5	\$0	-
Thunderstorm Wind	7/23/2008	50	\$20,000	-
Hail	7/25/2006	0.88	\$8,000	-
Thunderstorm Wind	7/25/2006	50	\$20,000	-
Thunderstorm Wind	7/6/1999	-	\$10,000	-
Thunderstorm Wind	9/7/1998	-	\$500,000	-
Thunderstorm Wind	7/15/1997	-	\$5,000	-
Total			\$573,000	-

Future Potential Impacts

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

4.1.4 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 Village of Phoenix 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 relatively common occurrence.

Historical Hazard Occurrences and Damage Estimates

The Village of Phoenix 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 Phoenix. Extreme temperature events are unlikely to cause significant property damage. Significant injuries or loss of life due to extreme temperature events are possible, but in small numbers.

Future Potential Impacts

The Village of Phoenix 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. The Village has emergency shelters established, several of which are designated warming stations that residents may use during extreme cold events.

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

The Village is drained by a number of streams (identified as tributaries of the Oswego River). The Oswego River is located at the Village's southern boundary. 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 below summarizes the amount of land within the Village of Phoenix 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)			
Village of Phoenix Total Area	Percent of Total Area		
	100-Year Floodplain	500-Year Floodplain	Area of Minimal Flood Hazard
819.1 acres	16.24%	0.96%	82.53%

Table 5 below summarizes the value of properties in the Village of Phoenix 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
Commercial	15	\$3,264,515	9	\$2,357,940
Community Services	2	\$538,050	1	\$480,100
Other	24	\$188,700	18	\$180,700
Residential	100	\$6,056,215	70	\$4,428,515
Utility	3	\$2,321,945	3	\$2,264,670
Total	144	\$12,369,425	101	\$9,711,925
*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 fifteen (15) years, no flood records were noted to specifically impact the Village of Phoenix. The Village has experienced minor localized flooding issues along roadways due to beaver dams in the past but culvert replacement projects have been successful in alleviating these issues.

As described in Section 6.0 of this annex, one (1) loss claim has been filed and paid in the Village of Phoenix. No repetitive loss properties are located within the Village. The Village does currently participate in the National Flood Insurance Program (NFIP).

Future Potential Impacts

Properties along the shore of the Oswego River, which borders the Village to the south, and its tributaries are vulnerable to flooding. Approximately 16% of the Village of Phoenix is within a mapped 100-year floodplain. Multiple critical facilities are located on parcels that intersects a mapped 100-year floodplain. The Village's wastewater treatment plant, State Street pump station, Phoenix Fire Station No. 2, and Lock Island Park contain structures within the mapped floodplain. The Village noted that the wastewater treatment plant, State St pump station, and Lock Island Park do not have a history of flooding issues.

4.2 Technological Hazards

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

4.2.1 Water Supply Contamination

Hazard Vulnerability

The Village of Phoenix would be highly vulnerable to water supply contamination due to the moderate extent, fast onset, and moderate damage or injury potential for this hazard. While unlikely, contamination could be caused due to improper treatment or localized groundwater contamination. Water supply contamination could also result from terrorism. Currently, the Village water system serves over 2,000 people, including outside users within the Town of Schroepfel.

Historical Hazard Occurrences and Damage Estimates

There are no historical records or damage estimates for water supply contamination in the Village of Phoenix. The most recent water quality report indicated no maximum contaminant levels were violated for any parameter. However, if this event were to occur, it has the potential to cause a moderate 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.

4.2.2 Fire

Hazard Vulnerability

The Village of Phoenix had a moderate vulnerability ranking for fires. These events tend to be more localized, affecting one (1) 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 central portion of the Village, which is most densely developed, would be the most vulnerable area for a fire event.

Historical Hazard Occurrences and Damage Estimates

Structural fires occur occasionally within the Village and have the potential to cause significant injuries or loss of life, and hundreds of thousands of dollars in damages.

Future Potential Impacts

The Village of Phoenix is closely developed within a small area. The developed portions along main transportation routes are most susceptible to structure fires.

4.2.3 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).

There is one (1) dam in the Village of Phoenix. The Phoenix Dam – Lock #1 is a concrete gravity dam that was completed in 1914. The purpose of the dam is listed as hydroelectric, navigation, and recreation. This dam is rated as a Class C, or High Hazard dam.

Historical Hazard Occurrences and Damage Estimates

There are no records of dam failures occurring in the Village of Phoenix. The Village elected to include this hazard due to the potential for significant damages to occur should this Class C dam fail.

Future Potential Impacts

Should the dam fail, properties immediately downstream of the dams would be susceptible to flooding.

4.2.4 Utility Failure

For a description of this hazard, please see Section 5.2.3 of the main body of the Plan.

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 Phoenix 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 entire developed portion 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.

Historical Hazard Occurrences and Damage Estimates

The Village of Phoenix 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.

A National Grid substation is located with the mapped floodplain as well as several other municipal utility resources. These facilities are a greatest risk for utility failure.

4.2.5 HAZMAT Transit and Oil Spills

For a description of HAZMAT in Transit, please see Section 5.2.1 of the main body of the Plan.

Hazard Vulnerability

A hazardous materials transit or oil spill incident could occur at sites that store petroleum products or other chemicals for industrial or commercial use or otherwise transport these materials through the Village. The NYSDEC lists no chemical bulk storage (CBS) sites, seven petroleum bulk storage (PBS) sites, and no Major Oil Storage Facilities (MOSF) as active in the Village of Phoenix (Figure 1). These sites include the municipality owned storage sites, gas stations, and service garages. If a large petroleum spill were to occur at any of these locations or while transporting petroleum or chemical materials to these sites, 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 major HAZMAT events specifically in the Village of Phoenix. The Village elected to profile this hazard due to the presence of hazardous material storage facilities that store or use hazardous materials.

Future Potential Impacts

The Village 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.

4.2.6 Transportation Accident

For a description of this hazard, please see Section 5.2.6 of the main body of the Plan.

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 Phoenix Main Street is also County Route 57, traveling north along the eastern edge of the Oswego River. Additionally, State Route 481 travels along the eastern border of the Village and is a major transport route to the City of Oswego. A transportation accident on any of these routes has the potential to impact a portion of the Village of Phoenix.

Historical Hazard Occurrences and Damage Estimates

While minor vehicular accidents are relatively common throughout the County, there are no specific records of major transportation accidents in the Village of Phoenix (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 major transportation routes.

Future Potential Impacts

While major transportation accidents are infrequent, but the Village remains susceptible to future incidents along major transportation routes, 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.

4.2.7 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 Phoenix is moderately susceptible to a terrorist event due to the event's short onset (little to no warning) and moderate potential impact to Village infrastructure or residents.

Historical Hazard Occurrences and Damage Estimates

There are no records of terrorist events in the Village of Phoenix 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. However, terrorism remains a low risk for the Village of Phoenix. The Village is a small center in a mostly rural area and does not have any schools or public infrastructure that is likely 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		
Planning Mechanism	Village of Phoenix	Notes
Plans		
Comprehensive/Land Use Plan	X	Adopted.
Post-disaster Recovery Plan	X	In place.
Comprehensive Emer. Mgmt. 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 	Code Enforcement Officer
Zoning/Land Use Codes/Restriction	X	Local Law
Property Set-back Ordinance	X	In zoning.
Flood Regulations	X	Adopted.
Stormwater Ordinance	X	Adopted.
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	DPW responsible
Storm Drainage Maintenance Program	X	DPW responsible
Mutual Aid Agreements	X	Agreements with neighboring jurisdictions and Oswego County
Studies/Reports		
Hazard Analysis/Risk Assessment	X	2012 Oswego County HMP
Floodplain Maps/Insurance Studies	X	FEMA- 2013
Hydraulic Studies	X	Completed for municipal water system development.
Staff/Development		
Building Code Official	X	Code Enforcement Officer

Table 6. Planning Mechanisms and Capabilities		
Planning Mechanism	Village of Phoenix	Notes
Engineer/Public Works Official	X	DPW
Local Floodplain Administrator	X	Code Enforcement Officer
Public Information Official	X	Mayor

5.2 Emergency Communications, Routes, and Shelters

The Village of Phoenix, along with Oswego County, utilize the HyperReach emergency communications system. Major transportation routes within the Village include State Routes 481 and County Route 57, which is the Village Main Street. The Village of Phoenix has one (1) established emergency shelter:

- Main Street Fire Department – 457 Main Street, Phoenix

The Fire Department is ADA-compliant. Pets may be sheltered at the Town of Schroepel's kennels during an emergency if space is available.

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 Phoenix based on the 2017 NYS Hazard Mitigation Planning Standards. The following locations were selected for residents in the Village of Phoenix. It is noted that formal agreements would need to be established in order to use privately-owned properties.

- **Potential Temporary Housing Locations**
 - John C. Birdlebough High School Athletic Fields – 552 Main Street
 - E. J. Dillon Middle School Athletic Fields – 116 Volney Street
 - Village Hall – 455 Main Street
- **Potential Permanent Housing Locations**
 - Vacant Village property off of Bridge St

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 Phoenix currently participates in the NFIP. As of July 2018, the Village had twelve (12) flood insurance policies in-force, with a total coverage amount of \$2,576,600.00 and one (1) claim has been filed to date with a payment of \$623.50. There are no repetitive loss properties within the Village of Phoenix.

The Village's Code Enforcement Officer serves as the Local Floodplain Administrator, and flood maps are available for viewing and copying at the Village Hall (455 Main Street). 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 of Phoenix did not participate in the 2012 Oswego County HMP and therefore has no progress to report on hazard mitigation projects identified in that plan. The Village has completed flood mitigation-related projects since 2012. Several new catch basins were constructed at Bridge St and Main St, various locations along State St, and at Cherry St and Lock St.

7.2 Proposed Mitigation Actions

The Village proposed four (4) new mitigation actions to be included in the HMP update. These actions are described in Table 7, below and on worksheets included in Attachment A.

Table 7. 2018 Proposed Mitigation Actions Village of Phoenix									
Action ID	Mitigation Action	Hazard(s) Mitigated	Implementing Agencies (Lead* & Support)	Planning Mechanism	Timeframe	New or Existing Development	Estimated Cost	Funding Source(s)	Priority
Phoenix 1	Sanitary Sewer System Improvements	Flood	Village Administrator*	Comprehensive Plan	1-2 years	Existing	\$8 million	FEMA- PDM; NYSEFC-CWSRF	Phoenix 1
Phoenix 2	Provide backup power for Village Hall (potential shelter) and Police Station	All	Village of Phoenix Police Dept.*	Comprehensive Emergency Management Plan	1-5 years	Existing	\$15-20K	FEMA- PDM; USDA-RD-Community Facilities Grant	Phoenix 2
Phoenix 3	Develop and distribute property resilience brochure to all Village residents	Severe Thunderstorm/Wind/ Tornado, Flooding, Severe Winter Storm, Ice Storm	Village Administrator*	Comprehensive Plan	6 months	Existing	\$500-2,000	Village budget	Phoenix 3
Phoenix 4	Implement Sidewalk Clearing Program and increase public outreach	Severe Winter Storm	Village of Phoenix Police Dept.*	Comprehensive Plan	1 year	Existing	\$500	Village budget	Phoenix 4
Potential Funding Sources NYSEFC CWSRF: https://www.efc.ny.gov/CWSRF 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

Dix, Barbara. 2016. "Village of Phoenix". *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. 131-133. 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 Phoenix**



Attachment A

**Mitigation Action Worksheets –
Village of Phoenix**

Oswego County Multi-Jurisdictional Hazard Mitigation Plan

Name of Jurisdiction:	Village of Phoenix
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Mitigation Action Worksheet	
Project Name:	Sanitary Sewer System Improvements
Project Number:	Phoenix 1
Risk/Vulnerability	
Hazard of Concern:	Flood
Description of the Problem:	The Village owns and operates an aging sanitary sewer system. Severe storms and wet weather events lead to sanitary sewer overflows and localized flash flooding, as the existing WWTP infrastructure cannot adequately handle and treat the added stormwater infiltration flows.
Action of Project Intended for Implementation	
Description of the Solution:	Complete a sanitary sewer rehabilitation project to improve the existing sewage pump station, WWTP, and distribution system to decrease inflow/infiltration of stormwater and accommodate increased sewage flows.

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):	Less flood damages during wet weather events.
Useful Life:	Long-term		
Estimated Cost:	\$8 million		

Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	1-2 years
Estimated Time Required for Project Implementation:	2-3 years	Potential Funding Sources:	FEMA-PDM; NYSEFC- CWSRF
Responsible Organization:	Village Administrator	Local Planning Mechanisms to be used in Implementation, if any:	Comprehensive Plan

Three Alternatives Considered (Including No Action)			
	Action	Estimated Cost	Evaluation
Alternatives:	No Action	\$0	No change in sewage treatment/flooding issues.
	Rehab existing sewer mains only	\$4 million	Partial solution. May reduce inflow/infiltration issues but WWTP still cannot handle additional flows
	Rehab collection system and WWTP/pump station	\$8 million	More comprehensive approach

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:	Village of Phoenix
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Mitigation Action Worksheet	
Project Name:	Provide backup power for Village Hall (potential shelter) and Police Station
Project Number:	Phoenix 2
Risk/Vulnerability	
Hazard of Concern:	All
Description of the Problem:	The Village Hall/Police Station currently lack backup power. The Village Hall is an emergency shelter location. In addition, the Village Hall and Police Station conduct critical emergency operations during hazard events.
Action of Project Intended for Implementation	
Description of the Solution:	Install generator at Village Hall/Police Station (same building)

Is this project related to a Critical Facility? Yes ☒ 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):	Maintain critical operations and shelter availability during power outages.
Useful Life:	Long-term- 20-30 years		
Estimated Cost:	\$15-20,000		

Plan for Implementation			
Prioritization:	#1 (High)	Desired Timeframe for Implementation:	1-5 years
Estimated Time Required for Project Implementation:	2 months	Potential Funding Sources:	FEMA- PDM; USDA-RD- Community Facilities Grant
Responsible Organization:	Village Police 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	Village Hall/Police Dept still at risk of power outage.
	Purchase portable generator to be shared among Village facilities	\$10,000	Requires additional coordination for use, may not be available when needed
	Rehabilitate portions of the existing drainage systems that contribute to the most flooding issues	\$20,000	Best protection of Village facilities to maintain emergency operations and shelter options.

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:	Village of Phoenix
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Mitigation Action Worksheet	
Project Name:	Develop and distribute property resilience brochure to all Village residents
Project Number:	Phoenix 3
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 Village of Phoenix, 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 Village codes, contact information, and other Village -specific information. Distribute the brochure to each Village resident, either by mailing or making the document available on the Village website and at the Village Hall.

Is this project related to a Critical Facility? Yes ☐ 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:	Low	Estimated Benefits (losses avoided):	Village 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:	Medium	Desired Timeframe for Implementation:	6 months
Estimated Time Required for Project Implementation:	2-3 months	Potential Funding Sources:	Village budget
Responsible Organization:	Village Administrator	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	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 Village-specific information.
	Distribute Oswego County property resiliency brochure modified with Village -specific information	\$500-2,000	Most comprehensive approach, gives Village residents more complete information regarding Village -specific codes and contacts.

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:	Village of Phoenix
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Mitigation Action Worksheet	
Project Name:	Implement Sidewalk Clearing Program and increase public outreach
Project Number:	Phoenix 4
Risk/Vulnerability	
Hazard of Concern:	Severe Winter Storm
Description of the Problem:	During heavy snow events, many sidewalks remain un-cleared particularly in front of residential properties. This creates hazardous conditions for pedestrians throughout the Village.
Action of Project Intended for Implementation	
Description of the Solution:	Raise public awareness by implementing an outreach program using social media to emphasize the importance of keeping sidewalks clean. Provide resources for residents who may not be able to clear sidewalks themselves.

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):	Increase pedestrian safety during winter months by keeping sidewalks clear throughout the Village.
Useful Life:	Short-term, annual outreach		
Estimated Cost:	\$500		

Plan for Implementation			
Prioritization:	#2 (Medium)	Desired Timeframe for Implementation:	1 year
Estimated Time Required for Project Implementation:	2 months	Potential Funding Sources:	Village Budget
Responsible Organization:	Village Police Dept.	Local Planning Mechanisms to be used in Implementation, if any:	Comprehensive Plan

Three Alternatives Considered (Including No Action)			
	Action	Estimated Cost	Evaluation
Alternatives:	No Action	\$0	Pedestrian safety during winter remains a concern.
	Increase social media outreach to remind residents to clear sidewalks	\$500	Better informed public but some residents may not be physically capable of clearing snow.
	Install generator at Fire Dept. or Church to provide a second suitable shelter location for residents	\$500	Better informed public and connects residents who need assistance with clearing to potential resources.

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

Attachment B

**STAPLEE Table—
Village of Phoenix**

Worksheet #6

STAPLEE Criteria Consideration Table

Mitigation Action Prioritization and Comparison

Jurisdiction Village of Phoenix

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							Levels = High, Medium, or Low						
Phoenix 1	Sanitary Sewer System Improvements	+	0	-	+	+	-	+	-	+	-	High	High	High (#1)	
Phoenix 2	Provide backup power for Village Hall (potential shelter) and Police Station	+	0	0	0	+	-	0	+	+	+	High	Med	High (#2)	
Phoenix 3	Develop and distribute property resilience brochure to all Village residents	+	+	+	+	+	0	0	+	+	+	High	Low	Med (#3)	
Phoenix 4	Implement Sidewalk Clearing Program and increase public outreach	+	+	0	+	+	0	+	+	+	+	High	Low	Med (#4)	