



MONTGOMERY COUNTY MULTI-JURISDICTION NATURAL HAZARD MITIGATION PLAN

5-YEAR UPDATE 2024

Prepared for Montgomery County

Prepared by Tighe & Bond Engineering and Landscape Architecture, P.C.



FEMA

Volume II Annex Reports

CITY OF AMSTERDAM

MONTGOMERY COUNTY HAZARD

MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



City of Amsterdam

61 Church Street

Amsterdam, NY 12010

<https://www.amsterdamny.gov/>

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City of Amsterdam Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the City of Amsterdam not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the City of Amsterdam.

| Primary Point of Contact | Alternate Point of Contact |
|--|--|
| Michael A. Clark, P.E., City Engineer 61 Church Street, Amsterdam, NY 12010 518-841-4331 mclark@amsterdamny.gov | Anthony Agresta, Fire Chief 10 Guy Park Ave. Ext. Amsterdam, NY 02010 518-841-4331 aagresta@amsterdamny.gov |

1. Municipality Profile

1.1 Brief History¹

The City of Amsterdam is located within the original "City of Caughnawaga." The city was incorporated as a village in 1830 and new charters throughout the nineteenth century increased the size of the village until 1885 when it became a city.

This was a period of rapid growth for the village, influenced by major transportation developments. In turn, the Mohawk Turnpike, the Erie Canal, and construction of the railroad across the valley improved trade. The steeply descending creeks in the region, which flowed from the foothills of the Adirondacks, were used to power an increasing number of mills. These manufactured goods were shipped from the region by land, canal and rail. Products such as linseed oil, brooms, knit ware, buttons, and iron goods were produced in the growing village, which became an important manufacturing center. It was best known, however, for its carpets, eventually becoming the carpet and rug manufacturing center of the U.S.

In the [Great Depression](#), the mills slowed down their output, but did not close. The city survived the two world wars without significant effect. Shortly after World War II, however, manufacturing in general began to move to the southern United States, where labor costs and taxes were lower. The mills of Amsterdam also shifted their jobs to the South. After a period in the South, that region lost industrial jobs to overseas locations.

In an attempt to draw people and business back to Amsterdam, the City and State began a program of urban renewal and arterial roadway construction, destroying much of the original fabric of downtown. In the early 21st century, post-industrial Amsterdam is still trying to re-invent itself.¹ The city suffered serious flood damage in late August 2011, in the aftermath of [Hurricane Irene](#). The flooding threatened

¹ [History of Amsterdam, NY](#)" City of Amsterdam website

properties at the river's edge due to erosion and water damage.

1.2 Location and Demographics

The City of Amsterdam is a consolidated urban community of approximately 6.3 square miles, situated in the northeast corner of the region. The city is developed on both sides of the Mohawk River and Erie Canal. The City is located in the Alplaus Kill Sub watershed to the Mohawk River with predominant drainage features including Bunn, North Chuctanunda and South Chuctanunda Creeks. Land surface ranges from around 260 feet above mean sea level along the Mohawk River to a high of 700 feet as the topography rises to the west and northward, and 450 feet at the southernmost section of the city. The steep slopes rising from the base of the floodplain and along the creek banks range from 25% to 45% grades. A more detailed description of the Eastern Alplaus Kill Sub watershed is included in the HMP Community Asset Inventory Section 5.6. Amsterdam's societal, economic, infrastructural and economic resources, including critical assets are highlighted in Figure 1.

The City shares its boundaries with the Village of Hagaman to the north; the Town of Florida to the south; and the Town of Amsterdam to the east and west. New York State Route 30, a north-south highway called Market Street crosses the Mohawk River to line the main part of Amsterdam to the New York State Thruway. An Amtrak Station also serves the city with its Empire Service line.

The City of Amsterdam is home to 18,218 residents, with a population density of 3,102 people per square mile. According to the 2020 US Census², 79% of their 9,296 housing units are occupied, while 21% of the housing units remain vacant. Of the occupied units, 52% are owner occupied and 48% are renter occupied. Their unemployment rate is 5.4% as of January 2023. 23.8% of the total population is below the poverty level, which includes 36% of children below the age of 18 (nearly double the rate in New York). The average labor force is 10,950 people and approximately 18 percent of the City's residents have attained a four-year college degree or higher. The median household income for Amsterdam is \$43,164. In contrast to Montgomery County, where the population is largely homogenous, the City of Amsterdam is racially and ethnically diverse. Nearly 15% of residents report a race other than white alone, and 37% identify as Hispanic or Latino. A significant portion of the population is Spanish speaking which adds a layer of complexity during emergency response and recovery, as services must be provided in more than one language.

The Agency for Toxic Substances and Disease Registry (ATSDR), a federal public health agency of the U.S. Department of Health and Human Services, has developed a Social Vulnerability Index (SVI) that it uses to rank census tracts on 15 social factors, including poverty, disability status, and household composition, lack of vehicle access, unemployment, and language. SVI scores range from 0 (lowest vulnerability) to 1 (highest vulnerability). The SVI is used by public health officials and emergency response planners to help them meet the needs of the socially vulnerable during natural disasters and public health emergencies.³ The 2018 CDC/ATSDR Social Vulnerability Index score for Montgomery County is 0.8306, indicating a high level of vulnerability. It is the second-highest SVI score of any county in New York State; only Bronx

² <https://censusreporter.org/profiles/06000US3605702066-amsterdam-city-montgomery-county-ny/>

³ Agency for Toxic Substances & Disease Registry. (January 31, 2020). CDC SVI 2018 Documentation http://www.atsdr.cdc.gov/placeandhealth/svi/documentation/SVI_documentation_2018.html.

County has a higher SVI score (0.9927). Within the City of Amsterdam, SVI scores range from a low of 0.4589 in Census Tract 705 to highs of 0.9322 and 0.9365 in Census Tracts 702 and 709, respectively.⁴

1.3 Governance

The City of Amsterdam is governed by a mayor and a five-member City Council. This governing body will be responsible for adoption and implementation of this plan.

1.4 Land Use and Development

Land uses within the City of Amsterdam vary greatly and are concentrated in distinct nodes. Each of these sections exhibits unique land use patterns, needs, and opportunities. The predominant land use in the city of Amsterdam is residential land, with significant nodes of commercial and industrial land as well as open space and vacant land.

The city is served by a public water system with water sources located north of the city in Saratoga County. The city's Wastewater Treatment Plan is located on Quist Road. The city was recently awarded a \$4.3 million dollar grant for plant upgrades.

Land areas adjacent to the Mohawk River, Dove Creek, Bunn Creek, Northern and Southern Chuctanunda Creek are primarily classified as an AE Flood Zone or 100-year Flood Zone, which represents the 1% annual chance of flooding. These areas are located on FEMA Flood Insurance Rate Maps and pictured in Figure 1. Substantial portions of several neighborhoods in the Community are located within the 100-year floodplain, including large areas in the hamlet of Fort Hunter, the Village of Fort Johnson, and the (former) neighborhood of Lost Valley.

Some of the key issues with current development that are noted include:

- Lack of access to the waterfront limits the possibilities for the presence of water dependent and water enhances users.
- The housing stock is aging and/or in poor conditions. Rehabilitation is necessary to improve the conditions of homes and reduce blight around the waterfront area and increase aesthetic and scenic quality.
- Infrastructure in the Southside is old and in need of repair.
- Greater than 75% of the Downtown area is paved, creating a lack of natural space and excess of storm water runoff.
- High number of sites identified as potential brownfields, underutilized or abandoned.
- Large number of Brownfield opportunity areas associated with areas historically used for industrial purpose for over 175 years.

The City of Amsterdam is currently updating its comprehensive plan under the Smart Growth Comprehensive Planning Grant Program. City Planning has centered on unifying the waterfront revitalization efforts of the along the Mohawk and the City of Amsterdam Local Waterfront Revitalization

⁴ Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry, Geospatial Research, Analysis, and Services Program. CDC/ATSDR Social Vulnerability Index 2018 Database, New York.

(LWRP) was published in March of 2023⁵. The LWRP will guide growth and development in this region, identify sustainable approaches to mitigate climate change impacts and improve resiliency, redevelop vacant and underutilized industrial structures, stimulate economic development, increase waterfront access and connectivity to downtown, tourism, and recreational boating. Excerpts from this massive planning document are referenced in this HMP as it represents the most up to date document on the City of Amsterdam's land use and development policies and goals with a focus on the most flood prone areas, and culturally rich communities. The LWRP is the only planning and regulatory tool that allows a local community to refine Statewide waterfront policies to apply to the local situation. Once completed and approved by the New York Secretary of State, the City of Amsterdam will have a powerful tool in place to guide waterfront development and ensure that all local, state, and federal actions proposed for their waterfront will be consistent with the plan, and government will work in unison to build a stronger economy and a healthier waterfront environment.

Some of the goals from the LWRP that resonate with the goals of the HMP include:

- **Healthy Neighborhoods-** Promote and facilitate an adequate supply of quality housing suitable for all community members while simultaneously focusing on parks, recreation, and core infrastructure needs along with pedestrian and bicycle safety to create healthy and stable neighborhoods.
- **Enhance Resiliency-** Anticipate and mitigate future flood risks, limit impacts to property and infrastructure when flooding is unavoidable, and respond efficiently and recover quickly, in a manner that protects vulnerable populations and our quality of life.

⁵ <https://amsterdamny.gov/324/Local-Waterfront-Revitalization-Program->

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snowstorms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for Amsterdam. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the City of Amsterdam that is not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for earthquakes is included.

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the City in the past 10 years.

Table 1. Hazard Event History 2011-2021⁶

| Dates of Event | Event Type | Summary of Damages/Losses |
|-------------------------------|--------------------------------|--|
| August 26 – September 5, 2011 | Hurricane Irene and Tornado | The City was without power due to Irene. The power outages shut down communication between the DPW and the DPW supervisor, city hall and other government entities. Numerous residents were evacuated and/or sheltered. Many roads and access to bridges were cut off. Parts of the City flooded and impacted homes and businesses, particularly on the west end along Route 5. The Amtrak Station was flooded and had to close, and Canal Lock 11 was severely damaged. Dove Creek experienced bank erosion, undercutting its retaining wall which placed St. Mary's Hospital facilities at risk. The basement flooded at the hospital, forcing parts of the hospital to evacuate. Two neighborhoods in the City, hamlet of Port Jackson and the west side along Route 5 sustained the majority of flood damage from Hurricane Irene. |
| September 7-11, 2011 | Remnants of Tropical Storm Lee | Within a span of a week, two damaging storms impacted the City of Amsterdam. The close timing of the storms caused extended power outages, road closures, delays in the provision of critical services, and infrastructure damage. |
| November 1, 2019 | Flood | Route 5 had all lanes closed at Truax Road, Groff Road, and Staley Road due to flooding. State Route 55 was closed between Pattersonville Road and Bulls Head Road, and between Route 80 and Rouse Road due to flooding. Amtrak service was suspended on some routes between Albany and Syracuse, and some inbound passengers were transferred to buses. |
| September 15, 2021 | Flood | At least 6 inches of water was reported on the corner of Route 5 and Evelyn Street, and several inches of standing water was reported on the roadway. Parking lots with vehicles in high water reported. East Street and Park Street were closed due to flooding. Dove Creek was reported out of its bank impacting an area in the vicinity of St. Mary Healthcare, and a trained spotter reported a road closure due to flooding near Route 55 and Sprakers Hill Road. |

⁶ <https://www.ncdc.noaa.gov/stormevents/>

2.2 Community Assets

Eighty-nine Community Assets were identified for the City of Amsterdam for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID corresponds with locations shown in **Figure 1**.

Table 2. Community Assets in the City of Amsterdam

| | Asset ID | Subtype | Name |
|-----------------|----------|--------------------------------|--------------------------------------|
| ECONOMY | 1 | Food/ Grocery | Dollar General |
| | 2 | Food/ Grocery | Dollar General |
| | 3 | Fuel | Stewarts |
| | 4 | Fuel | Mobil |
| | 5 | Fuel | Stewarts |
| | 6 | Fuel | Lucky Mini Mart |
| | 7 | Fuel | Exxon |
| | 8 | Fuel | Stewarts |
| | 9 | Fuel | Fastrac |
| | 10 | Hardware | Amsterdam Riverfront Hardware |
| | 11 | Major Employer | Liberty Enterprises |
| | 12 | Major Employer | City of Amsterdam |
| | 13 | Major Employer | Breton Industries |
| SOCIETAL | 14 | School/ Public | Marie Curie Middle School |
| | 15 | School/ Public | William Barkley School |
| | 16 | Church | St. Mary's Church |
| | 17 | Church | Calvary Assembly of God Church |
| | 18 | Food Pantry | United Way-Montgomery County |
| | 19 | Medical Facility | St. Mary's Hospital |
| | 20 | School/ Private | Saint Mary's Institute |
| | 21 | School/ Private | Montessori School of Amsterdam |
| | 22 | School/ Public / Special Needs | Clara S. Bacon School |
| | 23 | School/ Public | Lynch Middle School |
| | 24 | School/ Public | Raphael J. McNulty Elementary School |

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| | 25 | School/ Public | Annex |
| | 26 | School/ Public | Central Administration Building (CAB) |
| | 27 | Historic Site | Walter Elwood Museum |
| | 28 | Historic Site | Guy Park Manor |
| | 29 | Church | Love City Church |
| | 30 | Church | United Presbyterian Church |
| | 31 | Church | Crossroads Community Church |
| | 32 | Church | Trinity Evangelical Lutheran Church |
| | 33 | Church | Our Lady of Mt. Carmel Church |
| | 34 | Church | Covenant Presbyterian Church |
| | 35 | Church | Step of Faith Church |
| | 36 | Church | Lord of the Harvest Church |
| | 37 | Church | Freedom Life Baptist Church |
| | 38 | Church | St Ann's Episcopal Church |
| | 39 | Church | Freedom Church |
| | 40 | Church | St Luke's Lutheran Church |
| | 41 | Church | Vast Church |
| | 42 | Church | Pilgrim Holiness Church |
| | 43 | Church | The Amsterdam Seventh-day Adventist Church |
| | 44 | Church | First Baptist Church |
| | 45 | Food Pantry | Catholic Charities - Montgomery - Food Distribution Center |
| | 46 | Food Pantry | Montgomery County Office For The Aging - Food Distribution Center |
| | 47 | Food Pantry | Fulmont Community Action - Food Distribution Center |
| | 48 | Food Pantry | AMEN Food Pantry - Food Distribution Center |
| | 49 | Library | Amsterdam Free Library |
| | 50 | Affordable Housing | Mohawk Terrace Apartments |
| | 51 | Affordable Housing | Colonial Square I |
| | 52 | Affordable Housing | Amsterdam Rehabilitation |
| | 53 | Affordable Housing | New Amsterdam Apartments |
| | 54 | Affordable Housing | Rivercrest Commons |

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| | 55 | Cemetery | Fairview Cemetery |
| | 56 | Mortuaries | Amsterdam Funeral Chapel |
| | 57 | Mortuaries | Amsterdam Funeral Chapel |
| | 58 | Mortuaries | Rossi Vincent J Funeral Home |
| | 59 | Mortuaries | De Stefano Funeral Home |
| | 60 | Mortuaries | Betz, Rossi, Bellinger & Stewart Funeral Homes |
| | 61 | Medical Facility | Hometown Health Centers Amsterdam |
| | 62 | Medical Facility | Eastern Med, LLC. |
| | 63 | Medical Facility | St. Mary's Urology Health Center |
| | 64 | Special Needs | Montgomery County ARC |
| | 65 | Historic Site | Henry Thomas House |
| INFRASTRUCTURAL | 66 | Municipal / Public Safety | Amsterdam Public Safety / Police Department |
| | 67 | Municipal /DPW /Highway | City of Amsterdam DPW |
| | 68 | Post Office | USPS Amsterdam Office |
| | 69 | Municipal / Public Safety | Amsterdam Fire Dept. |
| | 70 | Rail | Amsterdam (CSX) / (AMS) |
| | 71 | Sub/Switching Station | Church Street Electrical Substation |
| | 72 | PWS Treatment | Amsterdam WTP |
| | 73 | Airport / Helipad | Amsterdam St. Mary's |
| | 74 | WWTP | Amsterdam Wastewater Treatment Plant |
| | 75 | Dam | Smeallie Dam |
| | 76 | Dam | Mohasco Dam |
| | 77 | Dam | Harrower Mill Dam |
| | 78 | Dam | Amsterdam Ice Pond Dam |
| | 79 | Dam | (189-0270f) |
| | 80 | Dam | (189-0270g) |
| | 81 | Dam | Brookside Reservoir Dam |
| | 82 | Dam | Kellogg Dam |
| | 83 | Dam | Lock E-11 Dam At Amsterdam OWNED BY NYS |
| | 84 | Pump Station | Amsterdam Pump Station West Side |
| | 85 | Pump Station | Amsterdam Pump Station South Side |

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| | 86 | Pump Station | Amsterdam Pump Station East Side |
| | 87 | Pump Station | Brookside Pump Station |
| | 88 | PWS Tank | Locust Tank |
| | 89 | PWS Tank | Techler Tank |
| Bold indicated asset is identified as an essential facility | | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are 24 essential facilities in the City, with seven designated emergency shelters. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability, flooding hazard and proximity to geographically defined Environmental Justice Areas. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the City of Amsterdam.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? | Environmental Justice Area |
|---|-------------------------------------|------------------|----------|----------------|----------------------------|
| Amsterdam Public Safety / Police Department | 1 Guy Park Ave | Y | N | N | Y |
| City of Amsterdam DPW | 1 Park Drive | Y | N | N | Y |
| Amsterdam Fire Dept. | 2 Guy Park Ave Ext. | Y | Y | Y | Y |
| Amsterdam (CSX) / (AMS) | 466 W Main St, | Y | N | 500-year flood | Y |
| Church Street Electrical Substation | 209 Church St | N | N | N | Y |
| Amsterdam WTP | 250 Brookside Avenue | Y | N | N | Y |
| Amsterdam St. Mary's | 427 Guy Park Ave | Y | N | N | Y |
| Amsterdam Wastewater Treatment Plant | Quist Road | Y | N | N | Y |
| Amsterdam Pump Station West Side | West Main St | Y | N | N | Y |
| Amsterdam Pump Station South Side | Erie Street/Circle | Y | N | N | |
| Amsterdam Pump Station East Side | Swan St. | Y | N | N | Y |
| Amsterdam Pump Station water pump station | Brookside Ave | Y | N | N | Y |
| Locust Tank | Locust Ave | N | N | N | |
| Techler Tank | Shuttleworth Ave / by school | N | N | N | |
| Glen Wild Watershed | Town Of Providence, Saratoga County | Y | N | N | N |

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|---------------------------------------|--|---|---|---|---|
| Raw Water Transmission Line | Saratoga County, Fulton County, Montgomery | N | N | N | N |
| Marie Curie Middle School | 9 Brice St | Y | Y | N | Y |
| William Barkley School | 66 De Stefano St | Y | Y | N | Y |
| St. Mary's Hospital | 427 Guy Park Ave | Y | | N | Y |
| Saint Mary's Institute | 10 Kopernick Blvd | Y | N | N | Y |
| Montessori School of Amsterdam | 74 Locust Ave | Y | Y | N | Y |
| Clara S. Bacon School | 40 Henrietta Blvd | Y | Y | N | |
| Lynch Middle School | 53 Brandt Place | Y | Y | N | Y |
| Raphael J. McNulty Elementary School | 60 Brandt Place | Y | Y | N | Y |
| Annex | 55 Brandt Place | Y | N | N | Y |
| Central Administration Building (CAB) | 11 Liberty Street | Y | Y | N | Y |

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Figure 1. City of Amsterdam FEMA Flood Zones, Community Assets and Essential Facilities

2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there were no repetitive loss properties in the City of Amsterdam. As of December 31, 2022, 14 policies were in force. The City of Amsterdam had a total of 26 claims totaling \$510,680 in losses for all NFIP-insured structures. It should be noted that according to FEMA data there are 170 structures within the 100-year flood plain.

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the City, by hazard as shown in Table 4. The estimated value of at risk assets is based on the City's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. City of Amsterdam Vulnerable Assets Exposure Analysis⁷.

| Hazard | At-Risk All Properties ⁸ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|---------------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value ⁹ | Number |
| Hurricane/Tropical Storm | \$733,251,523 | 5,782 | \$104,280,000 | 24 | \$31,666 | 3 |
| Severe Thunderstorm | \$733,251,523 | 5,782 | \$104,280,000 | 24 | 31,666 | 3 |
| Severe Winter Storm | \$733,251,523 | 5,782 | \$104,280,000 | 24 | 31,666 | 3 |
| Tornado | \$733,251,523 | 5,782 | \$104,280,000 | 24 | 31,666 | 3 |
| Flood | | | | | | |
| 1% Annual Chance | \$104,851,167 | 170 | - | | - | 1 |
| 0.2% Annual Chance | \$106,236,508 | 216 | - | 1 | - | - |

⁷ Values are 50% of the assessor's full market value

⁸ Includes Villages of Hagaman & Fort Johnson

⁹ Does not include Guy Park Manor

2.6 Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the City of Amsterdam. The totals include capital stock and economic loss estimates.

Table 5 City of Amsterdam Earthquake Vulnerability Analysis

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|----------------|------------------|
| Estimated total number of buildings | 5,782 | 5,782 |
| Total direct building economic loss | \$1,699,000 | \$22,438,000 |

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions.

These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Amsterdam Problem Statements.

| Problem Area | Description |
|-----------------------------|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. There are many diseased trees that create an additional threat to wires. UTILITY is working hard to cut the trees and upgrade the wires. |
| Geographic Areas of Concern | |
| Brookside Reservoir Dam | This is planned for a breaching within 5 years Thirty-five residential and commercial structures sustained flood damage following Hurricane Irene and Tropical Storm Lee. No Substantial Damage determinations were made. Only one property is currently pursuing a mitigation project. Dove Creek has been the subject of a \$2.2 million mitigation project funded by FEMA. Work is complete. |
| North Chuctanunda Creek | |
| South Chuctanunda Creek | |
| Bunn Creek, Dove Creek | |
| Vulnerable Community Assets | |
| Shelters | Five shelters exist in Amsterdam, backup power is not known. Florida Ave, Rt 5 and Rt 30 Bridges are vulnerable to flooding. NYS and NY 30 bridges are jurisdictional to NYSDOT. Amsterdam sewage pump stations 4,000+ acres located in Town of Providence, Saratoga County contain the Steele Reservoir and Ireland Vly Reservoir. Communication between City WTP and the Watershed attendants is crucial. |
| Bridges | |
| Pump Stations | |
| Glen Wild Reservoir | |

Raw Water Transmission Line

24" diameter cast iron line constructed circa 1895 transports ALL WATER from City reservoirs in Saratoga County to the Water Filtration Plant on Brookside Avenue. Total length exceeds 16 miles. A 2024 transmission line clearing project is under contract to clear the R.O.W. of this crucial line 20' from the WTP north to NY Route 29. If this line were to break far from access, the City will lose all ability to supply potable water to residents in LESS THAN 24 hours.

4. Capabilities

The City of Amsterdam is a city in Montgomery County with capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the City's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The City of Amsterdam completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for Amsterdam:

- Comprehensive/Master Plan - *Currently being updated via State Smart Growth grant.*
- Capital Improvements Plan – *City Engineer and Comptroller updates the CIP annually.*
- Continuity of Operations Plan
- Transportation Plan – *County Plan*
- Stormwater Management Plan – *Code does not specifically address stormwater. Chapter 250 adopted 4/21/1992. Note that City of Amsterdam is not MS4.*
- Watershed Management Plan – *Mohawk River Watershed Management Plan, 2015*
- Floodplain Management Basin Plan – *State managed by DEC. Chapter 90, adopted 7/17/2007.*
- Open Space and Recreation Plan
- Building Codes – *2020 Edition Building Code of NY State*
- Land Use Planning
- Zoning Ordinance – *Zoning updated to include form-based code in 2010.*
- Subdivision Ordinance – *Planning board administers subdivision and can condition projects to reduce hazards under Chapter 210*
- NFIP Flood Damage Prevention Ordinance – *City of Amsterdam Code, Chapter 129, adopted 11/8/2017.*
- Real Estate Disclosure Requirements – *State mandated that Realtor disclose flooding events.*
- Natural Hazard Specific Ordinance
- Acquisition of Land for Open Space & Recreation

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Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

The City of Amsterdam has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for Amsterdam:

- Planning Commission
- Maintenance Programs to Reduce Risk
- Mutual Aid Agreements
- Chief Building Official
- Floodplain Administrator – *the is the City Engineer*
- Emergency Manager (*full-time*)
- Community Planner (*not trained in hazards*)
- Civil Engineer – *including a Professional Engineer and Assistant Engineer*
- GIS Coordinator – *This is the Assistant Engineer*
- Warning Systems (*reverse 911, outdoor warning signals*)
- Hazard Data

The City of Amsterdam is governed by a Mayor's Office. The City has a full time engineering department with adequate staffing and tools to support mitigation activities. City staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for Amsterdam:

- Capital improvement project funding (*general infrastructure*)
- Federal Funding – various sources
- State Funding – *various sources*
- Hazard Mitigation Grant Programs

The City of Amsterdam has improving financial capabilities due to its size and relatively small income- generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concern with regard to the implementation of mitigation projects and related risk reduction activities.

The City Controller is responsible for the accounting of all City funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The Controller’s Office provides budget monitoring and financial reports to the Mayor and the City Council throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for Amsterdam:

- Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)
- StormReady certification
- Natural Disaster Program in Schools
- Human Services (*outreach/activities for seniors etc.*)
- Website
- Social Media

4.2 NFIP Participation and Compliance

The City of Amsterdam has actively participated in the National Flood Insurance Program (NFIP) since 1984. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. See the map amendment dated March 2020. This amendment approved by FEMA gives credit to the Army Corps of Engineers Certified Floodwall of the Southside of Amsterdam for the flood protection provided. Please see Map # 36057C0212E. As of December 31, 2022, there are a total of 14 NFIP policies in force. The total annual premium cost is \$16,938 for \$4,097,000 in total coverage. As of February 23, 2023, a total of 26 claims

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amounting to approximately \$510,680 have been paid to NFIP policyholders in Amsterdam since joining the program¹³ more information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 8 describes the City of Amsterdam's participation and continued compliance in accordance with NFIP requirements and as specified in FEMA's 2022 Local Mitigation Planning Policy Guide.¹⁴

Table 7. NFIP Participation and Compliance, City of Amsterdam.

| REQUIRED INFORMATION | RESPONSE |
|--|--|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2017 via Amsterdam City Code Chapter 129 Flood Damage Prevention. |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Ordinance (Section 129.6 Basis for establishing areas of Special Flood Hazard.). FIRM updated March 2020 to recognize ACOE Southside floodwall. |
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the City Engineer was appointed Local Administrator to administer the provisions of the Floodplain District. The Local Administrator shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the City Engineer of the City of Amsterdam has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The City follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 129.4 of the City's Code define substantial improvement/substantial damage as 50% of market value of the structure. |

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov//reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

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Minimum standards set forth by FEMA and New York State have been adopted by the City of Amsterdam. The City of Amsterdam requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

The City of Amsterdam does not participate in the Community Rating System (CRS), however, the City has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the City's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.2.1 Improvement Opportunities

Despite the limitations and constraints faced by the City of Amsterdam when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The City is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the City during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated versions of the City's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the City to cope with potential in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout the city.

Financial Capabilities

- Maximize opportunities through the City's budgeting and other sources, *process* to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the City's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue

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funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.

- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the City to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the City's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the City Engineer is responsible for administering the provisions of the Floodplain District.
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- Amsterdam's local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood)
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

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5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status (i.e. completed, in progress, deferred, deleted), actions brought forward to this 2023 plan are identified in the Keep for Plan Update Column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – City of Amsterdam

| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/ Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|--|---|--|------------------------|-----------------------------|---|--|---|
| Property Protection | Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Assure that any mitigation addresses the 500- year flood event or “worst damage scenario”. | City Engineer | Flooding, Severe Storm | Long-term / Medium priority | FEMA- HMGP, FMA, BRIC competitive grant programs. | On-Going | See Dove Creek Project |
| Prevention | Pursue continuing professional education and certification (e.g., Certified Floodplain Manager under the Association of State Floodplain Managers) of Code Enforcement Officers and NFIP FPAs in floodplain management and hazard risk reduction. | City Administration | Flood | Short-term / High priority | Local budget | Completed | Portable generator purchased and emergency generators at City Hall and Public Safety Building |
| Property Protection / Structural Project | Consider flood-proofing efforts for St. Mary’s Hospital which is in the 500-year floodplains. Assure that any mitigation addresses the 500- year flood event or “worst damage scenario”. | St. Mary’s Hospital | Flooding | Long-term / Medium priority | FEMA- HMGP, FMA, BRIC competitive grant programs. | Deferred | Do not know the status |

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| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/ Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|---|---|--|-------------------------|-----------------------------|---|--|--|
| Structural Project | Consider flood-proofing, or elevating Amsterdam WW Pump Stations 1 and 3 which are in the 100-year floodplain. Assure that any mitigation addresses the 500- year flood event or “worst damage scenario”. | City Engineer | Flooding | Long-term / Medium priority | FEMA- HMGP, FMA, BRIC competitive grant programs. | Completed | South side is behind the flood wall and the West and East side are Zone x on the recent flood maps |
| Emergency Services Protection | Establish an emergency shelter location and a supply of portable generators. | City Engineer | Flooding | Short-term | Local budget | Completed | Portable generator purchased and emergency generators at City Hall and Public Safety Building |
| Emergency Services Protection/ Public Education and Awareness | Establish an emergency communications protocol and implement a formal multi-lingual communications system. | City Administration | Flooding | Short-term | Local budget | Completed | City Wide notification by Nixle system equal to County. Notifications also uploaded to City website and Facebook |
| Emergency Services Protection/ Public Education and Awareness | Provide emergency communications in Spanish and work with community leaders to identify best paths of communication for those with limited technology. | City Administration | Flooding | Short-term | Local budget | Completed | City Wide notification by Nixle system equal to County. Notifications also uploaded to City website and Facebook |
| Property Protection/ Structural Project | Protect and reinforce the Dove Creek retaining wall which sits adjacent to the St. Mary's Hospital computer systems and hospital records. | City Engineer | Flooding, severe storms | Short-term | Funding sources TBD | Completed | Work is complete and the final closeout paperwork is being submitted to DHS |
| Emergency Services Protection | Establish pre-positioned EMS resources on the south side of the river. There are currently no services in this location and emergency responders are unable to reach populations across the river during severe storms. | City Administration, St. Mary's Hospital | Flooding, severe storms | Short-term | Local budget | Completed | AFD has control of EMS services within the City. MVGO bridge can handle emergency vehicle traffic if needed. |
| Prevention | Conduct a detailed property inventory and analysis of existing conditions of buildings that have been damaged by floods, especially in the East End and South Side neighborhoods in the City. | City Engineer | All Hazards | Unknown | Local budget | Completed | Work has been completed and no recent flooding in the area has occurred. |

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| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/ Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|--|---|--|----------------------|-----------------------------|---|--|--|
| Natural Resource Protection and Green Infrastructure | Maintain the Mohawk River and Schoharie Creek tributaries through debris clearance. | Unknown | Flood | Annual | Local budget | Deferred | Resources not available for removing debris in tributaries. Access also an issue in many areas |
| Property Protection | Relocation of the Amtrak station away from an extremely high-risk area to mitigate and recover from interstate transportation disruptions. | City Engineer | Flood, severe storms | Short-term | Potential funding by USDOT Transportation Investment Generating Economic Recovery (TIGER) grant program | In progress | Multi-Model project in concept planning and design |
| Structural Project | Complete infrastructure improvements for storm drains in the west end of the City of Amsterdam (NYSDOT project in planning) to mitigate drainage issues for key areas known to flood. | City Engineer | Flood, severe storms | Short-term | Local budget | Partially Completed/Deferred | AKA Route 5 Stormwater Reconstruction CSX involvement required |
| Natural Resource Protection and Green Infrastructure | Stabilize the stream bank along South Chuctanunda Creek. | City Engineer, Public Safety | Flood, severe storms | One year from project start | Local budget | Deferred | Programming and Funding Necessary |
| Property Protection | Stabilize Cleveland Avenue. | City Engineer | All hazards | Unknown | Local budget | Completed | Work has been completed to stabilize Cleveland Ave. |
| Natural Resource Protection and Green Infrastructure | Identify and purchase floating dock designs for Riverlink Park. | City Engineer | Flood, severe storms | Short-term | Potential funding by Local Waterfront Revitalization Program, NYS OPRHP Recreational Trails Program | Completed | Floating docks installed seasonally at Riverlink Park |

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| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/ Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|--|--|--|----------------------|---------------------|---|--|--|
| Natural Resource Protection and Green Infrastructure | Construct the Riverwalk and Chuctanunda Trail which will provide opportunities for streambank stabilization and other mitigation features. | City Engineer | Flood, severe storms | Short-term | Potential funding by Local Waterfront Revitalization Program, NYS OPRHP Recreational Trails Program | Completed | Riverlink park and pedestrian bridge completed. Other improvements planned |
| Natural Resource Protection and Green Infrastructure | Development of a marina which will provide a shelter for vessels and floating structures out of the main current. | City Engineer | Flood, severe storms | Unknown | Local budget | Modified | Developer not found to complete proposed project due to economic concerns |
| Property Protection | Relocate the City's DPW garage and storage facility which is currently located within the Mohawk River floodplain. | City Engineer | Flood, severe storms | Short-term | Potential funding by USDOT Transportation Investment Generating Economic Recovery (TIGER) grant program | Deleted | Existing DPW building to be demolished and rebuilt in same location. Based on FEMA map dated 1/19/2018 the DPW garage is within zone x and therefore is not within the flood prone area. |
| Structural Project | South Side Floodwall Certification | City Engineer | Flood, severe storms | Unknown | Local budget | In Progress | DEC completes annual inspections of the flood wall and associated infrastructure |
| Property Protection | Dove Creek Restoration and Medical Facility Retaining Wall Reinforcement | City Engineer | Flood, severe storms | Short-term | Funding TBD | Completed | Work is complete and the final closeout paperwork is being submitted to DHS |
| Structural Project | Combined Sewer Overflow Diversion Structure Screens Project West Side Pump Station only | City Engineer | Flood, severe storms | Short-term | Local budget | Delete | Project is not Economically Viable |

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| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/ Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|--|--|--|----------------------|---------------------|----------------------|--|--|
| Property Protection | East Side Pump Station Mechanical Bar Screen Replacement Project | City Engineer | Flood, severe storms | Short-term | Local budget | Completed | Completed as part of the recent EFC funded project |
| Property Protection / Natural Resource Protection and Green Infrastructure | Removal of Old Brookside Reservoir Dam and repair Bunn Creek Bypass | City Engineer | Flood, severe storms | Short-term | Local budget | In Progress | Project is in the planning phase and trying to locate potential funding sources |
| Property Protection | Acquisition of Properties | Common Council | All hazards | Unknown | Local budget | Deferred | No other properties that they know of |
| Property Protection | Gateway Park – demolish the Carpetland building that was severely damaged during Hurricane Irene and repurpose property for public recreational use. | Carpetland property owner, City Engineer | Flood, severe storms | Short-term | Local budget | Completed | Chalmers site has been demolished and plans have been developed for recreational opportunities in the area |
| Structural Projects/Natural Resource Protection and Green Infrastructure | Streambed and Retaining Wall Inspection and Repair North Chuctanunda Creek | City Engineer | Flood, severe storms | Short-term | Local budget | In Progress | Areas are being inspected as time/budget allow |
| Structural Projects/Natural Resource Protection and Green Infrastructure | Streambed and retaining wall inspection and repair Bunn Creek | City Engineer | Flood, severe storms | Short-term | Local budget | In Progress | Project is in planning phase and trying to locate potential funding sources |
| Structural Projects | Stormwater System Installation at Guy Park Avenue between State Route 5 and Steadwell Avenue | City Engineer | Flood, severe storms | Short-term | Local budget | Delete | Project not Economically viable at this time |

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| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/ Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|--|--|--|----------------------|---------------------|--|--|--|
| Prevention / Natural Resource Protection and Green Infrastructure | Identify appropriate green infrastructure measures and flood mitigation techniques, develop enhanced stormwater and other regulations that will require and/or incentivize green infrastructure throughout the urban core, and flood mitigation measures in areas prone to flooding. | City Engineer | Flood, severe storms | Short-term | Local budget | Deferred | Project not Economically viable at this time |
| Emergency Services Protection | Purchase and install generators for City Hall and DPW buildings | City Engineer | Flood, severe storms | Short-term | Local budget | In Progress | City Hall and both plants have generators. DPW building needs to be replaced |
| Structural Projects / Natural Resource Protection and Green Infrastructure | Waterfront Heritage Area | City Engineer | Flood, severe storms | Short-term | Potential funding from Local Waterfront Revitalization Program | Delete | This is not a City Project |

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Table 9. Updated Mitigation Actions (2023-2028) – City of Amsterdam.

| Action # | Action Title | Action Description | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|--|---|----------------|---|-----------------|-------------------------|----------|
| 1 | Property Protection | Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Assure that any mitigation addresses the 500- year flood event or “worst damage scenario.” | High | FEMA- HMGP, FMA, BRIC competitive grant programs | City | 2023-2028 | Low |
| 2 | Property Protection | Relocation of the Amtrak station away from an extremely high-risk area to mitigate and recover from interstate transportation disruptions. | High | Potential funding by USDOT Transportation Investment Generating Economic Recovery (TIGER) grant program | City | 2023-2028 | High |
| 3 | Natural Resource Protection and Green Infrastructure | Development of a marina which will provide a shelter for vessels and floating structures out of the main current. | High | Local | City | 2023-2028 | High |
| 4 | Structural Project | South Side Floodwall Certification | Low | Local | City | 2023-2028 | Low |

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| | | | | | | | |
|----------|--|---|--------|-------|------|-----------|--------|
| 5 | Property Protection / Natural Resource Protection and Green Infrastructure | Removal of Old Brookside Reservoir Dam and repair Bunn Creek Bypass. | High | Local | City | 2023-2028 | High |
| 6 | Property Protection / Natural Resource Protection and Green Infrastructure | Streambed and Retaining Wall Inspection and Repair North Chuctanunda Creek. | High | Local | City | 2023-2028 | Low |
| 7 | Property Protection / Natural Resource Protection and Green Infrastructure | Streambed and retaining wall inspection and repair Bunn Creek. | Medium | Local | City | 2023-2028 | High |
| 8 | Emergency Services Protection | Purchase and install generators for City Hall and DPW buildings. | Low | Local | City | 2023-2028 | Medium |

Capability Assessment Worksheet- Town of Amsterdam

Planning and Regulatory

| COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | | | T&B TO REVIEW OLD ANNEX |
|---|--------------------------|--|--|
| Plans | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? | NOTES FROM 2016 Annex |
| Comprehensive/Master Plan | Yes; 2004 | The plan addresses hazards and can be used to identify mitigation projects. | <i>Planning Board last update was 2004</i> |
| Capital Improvements Plan | Yes; updated annually | The capital program projects address hazards and could be used to identify mitigation projects as well as to implement identified mitigation projects in the future. | <i>The Town Council updates the CIP on an annual basis</i> |
| Economic Development Plan | Yes | The plan addresses hazards and can be used to identify mitigation projects. | <i>Planning Board/Town last update was 2004 (incorporated into Comprehensive Plan)</i> |
| Local Emergency Response Plan | Yes | | <i>2016 Annex indicates that there is a plan in place. Department/Agency responsible: Supervisor and Fire Districts.</i> |
| Continuity of Operations Plan | Yes | | <i>2016 Annex does not indicate if there is a plan in place</i> |
| Transportation Plan | Yes | County Plan reportedly includes municipality; A transportation plan is incorporated into Chapter 6 of the 2004 Comprehensive Plan. | |
| Stormwater Management Plan | Yes | 2014 NY Rising Community Reconstruction plan includes stormwater projects listed for the Town of Amsterdam (incl. Village of Fort Johnson). | <i>2016 Annex indicates Planning Board/Town Council update was 2004 (incorporated into Comprehensive Plan)</i> |
| Watershed Management Plan | Yes, 2015 | Mohawk River Watershed Management Plan, 2015 | |
| Floodplain Management Basin Plan | Yes | The plan addresses hazards and can be used to identify mitigation projects. | <i>2016 Annex notes there is a plan in place. Incorporated into 2004 Comprehensive Plan.</i> |
| Open Space and Recreation Plan | Yes | Incorporated into the Town's 2004 Comprehensive Plan. 2014 NY Rising Community Reconstruction plan includes recreation and open space projects listed for the Town of Amsterdam (incl. Village of Fort Johnson). | <i>2016 Annex notes no Open Space Plan. No mention of Recreation Plan.</i> |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? | NOTES FROM 2016 Annex |
| Building Code | Yes, 2020 | 2020 Edition Building Code of NY State | |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | | <i>2016 Annex notes a classification and date classified BCEGS as "TBD"</i> |
| Fire department ISO rating | No | | |
| Site plan review requirements | Yes, Amended 2010 | Article VI Section 20 Town of Amsterdam Zoning Law, page 45. Adopted 1972. New zoning law adopted 8/19/2009 and last amended 3/24/2023. | |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? | NOTES FROM 2016 Annex |
| Zoning ordinance | Yes, Amended 2010 | Adopted 1972. New zoning law adopted 8/19/2009 and amended 3/24/2023. | |
| Subdivision ordinance | Yes | Subdivision Law adopted October 1964 | |
| NFIP Flood Damage Prevention Ordinance | Yes | Local Law No. 3 of 2022 | |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | | |
| Flood insurance rate maps | Yes | Effective 1/19/2018 | <i>2016 Annex notes the current effective Flood Insurance Rate Maps are dated December 1, 1987.</i> |
| Acquisition of land for open space and public recreation uses | No | | |
| Stormwater Management Ordinance | No | | |
| Growth Management Ordinance | Yes | | <i>2016 Annex indicates Planning Board/Town Council update was 2004 (incorporated into Comprehensive Plan)</i> |
| Real Estate Disclosure Requirements | Yes | NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467 | <i>State Mandated that Realtor disclose flooding events</i> |

Administrative and Technical

| Administration | Yes/No | Describe capability Is coordination effective? | NOTES FROM 2016 Annex |
|--|--------|---|-----------------------|
| Planning Commission | Yes | Meets monthly; coordinates with other Departments/jurisdictions; has staff and professional consulting resources available | |
| Mitigation Planning Committee | No | | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | Yes | As part of regular maintenance programs DPW proactively addresses aspects of the Town's infrastructure that could pose risk and implements these activities both on a planned and response basis. | |

| | | | |
|---|------------------------------------|--|--|
| Mutual aid agreements | Yes | | 2016 Annex notes that there are agreements within surrounding municipalities |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| Chief Building Official | Yes; PT | | |
| Floodplain Administrator | Yes; PT | | Code Enforcer - Tom CiCaprio |
| Emergency Manager | No | | Amsterdam Police/Fire Departments and Engineering Department |
| Community Planner | Yes | Delaware Engineering provides consulting planning services to the Town. | Delaware Engineering? |
| Civil Engineer | Yes | Delaware Engineering provides consulting engineering services to the Town. | Delaware Engineering? |
| GIS Coordinator | Yes | Delaware Engineering provides consulting GIS services to the Town. | Delaware Engineering? |
| Other | | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| Warning systems/services (Reverse 911, outdoor warning signals) | Yes | TextMyGov has been implemented as of 2023 and provides citizen engagement capability Townwide as well as subareas, such as specific water districts. | |
| Hazard data and information | Yes | Delaware Engineering provides consulting planning and engineering services to the Town. | Delaware Engineering? |
| Grant writing | Yes | Delaware Engineering provides consulting grant writing services to the Town. | Delaware Engineering? |
| Hazus analysis | Yes | Delaware Engineering provides consulting GIS services to the Town. Montgomery County coordinates preparation of HMP, which includes Hazus analysis. | Delaware Engineering? |
| Other | | | |
| Financial | | | |
| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | NOTES FROM 2016 Annex |
| Capital improvements project funding | Yes | The capital program has been used for roadway maintenance activities and other projects and could be used in the future to fund mitigation projects. | |
| Authority to levy taxes for specific purposes | Yes | This capability has supported mainly water and sewer infrastructure in the Town and can be used in the future to fund future mitigation actions relating to these systems. | |
| Fees for water, sewer, gas, or electric services | Yes | The Town charges user fees for water and sewer service. | |
| Impact fees for new development | No | | |
| Storm water utility fee | No | | |
| Incur debt through general obligation bonds and/or special tax bonds | Yes | This capability has supported mainly water and sewer infrastructure in the Town and can be used in the future to fund future mitigation actions relating to these systems. | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | The Town has in the past obtained assistance for NY Rising Community Reconstruction (NYRCR) Plan-related efforts. | |
| Other federal funding programs | No | | |
| State funding programs | Yes | The Town has in the past obtained assistance for sewer engineering studies and for NY Rising Community Reconstruction (NYRCR) Plan efforts. | |
| Hazard Mitigation Grant Programs | Yes | | |
| Education and Outreach | | | |
| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | Yes | Chucktanunda Creek corridor trail working group | |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | No | | |
| Natural disaster or safety related school programs | Yes | MC Emergency Management and Local Fire Departments | |
| StormReady certification | No | | |
| Firewise Communities certification | No | | |
| Public-private partnership initiatives addressing disaster-related issues | No | | |
| Other | | | |

TOWN OF AMSTERDAM

MONTGOMERY COUNTY HAZARD

MITIGATION PLAN UPDATE ANNEX

December 2023



Town of Amsterdam

283 Manny's Corner Road

Amsterdam, NY 12010

<https://www.townofamsterdam.org/>

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Town of Amsterdam Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the Town of Amsterdam not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Town of Amsterdam.

| Primary Point of Contact | Alternate Point of Contact |
|---|---|
| Tom DiMezza, Supervisor 283 Manny's Corners Rd., Amsterdam, NY 12010 518-842-7961 tdimezza@townofamsterdam.org | Bart Tessiero, Highway Superintendent 283 Manny's Corners Rd., Amsterdam, NY 02010 518-376-7697 btessiero@townofamsterdam.org |

1. Municipality Profile

1.1 Brief History

According to the Town of Amsterdam's website¹:

"In 1793 Caughnawaga, which was the land north of the Mohawk River, was divided into four towns: Johnstown, Mayfield, Broadalbin, and Amsterdam. The earliest known family to settle within the Town of Amsterdam was that of Philip Groat. Groat, of Rotterdam (Holland), acquired the title to the land direct from the Mohawks to a strip of land near present day Cranesville. This is probably the earliest grant obtained from the Mohawks. The Mohawks conveyed "all the land between the creeks (about one mile, embracing Cranesville), as far north from the river as the grantee may desire."

"Fort Johnson is the most prominent historic site in the Town². This sturdy stone house and fortress was the home of Sir William Johnson, a key figure in the settlement of the Mohawk Valley in the decades prior to the Revolution. Johnson played many roles in regional history including merchant, soldier, negotiator, king's representative and superintendent of Indian affairs. Johnson built the three-story Georgian style house in 1749, near the spot where the Kayaderosseras Creek flows into the Mohawk River. Over the next ten years he added a gristmill, blockhouse, barracks, stables, barns, a posh outhouse, and accommodations for the Indians who held council on the site."

¹ <https://www.townofamsterdam.org/>

² Cover Photo Fort Johnson

1.2 Location and Demographics

The Town of Amsterdam is a sparsely populated suburban community of approximately 30 square miles situated in the northeast corner of the region. Land surface ranges from around 243 feet above mean sea level along the Mohawk River to a high of 720 feet as the topography rises northward. The Town is located in the Alplaus Kill Sub watershed to the Mohawk River with predominant drainage features including Kayaderosseras, McQueen, Bunn, North Chuctanunda and Cranes Hollows Creeks. A more detailed description of the Eastern Alplaus Kill Sub watershed is included in the HMP Community Asset Inventory Section 5.6. Amsterdam's societal, economic, infrastructural and economic resources, including critical assets are highlighted in Figure 1.

It shares its boundaries with Fulton County to the north; the Mohawk River, City of Amsterdam and Town of Florida to the south; Saratoga and Schenectady Counties to the east and the Town of Mohawk to the west. The City of Amsterdam is adjacent to the Town and the Erie Canal passes along the southern border. The Village of Fort Johnson will be incorporated into the Town of Amsterdam effective January 1, 2024.

Amsterdam is home to 5,575 residents, with a population density of less than 200 people per square mile. According to the 2020 US Census³, 89% of the Town's 2,721 housing units are occupied, while 11% of the housing units remain vacant. Of the occupied units, 81% are owner occupied and 19% are renter occupied. The Town's unemployment rate is 4.9% as of February 2023. 7.2% of the total population is below the poverty level, which includes 18% of children below the age of 18. The average labor force is 3,066 people, and approximately thirty percent of the Town's residents have attained a four-year college degree or higher. The median household income for Amsterdam is \$62,097.

1.3 Governance

The Town of Amsterdam is governed by a Town Council consisting of five members with equal votes. This governing body will assume responsibility for adoption and implementation of this plan.

1.4 Land Use and Development

The Town of Amsterdam is adjacent to the region's main population and important commercial center, the City of Amsterdam. Amtrack that runs along the southern boundary which benefits local commercial and industrial uses.

The western half of Amsterdam is largely agricultural and includes the Village of Fort Johnson that was incorporated into the Town in 2023. The central part of Amsterdam includes a regionally-significant commercial and industrial corridor running to the north along Route 30, from the City of Amsterdam, to Fulton County. The remainder of the Town is a rural residential area with a large proportion of agricultural land use. The Town of Amsterdam purchases its water from the City of Amsterdam whose water sources are all located in Saratoga County, NY. The Town provides water to 208 residential and 65 commercial properties. Outside of these service areas, residents of Amsterdam have no municipal water or sewer service and rely on wells as a source for all their needs.

³ <https://censusreporter.org/profiles/06000US3605702077-amsterdam-town-montgomery-county-ny/>

Over the years, The Town has continued to grow both as a residential community and as the area's commercial center. In the early 1960's the first shopping center developments were built along Rt. 30 North. Today the Rt. 30 corridor in the Town is referred to as "the miracle mile." Since the opening of the new Big Box retail stores (Wal-Mart and Super K-Mart) in 1993, the Town has seen a rapid increase in development proposals along the corridor. Square footage of commercial space doubled along the Route 30 corridor from 1990 to 2000. Route 67 has also experienced a moderate increase in development. The Town reviews each new development proposal in accordance with applicable local, state, and federal requirements, such as the Town's zoning and subdivision laws and the State Environmental Quality Review Act (SEQR).

Residential development is also on the rise in the Town, with approximately 6 new housing starts per year. In 2023, building permit data show 8 new housing starts. Over the past several years, the land development community has demonstrated an interest to develop rental units along the Route 30 corridor, including senior housing and net-zero market rate projects. The Town's regional location, relatively short distance to the Capital Region and City of Albany, low taxes, rural character, and other amenities have encouraged new residential development.

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snow storms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for Amsterdam. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Town of Amsterdam that is not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for Earthquakes is included

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Town in the past 10 years.

Table 1. Hazard Event History 2011-2021⁴

| Dates of Event | Event Type | Summary of Damages/Losses |
|-------------------------------|-----------------------------|--|
| August 26 – September 5, 2011 | Hurricane Irene and Tornado | State Highway 5 from City Line to Schenectady County line, Touareuna Road, Krutz Road, Swart Hill Rd, and Robb Road. Upper Van Dyke Avenue was damaged by soil erosion. The shoulder of the road washed away and was repaired by the Town. Debris was also removed from in front of the culvert. Following the September 4th tornado, emergency management officers, Montgomery Co. Sheriff's Department, NYS Police, and Cranesville, Hagaman and Beukendaal Volunteer Fire Depts. cleared debris from buildings, power lines and roadways to ensure public health and safety. Town crews worked from August 2011 to January 2012 repairing the damage from Hurricane Irene and the subsequent tornado, including repairs to Upper Van Dyke Avenue and removing over 2,571 CY of trees, brush and vegetative matter Town-wide, primarily on Cranes Hollow, Riverview, Robb, Krutz and Waters Roads and Darlene Drive. Damages to the Town ranged from \$0.5 M to \$1 M. |
| May 22, 2013 | Flash Flood | Heavy rainfall led to flash flooding in Florida, causing significant damage to a home. Over a foot of water swept through the house, causing \$100 K in property damage. |
| June 13, 2014 | Flooding | Residents from five homes along Argersinger Road had to be evacuated due to rising flood waters. Currytown Road was closed, and several nearby homes had water in their basements. Media reported that Lusso Road and Borden Road were closed. A mudslide occurred along McDonald Drive, and one home along Noonan Road in Fort Johnson partially collapsed due to flooding and the residents had to be evacuated. |
| August 21-22, 2014 | Flash Flood | Slow moving thunderstorms produced two to four inches of rain across the Mohawk Valley and Sacandaga Region on August 20th. Another batch of thunderstorms on August 21st brought several inches of rain across the central Mohawk Valley, causing small streams to overflow their banks. At least 15 roads were closed in Montgomery County, including an onramp for the New York State Thruway. A state of emergency was issued due to the flooding. The flooding caused sewage treatment plants to be inundated and a boil water advisory was issued for several days. In some parts of the County, residents had to evacuate their homes. Rainfall totals in the County ranged from 2.41 inches in Hessville to 4.35 inches in Fonda. |

⁴ <https://www.ncdc.noaa.gov/stormevents/>

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| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------|----------------------|---|
| August 2021 | High Winds, Flooding | Hurricane Henri |
| September 15, 2021 | Flooding | Dove Creek was reported to be out of its banks, impacting an area in the vicinity of St. Mary Healthcare, and a trained spotter reported a road closure due to flooding near Route 5S and Sprakers Hill Road. |

2.2 Community Assets

Forty-eight Community Assets were identified for the Town of Amsterdam for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID correspond with locations shown in **Figure 1**.

Table 2. Community Assets in the Town of Amsterdam

| | Asset ID | Subtype | Name |
|----------|-----------|------------------------|---|
| ECONOMY | 1 | Food/ Grocery | Market 32 |
| | 2 | Food/ Grocery | Walmart |
| | 3 | Food/ Grocery | Hannaford |
| | 4 | Fuel | Stewarts |
| | 5 | Fuel | Sunoco Gas Station |
| | 6 | Fuel | Exxon |
| | 7 | Hardware | The Home Depot |
| | 8 | Hardware | Lowe's Home Improvement |
| | 9 | Major Employer | Greater Amsterdam School District |
| | 10 | Major Employer | Amsterdam Printing & Litho (Holland USA) |
| | 11 | Major Employer | Power Pallet |
| | 12 | Hardware | Harbor Freight |
| | 50 | Senior Services | Hillcrest Spring Assisted Living Facility |
| SOCIETAL | 13 | Senior Services | Capstone Rehabilitation |
| | 14 | Historic Site | Old Stone Methodist Church |
| | 15 | Historic Site | Old Fort Johnson National Historic Landmark |
| | 16 | Cemetery | Mt Carmel Cemetery |
| | 17 | Cemetery | St Mary's Cemetery |
| | 18 | Cemetery | St Joseph's Cemetery |
| | 19 | School/ Public | Amsterdam High School |
| | 20 | School/ Public | William B. Tecler Elementary School |
| | 21 | School/ Public | Fulmont Head Start |
| | 22 | Senior Services | Wilkinson Residential Health |
| | 23 | Church | Amsterdam United Methodist Church |
| | 24 | Church | Cranesville Reformed Church |
| | 25 | Cemetery | Marselis Cemetery |
| | 26 | Cemetery | Good Shepherd Cemetery Amsterdam |
| | 27 | Cemetery | St Casimir's Cemetery |

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| | Asset ID | Subtype | Name |
|-----------------|----------|---------------------------|--|
| | 28 | Cemetery | Old Saint Joseph's Cemetery |
| | 29 | Cemetery | St John's Cemetery |
| | 30 | Medical Facility | Carondelet Regional Medical, Pc |
| | 31 | Medical Facility | Mohawk Valley Multi Specialty Medical Group Pllc |
| | 51 | Medical Facility | St. Mary's Memorial Health Ctr |
| | 52 | Medical Facility | St. Peter's Wellnow EmUrgent Care |
| | 53 | Medical Facility | Albany Med/Nathan Littauer EmUrgent Care and medical services facility |
| | 54 | Pharmacy | Walgreens Pharmacy |
| | 55 | Pharmacy | Market32 |
| | 56 | Pharmacy | Hannaford |
| | 57 | Pharmacy | Target |
| | 58 | Pharmacy | Wal-Mart |
| | 59 | Pharmacy | St. Mary's Hospital |
| | 60 | Cell Tower | Town of Amsterdam Water Tower |
| INFRASTRUCTURAL | 32 | Cell Tower | New Cingular Wireless PCS, LLC |
| | 66 | Cell Tower | Cellco Verizon Cell Tower |
| | 33 | Municipal / Public Safety | Cranesville Fire Dept. |
| | 34 | Post Office | USPS Tribes Hill Office |
| | 35 | Municipal / Public Safety | Fort Johnson Fire CO |
| | 36 | Post Office | USPS Fort Johnson Office |
| | 37 | Airport / Helipad | Amsterdam Airfield |
| | 38 | Sub/Switching Station | Perth Rd/Route 30 Electrical Substation |
| | 39 | Pump Station | Brant St Waste Water Pump Station |
| | 40 | Pump Station | Fort Johnson Rd Waste Water Pump Station |
| | 41 | Municipal / Public Safety | Fort Johnson Fire CO |
| | 42 | Dam | Rostowski Pond Dam |
| | 43 | Dam | Antlers Country Club Pond Dam |
| | 44 | Dam | Amsterdam Diversionary Dam |
| | 45 | Dam | Kellogg Reservoir Dam |
| | 46 | Dam | Harrower Pond Dam |
| | 47 | Pump Station | Wallins Corner Pump Station |
| | 48 | Pump Station | Country Ridge Pump Station |
| | 49 | Pump Station | Log City Pump Station |

| | Asset ID | Subtype | Name |
|--|-----------|-----------------------|---------------------------------------|
| | 61 | Pump Station | Water Supply Pumping Station |
| | 62 | School/ Public | Town of Amsterdam Town Hall |
| | 63 | Pump Station | Route 30 Water Booster Station |
| | 64 | School/ Public | Route 30 Water Tank |
| | 65 | School/ Public | Harrower Water Tank |
| Bold indicated asset is identified as an essential facility | | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are sixteen essential facilities in town, with two designated emergency shelters: the Amsterdam High School and William B. Tecler Elementary School. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Town of Amsterdam.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|---|--------------------------|------------------|----------|----------------|
| Cranesville Fire Dept. | 167 Riverview Rd | Y | N | N |
| Fort Johnson Fire CO | 4 Ft Johnson Ave | Y | N | N |
| Fort Johnson Fire CO | Golf Course Rd | Y | N | N |
| Amsterdam Airfield | Sand Pit Rd | N | N | N |
| Brant St Wastewater Pump Station | Brant Ave Ft. Johnson | Y | N | 500-year flood |
| Fort Johnson Rd Wastewater Pump Station | Fort Johnson Ave | N | N | 100-year flood |
| Wallins Corner Pump Station | 209 Wallins Corners Rd | Y | N | N |
| Country Ridge Pump Station | 108 N Country Ridge Dr. | N | N | N |
| Pump Station | Log City Pump Station | N | N | N |
| Amsterdam High School | 140 Saratoga Ave | Y | Y | N |
| William B. Tecler | 210 Northern Blvd | N | Y | N |

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| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|--------------------------------|---|------------------|----------|----------------|
| Elementary School | | | | |
| Fulmont Head Start | 208 Truax Road | Y | N | N |
| Wilkinson Residential Health | 4988 NY-30 | Y | N | N |
| Capstone Rehabilitation | 302 Swart Street | Y | N | N |
| Town of Amsterdam Town Hall | 283 Manny Corners Rd, Amsterdam, NY 12010 | Y | Y | N |
| Route 30 Water Booster Station | Sthwy 30 (SBL 39.12-2-10.21) | N | N | N |
| Route 30 Water Tank | Sthwy 30 (SBL 24.-2-12.2) | N | N | N |
| Harrower Water Tank | 4825 MAPLE AVE EXT | N | N | N |
| Cellco Verizon Cell Tower | 192 Hammonds town Rd | Y | N | N |

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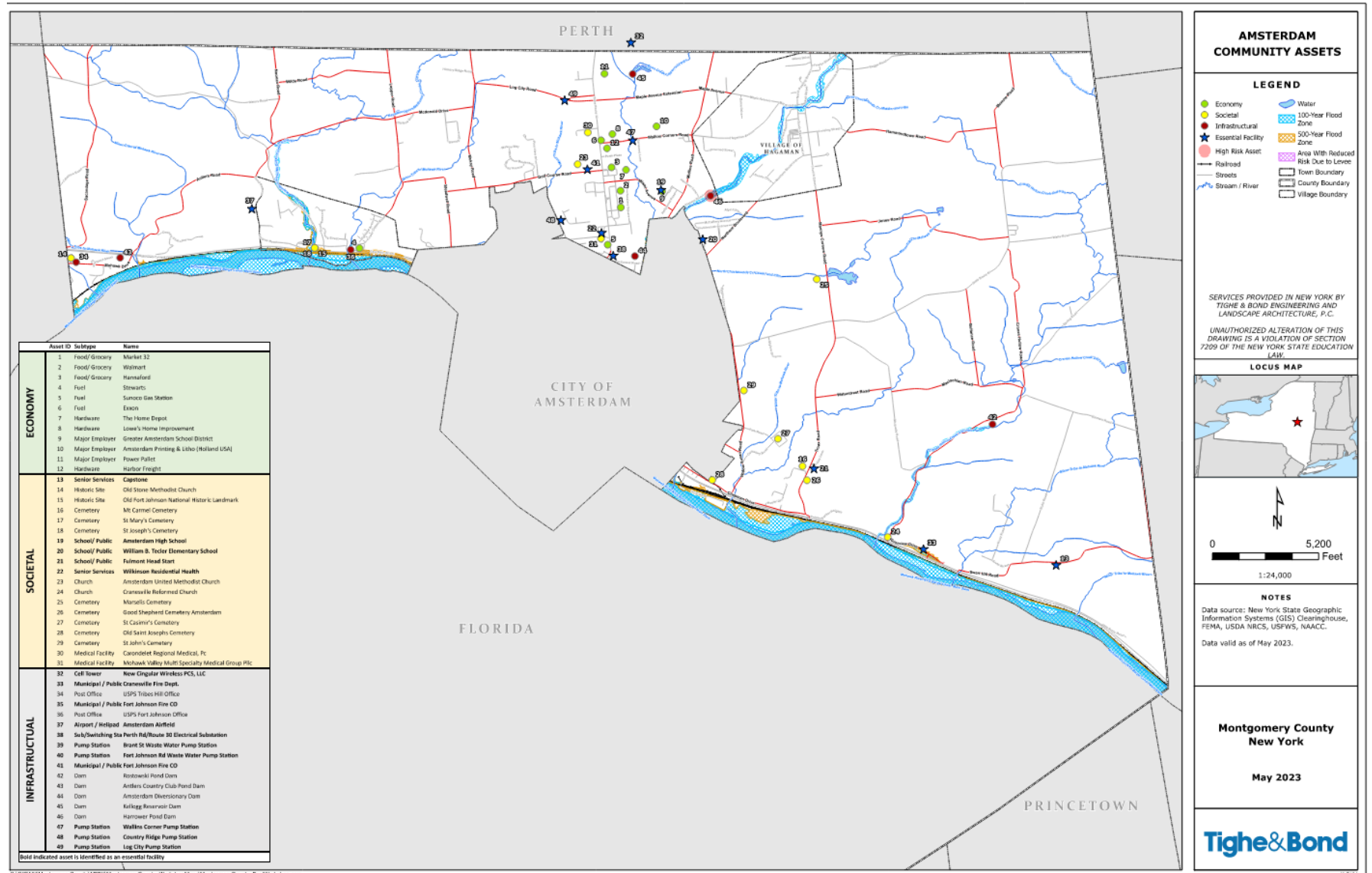


Figure 1. Town of Amsterdam FEMA Flood Zones, Community Assets and Essential Facilities

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2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there was one identified repetitive loss property in Amsterdam as of 2016, and as of 2022, this has not changed. As of December 31, 2022, 5 policies were in force. The Town of Amsterdam had a total of 7 claims totaling \$109,695 in losses for all NFIP-insured structures. It should be noted that according to FEMA data there are 145 structures within the 100-year flood plain.

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Town, by hazard as shown in Table 4. The estimated value of at risk assets is based on the Town's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Town of Amsterdam Vulnerable Assets Exposure Analysis⁵.

| Hazard | At-Risk All Properties ⁶ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|---------------------------------|-------------------------------------|-----------|------------------------------|--------|-------------------------|----------|
| | Value | Number | Value | Number | Value ⁷ | Number |
| Hurricane/Tropical Storm | \$553,867,141 | 2,507 | \$42,016,778 | 16 | N/A | 2 |
| Severe Thunderstorm | \$553,867,141 | 2,507 | \$42,016,778 | 16 | N/A | 2 |
| Severe Winter Storm | \$553,867,141 | 2,507 | \$42,016,778 | 16 | N/A | 2 |
| Tornado | \$553,867,141 | 2,507 | \$42,016,778 | 16 | N/A | 2 |
| Flood | | | | | | |
| 1% Annual Chance | \$17,511,398 | 145 | - | - | - | 1 |
| 0.2% Annual Chance | \$11,691,822 | 67 | - | - | - | - |

⁵ Based on 50% of assessor's full market value

⁶ Includes Villages of Hagan & Fort Johnson

⁷ Values not available

2.6 Townwide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damage from earthquakes for the Town of Amsterdam. The totals include capital stock and economic loss estimates.

Table 5 Town of Amsterdam Earthquake Vulnerability Analysis

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-------------|--------------|
| Estimated total number of buildings | 2,507 | 2,507 |
| Total direct building economic loss | \$1,218,000 | \$14,619,000 |

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Amsterdam Problem Statements.

| Problem Area | Description |
|--|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. In addition, downed trees and other debris can obstruct culverts and other infrastructure along waterways. There are many diseased trees that create an additional threat to wires. |
| Ice Jams along the Mohawk River | The Mohawk River is prone to ice jams during periods of river ice break-up. These jams, which form at channel constrictions, bridge piers, lock and dam structures, and sections with a reduced floodplain, can cause flooding behind the jam or downstream of a jam due to sudden water release. ⁸ |
| Undersized and deteriorated storm sewers | Given the age of many land developments in the Town, changing watershed conditions, and changing rainfall patterns, much of the Town's storm sewer system needs investment to address a range of conditions, from deteriorated metal pipe to undersized conveyances, which result in persistent flooding or present other hazards. |
| Geographic Areas of Concern | |
| Fort Johnson Kayaderosseras Creek | Local Areas of Flooding: Chapman Drive (County Rd 157) from the City of Amsterdam line to Truax Road. This road experiences flooding at all times of the year. Flooding is in part due to older and potentially undersized drainage infrastructure designed to convey runoff from the north side of Route 5 to the Mohawk River. Upper Van Dyke Avenue at Country Ridge Drive. Water collects at this intersection flooding roadway |
| Harrower District North Chuctanunda Creek | |
| Cransville Cranes | |

⁸ See USGS, <https://www.usgs.gov/centers/new-york-water-science-center/science/mohawk-river-ice-jam-monitoring>

| | |
|------------------------------------|--|
| Hollow Creek | (often causing road closure) and then on to municipal golf course. The pipe material upstream, in the Country Ridge neighborhood, is galvanized steel, undersized, and is in need of repair. Upper Van Dyle Ave is classified as a major urban collector street and carries almost 3,500 vehicles per day. |
| Mohawk River | <p>Fort Johnson, Route 5 at intersection of Route 67 and Lepper Road along Route 5. In this location, flooding is directly related to flood stage of the Mohawk River. When the River is in flood stage and overtops Route 5, the Fitzpatrick and Kayaderasseras Crks, which drain to the River, both flood.</p> <p>The stormwater conveyance system along Harrower Lane is built from about 1,000 feet of galvanized metal pipe which discharges to the Chuctanunda Crk. that is currently undersized and in poor condition, representing a risk to public roads and private property in the vicinity of Harrower Lane and its intersection with Pioneer St..</p> |
| Vulnerable Community Assets | |
| Pump Stations | The Brant Street pumpstation is in a flood zone, but the equipment has been elevated to be above the 100 year flood elevation. |
| Harrower Pond Dam | The Harrower Pond Dam is located along the Chuctanunda Creek off of Pioneer St. The dam, which is a Class C “high hazard” structure, is privately owned and has been the subject of NYSDEC-issued violations and enforcement actions, including a partial breach to increase safety. Since the breach, the dam holds back less water than it had been capable of, but given its classification and settlement patterns along the creek, may still present hazards under certain conditions. |

4. Capabilities

Like many municipalities, including small, sparsely populated communities, the Town of Amsterdam does not have unlimited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Town's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Town of Amsterdam completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for Amsterdam:

- Comprehensive/Master Plan - *The plan addresses hazards and can be used to identify mitigation projects.*
- Capital Improvements Plan - *Updated annually; The capital program projects address hazards and could be used to identify mitigation projects as well as to implement identified mitigation projects in the future.*
- Montgomery County Economic Development Plan – *The plan addresses hazards and can be used to identify mitigation projects.*
- Local Emergency Response Plan
- Continuity of Operations Plan
- Transportation Plan – *A transportation plan is incorporated into Chapter 6 of the 2004 Comprehensive Plan. Capital District Transportation Authority (CDTA) maintains separate planning initiatives for transit service in the Town.*
- Stormwater Management Plan – *2014 NY Rising Community Reconstruction plan includes stormwater projects listed for the Town of Amsterdam (incl. Village of Fort Johnson).*
- 2015 Watershed Management Plan
- Floodplain Management Basin Plan - *The plan addresses hazards and can be used to identify mitigation projects.*
- Open Space and Recreation Plan - *Incorporated into the Town's 2004 Comprehensive Plan. 2014 NY Rising Community Reconstruction plan includes recreation and open space projects listed for the Town of Amsterdam (incl. Village of Fort Johnson).*
- Building Codes – *2020 Edition Building Code of NY State*
- Land Use Planning

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- Zoning Ordinance – *Adopted 1972. New zoning law adopted 8/19/2009 and amended 3/24/2023.*
- Subdivision Ordinance – *Subdivision Law adopted October 1964*
- Acquisition of Land for Open Space & Recreation
- NFIP Flood Damage Prevention Ordinance – *Local Law No. 3 of 2022*
- Growth Management Ordinance
- Real Estate Disclosure Requirements – *NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467*

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

The Town of Amsterdam has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for Amsterdam:

- Planning Board
- Maintenance Programs to Reduce Risk - *As part of regular maintenance programs DPW proactively addresses aspects of the Town's infrastructure that could pose risk and implements these activities both on a planned and response basis.*
- Mutual Aid Agreements
- Highway Superintendent (full time)
- Chief Building Official (*part-time*)
- Floodplain Administrator
- Community Planner (*Delaware Engineering*)
- Civil Engineer (*Delaware Engineering*)
- GIS Coordinator (*Delaware Engineering*)
- Warning Systems - *TextMyGov has been implemented as of 2023 and provides citizen engagement capability Townwide as well as subareas, such as specific water districts. The Town maintains a social media presence on Facebook for dissemination of information and also uses the Town website for this purpose. Outside of Town Hall, a digital reader board allows messages to be broadcast to the public traveling by.*

- Hazard Data

The Town of Amsterdam is governed by a Town Board, Planning Board, Zoning Board of Appeals, and Town Supervisor. The Town has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Town staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. Emergency management within Amsterdam includes volunteer fire departments along with county-wide fire departments. Emergency management programming is integrated within Town initiatives, seeking to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

The following is a list of individuals, offices and departments responsible for administration:

- Supervisor's Office
- Town Clerk's Office
- Highway Dept.
- Zoning Officer
- Water and Sewer Dept.'s
- Town Designated Engineer (Delaware Engineering)
- Town Budget Officer (Town Supervisor)

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for Amsterdam:

- Capital improvement project funding - *The capital program has been used for roadway maintenance activities and other projects and could be used in the future to fund mitigation projects.*
- Community Development Block Grant - *The Town has in the past obtained assistance for NY Rising Community Reconstruction (NYRCR) Plan-related efforts.*
- State Funding - *The Town has in the past obtained assistance for sewer engineering studies and for NY Rising Community Reconstruction (NYRCR) Plan efforts.*
- Hazard Mitigation Grant Programs
- Consolidated Local Street and Highway Improvement Program (CHIPS) – *CHIPS provides NYS funding for roadway capital improvements.*
- *Local Tax Levey* – As a NYS municipal corporation, the Town has the authority to levy property taxes within its jurisdiction. In addition, water and sewer and other special districts managed by the Town Board also have taxing authority.
- *Environmental Facilities Corporation* – EFC has provided funding for water and sewer planning and capital projects.

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- *ARPA* – The Town received one-time disbursements under federal legislation.

The Town of Amsterdam has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concern with regard to the implementation of mitigation projects and related risk reduction activities.

The Town Supervisor, in their capacity as Town Budget Officer, is responsible for the accounting of all Town funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The Town Budget Officer provides budget monitoring and financial reports to the Town Board throughout the fiscal year. The Town Clerk is responsible for managing accounts receivable.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for Amsterdam:

- Natural disaster or safety related school programs - *MC Emergency Management and Local Fire Departments*
- Citizen request management software (“TextMyGov”)
- Hagaman/Cranesville Youth Commission
- Tribes Hill Youth Commission
- CERT Team
- Public Education Program
- Natural Disaster Program in Schools
- Citizen Group or Nonprofit Focused on Emergency Preparedness
- Human Services (*outreach/activities for seniors etc.*)
- CodeRed
- Website
- Email
- Social Media

4.2 NFIP Participation and Compliance

The Town of Amsterdam has actively participated in the National Flood Insurance Program (NFIP) since 1987. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there are a total of 5 NFIP policies in force. The total annual premium is \$7,096 for a total of \$957,000 in coverage. As of February 23, 2023, a total of 7 claims amounting to approximately \$109,695 have been paid to NFIP policyholders in Amsterdam since joining the

Town of Amsterdam Annex

2023 Montgomery County Hazard Mitigation Plan

program¹³ more information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 7 describes the Town of Amsterdam's participation and continued compliance in accordance with NFIP requirements and as specified in FEMA's 2022 Local Mitigation Planning Policy Guide.¹⁴

Table 7. NFIP Participation and Compliance, Town of Amsterdam.

| REQUIRED INFORMATION | RESPONSE |
|--|---|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2022 via Town of Amsterdam Local Law No.3 of 2022 Flood Damage Prevention. |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Local Law (Section 3.2. Basis for establishing areas of Special Flood Hazard). The latest effective FIRM is dated January 19, 2018. |
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Codes & Zoning Enforcement Officer of the Town of Amsterdam administers the provisions of the Floodplain District. The Codes & Zoning Enforcement Officer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Codes & Zoning Enforcement Officer of the Town of Amsterdam has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 2 of the Town's Local Law 3 of 2022 define substantial improvement/substantial damage as 50% of market value of the structure. |

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov//reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

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Minimum standards set forth by FEMA and New York State have been adopted by the Town of Amsterdam. The Town of Amsterdam requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

The Town of Amsterdam does not participate in the Community Rating System (CRS); however, the Town has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Town's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.2.1 Improvement Opportunities

Despite the limitations and constraints faced by the Town of Amsterdam when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Town is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Town during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated versions of the Town's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.
- Ensure hazard mitigation and resilience are considered as part of Town project development activities. Where project development, such as of transportation investments, is spearheaded by other agencies, such as NYSDOT or Montgomery County, coordinate with project sponsors relative to mitigation and resilience features and strategies.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Town to cope with potential unforeseen challenges in the future, such as staff turnover or other disruptions to routine government functions and duties, that support risk reduction.
- Seek and implement more capacity building initiatives for Town staff, as appropriate, including but not limited to: continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout the town. Partner with County and State maintenance efforts.

Financial Capabilities

- Maximize opportunities through the Town’s budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Town’s chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Town to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Town’s website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Town Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- Amsterdam’s local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

Town of Amsterdam Annex

2023 Montgomery County Hazard Mitigation Plan Update

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the current status of the mitigation actions (completed, ongoing/in process, deleted, modified or deferred) included in the 2016 version of this plan. Besides current status, actions brought forward to this 2023 plan are identified in the Keep for Plan Update? Column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Town of Amsterdam.

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|----------------------------------|---|----------------|---|-----------------------|
| 1 | Vulnerable structures mitigation | Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. | Ongoing | Phase 1: Identify appropriate candidates and determine most cost-effective mitigation option (in progress). Phase 2: Work with the property owners to implement selected action based on available funding from FEMA and local match availability. | YES |
| 2 | Mutual Aid Agreements | Create/enhance/maintain mutual aid agreements with neighboring communities. | Ongoing | The Town continues to work with area municipalities and identify new areas of collaboration and resource-sharing. | YES |
| 3 | Emergency Shelters | Establish an emergency shelter at Town Hall and at the high school | Complete | | NO |

Town of Amsterdam Annex

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| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|--|----------------|---|-----------------------|
| 4 | Chuctanunda Creek corridor projects | Floodplain buffers, bikeway, and dam rehabilitation along Chuctanunda Creek | In progress | The Town has an active trails committee working on the bikeway. The Town continues to monitor the private Harrower Pond Dam and work with involved agencies. | YES |
| 5 | Stormwater upgrades | Enhance stormwater conveyance systems on Crouse Drive, Maple Street, Midline Road, and Wallins Corners Road to Bunn Creek. | Delete | This area, much of which is less heavily developed, does not experience substantial flooding such that it's a present concern of the Town. | NO |
| 6 & 7 | Old Fort Johnson projects | Old Fort Johnson conditions assessment and Rebuild retaining wall on Kayaderosseras Creeks next to Old Fort Johnson | Complete | | NO |
| 10 | Chapman Drive stormwater infrastructure | Restore storm infrastructure -- Chapman Drive | Incomplete | The primary concern is safely and effectively moving water from Chapman to the outfall at the Mohawk River, and this involves several local and state agencies as well as the CSX railroad. | YES |
| 11 | Stream monitoring upgrades | Develop a remote monitoring and gauging system for stream channels at risk of flooding. Connect to alarm capabilities. | Incomplete | The Town views information that could be provided as part of such a system as a potentially valuable input to decision-making during potential emergencies, like flood events. | YES |
| 13 | Stream debris management | Maintain Mohawk River tributaries through debris clearance | Ongoing | The Town continues to monitor riparian corridors and assess debris management needs. | YES |

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| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|--|---|----------------|---|-----------------------|
| 14 | Stabilize and revitalize neighborhoods | Conduct a detailed property inventory and analysis of existing conditions, especially in areas that experienced flooding | Incomplete | The Town views having this information as potentially important to inform future planning and response activities. | YES |
| 15 | Stream corridor cleanup and flood damage project support | Clean-up several areas along tributaries to the Mohawk River and support other flood damage projects for Fort Johnson and the Town of Amsterdam. | Complete | | NO |
| 16 | CRS participation | Support participation in the NFIP Community Rating System (CRS) program by attending CRS workshop(s) if offered within the county. Join the CRS program if adequate resources to support long term participation can be dedicated. See following related Community Assistance Visit (CAV) initiative. | Deferred | CRS participation may need to be reevaluated as the Village of Fort Johnson is dissolved and when it becomes part of the Town. | YES |
| 17 | FEMA Community Assistance program | Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed. This is a part of the process of joining CRS (above initiative). | Deferred | CRS participation may need to be reevaluated as the Village of Fort Johnson is dissolved and when it becomes part of the Town. | YES |
| 18 | Certified Floodplain Manager | Have designated NFIP Floodplain Administrator (FPA), and other local officials who would benefit, become a Certified Floodplain Manager (CFM) | Ongoing | The Town will continue to evaluate training opportunities for staff involved in floodplain management and land use decision-making. The Town has access, via its consulting engineer, to CFM personnel. | YES |
| 19 | Amsterdam Pump Station #1 | Encourage the property owner of Amsterdam Pump Station #1 to evaluate the facility's flood vulnerability and identify feasible mitigation options. | Deleted | Amsterdam Pump Station #1 is not within the Town of Amsterdam. | NO |

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| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|--|----------------|---|-----------------------|
| 20 | Crescent Avenue and Prospect Street bridges | Evaluate the bridges at Crescent Avenue and Prospect Street and their vulnerability to flood; identify feasible mitigation options | Deleted | The bridges at Crescent Avenue and Prospect Street are not situated within the Town of Amsterdam. | NO |

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2023 Montgomery County Hazard Mitigation Plan Update

Table 9. Updated Mitigation Actions (2023-2028) – Town of Amsterdam.

| Action # | Action Title | Action Description | Project Type* | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|---|--|---------------|---|----------------|--------------------------|-------------------|-------------------------|----------|
| 1 | Chuctanunda Creek corridor projects | Floodplain buffers, bikeway, and dam rehabilitation along Chuctanunda Creek | SIP | Flooding, severe thunderstorm, Hurricane/tropical storm | High | USDOT, NYSDEC, HMGP | Town of Amsterdam | Depending on Funding | High |
| 2 | Chapman Drive stormwater infrastructure | Restore storm infrastructure -- Chapman Drive | SIP | Flooding, severe thunderstorm, Hurricane/tropical storm | Medium | USDOT, NYSDEC, HMGP | NYSDOT | Short term | High |
| 3 | Hammondstown Rd stormwater | Upsize culvert pipe on this County road | SIP | Flooding, severe thunderstorm, Hurricane/tropical storm | Medium | Montgomery County; NYS | Montgomery County | Short term | High |
| 4 | Regina Drive stormwater | Replace and upgrade culvert pipe; identify upgrades that may also be needed downstream, in the City of Amsterdam | SIP | Flooding, severe thunderstorm, Hurricane/tropical storm | Medium | CHIPS, Town budget | Town of Amsterdam | Short term | High |

Town of Amsterdam Annex

2023 Montgomery County Hazard Mitigation Plan Update

| Action # | Action Title | Action Description | Project Type* | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|--|--|---------------|---|----------------|---|-------------------|-------------------------|----------|
| 5 | Stream debris management | Maintain Mohawk River tributaries through debris clearance | NSP | Flooding, severe thunderstorm, Hurricane/tropical storm | Medium | Town budget | Town of Amsterdam | Ongoing | Medium |
| 6 | Hazard Tree Management | Continue the Town's aggressive tree removal program in coordination with local utility companies to identify and prioritize trees for the most urgent removal. | NSP | Flooding, severe winter storm, severe thunderstorm, Hurricane/tropical storm, | Low | Town budget, utility companies, public road owning agencies | Town of Amsterdam | Ongoing | Medium |
| 7 | Harrower Lane conveyance system rehabilitation | Develop and implement a project to rehabilitate storm sewer along Harrower Lane | SIP | Flooding, Hurricane/Tropical Storm, Severe Thunderstorm | High | Town budget, HMGP | Town of Amsterdam | Short term | Medium |
| 8 | Upper Van Dyke Avenue at Country Ridge Drive stormwater system | Develop and implement a project to replace and/or rehabilitate aging, undersized galvanized storm sewer pipe in this location. | SIP | Flooding, Hurricane/Tropical Storm, Severe Thunderstorm | High | Town budget, HMGP | Town of Amsterdam | Depending on Funding | Medium |

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| Action # | Action Title | Action Description | Project Type* | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|-----------------------|---|---------------|---|----------------|--------------------------|---|-------------------------|----------|
| 9 | Mutual Aid Agreements | Create/enhance/maintain mutual aid agreements with neighboring communities. | AT | All | Low | Staff time | Town of Amsterdam, in partnership with other agencies | Ongoing | Medium |
| 10 | Ice jams | Support regional ice jam monitoring systems put in place by federal and other NYS partners. Evaluate ways to use this information as part of local hazard mitigation/response activities and public notifications. | AT | Flooding, severe thunderstorm | Low | Staff time, Town budget | Town of Amsterdam | Short term | Medium |
| 11 | CRS participation | Support participation in the NFIP Community Rating System (CRS) program by attending CRS workshop(s) if offered within the county. Join the CRS program if adequate resources to support long term participation can be dedicated, including pursuing a Community Assistance Visit (CAV), as appropriate. | NFIP | Flooding, Hurricane/Tropical Storm, Severe Thunderstorm | Low | Staff time, Town budget | Town of Amsterdam | Ongoing | Medium |

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2023 Montgomery County Hazard Mitigation Plan Update

| Action # | Action Title | Action Description | Project Type* | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|----------------------------------|---|---------------|---|----------------|--|---|---|----------|
| 12 | Certified Floodplain Manager | Have designated NFIP Floodplain Administrator (FPA), and other local officials who would benefit, become a Certified Floodplain Manager (CFM) | NFIP | Flooding, Hurricane/Tropical Storm, Severe Thunderstorm | Low | Staff time, Town Budget | Town of Amsterdam | Ongoing | Medium |
| 13 | Vulnerable structures mitigation | Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. | SIP | Flooding | Medium | FEMA HMA (BRIC, HMGP); Town budget or property owner for local match | Town Engineering via NFIP FPA) with NYS DHSES, FEMA support | Ongoing (outreach and specific project identification); Long term DOF (specific project application and implementation) | Medium |
| 14 | Stream monitoring upgrades | Develop a remote monitoring and gauging system for stream channels at risk of flooding. Connect to alarm capabilities. | AT | Flooding | High | USGS, academic partners, Town budget, HMA | Town of Amsterdam | Depending on Funding | Medium |

***Project Type:**

PR = Planning and Regulatory

AT = Administrative and technical

FC = Financial capabilities

EOC = Education and Outreach

NFIP = Actions Related to NFIP Participation and Compliance

SIP = Structure and Infrastructure Project

NSP = Natural Systems Protection

Capability Assessment Worksheet- Town of Amsterdam

Planning and Regulatory

| COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | | T&B TO REVIEW OLD ANNEX | |
|---|--------------------------|--|---|
| Plans | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? | NOTES FROM 2016 Annex |
| Comprehensive/Master Plan | Yes; 2004 | The plan addresses hazards and can be used to identify mitigation projects. | Planning Board last update was 2004 |
| Capital Improvements Plan | Yes; updated annually | The capital program projects address hazards and could be used to identify mitigation projects as well as to implement identified mitigation projects in the future. | The Town Council updates the CIP on an annual basis |
| Economic Development Plan | Yes | The plan addresses hazards and can be used to identify mitigation projects. | Planning Board/Town last update was 2004 (incorporated into Comprehensive Plan) |
| Local Emergency Response Plan | Yes | | 2016 Annex indicates that there is a plan in place. Department/Agency responsible: Supervisor and Fire Districts. |
| Continuity of Operations Plan | Yes | | 2016 Annex does not indicate if there is a plan in place |
| Transportation Plan | Yes | County Plan reportedly includes municipality; A transportation plan is incorporated into Chapter 6 of the 2004 Comprehensive Plan. | |
| Stormwater Management Plan | Yes | 2014 NY Rising Community Reconstruction plan includes stormwater projects listed for the Town of Amsterdam (incl. Village of Fort Johnson). | 2016 Annex indicates Planning Board/Town Council update was 2004 (incorporated into Comprehensive Plan) |
| Watershed Management Plan | Yes, 2015 | Mohawk River Watershed Management Plan, 2015 | |
| Floodplain Management Basin Plan | Yes | The plan addresses hazards and can be used to identify mitigation projects. | 2016 Annex notes there is a plan in place. Incorporated into 2004 Comprehensive Plan. |
| Open Space and Recreation Plan | Yes | Incorporated into the Town's 2004 Comprehensive Plan. 2014 NY Rising Community Reconstruction plan includes recreation and open space projects listed for the Town of Amsterdam (incl. Village of Fort Johnson). | 2016 Annex notes no Open Space Plan. No mention of Recreation Plan. |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? | NOTES FROM 2016 Annex |
| Building Code | Yes, 2020 | 2020 Edition Building Code of NY State | |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | Yes | | 2016 Annex notes a classification and date classified BCEGS as "TBD" |
| Fire department ISO rating | Yes | | |
| Site plan review requirements | Yes, Amended 2010 | Article VI Section 20 Town of Amsterdam Zoning Law, page 45. Adopted 1972. New zoning law adopted 8/19/2009 and last amended 3/24/2023. | |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? | NOTES FROM 2016 Annex |
| Zoning ordinance | Yes, Amended 2010 | Adopted 1972. New zoning law adopted 8/19/2009 and amended 3/24/2023. | |
| Subdivision ordinance | Yes, 1964 | Subdivision Law adopted October 1964 | 2016 Annex notes updates are currently in progress. |
| NFIP Flood Damage Prevention Ordinance | Yes | Local Law No. 3 of 2017, Adopted December 20, 2017. | |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | | |
| Flood insurance rate maps | Yes | Effective 1/19/2018 | 2016 Annex notes the current effective Flood Insurance Rate Maps are dated December 1, 1987. |
| Acquisition of land for open space and public recreation uses | Yes | | |
| Stormwater Management Ordinance | No | | |
| Growth Management Ordinance | Yes | | 2016 Annex indicates Planning Board/Town Council update was 2004 (incorporated into Comprehensive Plan) |
| Real Estate Disclosure Requirements | Yes | NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467 | State Mandated that Realtor disclose flooding events |

Administrative and Technical

| Administration | Yes/No | Describe capability Is coordination effective? | NOTES FROM 2016 Annex |
|--|-----------------|---|--|
| Planning Commission | Yes | Meets monthly; coordinates with other Departments/jurisdictions; has staff and professional consulting resources available | |
| Mitigation Planning Committee | No | | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | Yes | As part of regular maintenance programs DPW proactively addresses aspects of the Town's infrastructure that could pose risk and implements these activities both on a planned and response basis. | |
| Mutual aid agreements | Yes | | 2016 Annex notes that there are agreements within surrounding municipalities |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| Chief Building Official | Yes; PT | | |
| Floodplain Administrator | Yes | | Code Enforcer - Tom CiCaprio |
| Emergency Manager | No | | Amsterdam Police/Fire Departments and Engineering Department |
| Community Planner | Yes | Delaware Engineering provides consulting planning services to the Town. | Delaware Engineering? |
| Civil Engineer | Yes | Delaware Engineering provides consulting engineering services to the Town. | Delaware Engineering? |
| GIS Coordinator | Yes | Delaware Engineering provides consulting GIS services to the Town. | Delaware Engineering? |
| Other | | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| Warning systems/services (Reverse 911, outdoor warning signals) | Yes | TextMyGov has been implemented as of 2023 and provides citizen engagement capability Townwide as well as subareas, such as specific water districts. | |
| Hazard data and information | Yes | Delaware Engineering provides consulting planning and engineering services to the Town. | Delaware Engineering? |

| | | | |
|----------------|-----|---|------------------------------|
| Grant writing | Yes | Delaware Engineering provides consulting grant writing services to the Town. | <i>Delaware Engineering?</i> |
| Hazus analysis | Yes | Delaware Engineering provides consulting GIS services to the Town. Montgomery County coordinates preparation of HMP, which includes Hazus analysis. | <i>Delaware Engineering?</i> |
| Other | | | |

Financial

| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | NOTES FROM 2016 Annex |
|--|------------------------------------|--|-----------------------|
| Capital improvements project funding | Yes | The capital program has been used for roadway maintenance activities and other projects and could be used in the future to fund mitigation projects. | |
| Authority to levy taxes for specific purposes | Yes | This capability has supported mainly water and sewer infrastructure in the Town and can be used in the future to fund future mitigation actions relating to these systems. | |
| Fees for water, sewer, gas, or electric services | Yes | The Town charges user fees for water and sewer service. | |
| Impact fees for new development | No | | |
| Storm water utility fee | No | | |
| Incur debt through general obligation bonds and/or special tax bonds | Yes | This capability has supported mainly water and sewer infrastructure in the Town and can be used in the future to fund future mitigation actions relating to these systems. | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | The Town has in the past obtained assistance for NY Rising Community Reconstruction (NYRCR) Plan-related efforts. | |
| Other federal funding programs | No | | |
| State funding programs | Yes | The Town has in the past obtained assistance for sewer engineering studies and for NY Rising Community Reconstruction (NYRCR) Plan efforts. | |
| Hazard Mitigation Grant Programs | Yes | | |

Education and Outreach

| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
|---|--------|---|-----------------------------|
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | | |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | No | | |
| Natural disaster or safety related school programs | Yes | MC Emergency Management and Local Fire Departments | |
| StormReady certification | No | | |
| Firewise Communities certification | No | | |
| Public-private partnership initiatives addressing disaster-related issues | No | | |
| Other | | | |

TOWN OF CANAJOHARIE

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Town of Canajoharie

12 Mitchell Street

Canajoharie, NY 13317

<https://www.co.montgomery.ny.us/web/municipal/tcanajoharie/>

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Town of Canajoharie Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the Town of Canajoharie not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Town of Canajoharie.

| Primary Point of Contact | Alternate Point of Contact |
|--|--|
| Erica Hayes, Town Clerk 12 Mitchell Street, Canajoharie, NY 13317 518-376-3112 canajoharietownclerk@gmail.com | Peter Vroman, Town Supervisor 12 Mitchell Street, Canajoharie, NY 13317 347-606-9342 canajohariesupervisor@gmail.com |

1. Municipality Profile

1.1 Brief History

The native name, "Gana-jo-ha-ray," means a "great boiling pot" referring to a local hole in the Canajoharie Creek bed. The region was home to the Mohawk Tribe of the Iroquois. The Town of Canajoharie was formed in 1788, from the Towns of Minden and Root. In 1865, the population of the Town was 4,248. Beech-Nut, the baby food producer, was founded in Canajoharie in 1891 and served as the largest employer in the Town for over a century.

1.2 Location and Demographics

The Town of Canajoharie is a sparsely populated agricultural community of approximately 43 square miles located in the southwestern portion of Montgomery County south of the Mohawk River, about 45 miles west of Albany. It shares its boundaries with the Town of Palatine, Village of Palatine Bridge, and Village of Nelliston to the north; Town of Root to the east; Counties of Otsego and Schoharie to the south and Town of Minden and Village of Fort Plain to the west. The Villages of Ames and Canajoharie are located within its borders. Hamlets within the town's boundaries include Buel, Marshville, Sprout Brook, Van Deusenville and Waterville.

Land surface ranges from around 300 feet above mean sea level along the Mohawk River to a high of 1,460 feet above mean seal level on Budd Hill, south of the Village of Ames. The Town is located in the Canajoharie Creek sub watershed to the Mohawk River with predominant drainage features including Schoharie, Creek Bowman's Creek and Flat Creek. A more detailed description of the Eastern Alplaus Kill Sub watershed is included in the HMP Community Asset Inventory Section 5.6. Canajoharie's societal and infrastructural resources, including critical assets are highlighted in Figure 1.

Canajoharie is home to 3,682 residents, with a population density of less than 43 people per square mile.

Town of Canajoharie Annex

2023 Montgomery County Hazard Mitigation Plan

According to the 2020 US Census¹, 85% of their 1,497 housing units are occupied, while 15% of the housing units remain vacant. Of the occupied units, 74% are owner occupied and 26% are renter occupied. 7.4% of the total population is below the poverty level, which includes 8% of seniors 65 and over. Approximately 16 percent of the town's residents have attained a four-year college degree or higher. The median household income for Canajoharie is \$57,111. There is little racial or ethnic diversity in the community with 95% reporting as White.

1.3 Governance

The Town of Canajoharie is governed by a supervisor and four-member Town Council. This governing body will assume responsibility for adoption and implementation of this plan.

1.4 Land Use and Development

There are 33,811 total acres of land in the town. The primary land use in the town is agricultural, which includes approximately 90% of the town. Agricultural land totals 20,050 acres with an average parcel size of 108 acres. Rural residential is the second largest use of land with 4,970 acres devoted to this use or 14.7% of the total land area. Vacant land constitutes another 3,888 acres or 11.5% of the land area.

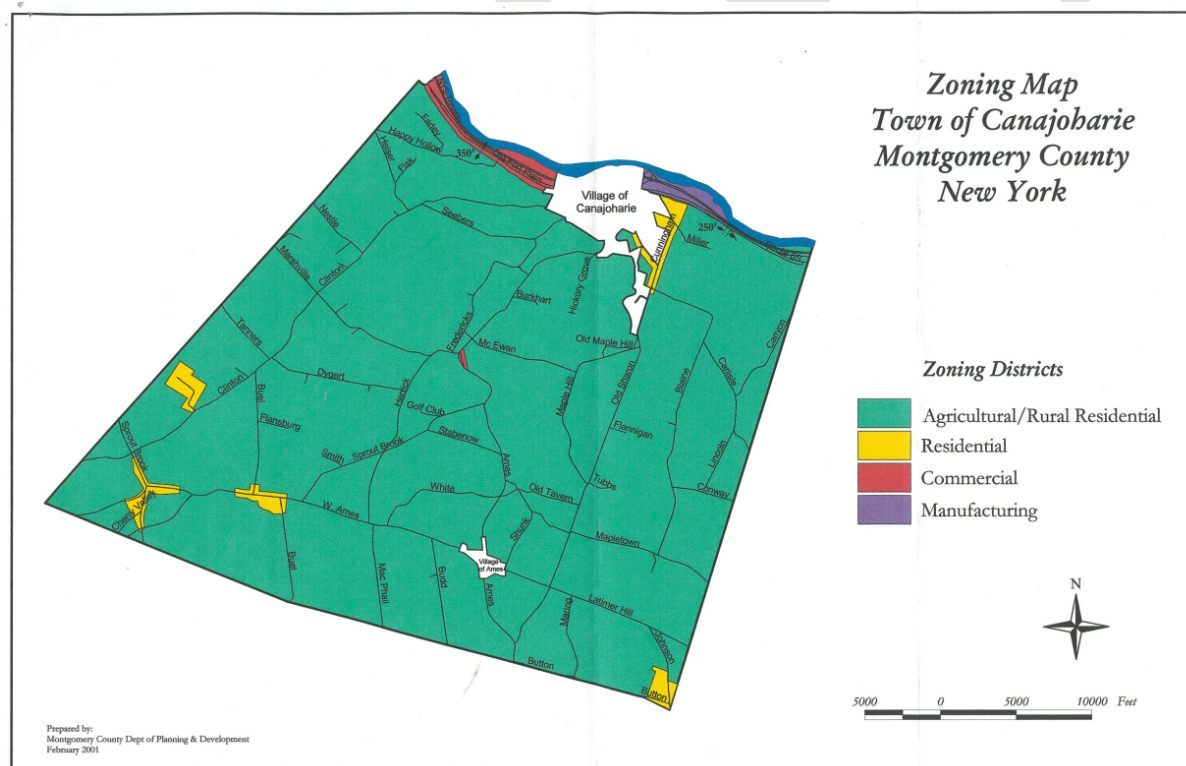


Figure 1. Town of Canajoharie Land Use

¹ <https://censusreporter.org/profiles/06000US3605712122-canajoharie-town-montgomery-county-ny/>

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2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snow storms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for Canajoharie as evidenced during Hurricane Irene. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Town of Canajoharie that is not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for Earthquakes is included.

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Town in the past 10 years.

Table 1. Hazard Event History 2011-2021²

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------------------|--|---|
| August 26 – September 11, 2011 | Hurricane Irene and Remnants of Tropical Storm Lee | In Montgomery County, flash flooding was also reported in numerous locations, along with many road closures, and approximately 1000 evacuations. Record flooding occurred on the Canajoharie Creek in Canajoharie. |
| June 26 - July 10, 2013 | Severe Storms Flooding | There was damage to the retaining wall that supports the north side of Happy Hollow Road and a private bridge/driveway to a home. A private bridge to a residence was damaged. One side of the bridge was held up by a retaining wall that was damaged by scouring from high water. The other end of bridge was also scoured. The Town requested public assistance from FEMA. |
| June 28, 2013, | Flash Flood | Significant flooding occurred throughout Canajoharie due to flash flooding from heavy rainfall, especially for areas along the Canajoharie Creek. Interstate 90 (The New York State Thruway) was closed between exits 29 and 29A due to flooding. |
| August 22, 2014 | Flash Flood | Flash flooding occurred along the Canajoharie Creek in Canajoharie due to thunderstorm heavy rainfall. Old Sharon Road was closed between Carlisle Road and Maple Hill Road due to high water. |
| Feb 25, 2016 | Heavy Rain | An apartment building located at 3 Rock Street in Canajoharie was damaged due to flooding from heavy rain occurring over frozen ground. Utility services were cut to the building and firefighters provided temporary shelter for residents until the Red Cross was able to open an emergency shelter. |

² <https://www.ncdc.noaa.gov/stormevents/>

2.2 Community Assets

Ten community assets were identified for the Town of Canajoharie for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID corresponds with locations shown in **Figure 1**.

Table 2. Community Assets in the Town of Canajoharie

| | Asset ID | Subtype | Name |
|---|-----------|-----------------------|--|
| SOCIAL | 1 | School/ Private | Twin Mountain Amish School |
| | 2 | School/ Private | Sunset View Amish School |
| | 3 | Historic Site | Site of Central Asylum School for Deaf |
| INFRASTRUCTURAL | 4 | Dam | Rattlesnake Hill #7 Marsh Dam |
| | 5 | Dam | (158-0443) |
| | 6 | Dam | Smith Dam #1 |
| | 7 | Dam | (158-0458) |
| | 8 | Dam | (158-0461) |
| | 9 | Dam | (158-0505) |
| | 10 | Sub/Switching Station | Canajoharie Substation #1 |
| Bold indicated asset is identified as an essential facility | | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are five essential facilities in town. There is no designated emergency shelter. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Town of Canajoharie.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|----------------------------|---------------------------------|------------------|----------|----------------|
| Twin Mountain Amish School | 163 Buel Road, Canajoharie | Unknown | N | N |
| Sunset View Amish School | 184 Blaine Road, Canajoharie | Unknown | N | N |
| Canajoharie Substation #1 | Clinton Road | Y | N | N |

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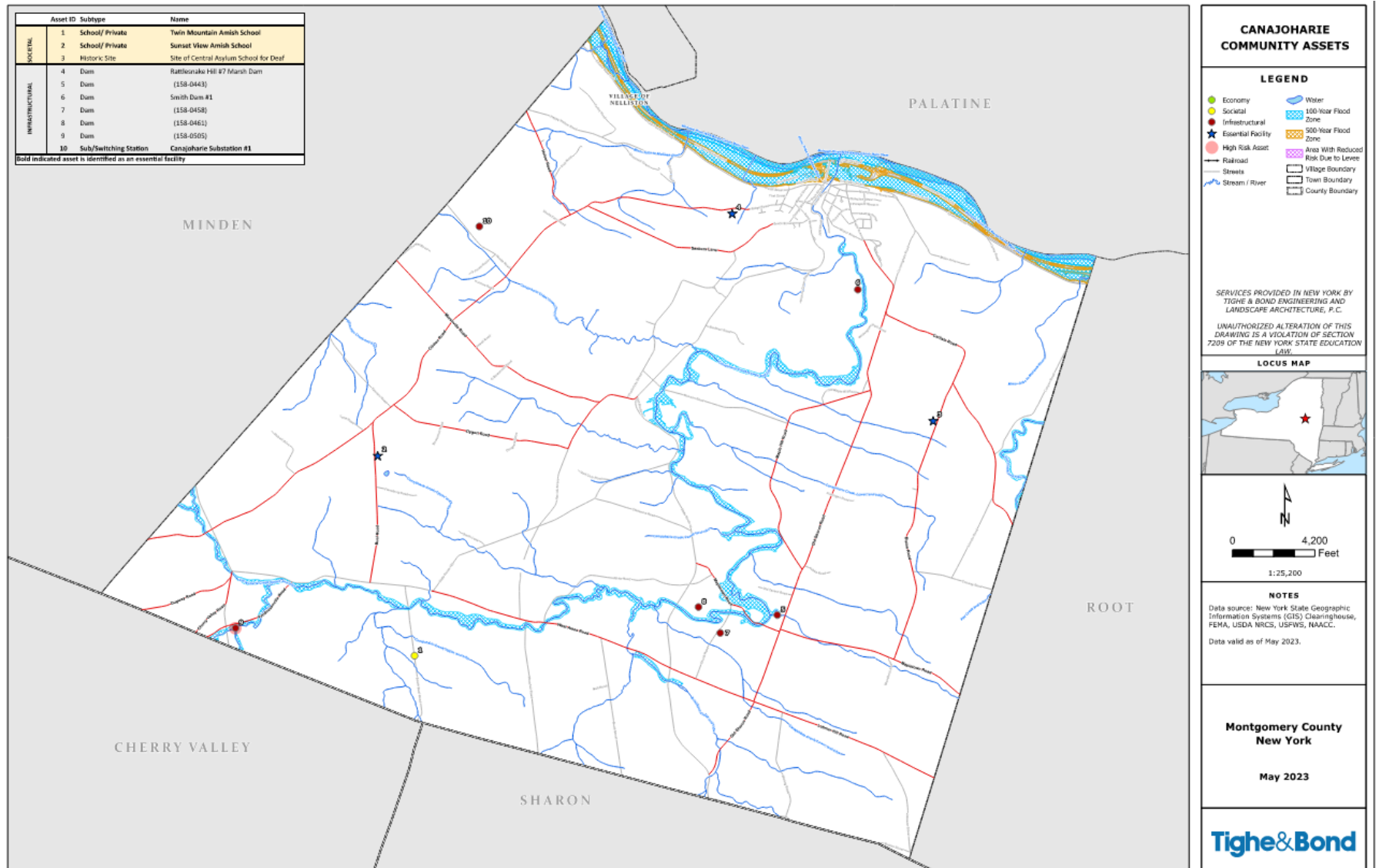


Figure 2. Town of Canajoharie FEMA Flood Zones, Community Assets and Essential Facilities

Town of Canajoharie Annex

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2.4 Repetitive Loss and Severe Repetitive Loss Properties

There was one identified repetitive loss properties in Canajoharie in the 2016 HMP. As of 2022, according to FEMA records no repetitive loss properties were identified. As of December 31, 2022, 1 policy was in force. The Town of Canajoharie had a total of 6 claims totaling \$409,201 in losses for all NFIP-insured structures. It should be noted that according to FEMA data there are 184 structures within the 100-year flood plain (including the Villages of Canajoharie and Ames).

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Town, by hazard as shown in Table 4. The estimated value of at risk assets is based on the Town's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Town of Canajoharie Vulnerable Assets Exposure Analysis³.

| Hazard | At-Risk All Properties ⁴ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|--------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$257,990,179 | 1,446 | \$444,900 | 20 | \$192,500 | 1 |
| Severe Thunderstorm | \$257,990,179 | 1,446 | \$444,900 | 20 | \$192,500 | 1 |
| Severe Winter Storm | \$257,990,179 | 1,446 | \$444,900 | 20 | \$192,500 | 1 |
| Tornado | \$257,990,179 | 1,446 | \$444,900 | 20 | \$192,500 | 1 |
| Flood | | | | | | |
| 1% Annual Chance | \$50,473,787 | 184 | - | 0 | - | 0 |
| 0.2% Annual Chance | \$27,617,350 | 75 | - | 0 | - | 0 |

³ Values based on 50% assessors full market value

⁴ Includes Villages of Ames & Canajoharie

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2.6 Townwide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Town of Canajoharie. The totals include capital stock and economic loss estimates.

*Table 5 Town of Canajoharie Earthquake Vulnerability Analysis**

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 1,446 | 1,446 |
| Total direct building economic loss | \$427,000 | \$5,986,000 |

- *Hazus includes the villages of Canajoharie and Ames in these calculations.*

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Canajoharie Problem Statements.

| Problem Area | Description |
|-----------------------------|--|
| Primary Hazards of Concern | |
| Trees | Currently the town is undergoing continued efforts to keep potential issues trees maintained and removed when documented. Every Year there is inspection done of roadways and growth or decay of existing trees and then trees are removed or limbed to eliminate issue. |
| Geographic Areas of Concern | |
| | Local Areas of Flooding- Dygart Road, McPhail Road, White Road, Mapletown Road, South Buel Road, VanDeusenville Road |
| Canajoharie Creek | |
| Mohawk River | |
| | |
| Vulnerable Community Assets | |
| Shelters | There are no local shelters identified in Canajoharie. These have been resolved, however Bridge @ shunk and Mapletown is in poor condition. Clinton Road and Old Sharon Road culverts have been repaired but need cleaning, McPhail Road needs cleaning. The DPW Barn is located in a flood zone in the Village of Ames. It is mentioned in the Village of Ames Annex, but is included in the Town of Canajoharie as a mitigation action, New Town Barn is not in Flood Zone and old barn will be Cold Storage only. |
| Bridges/ Culverts | |
| Critical Facilities | |
| | |

4. Capabilities

The Town of Canajoharie is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Town's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Town of Canajoharie completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

4.1 Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for Canajoharie:

- Comprehensive/Master Plan – Adopted 1992
- Capital Improvements Plan – Updated Annually
- Local Emergency Response Plan – County Emergency Operations Plan
- Transportation Plan – Included in County Plan
- Watershed Management Plan – Mohawk River Management Plan
- Floodplain Management Basin Plan – DPW working with County Management Plan
- Building Codes – State Code
- Growth Management Ordinance – Local Law #1, 2001
- Zoning Ordinance – Local Law #1, 2001
- Subdivision Ordinance – Local Law #1, 2001
- Flood Damage Prevention Ordinance – Local Law #5-Adpoted 2017

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

The Town of Canajoharie has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The

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administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for Canajoharie:

- Planning Commission
- Mutual Aid Agreements
- Chief Building Official
- Floodplain Administrator
- Emergency Manager
- Community Planner (*MCBDC*)
- GIS Coordinator (*MCBDC*)
- Hazard Data- (*MCBDC*)

The Town of Canajoharie is governed by the Town Council, Planning Board, Zoning Board, and Town Supervisor. The Town has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Town staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. Emergency management services within Canajoharie include local and county-wide fire departments. Emergency management programming is integrated within town initiatives, seeking to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.2 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for Canajoharie:

- Federal Funding (future funds can be obtained)
- State Funding (future funds can be obtained)
- Hazard Mitigation Grant Programs (2023 Hazard Mitigation Plan)

The Town of Canajoharie has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concern with regard to the implementation of mitigation projects and related risk reduction activities.

The Town Clerk and Town Bookkeeper are responsible for the accounting of all Town funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The “Town Supervisor, along with Bookkeeper and Clerk” provide budget monitoring and financial reports to the “Town Council” throughout the fiscal year.

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4.1.3 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for Canajoharie:

- Storm Ready Certification
- CERT Team
- Public Education Program
- Natural Disaster Program in Schools
- Citizen Group or Nonprofit Focused on Emergency Preparedness
- Human Services (*outreach/activities for seniors etc.*)
- Website
- Social Media

4.2 NFIP Participation and Compliance

The Town of Canajoharie has actively participated in the National Flood Insurance Program (NFIP) since 1983. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there is only one NFIP policy in force. The total annual premium is \$1,321 for a total of \$120,000 in coverage. As of February 23, 2023, a total of 6 claims amounting to approximately \$409,201 have been paid to NFIP policyholders in Canajoharie since joining the program.¹³ More information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 7 describes the Town of Canajoharie's participation and continued compliance in accordance with NFIP requirements and as specified in FEMA's 2022 Local Mitigation Planning Policy Guide.¹⁴

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov//reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

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Table 7. NFIP Participation and Compliance, Town of Canajoharie.

| REQUIRED INFORMATION | RESPONSE |
|--|--|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2017 via Town of Canajoharie Local Law # 5 Flood Damage Prevention. |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Ordinance Section 3.2 Basis for establishing areas of special flood hazard. Latest effective FIRM is dated January 19, 2018. |
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Code Enforcement Official of the Town of Canajoharie administers the provisions of the Floodplain District. The Building Code Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Code Enforcement Official of the Town of Canajoharie has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 2 define substantial improvement/substantial damage as 50% of market value of the structure. |



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Minimum standards set forth by FEMA and New York State have been adopted by the Town of Canajoharie.

The Town of Canajoharie does not participate in the Community Rating System (CRS), however, the Town has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Town's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.3 Improvement Opportunities

Despite the limitations and constraints faced by the Town of Canajoharie when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Town is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Town during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated versions of the Town's Comprehensive Plan, CIP, Transportation Plan, Watershed Management Plan, and Floodplain Management Plan, or others, especially as it relates to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Town to cope with potential unforeseen challenges in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Town staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout town.

Financial Capabilities

- Maximize opportunities through the Town's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Town's chances

for a grant award.

- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Town to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Town's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Town Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Town should coordinate with the State NFIP Coordinator on possible updates or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- The Town of Canajoharie should require two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibit any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.
- Canajoharie's local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood)
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

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2023 Montgomery County Hazard Mitigation Plan Update

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status (Completed, Partially Completed, In Progress, Deleted), actions brought forward to this 2023 plan are identified in the Keep for Plan Update? column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Town of Canajoharie

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|--|---|----------------|--------------------------------|-----------------------|
| 1 | Structural Mitigation: Elevation, Flood Proofing, Acquisition / Relocation | Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario.” | Completed | | NO |
| 2 | Happy Hollow Road Lower End Streambank Stabilization | Streambank stabilization on the lower end of Happy Hollow Road. | Completed | | NO |
| 3 | Happy Hollow Road Culvert Upsizing and Retaining Wall Replacement | Upsize culvert and replace retaining wall on Happy Hollow Road. | Completed | | NO |
| 4 | Initiatives Section 9.1 County Annex and HMP Support | Support County-wide initiatives identified in Section 9.1 of the County Annex. Support county-wide initiatives identified in the Montgomery County Hazard Mitigation Plan. | Completed | | NO |

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| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|--|----------------|--|-----------------------|
| 5 | Town DPW / Barn Relocation for Flood Resilience | Relocate the Town DPW facility/barn. It is currently located in a floodplain and experiences damage during flood events. The facility is in the Village of Ames. The Town has identified possible locations within the municipality. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario.” | In Progress | Discussions held and a new location selected along with a salt storage barn grant in 2018, but no other work done. | YES |
| 6 | Shunk Road Bridge Flood Vulnerability Assessment and Mitigation | Evaluate the bridge on Shunk Road and its flood vulnerability; identify feasible mitigation options. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario.” | Completed | | NO |

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Table 9. Updated Mitigation Actions (2023-2028) – Town of Canajoharie

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|---|--|---------------------|------------------|----------------|---|---|-------------------------|----------|
| 1 | Town DPW / Barn Relocation for Flood Resilience | Relocate the Town DPW facility/barn. It is currently located in a floodplain and experiences damage during flood events. The facility is in the Village of Ames. The Town has identified possible locations within the municipality. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario.” | Property Protection | Flood | High | Town, FEMA, NYS DHSES, County, Municipality | DPW and Town Administration | 2023-2028 | High |
| 2 | Canajoharie Creek/Maple town Road | Creek in this area continues to flood when there is any significant rain, need to work with County as this is a county Road to mitigate this issue, whether it is increasing BANK Structure or clearing out and deeming Flood areas | Public Safety | Flood | High | Town, FEMA, NYS DHSES, County, Municipality | DPW, Town Administration, Montgomery County | 2023-2028 | High |
| 3 | Maple Hill Road and McEwan Road Intersection | Intersection continues to flood with any significant rain fall or snow melt, hazard to traffic and bus routes. Need to increase capacity of Culverts on both roads at intersection. Require cooperation with County as they are county roads. | Public Safety | Flood | High | Town, FEMA, NYS DHSES, County, Municipality | DPW, Town Administration, Montgomery County | 2023-2028 | High |



Capability Assessment Worksheet- Town of Canajoharie

Planning and Regulatory

COUNTY TO WORK WITH JURISDICTIONS TO ANSWER

T&B TO REVIEW OLD ANNEX

| Plans | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? | NOTES FROM 2016 Annex |
|---|----------------|---|---|
| Comprehensive/Master Plan | Yes; 1992 | Yes | 2016 Annex indicates PB adopted Master Plan in 1992. |
| Capital Improvements Plan | Yes | No | Town Administration updates the CIP on an annual basis |
| Economic Development Plan | No | | |
| Local Emergency Response Plan | Yes | Yes | 2016 Annex indicates that there is a Emergency Operation Plan in place, notes OEM/is Part of the County's Plan. Also a Comprehensive Emergency Management Plan, also part of the County's plan, OEM is responsible. |
| Continuity of Operations Plan | No | | |
| Transportation Plan | Yes | Yes | 2016 Annex notes in the Town of Canajoharie that the County Plan includes municipalities |
| Stormwater Management Plan | No | | |
| Watershed Management Plan | Yes | Yes | Mohawk River Watershed Management Plan, 2015 |
| Floodplain Management Basin Plan | Yes | Yes | Local DPW, annual check/maintenance |
| Open Space and Recreation Plan | No | | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? | NOTES FROM 2016 Annex |
| Building Code | Yes | Yes | Accept minimum NYS code; have to adopt state building code and can enhance if wanted |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | | |
| Fire department ISO rating | No | | |
| Site plan review requirements | Yes | Yes | Zoning Law of the Town of Canajoharie, Local Law No. 1 of 2001; adopted April 5, 2001 |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? | NOTES FROM 2016 Annex |
| Zoning ordinance | Yes | Yes | Zoning Law of the Town of Canajoharie, Local Law No. 1 of 2001; adopted April 5, 2001 |
| Subdivision ordinance | Yes | Zoning Law of the Town of Canajoharie, Local Law No. 1 of 2001; adopted April 5, 2001 | The Planning Board administers subdivision, and can condition projects to reduce hazards under Chapter 210 |
| NFIP Flood Damage Prevention Ordinance | Yes | Yes | Local, Code Enforcement Office |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | | |
| Flood insurance rate maps | Yes | Updated January 19, 2018 | |
| Acquisition of land for open space and public recreation uses | No | | |
| Stormwater Management Ordinance | No | | |
| Growth Management Ordinance | Yes | No | Zoning Law of the Town of Canajoharie, Local Law No. 1 of 2001; adopted April 5, 2001 |
| Real Estate Disclosure Requirements | Yes | No | NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467 |

Administrative and Technical

| Administration | Yes/No | Describe capability Is coordination effective? | NOTES FROM 2016 Annex |
|--|-------------------------|---|--|
| Planning Commission | Yes | Yes | |
| Mitigation Planning Committee | No | | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | No | | |
| Mutual aid agreements | Yes | no | Surrounding municipalities |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| Chief Building Official | Yes | Yes | |
| Floodplain Administrator | Yes | Yes | Leslie Hassan, CEO/Zoning Officer (per NYSDEC records) |
| Emergency Manager | Yes | Yes | |
| Community Planner | Yes | Yes, MCBDC | Planning Board or McDonald Engineering |
| Civil Engineer | No | | |
| GIS Coordinator | Yes | Yes, MCBDC | |
| Other | | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| Warning systems/services (Reverse 911, outdoor warning signals) | No | | McDonald Engineering? |
| Hazard data and information | Yes | 2023 hazard mitigation plan | McDonald Engineering? |
| Grant writing | yes | Yes | |
| Hazus analysis | No | | McDonald Engineering? |
| Other | | | |

Financial

| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | NOTES FROM 2016 Annex |
|--|------------------------------------|--|-----------------------|
| Capital improvements project funding | No | Future funding can be obtained. | |
| Authority to levy taxes for specific purposes | Yes | no | |
| Fees for water, sewer, gas, or electric services | Yes | No | Sewer District No. 1 |

| | | | |
|--|-----|---------------------------------|--|
| Impact fees for new development | No | | |
| Storm water utility fee | No | | |
| Incur debt through general obligation bonds and/or special tax bonds | Yes | | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | No | Future funding can be obtained. | |
| Other federal funding programs | Yes | Future funding can be obtained. | |
| State funding programs | yes | Future funding can be obtained. | |
| Hazard Mitigation Grant Programs | yes | 2023 hazard mitigation plan | |

Education and Outreach

| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
|---|--------|---|-----------------------------|
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | | |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | No | | |
| Natural disaster or safety related school programs | No | | |
| StormReady certification | Yes | County wide certification | <i>Not participating</i> |
| Firewise Communities certification | No | | <i>Not participating</i> |
| Public-private partnership initiatives addressing disaster-related issues | No | | |
| Other | | | |

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX NOVEMBER 2023



Town of Charleston

480 Corbin Hill Road

Sprakers, NY 12166

<https://www.co.montgomery.ny.us/web/municipal/charleston/>

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Town of Charleston Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the Town of Charleston not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Town of Charleston.

| Primary Point of Contact | Alternate Point of Contact |
|---|---|
| Robert Sullivan, Supervisor 480 Corbin Hill Rd. Sprakers, NY 12166 (518) 423-3744 sully3391@frontiernet.net | Ellen McHale, Town Council Representative 2031 Burtonville Road, Esperance, NY 12066 (518) 875-6889 |

1. Municipality Profile

1.1 Brief History

The Town of Charleston was formed by a division of the original "Town of Mohawk" in 1793. This division, which also created the Town of Florida, terminated Mohawk as a town until another town with that name (Mohawk) was created in 1837. Charleston was reduced in size in 1823, when the Towns of Glen and Root (in part) were established.

1.2 Location and Demographics

The Town of Charleston is a sparsely populated agricultural community of approximately 43 square miles. It lies along the south border of Montgomery County, and is the only town that does not border the Mohawk River. It occupies a portion of the high plateau region immediately west of Schoharie Creek, and the majority of the landscape is rolling uplands. The Town is located across the Fly Creek/Schoharie Creek/ sub watershed to the Mohawk River with predominant drainage features including Schoharie Creek and its tributaries including Wilsey Creek, in addition to Yateville Creek and Fly Creek. A more detailed description of the Central Cayadutta Creek/ Fly Creek/Schoharie Creek/ Sub watershed is included in the HMP Community Asset Inventory Section 5.1 . The Town includes the hamlets of Burtonsville located at the southeastern corner of the town on the Schoharie Creek, Oak Ridge located on NY-30A near the southern town line, and Charleston Four Corners located on NY-162 and Rockwell Corners. It shares its boundaries with the Town of Glen to the north; Town of Florida and Schenectady County to the east; Schoharie County to the south; and Town of Root to the west.

Charleston's societal, economic, infrastructural and economic resources, including critical assets are highlighted in Figure 1.

Town of Charleston Annex

2023 Montgomery County Hazard Mitigation Plan

Charleston is home to 1,336 residents, with a population density of less than 32 people per square mile. According to the 2020 US Census¹, 81% of their 646 housing units are occupied, while 19% of the housing units remain vacant. Of the occupied units, 95% are owner occupied and 5% are renter occupied. 8.4% of the total population is below the poverty level, which includes 3% of seniors 65 and over. Approximately eighteen percent of the town's residents have attained a four-year college degree or higher. The median household income for Charleston is \$71,420. There is little racial or ethnic diversity in the community with 96% reporting as white, and 4% as multi-racial.

1.3 Governance

The Town of Charleston is governed by a supervisor and a four-member council. This governing body will be responsible for the adoption and implementation of this plan.

1.4 Land Use and Development

There are 1,855,656 total acres of land in the town. The primary land use in the town is agricultural, which includes approximately 60% of the town. Agricultural land totals XX acres with an average parcel size of XX acres. State Forest is the second largest use of land with XX acres devoted to this use or 14.7% of the total land area. Vacant land constitutes another 3,888 acres or 11.5% of the land area. No significant development is anticipated at this time.

¹ <https://censusreporter.org/profiles/06000US3605713816-charleston-town-montgomery-county-ny/>

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snow storms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for Charleston as evidenced during Hurricane Irene, especially for the hamlet of Burtonsville and area along the Schoharie Creek. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Town of Charleston that is not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for Earthquakes is included

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Town in the past 10 years.

Table 1. Hazard Event History 2011-2021²

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------------------|--|--|
| August 26 – September 11, 2011 | Hurricane Irene and Remnants of Tropical Storm Lee | Town of Charleston suffered several severe road damages, three homes were destroyed in the Burtonsville area and not rebuilt. Other homes in the Sprakers/Esperance area suffered less severe damage. The Town was reimbursed by FEMA in the amount of \$117,845.50. Power was lost for several days. The municipal building was used as a safe house. Town of Charleston had a large cleanup effort due to dam of debris. FEMA Reimbursed the Town for manual labor, equipment, debris removal, administrative time. Several volunteers were logged for two days which were also submitted to FEMA. |
| March 7-8, 2018 | Severe Winter Storm with high snowfall rates | A nor'easter dropped 30" of snow in the Western Catskills, with a state of emergency called. All residents were ordered to stay off the roads. |
| Winter 2014-2015 | Severe Winter Storm/ Extreme Temperatures | Road damage due to extreme cold temperatures and snow. CHIPs funds were provided to fund repairs. |
| August 8, 2019 | Thunderstorm Wind | An upper-level disturbance moved through the region ahead of a surface cold front, which sparked off strong to severe thunderstorms during the afternoon and evening hours of Thursday, August 8th, 2019. As a result, numerous trees and wires were downed across the region. Some of the storms also produced severe hail. A tree was reported down across Burtonsville Road in the town of Burtonsville. |

² <http://ncdc.noaa.gov/stormevents>,

2.2 Community Assets

Twenty eight Community Assets were identified for the Town of Charleston for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID correspond with locations shown in **Figure 1**.

Table 2. Community Assets in the Town of Charleston

| | Asset ID | Subtype | Name |
|-----------------|----------|----------------------------------|---|
| ECONOMY | 1 | Homestead Working Farm | Saipua: The Farm at World's End |
| | 2 | Winery | Hummingbird Hills Winery |
| | 3 | Diversified Agriculture | Mulligan Creek Acres |
| | 4 | Restaurant | The Stockyard Public House |
| ENVIRONMENT | 5 | State Forest | Charleston State Forest |
| | 6 | Land Conservancy | Landis Arboretum |
| | 8 | Town Forest | Burbine Forest |
| | 9 | Land Conservancy | Mohawk Hudson Land Conservancy - Schoharie Creek Preserve |
| | 10 | Land Conservancy | Schoharie River Center & Nature Preserve |
| INFRASTRUCTURAL | 11 | Municipal / Public Safety | Charleston Fire Dept |
| | 12 | Municipal / Public Safety | Burtonville Fire Dept |
| | 13 | Dam | Charleston State Area Marsh Dam #2 |
| | 14 | Dam | Charleston State Area Marsh Dam #1 |
| | 15 | Dam | Charleston State Area Marsh Dam #3 |
| | 16 | Dam | Charleston State Area Marsh Dam #4 |
| | 17 | Dam | Charleston State Area Marsh Dam #5 |
| | 18 | Dam | Charleston State Area Marsh Dam #6 |
| | 19 | Dam | Charleston State Area Marsh Dam #7 |
| | 20 | Dam | Charleston State Area Marsh Dam #9 |
| | 21 | Dam | Charleston State Area Marsh Dam #8 |
| | 22 | Dam | Charleston State Area Marsh Dam #10 |
| | 23 | Dam | Herrick Fish Pond Dam |
| | 24 | Dam | Frank Pond Dam |
| | 25 | Historic Site | Charleston Baptist Church of 1797 |

| | | | |
|--|----|-------------------------|--|
| | 26 | Municipal/ Recreational | Burbine Forest Disc Golf |
| | 27 | Municipal/Historical | Town of Charleston Historical Society |
| | 28 | Historic Site | Christian Church of Charleston Four Corners |
| | 29 | Historic Site | Burtonville Historic Methodist Church/now Schoharie River Center's Cultural Center |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are two essential facilities in town, and no emergency shelters. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Town of Charleston.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|-----------------------|--------------------------------|------------------|----------|----------------|
| Charleston Fire Dept | 1412 East Lykers Rd, Sprakers | Y | N | N |
| Burtonville Fire Dept | 2052 Burtonville Rd, Esperance | Y | Y | Y |

Town of Charleston Annex

2023 Montgomery County Hazard Mitigation Plan

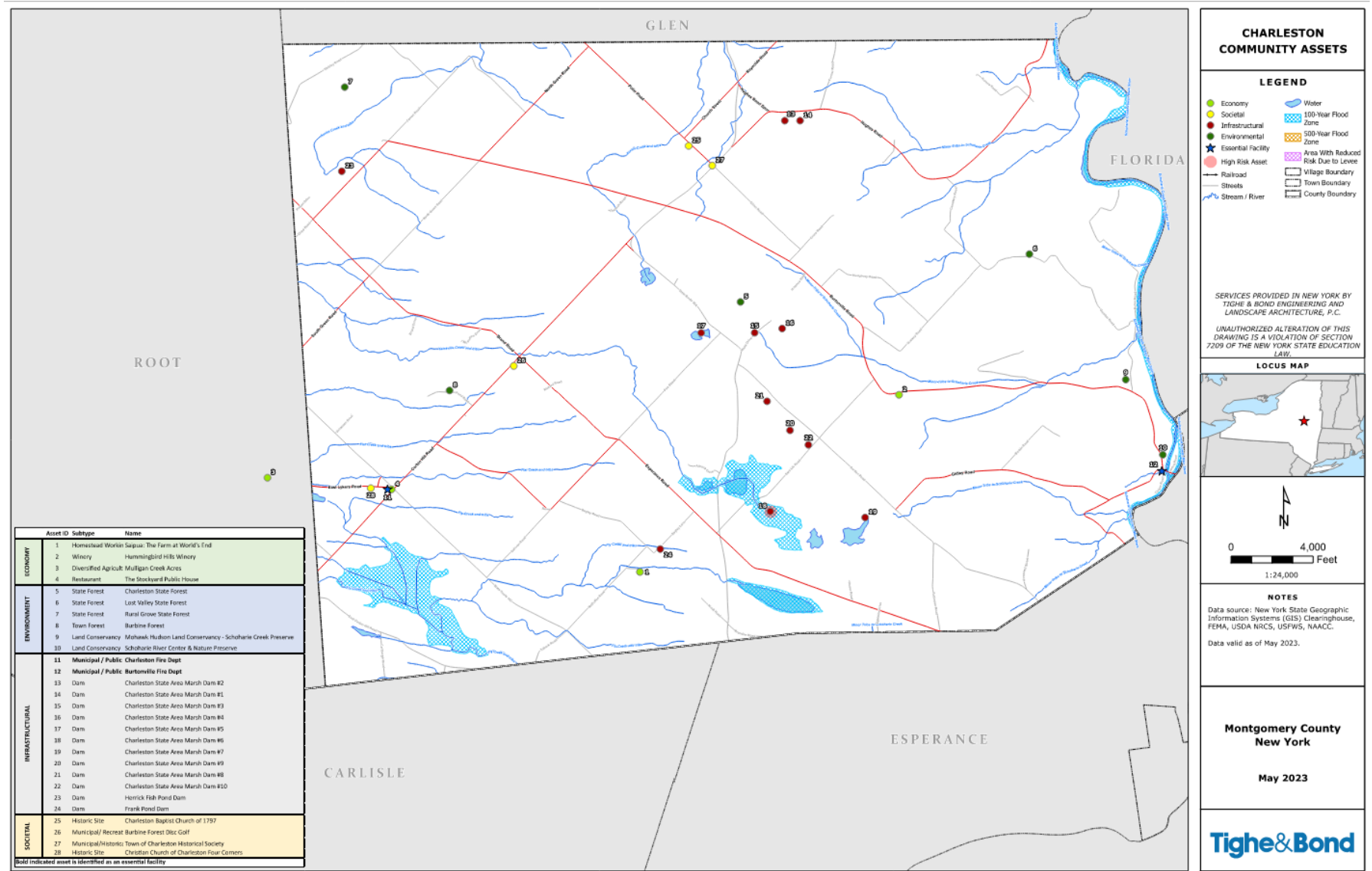


Figure 1. Town of Charleston FEMA Flood Zones, Community Assets and Essential Facilities

Town of Charleston Annex

2023 Montgomery County Hazard Mitigation Plan

2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there was one identified repetitive loss property in Charleston as of 2016, and as of 2022, there were two identified repetitive loss properties both adjacent to Schoharie Creek. As of December 31, 2022, 2 policies were in force. The Town of Charleston had a total of 11 claims totaling \$510,827 in losses for all NFIP-insured structures. It should be noted that according to FEMA data there are 40 structures within the 100-year flood plain.

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Town, by hazard as shown in Table 4. The estimated value of at risk assets is based on the Town's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Town of Charleston Vulnerable Assets Exposure Analysis³.

| Hazard | At-Risk All Properties | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|---------------------------------|------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$86,129,673 | 696 | \$194,301 | 2 | \$83,817 | 2 |
| Severe Thunderstorm | \$86,129,673 | 696 | 194,301 | 2 | 83,817 | 2 |
| Severe Winter Storm | \$86,129,673 | 696 | 194,301 | 2 | 83,817 | 2 |
| Tornado | \$86,129,673 | 696 | 194,301 | 2 | 83,817 | 2 |
| Flood | | | | | | |
| 1% Annual Chance | \$4,983,333 | 40 | - | 0 | - | 0 |
| 0.2% Annual Chance | 0 | 0 | - | 0 | - | 0 |

³ Values are based on 50% of assessor's full market value

2.6 Town wide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Town of Charleston. The totals include capital stock and economic loss estimates.

*Table 5 Town of Charleston Earthquake Vulnerability Analysis**

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 1,346 | 1,346 |
| Total direct building economic loss | \$655,000 | \$9,173,000 |

- *Hazus combines Florida and Charleston, values above are for both communities*

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Charleston Problem Statements.

| Problem Area | Description |
|-----------------------------|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. |
| Geographic Areas of Concern | |
| | Local Areas of Flooding- Burtonville – the Schoharie Creek at Burtonville has a high bedrock embankment which causes channeling of the water during a high-water event. Historically flooding has occurred on Island Road and Colyer Road, both areas where the creek has gone over its banks and has caused the loss of homes. |
| Schoharie Creek | |
| | |
| | |
| Vulnerable Community Assets | |
| Shelters | The Burtonville Fire Department has agreed to serve as a cooling center during extreme heat. |
| Bridges | Town Bridges crossing Braman Corners Road and CR160 Burtonsville Road over Schoharie Creek |
| Homes | Burtonsville Residences near Colyer Steet and Island Road highly vulnerable to flooding |
| Emergency Service | Burtonsville Fire Station is not in flood zone but highly vulnerable to flooding |

4. Capabilities

The Town of Charleston is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Town's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy).

Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for Charleston:

- Comprehensive/Master Plan – *Updated 2002, in process for 2023*
- Local Emergency Operations Plan – *County OEM, 1996 Emergency Plan*
- Watershed Management Plan – *NYS DOS Mohawk River Watershed Management Plan, 2015*
- Building Codes – *Must adopt Uniform Construction codes and International Building Code*
- Land Use Planning and regulations take place through recommendations by the planning board to the Town Board. These include set-backs, junk laws, property size and subdivisions, etc.
- NFIP Flood Damage Prevention Ordinance – *Local Law No. 1, Adopted 1/15/2020.*
- Real Estate Disclosure Requirements – *NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467*

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

The Town of Charleston has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for Charleston:

- Planning Board
- Mutual Aid Agreements
- Records Management Officer

The Town of Charleston is governed by a Town Board, Planning Board, and Supervisor. The Town has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Town staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for Charleston:

- State Funding
- Hazard Mitigation Grant Programs

The Town of Charleston has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concern with regard to the implementation of mitigation projects and related risk reduction activities.

The Town Clerk is responsible for the accounting of all Town funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, serving as the records management officer, and the issuance of bonds. The Treasurer provides budget monitoring and financial reports to the Town Supervisor and the Town Board throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be

Town of Charleston Annex

2023 Montgomery County Hazard Mitigation Plan

used to support mitigation activities. The following education and outreach capabilities are in place for Charleston:

- Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. - The Schoharie River Center focuses on stewardship of the watershed and its waters.
- Ongoing public education or information program (e.g., responsible water use, environmental stewardship, and environmental education) is part of the mission of the Schoharie River Center. A non-profit organization, the Schoharie River Center in the Town of Charleston provides environmental education to youth, families, and adults.
- Human Services (*outreach/activities for seniors etc.*) include a seniors' Support group and a Youth Commission. These provide educational and recreational activities for the Town of Charleston.
- Website
- Social Media – Facebook pages for the Town of Charleston and the Charleston Youth Commission.

4.2 NFIP Participation and Compliance

The Town of Charleston has actively participated in the National Flood Insurance Program (NFIP) since 1985. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there are a total of 2 NFIP policies in force. The total annual premium is \$1,198 for a total of \$700,000 in coverage. As of February 23, 2023, a total of 11 claims amounting to approximately \$510,827 have been paid to NFIP policyholders in Charleston since joining the program¹³ more information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 7 describes the Town of Charleston's participation and continued compliance in accordance with NFIP requirements and as specified in FEMA's 2022 Local Mitigation Planning Policy Guide.¹⁴

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov//reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

Table 7. NFIP Participation and Compliance, Town of Charleston.

| REQUIRED INFORMATION | RESPONSE |
|--|---|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2020 via Town of Charleston Local Law of 2020-Flood Damage Protection. |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Local Law (Section 3. Basis for establishing areas of Special Flood Hazard). Latest effective FIRM is dated January 19, 2018. |

Town of Charleston Annex

2023 Montgomery County Hazard Mitigation Plan

| REQUIRED INFORMATION | RESPONSE |
|--|--|
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Building Code Enforces of the Town of Charleston administers the provisions of the Floodplain District. The Building Code Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Building Code Enforcer of the Town of Charleston has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 2 of the Local Law define substantial improvement/substantial damage as 50% of market value of the structure. |

The minimum standards set forth by FEMA and New York State have been adopted by the Town of Charleston. The Town of Charleston requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

The Town of Charleston does not participate in the Community Rating System (CRS), however, the Town has considered joining and would attend a CRS seminar if offered locally. CRS participation may not cost effective based on the Town's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.3 Improvement Opportunities

Despite the limitations and constraints faced by the Town of Charleston when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Town is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Town during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated versions of the Town's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Town to cope with potential unforeseen challenges in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Town staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout town.

Financial Capabilities

- Maximize opportunities through the Town's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Town's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Town to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Town's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Town Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Town should coordinate with the State NFIP Coordinator on possible updates or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- Charleston's local Flood Damage Prevention regulations and building code enforcement

procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:

- Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood
- Prohibit or minimize new development in floodplain areas.
- Prohibit or enforce higher standards for critical facilities subject to flood hazards.
- Add provisions that protect natural and beneficial functions of floodplains.

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status, actions brought forward to this 2023 plan are identified in the Keep for Plan Update? column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Town of Charleston.

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|---|----------------|---|-----------------------|
| 1 | Identify Vulnerable Structures for Retrofit | Support the mitigation of vulnerable structures via retrofit (e.g., elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario”. Phase 1: Identify appropriate candidates and determine the most cost-effective mitigation option (in progress). Phase 2: Work with the property owners to implement selected action based on available funding and local match availability. | In progress | As a result of the effects of Irene in 2011: Houses on Island Road (25% of structures) have been retrofitted per FEMA regulations. 25% have been repaired and are occupied. All of Island Road is occupied except one house. Houses on Colyer Road that were flooded were removed. One property has a temporary structure on it. A property on Hughes Road that had property damage has been occupied but the structure did not sustain damage in 2011. | YES |
| 2 | Begley Road Cross Culvert | Begley Road Cross Culvert- The existing cross culvert at the intersection of Begley Road and McDuffee Road is unable to manage the run-off during extreme rain conditions because it is undersized, and the outlet path has become obstructed from the lack of years of maintenance. | In Progress | Need to mitigate through constructing an off-road Ditch to alleviate run-off | Yes |

Town of Charleston Annex

2023 Montgomery County Hazard Mitigation Plan

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|--|---|------------------------|---|-----------------------|
| 3 | Butler Road Culvert Crossing 1 | Butler Road #1- The existing 30-inch cross culvert has been unable to manage the water volume in extreme rain situations. This problem has existed for many years and the situation has never been rectified. The over-flowing water erodes the road surface and makes it impassable. | In Progress / Modified | Largely for Butler Road - The erosion to the roadbed has to be stopped with riprap in order to stabilize the road. The landowner has been approached to donate land to move or reposition the road. That has not yet taken place. Work needs to proceed based on acquisition of land. This is an issue that is not addressed in the prior structural problems. Culverts need to be added. The road would need to be raised. | YES |
| 4 | Butler Road Culvert Crossing 2 | Butler Road #2 - This section of Butler Road has no cross culverts and the runoff from the hill to the south creates extreme volumes of water under heavy rain and causes erosion to the south side of the road, which is a very narrow road. | In Progress / Modified | Culverts need to be added. The road would need to be raised. The solution appears to be relocating the road, and back-filling the bank. Currently, the existing guard rail is not tethered to the ground as the edge of the road has eroded and is unstable. | YES |
| 5 | Capital Bridge Program Improvements | Capital Bridge Program – Burtonsville Road Spur Bridge | Completed | Completed | NO |
| 6 | Highway Bridge Flood Vulnerability Assessment | Evaluate the flood vulnerabilities of the highway bridges on Barman Corners Road, Burtonsville Road, and County Route 160; identify feasible mitigation options. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario”. | In progress | There are two bridges on Burtonsville Road over Woolsey Creek. The bridge closer to the winery has been replaced the other bridge needs to be replaced. | YES |
| 7 | Burtonsville Fire Station Flood Vulnerability Assessment | Encourage the property owner of Burtonsville Fire Station to evaluate the facility's flood vulnerability and to identify feasible mitigation options. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario”. | Completed | <p>Completed. As a critical facility this action is required to mitigate if exposed to 1% or 0.02% chance event (100 or 500-year flood). GIS mapping does not indicate that the property is in the flood zone, but it is still vulnerable to flooding due to proximity to the small tributary to Schoharie Creek.</p> <p>The Burtonsville Fire Department has an evacuation plan for the town. They have surveyed the land and agree that it is not in the flood plain. The culvert has been enlarged and runs under Colyer Road to Schoharie Creek. (in about 2021). A culvert has been replaced on the hillside on Burtonsville Road so that the fire department can access the land behind the fire department. This was completed after 2016.</p> | NO |

Town of Charleston Annex

2023 Montgomery County Hazard Mitigation Plan

Table 9. Updated Mitigation Actions (2023-2028) – Town of Charleston.

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|---|---|---------------------|------------------|----------------|----------------------------|---------------------|-------------------------|----------|
| 1 | Identify Vulnerable Structures for Retrofit | Support the mitigation of vulnerable structures via retrofit (e.g., elevation, flood proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario”. Phase 1: Identify appropriate candidates and determine the most cost-effective mitigation option (in progress). Phase 2: Work with the property owners to implement selected action based on available funding and local match availability. | Property Protection | Flood | Low | HMGP with local cost share | Town Superintendent | 2023 - 2028 | Medium |
| 2 | Butler Road Culvert Crossing 1 | Butler Road #1- The existing 30-inch cross culvert has been unable to manage the water volume in extreme rain situations. This problem has existed for many years and the situation has never been rectified. The over-flowing water erodes the road surface and makes it impassable. | Structural Project | Flood | High | Municipal Budget | DPW | 2023 - 2028 | High |
| 3 | Butler Road Culvert Crossing 2 | Butler Road #2- This section of Butler Road has no cross culverts and the runoff from the hill to the south creates extreme volumes of water under heavy rain and causes erosion to the south side of the road, which is a very narrow road. | Structural Project | Flood | High | Municipal Budget | DPW | 2023 - 2028 | High |

Town of Charleston Annex

2023 Montgomery County Hazard Mitigation Plan

| | | | | | | | | | |
|---|---|--|---|----------------------|--------|---|--------------------|-------------|--------|
| 4 | Highway Bridge Flood Vulnerability Assessment | Encourage the property owner of Burtonsville Fire Station to evaluate the facility's flood vulnerability and to identify feasible mitigation options. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario". | Public Education and Awareness/Prevention | Flood, Severe Storms | Medium | Staff Time, FEMA, NYS DHSES, County, Municipality | Municipal NFIP FPA | 2023 - 2028 | Low |
| 5 | Begley Road Cross Culvert | Begley Road Cross Culvert- The existing cross culvert at the intersection of Begley Road and McDuffee Road is unable to handle the run-off during extreme rain conditions because it is undersized and the outlet path has become obstructed from the lack of years of maintenance | Structural Project | Flood, Severe Storms | High | Municipal Budget | Town | 2023 - 2028 | High |
| 6 | Corbin Hill & Goldman | Intersection of Corbin Hill and Goldman Road has a culvert that is collapsing, causing a sink hole underneath the road bed | Structural Project | Flood, Severe Storms | High | Municipal Budget | Town | 2023 – 2028 | Medium |
| 7 | Highway Bridges | Evaluate the flood vulnerabilities of the highway bridges on Barman Corners Road, Burtonsville Road, and County Route 160; identify feasible mitigation options. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario". | Public Education and Awareness/Prevention | Flood, Severe Storms | Medium | Municipal Budget, FEMA, NYS DHSES, County | Town | 2023 – 2028 | Low |

Capability Assessment Worksheet- Town of Charleston

Planning and Regulatory

| Plans | COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | | T&B TO REVIEW OLD ANNEX |
|---|---|---|--|
| | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? | NOTES FROM 2016 Annex |
| Comprehensive/Master Plan | Yes, 2002 | No, it doesn't address hazards. The current plan being developed in 2023 will address hazards. | Planning Board |
| Capital Improvements Plan | No | | |
| Economic Development Plan | No | | |
| Local Emergency Response Plan | Yes, 1996 | | County OEM, 1996 Emergency Plan |
| Continuity of Operations Plan | no | | |
| Transportation Plan | No | | |
| Stormwater Management Plan | No | | |
| Watershed Management Plan | Yes, 2015 | | NYSDOS Mohawk River Watershed Management Plan, 2015 |
| Floodplain Management Basin Plan | No | | |
| Open Space and Recreation Plan | No | | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? | NOTES FROM 2016 Annex |
| Building Code | Yes | | Must adopt Uniform Construction codes and International Building Code. |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | no | | 2016 annex notes not participating |
| Fire department ISO rating | ? | | ISO noted in annex, but Town status is not |
| Site plan review requirements | Yes | | State Building Code and Local Law #1 |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? | NOTES FROM 2016 Annex |
| Zoning ordinance | No | | |
| Subdivision ordinance | No | | |
| NFIP Flood Damage Prevention Ordinance | Yes | Local Law No. 1, Adopted 1/15/2020. | 1984 Hwy Superintendent |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | | |
| Flood insurance rate maps | Yes | Effective 1/19/2018 | |
| Acquisition of land for open space and public recreation uses | incomplete | part of 2023 comprehensive plan | |
| Stormwater Management Ordinance | No | | |
| Growth Management Ordinance | No | | |
| Real Estate Disclosure Requirements | Yes | NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467 | Via Code Enforcement Officer, Planning Board |

Administrative and Technical

| | | | |
|--|---------------------|---|------------------------------|
| Administration | Yes/No | Describe capability Is coordination effective? | NOTES FROM 2016 Annex |
| Planning Commission | Yes | | Planning Board |
| Mitigation Planning Committee | No | | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | No | | |
| Mutual aid agreements | Yes | | Surrounding municipalities |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| Chief Building Official | no | | |
| Floodplain Administrator | Yes | | Hwy Superintendent |
| Emergency Manager | Yes | | County Emergency Manager |
| Community Planner | No | | Outside firm as needed |
| Civil Engineer | No | | Outside firm as needed |
| GIS Coordinator | Yes | | County |
| Other | | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| Warning systems/services (Reverse 911, outdoor warning signals) | yes | fire dept warning, Reverse 911 for flooding | |
| Hazard data and information | no | | |
| Grant writing | No | | Outside firm |
| Hazus analysis | no | | |
| Other | | | |

Financial

| | | | |
|---|---|--|------------------------------|
| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | NOTES FROM 2016 Annex |
| Capital improvements project funding | No | | |
| Authority to levy taxes for specific purposes | Yes | | |

| | | | |
|--|--|--|--|
| Fees for water, sewer, gas, or electric services | No | | |
| Impact fees for new development | No | | |
| Storm water utility fee | no | | |
| Incur debt through general obligation bonds and/or special tax bonds | Obligation bonds - yes, special tax bonds - no | | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | | |
| Other federal funding programs | no | | |
| State funding programs | yes | Has received DEC funding for a Salt Storage Facility. Could be approached for funding. | |
| Hazard Mitigation Grant Programs | Yes | | |

Education and Outreach

| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
|---|--------|---|-----------------------------|
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | yes | The Schoharie River Center focuses on stewardship of the watershed and its waters. | |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | yes | expansion needed. Schoharie River Center in the Town of Charleston provides environmental education to youth. | |
| Natural disaster or safety related school programs | no | | |
| StormReady certification | No | | Not participating |
| Firewise Communities certification | No | | Not participating |
| Public-private partnership initiatives addressing disaster-related issues | no | | |
| Other | | | |

TOWN OF FLORIDA

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Town of Florida

10569 214 Fort Hunter Road

Amsterdam, NY 12010

<https://www.townofflorida.com/>

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Town of Florida Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the Town of Florida not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Town of Florida.

| Primary Point of Contact | Alternate Point of Contact |
|---|---|
| Eric Mead, Supervisor 167 Fort Hunter Rd., Amsterdam, NY 12010 518-365-1680 supervisormead@hotmail.com | Steve Anderson, Superintendent of Highways 214 Fort Hunter Road, Amsterdam, NY 12010 518-848-4362 stevea950@gmail.com |

1. Municipality Profile

1.1 Brief History

According to the Town of Florida website the first inhabitants of the Town were the Mohawk Indians. The Town of Florida was officially formed on March 12, 1793¹:

"Throughout the 19th and 20th centuries, the Town of Florida developed as a farming community. In recent years, however, the Town has experienced an increase in single-family houses built on land once used for farming. In addition, there has been an increase in the amount of former farmland that now lies fallow. In general, the Town of Florida still remains primarily an agricultural community."

1.2 Location and Demographics

The Town of Florida is a sparsely populated agricultural community of approximately 51 square miles, situated in the southeast corner of Montgomery County. Land surface ranges from around 239 feet above mean sea level along the Mohawk River to a high of 1,216 feet above mean seal level on Bean Hill, west of Minaville as the topography rises southerly. The Town is located across the Schoharie/South Chuctanunda/Terwilliger Creek sub watershed to the Mohawk River with predominant drainage features including Schoharie Creek and South Chuctanunda Creek. A more detailed description of the Eastern Alplaus Kill Subwatershed is included in the HMP Community Asset Inventory Section 5.6. The town center is located in the Hamlet of Minaville at the intersection of State Highway 30 and Fort Hunter Road near South Chuctanunda Creek. The Hamlet of Fort Hunter is located at the northwestern corner of the town at the confluence of the Schoharie River and Mohawk River.

¹ <https://www.townofflorida.org/>

Town of Florida Annex

2023 Montgomery County Hazard Mitigation Plan

The Hamlet of Scotch Bush is located on the town's southern border on the South Chuctanunda Creek. Florida's societal, economic, infrastructural and economic resources, including critical assets are highlighted in Figure 1.

The Town is bounded to the west by the Schoharie Creek; north by the Erie Canal (Mohawk River), Town and City of Amsterdam; and Schenectady County to the east and south.

Florida is home to 2,692 residents, with a population density of less than 54 people per square mile. According to the 2020 US Census², 96% of their 1,079 housing units are occupied, while 4% of the housing units remain vacant. Of the occupied units, 89% are owner occupied and 11% are renter occupied. 11.6% of the total population is below the poverty level, which includes 9% of seniors 65 and over. Approximately twenty percent of the town's residents have attained a four-year college degree or higher. The median household income for Florida is \$82,230. There is little racial or ethnic diversity in the community with 94% reporting as White, 3% Black and 4% as Hispanic.

1.3 Governance

The Town of Florida is governed by a five member Town Board (one supervisor and four councilmen). This governing body will be responsible for the adoption and implementation of this plan.

1.4 Land Use and Development

There are 33,811 total acres of land in the town. The primary land use in the town is agricultural, which includes approximately 60% of the town. Agricultural land totals 20,050 acres with an average parcel size of 108 acres. Rural residential is the second largest use of land with 4,970 acres devoted to this use or 14.7% of the total land area. Vacant land constitutes another 3,888 acres or 11.5% of the land area. Commercial land use is primarily located along the Route 30 corridor and in a limited area on Route 5S in the northwestern portion of Town. Manufacturing uses are located in the area of the Industrial Business Park (IBP) zoning district along Route 5S between the City of Amsterdam and the Schenectady County border, a small area just south of Amsterdam, and in a small area along Route 5S west of Amsterdam. There are also natural product uses (mining) adjacent to the first manufacturing area. A mobile home residential area is located in the northeastern corner of the Town. Historical areas include the Hamlet of Fort Hunter. This area includes several historic sites relating to the Canal area such as "Clinton's Ditch," the Schoharie Creek Aqueduct and the Queen Anne Parsonage. Residential dwellings exist throughout the Town.

Throughout the 19th and 20th centuries, the Town of Florida developed as a farming community in recent years the town has experienced an increase in single family houses built on land once used for farming.

According to the Town of Florida Comprehensive Plan update completed in 2011, the Town has experienced a change in both its economic and demographic condition. This change has been characterized by a reduction of small farms and agricultural production, an increased demand for undeveloped land, the loss of local job opportunities, and the loss of younger generations of Town

² <https://censusreporter.org/profiles/06000US3605726308-florida-town-montgomery-county-ny/>

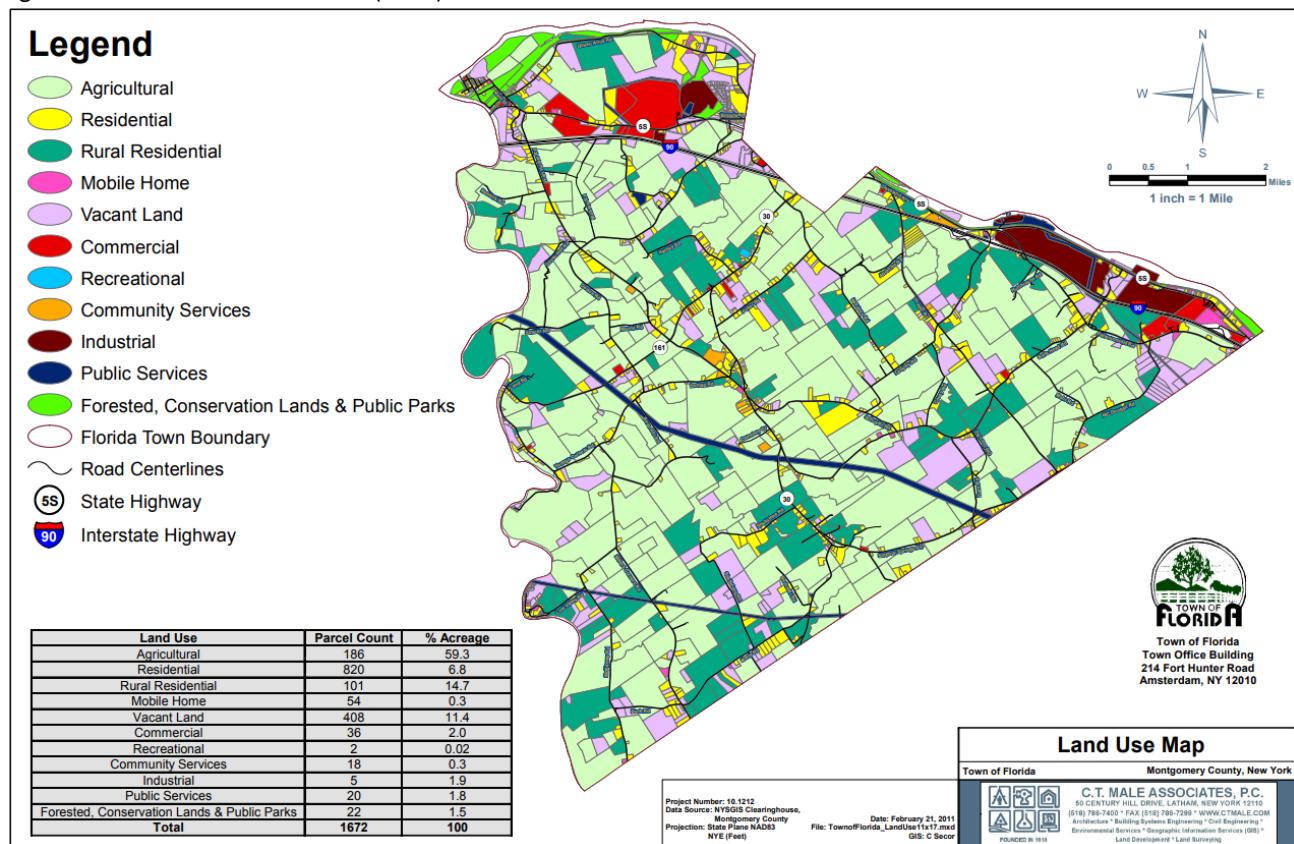
Town of Florida Annex

2023 Montgomery County Hazard Mitigation Plan

residents to areas with more opportunities for education and employment. The most recent amendments to the Florida Comprehensive Plan focused on how to best address the following challenges for the community and its future:

- Protection of farming and farmland
- Preserving Florida's rural setting
- Providing jobs and opportunities for the upcoming generations
- Stabilizing Florida's tax base
- Allowing and encourage new development without harming the environment

Figure 1 Town of Florida Land Use (2011)



2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snowstorms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for Florida as evidenced during Hurricane Irene, especially to Fort Hunter and properties on Schoharie Creek. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Town of Florida that are not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for earthquakes is included.

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Town in the past 10 years.

Table 1. Hazard Event History 2011-2021³

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------------------|--|--|
| August 26 – September 11, 2011 | Hurricane Irene and Remnants of Tropical Storm Lee | Five homes in Fort Hunter were substantially damaged, three were bought out through the FEMA FMA program, one was repaired, and one was abandoned. Four additional homes were abandoned. 20 residences were destroyed in Lost Valley near Schoharie Creek. The Minaville fire house was flooded, and the Erie Canal Lock at Fort Hunter collapsed. The Schoharie Crossing Historic Site sustained significant damage. Acres of farmland and crops were lost to flooding along the Mohawk and Schoharie Creek, due to inundation of crops, deposition of sediment and topsoil being washed away. |
| May 22, 2013 | Flash Flood | Local television media reported flash flooding on Sulphur Springs Road in Florida due to heavy rainfall from showers and thunderstorms. The flash flooding caused significant damage to a home. One and a half feet of water swept through the home. |
| May 29, 2013 | Tornado | A National Weather Service storm survey determined that a tornado touched down near Bernaski Road in Scotch Bush in the town of Florida. The tornado was only on the ground in Montgomery County for just under one mile before it crossed into Schenectady County border while traveling east. The tornado caused damage to a home along Bernaski Road, with half of the roof blown off. Grass was lifted and splattered on three sides of the home. Many windows were also blown out of the house. Nearby, a hundred-year-old barn was destroyed. A flagpole was ripped out of the ground. Trees were uprooted and/or split in half as well. Residents recalled seeing a funnel before taking cover. |
| July 7, 2013 | Severe Storms Flooding | A tree and wires were reported down on Route 30 due to thunderstorm winds in Scotch Bush. |
| May 15, 2022 | Hail | Quarter size hail was reported during a thunderstorm one mile south-southwest of Scotch Bush. |

³ <http://cdc.noaa.gov/stormevents>, NY Rising Report for Amsterdam and Florida

Town of Florida Annex

2023 Montgomery County Hazard Mitigation Plan

| Dates of Event | Event Type | Summary of Damages/Losses |
|----------------|--------------------|--|
| June 12, 2015 | Thunderstorm Winds | Trees were reported down in Minaville due to thunderstorm winds. |
| August 4, 2020 | Flash Flood | Tropical Storm Isaias tracked northeast from the eastern Carolinas across the mid-Hudson Valley and into New England. The center of the storm passed close to Albany on August 4th. This storm brought high winds and heavy rain to the region throughout the period. The heaviest rainfall occurred across the eastern Catskills, into the Capital District and up into the Lake George Saratoga Region, with the highest amounts of 5 to 7 inches in Greene County. State Hwy 30 south of Amsterdam from Fuller Road to State Hwy 161 in the town of Florida was closed due to flooding. |

2.2 Community Assets

Forty-eight Community Assets were identified for the Town of Florida for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID corresponds with locations shown in **Figure 1**.

Table 2. Community Assets in the Town of Florida

| | Asset ID | Subtype | Name |
|-----------------|----------|---------------------------|------------------------------|
| ECONOMY | 1 | Major Employer | Target DC |
| | 2 | Major Employer | Dollar General |
| | 3 | Major Employer | Beech Nut Nutrition |
| | 4 | Major Employer | Hill & Markes |
| | 5 | Major Employer | Alpin Haus |
| | 21 | Major Employer | Amazon |
| | 22 | Major Employer | Green Trucking |
| SOCIAL | 6 | Historic Site | Queen Anne's Parsonage |
| | 7 | Library | Fort Hunter Free Library |
| | 8 | Church | Florida Reformed Church |
| | 9 | Church | Family Bible Church |
| | 10 | Cemetery | Green Cemetery |
| INFRASTRUCTURAL | 11 | Municipal / Public Safety | Fort Hunter Fire Dept. |
| | 12 | Municipal / Public Safety | Town of Florida Fire Dept. |
| | 13 | Municipal /DPW /Highway | Florida Dept of Public Works |
| | 14* | Dam | (173-0298) |
| | 15 | Dam | Slezak Farm Pond Dam |
| | 16* | Dam | Lock E-10 Dam At Cranesville |

| | Asset ID | Subtype | Name |
|--|-----------|---------------------------|--|
| | 17 | Pump Station | Amazon Sewer Pump Station |
| | 18 | Pump Station | Dollar General Sewer Pump Station |
| | 19 | PWS Tank | Water Tower |
| | 20 | Water Pump Station | Broadway Ext water pump station |
| Bold indicated asset is identified as an essential facility. *Asset located in 100-year flood | | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are five essential facilities in town. There is no designated emergency shelter. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Town of Florida.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|---------------------------------|---|------------------|----------|----------------|
| Fort Hunter Fire Dept. | 351 Main St., Fort Hunter | Y | N | N |
| Town of Florida Fire Dept. | 6252 State Highway 30, Amsterdam | Y | N | N |
| Florida Dept of Public Works | 167 Fort Hunter Rd, Amsterdam, NY 12010 | Y | N | N |
| Water Tower | 5S | N | N | N |
| Broadway Ext water pump station | Broadway Ext. | Y | N | N |

Town of Florida Annex

2023 Montgomery County Hazard Mitigation Plan

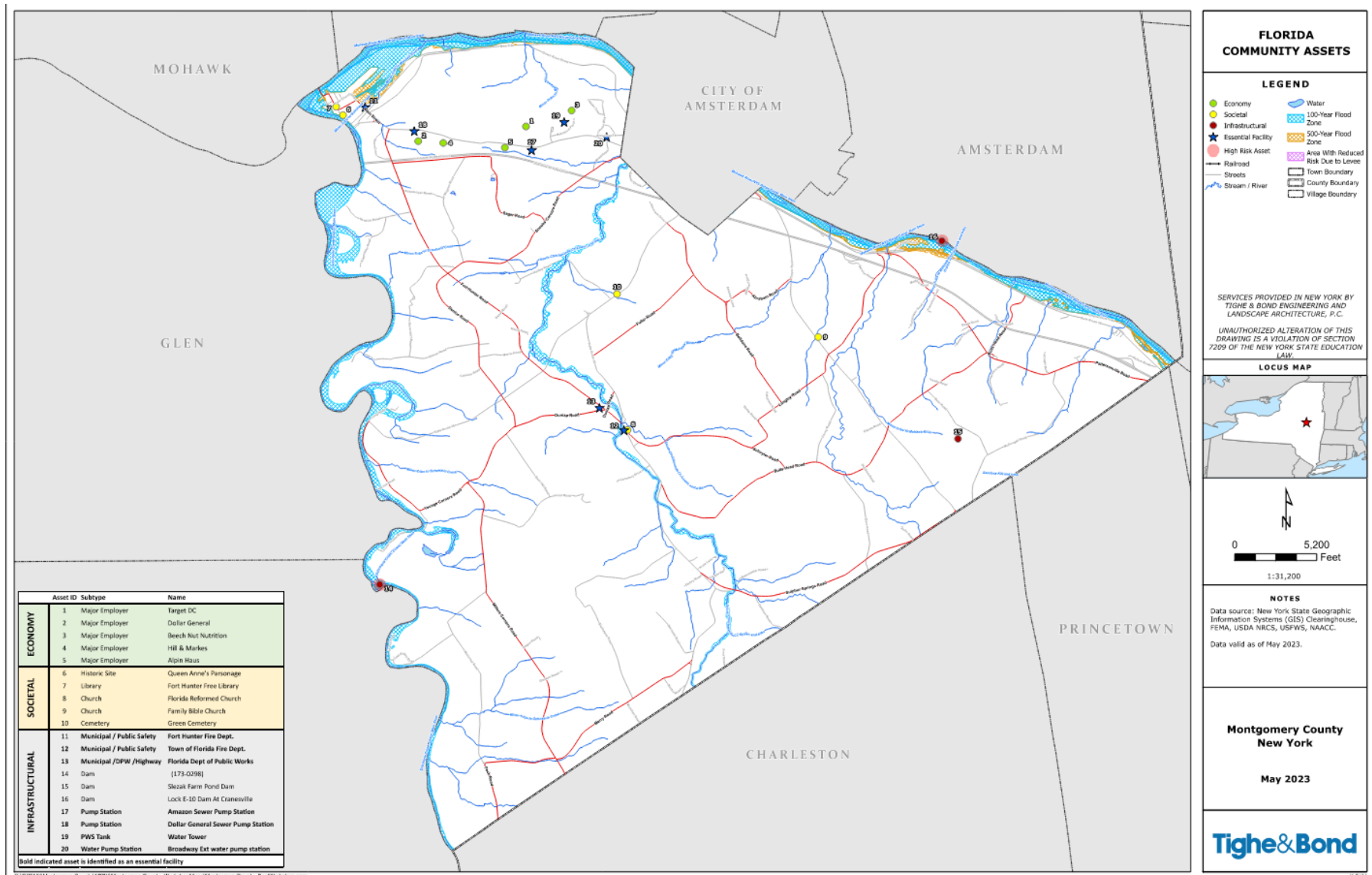


Figure 1. Town of Florida FEMA Flood Zones, Community Assets and Essential Facilities

2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there was one identified repetitive loss property in Florida as of 2016, and as of 2022, there were two identified repetitive loss properties both adjacent to Schoharie Creek. As of December 31, 2022, 6 policies were in force. The Town of Florida had a total of 8 claims totaling \$99,713 in losses for all NFIP-insured structures. It should be noted that according to FEMA data there are 154 structures within the 100-year flood plain.

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Town, by hazard as shown in Table 4. The estimated value of at-risk assets is based on the Town's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Town of Florida Vulnerable Assets Exposure Analysis⁴.

| Hazard | At-Risk All Properties ⁵ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|---------------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$553,867,141 | 1,346 | \$552,000 | 20 | \$N/A | 1 |
| Severe Thunderstorm | \$553,867,141 | 1,346 | \$552,000 | 20 | \$N/A | 1 |
| Severe Winter Storm | \$553,867,141 | 1,346 | \$552,000 | 20 | \$N/A | 1 |
| Tornado | \$553,867,141 | 1,346 | \$552,000 | 20 | \$N/A | 1 |
| Flood | | | | | | |
| 1% Annual Chance | \$30,747,152 | 154 | - | 0 | - | 0 |
| 0.2% Annual Chance | \$7,621,852 | 52 | - | 0 | - | 0 |

⁴ Value based on 50% of assessor's full market value

2.6 Townwide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damage from earthquakes for the Town of Florida. The totals include capital stock and economic loss estimates.

*Table 5 Town of Florida Earthquake Vulnerability Analysis**

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 1,346 | 1,346 |
| Total direct building economic loss | \$655,000 | \$9,173,000 |

- *Hazus combines Florida and Charleston, values above are for both communities.*

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Florida Problem Statements.

| Problem Area | Description |
|-----------------------------|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. |
| Geographic Areas of Concern | |
| | Local Areas of Flooding- Enhance stormwater conveyance an increase detention volume in Fort Hunter. Enlarge undersized culverts in Florida. Stabilize and repair South Chuctanunda Creek banks and streambed. |
| Schoharie Creek | |
| Mohawk River | |
| | |
| Vulnerable Community Assets | |
| Shelters | There are no local shelters identified in Florida. |
| Bridges/ Culverts | Town Bridges crossing South Chuctanunda Creek on Cemetery Drive and Hartley Road. Culverts on Pattersonville Road and Fort Hunter Road are in poor condition. |
| Emergency Service | Minaville firehouse is not in flood zone but vulnerable to flooding. |

4. Capabilities

The Town of Florida is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Town's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy).

Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for Florida:

- Comprehensive/Master Plan – *Town of Florida Comprehensive Plan, 2002*
- Capital Improvements Plan – *Town Council, funds from annual budget.*
- Economic Development Plan – *Annually updated as part of the consolidated funding application process.*
- Local Emergency Operations Plan – *Coordinated by Town Administration and Emergency Manager*
- Transportation Plan – *County Plan*
- Watershed Management Plan – *Engineering and DPW*
- Floodplain Management Basin Plan – *NYSDEC Floodplain Admin, Code Enforcement Officer*
- Building Codes – *Accept minimum NYS code; must adopt state building code and can enhance if wanted.*
- Zoning Ordinance – *Town of Florida Zoning Ordinance, 2014*
- Subdivision Ordinance – *Town of Florida Zoning Ordinance, 2014*
- NFIP Flood Damage Prevention Ordinance – *Local Law No. 3, Adopted 12/5/2017.*
- Growth Management Ordinance – *Town of Florida Comprehensive Plan, 2002*

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

The Town of Florida has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved

Town of Florida Annex

2023 Montgomery County Hazard Mitigation Plan

development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for Florida:

- Planning Board
- Maintenance Programs to Reduce Risk
- Mutual Aid Agreements
- Chief Building Official
- GIS Coordinator - *MCBDC*
- Warning Systems

The Town of Florida is governed by a Town Board, Planning Board, Zoning Board, and Supervisors Office. The Town has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Town staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters. To achieve this goal the office has established ongoing public education opportunities and informational programs for things such as responsible water use, fire safety, household preparedness or environmental education. Additional programming in schools is available for natural disaster and safety. These programs help keep the town prepared and safe during emergencies.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for Florida:

- Capital improvement project funding
- Community Development Block Grant
- Federal Funding
- State Funding (*CFA cycle*)
- Hazard Mitigation Grant Programs

The Town of Florida has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is

Town of Florida Annex

2023 Montgomery County Hazard Mitigation Plan

more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concern regarding the implementation of mitigation projects and related risk reduction activities.

The Town's Clerk is responsible for the accounting of all Town funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The Clerk provides budget monitoring and financial reports to the Supervisor throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for Florida:

- Website
- Email Listserv
- Social Media

4.2 NFIP Participation and Compliance

The Town of Florida has actively participated in the National Flood Insurance Program (NFIP) since 1987. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there are a total of 6 NFIP policies in force. The total annual premium is \$6,271 for a total of \$1,396,000 in coverage. As of February 23, 2023, a total of 8 claims amounting to approximately \$99,713 have been paid to NFIP policyholders in Florida since joining the program.¹³ More information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 8 describes the Town of Florida's participation and continued compliance in accordance with NFIP requirements and as specified in FEMA's 2022 Local Mitigation Planning Policy Guide.¹⁴

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov//reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

Town of Florida Annex

2023 Montgomery County Hazard Mitigation Plan

Table 7. NFIP Participation and Compliance, Town of Florida.

| REQUIRED INFORMATION | RESPONSE |
|--|---|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2017 via Town Local Law #3 of 2017 Flood Plain Management Regulations. |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Local Law (Section 3.2 Basis for establishing areas of Special Flood Hazard). The latest effective FIRM is dated January 19, 2018. |
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Building Code Enforces of the Town of Florida administers the provisions of the Floodplain District. The Building Code Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Building Code Enforcer of the Town of Florida has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 2 of the Town's Local Law define substantial improvement/substantial damage as 50% of market value of the structure. |

The minimum standards set forth by FEMA and New York State have been adopted by the Town of Florida. The Town of Florida requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

The Town of Florida does not participate in the Community Rating System (CRS), however, the Town has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Town's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.2.1 Improvement Opportunities

Despite the limitations and constraints faced by the Town of Florida when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Town is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Town during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated versions of the Town's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Town to cope with potential unforeseen challenges in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Town staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout town.

Financial Capabilities

- Maximize opportunities through the Town's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Town's chances

for a grant award.

- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Town to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Town's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Town Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Town should coordinate with the State NFIP Coordinator on possible updates or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- Florida's local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood)
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

Town of Florida Annex

2023 Montgomery County Hazard Mitigation Plan Update

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status, actions brought forward to this 2023 plan are identified in the Keep for Plan Update? column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Town of Florida.

| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status <i>Make sure to include a comment for each one other than completed</i> |
|-------------------------------|---|--|---------------------|---------------------|---------------------|--|--|
| Prevention | Work with Montgomery County to protect county resources on which the City and Town of Amsterdam, and Town of Florida rely on. | Town of Florida, Montgomery County | All hazards | Unknown | Local budget | Completed | |
| Emergency Services Protection | Additional caches of disposable emergency medical supplies and sheltering in-place resources for the Town. | Town Administration, St. Mary's Hospital | Flood, severe storm | Short-term | Local budget | Completed | |
| Prevention | Establish a program to address buildings that are too costly to renovate or have been abandoned. | Town of Florida, Montgomery County | All hazards | Unknown | Local budget | Deleted | No Funding |
| Emergency Services Protection | An emergency communications protocol will be established which includes elements such as a formal multi-lingual communications system to inform municipalities and residents. | Inter-municipal collaboration | Flood, severe storm | Short-term | Local budget | Deleted | No Funding |

Town of Florida Annex

2023 Montgomery County Hazard Mitigation Plan Update

| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status <i>Make sure to include a comment for each one other than completed</i> |
|--|---|--|---------------------|--|---------------------|--|--|
| Natural Resource Protection and Green Infrastructure | This project will repair and reinforce the hamlet of Fort Hunter's protective berm, improving resiliency against flooding from Schoharie Creek. | DPW, Engineering Consultant | Flood, severe storm | Short-term | Local budget | Deleted | Per NYS Canal |
| Structural Projects | This project proposes enlargements of culverts at up to 14 road crossings in the Town of Florida that were flooded out during Hurricane Irene and Tropical Storm Lee in 2011. | DPW, Engineering Consultant | Flood, severe storm | Short-term | Local budget | Completed | |
| Property Protection | The proposed project includes acquisition and demolition of substantially damaged homes on Brown Place and Quackenbush Street. | Town of Florida, Property Owners | Flood, severe storm | Short-term | Local budget | Completed | |
| Structural Projects / Natural Resource Protection and Green Infrastructure | Fort Hunter Berm Stabilization – repair the existing berm | Town of Florida | Flood | Short-term, depending on funding / Medium priority | HMGP, local funding | Deleted | No Funding |
| Prevention | Consider participation in incentive-based programs such as CRS. | Town of Florida | Flood | Short-term / High priority | Local budget | Deleted | Not participating |
| Prevention | Support County-wide initiatives identified in Section 9.1 of the County Annex. | Town of Florida, Montgomery County | All hazards | Short-term / High priority | Local budget | Completed | |
| Property Protection | Consider acquiring land in hazard areas as it becomes available, such as in the "Lost Valley" area. | Town of Florida, FEMA | Flood | Short-term, depending on funding / Medium priority | Local budget, FEMA | In progress | Will consider |

Town of Florida Annex

2023 Montgomery County Hazard Mitigation Plan Update

Table 9. Updated Mitigation Actions (2023-2028) – Town of Florida.

| Action # | Action Title | Action Description | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|--------------------|--|----------------|--------------------------|-----------------|-------------------------|----------|
| 1 | Acquiring Land | Consider acquiring land in hazard areas as it becomes available, such as in the “Lost Valley” area | Medium | Local Budget, FEMA | Town of Florida | 2023-2028 | Low |
| 2 | Culver Replacement | Replace culvert on Queen Anne Rd | Medium | Local Budget | Town of Florida | 2023-2028 | Medium |

Capability Assessment Worksheet- Town of Florida

Planning and Regulatory

| COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | | T&B TO REVIEW OLD ANNEX |
|---|----------------|---|
| Plans | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? |
| Comprehensive/Master Plan | Yes, 2002 | |
| Capital Improvements Plan | Yes | |
| Economic Development Plan | Yes | |
| Local Emergency Response Plan | Yes | |
| Continuity of Operations Plan | No | |
| Transportation Plan | Yes | |
| Stormwater Management Plan | Yes | |
| Watershed Management Plan | Yes | |
| Floodplain Management Basin Plan | Yes | |
| Open Space and Recreation Plan | | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? |
| Building Code | Yes | |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | |
| Fire department ISO rating | Yes | |
| Site plan review requirements | Yes | |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? |
| Zoning ordinance | Yes | |
| Subdivision ordinance | Yes | |
| NFIP Flood Damage Prevention Ordinance | Yes | Local Law No. 3, Adopted 12/5/2017 |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | |
| Flood insurance rate maps | Yes | Effective 1/19/2018 |
| Acquisition of land for open space and public recreation uses | No | |
| Stormwater Management Ordinance | No | |
| Growth Management Ordinance | Yes | |
| Real Estate Disclosure Requirements | Yes | |

Administrative and Technical

| Administration | Yes/No | Describe capability Is coordination effective? |
|--|-------------------------|---|
| Planning Commission | Yes | |
| Mitigation Planning Committee | No | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | Yes | |
| Mutual aid agreements | Yes | |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? |
| Chief Building Official | Yes | Code Enforcement Officer |
| Floodplain Administrator | Yes | |
| Emergency Manager | Yes | |
| Community Planner | Yes | |
| Civil Engineer | Yes | |
| GIS Coordinator | No | MCBDC |
| Other | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? |
| Warning systems/services (Reverse 911, outdoor warning signals) | Yes | Via county sheriff |
| Hazard data and information | Yes | |
| Grant writing | No | |
| Hazus analysis | No | |
| Other | | |

Financial

| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? |
|--|------------------------------------|--|
| Capital improvements project funding | Yes | |
| Authority to levy taxes for specific purposes | Yes | |
| Fees for water, sewer, gas, or electric services | Yes | |
| Impact fees for new development | No | |
| Storm water utility fee | No | |

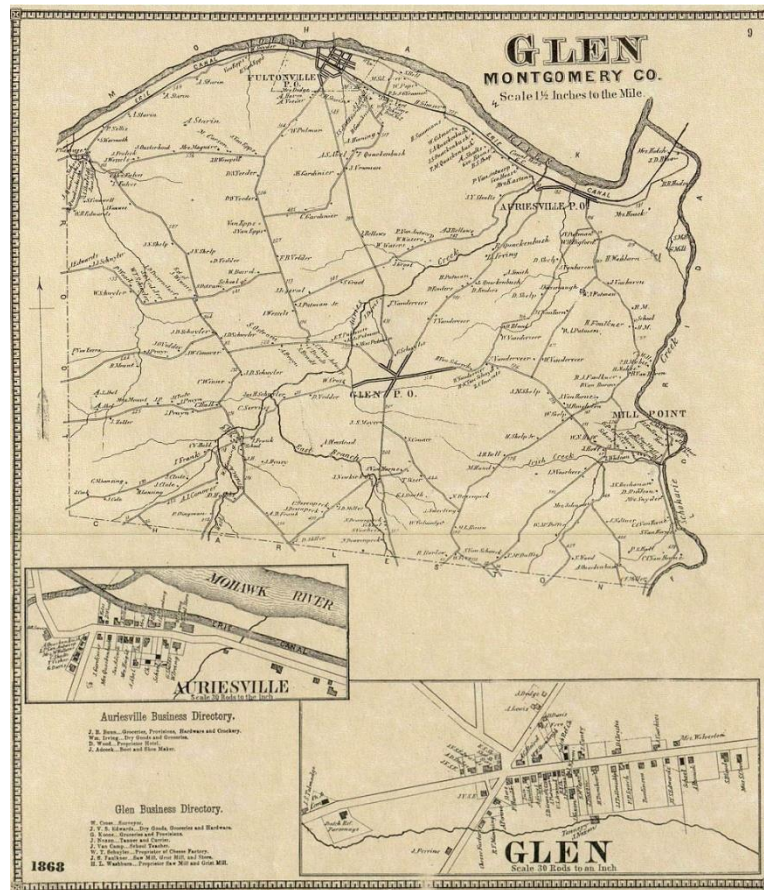
| | | | |
|---|---------------------------|---|------------------------------------|
| Incur debt through general obligation bonds and/or special tax bonds | Oblig - yes, special - no | | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | | |
| Other federal funding programs | Yes | | |
| State funding programs | Yes | Yes CFA cycle | |
| Hazard Mitigation Grant Programs | No | | |
| Education and Outreach | | | |
| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | | |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | Yes | | Through County |
| Natural disaster or safety related school programs | Yes | | |
| StormReady certification | No | | |
| Firewise Communities certification | No | | |
| Public-private partnership initiatives addressing disaster-related issues | No | | |
| Other | | | |

TOWN OF GLEN

MONTGOMERY COUNTY HAZARD

MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Town of Glen

7 Erie Street

Fultonville, NY 12072

<https://www.co.montgomery.ny.us/web/municipal/glen/default.asp>

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Town of Glen Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the Town of Glen not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Town of Glen.

| Primary Point of Contact | Alternate Point of Contact |
|---|---|
| Tim Reilly, Supervisor 7 Erie Street Fultonville, NY 12072 518.853-3865 glensupervisor@gmail.com | William Beddig, Superintendent of Highways 7 Erie Street Fultonville, NY 12072 518.922-5161 |

1. Municipality Profile

1.1 Brief History

According to the Town of Glen's website the first inhabitants of the Town were the Mohawk Indians. The Town of Glen was located inside the original Town of Mohawk. The Town was first settled in the 18th Century. The town was formed in 1823 from the Town of Charleston. In 1846, the community of Fultonville set itself apart from the town by incorporating it as a village.

1.2 Location and Demographics

The Town of Glen is a sparsely populated agricultural community of approximately 40 square miles, situated in central Montgomery County. The Mohawk River flows along the Town's northern border.

Land surface ranges from around 300 feet above mean sea level along the Mohawk River to a high of 1,100 feet above mean seal level near Oak Ridge Road as the topography rises southerly. The Town is located across the Schoharie/Fly Creek subwatershed to the Mohawk River with predominant drainage features including Schoharie Creel and its tributaries, Auries Creek and Van Wie Creek. A more detailed description of the Central Cayadutta Creek/ Fly Creek/Schoharie Creek/ Subwatershed is included in the HMP Community Asset Inventory Section 5.6. The town center is located in the village of Fultonville. Glen includes the hamlets of Glen, Mill Point, Auriesville and Stone Ridge. It shares its boundaries with the Village of Fonda and Town of Mohawk to the north, Town of Florida to the east, Town of Charleston to the south and the Town of Root to the west.

Glen's economic, societal and infrastructural resources, including critical assets are shown in Figure 1.

Glen is home to 2,513 residents, with a population density of about 65 people per square mile. According to the 2020 US Census¹, 81% of their 936 housing units are occupied, while 19% of the housing units remain vacant. Of the occupied units, 82% are owner occupied and 18% are renter occupied. 19.6% of the total population is below the poverty level, which includes 16% of seniors 65 and over and 31% for children under the age of 18. Approximately 16 % of the town's residents have attained a four-year college degree or higher. The median household income for Glen is \$63,864. There is little racial or ethnic diversity in the community with 91% reporting as white, 1% black, 3% multi-racial and 4% as Hispanic.

1.3 Governance

The Town of Glen is governed by a five member Town Board (one supervisor and four councilmen). This governing body will be responsible for the adoption and implementation of this plan.

1.4 Land Use and Development

According to the most recent comprehensive plan completed in 2000 there are 25,187 total acres of land in the town. The primary land use in the town is agricultural, which includes approximately 60% of the town. Agricultural land totals 14,603 acres. Rural residential is the second largest use of land with 3,912 acres devoted to this use or 16% of the total land area. Vacant land constitutes another 3,277 acres or 13% of the land area. Commercial land use is primarily located along Riverside Drive, a short section of Route 5S east of Fultonville and in the vicinity of the hamlet of Glen. Many of the commercial endeavors are agri-businesses which support the local and regional framing industry. There is a small amount of industrial use including the White Mop Wringer Company on Riverside Drive, Anderson Instruments in the Hamlet of Glen, and the Glen Canal View Business Park along Route 5S. Historic sites, Wild, Forested, Conservation Land and Public Parks encompass nearly 1,000 acres in Glen.

According to the comprehensive plan, notable goals that are consistent with the intent and purpose of the HMP include the following.

- Overall Goal: Promote land uses that complement and enhance the Town's existing development patterns while preserving the Town's rural and historic character and natural resources.
- Goal 2: Preserve and protect natural resources within the Town.
 - Ensure Planning Boards consider protection of natural resources (wetlands, steep slopes, aquifers, stream corridors, etc. in subdivision and Site Plan Review.
 - Prohibit permanent construction in 100-year flood zone.
 - Review regulations to be consistent with NYS Environmental Conservation Law.
- Goal 5: Identify and recognize historic properties warranting protection.
- Goal 6 Preserve Town Rural Character and Open Space.

¹ <https://censusreporter.org/profiles/06000US3605726308-florida-town-montgomery-county-ny/>

- Promote low density housing where water and sewer is not available.
 - Buffer areas to wetlands, aquifers, stream corridors, steep slopes.
- Goal 8 Enhance recreational and cultural opportunities.
 - Further investigate needs for community waterfront park along the Mohawk.
- Goal 9 Cooperate with adjacent municipality and Montgomery County.
 - Support existing public safety facilities.

DRAFT

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snowstorms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for Glen as evidenced during Hurricane Irene, especially to properties along the Mohawk River and Schoharie Creek bridge crossings. There were also many notable high wind/ thunderstorm events that impacted trees within the town. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Town of Glen that are not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for earthquakes is included.

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Town in the past 10 years.

Table 1. Hazard Event History 2011-2021²

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------------------|--|---|
| August 26 – September 11, 2011 | Hurricane Irene and Remnants of Tropical Storm Lee | Record floods were set at all the gages along Schoharie Creek: Prattsville, Gilboa Dam, Gilboa Bridge, Breakabeen and Burtonsville. Record flooding occurred along Schoharie Creek in Montgomery County. Several homes on Colyer Road in Burtonsville were destroyed. On August 28th, Route 5S over the Schoharie Creek was closed and the New York State Thruway, I-90, was closed westbound at Exit 27 (Amsterdam-Route 5) and eastbound at Exit 28 (Fultonville-Fonda) due to severe flooding on the Schoharie Creek. On the morning of August 29th at approximately 8:45 am EST, a 72-year-old man drowned when his truck was swept away from Route 5S by the Schoharie Creek in the Town of Glen. It was reported that at least 20 farmers lost crops and sustained damage to farmland in the Schoharie and Mohawk valleys in Montgomery County. The Burtonsville River gage on the Schoharie Creek, which is located on the right bank 0.4 miles south of Burtonsville, 2.7 miles north of Esperance, exceeded its 6-foot flood stage at 11:01 am EST on August 28th, its 8-foot moderate flood stage at 1:45 pm, its 10-foot major flood stage at 6:12 pm, and dropped below flood stage at 8:25 pm on August 30th. A record crest occurred but the time and reading were unknown since the gage was damaged during the flooding. Initially started out as flash flooding then transitioned to river flooding. |
| September 9, 2011 | Tornado | A National Weather Service Storm Survey team confirmed a weak tornado touched down in the Town of Glen. The tornado downed some small hardwood trees and broke off some large branches. Damage extended from just west of Noeltner Road to near Ripley Road. There was video and photo evidence. |
| July 23, 2012 | Hail | Large hail, some as large as 2.50 in diameter, occurred with some storms across parts of eastern New York. In addition, thunderstorm winds produced damage to trees as well. These storms produced a large amount of lightning, which drew a lot of attention from area residents. Tennis ball sized hail was reported during a thunderstorm in Glen. |

² <http://ncdc.noaa.gov/stormevents>

| Dates of Event | Event Type | Summary of Damages/Losses |
|-----------------|----------------------------------|--|
| May 22, 2013 | Flash Flood | Local television media reported flash flooding on Sulphur Springs Road in Florida due to heavy rainfall from showers and thunderstorms. The flash flooding caused significant damage to a home. One and a half feet of water swept through the home. |
| October 7, 2020 | Tornado/ Thunderstorm Wind | A high-end severe weather event unfolded across the Northeast on Wednesday October 7, 2020. A line of thunderstorms originated across New York state and moved eastward into New England during the afternoon hours, producing widespread damage. New York State Mesonet weather stations recorded widespread wind gusts between 50 and 60mph down the Mohawk Valley. As a result of this storm, there were over 160,000 power outages across the region. Schools closed the next day due to lack of power, and dry ice was distributed to the public while power was being restored over the next few days. Numerous trees downed and snapped in the Hamlet of Auriesville. |
| August 4, 2022 | Thunderstorm Winds | Amid a hot and humid air mass, showers and thunderstorms developed during the afternoon hours on August 4, 2022. Some thunderstorms became severe producing downed trees and power lines as well as heavy rainfall leading to flash flooding. Wires were downed along Ingersoll Road in the Town of Glen. |

2.2 Community Assets

Forty-eight Community Assets were identified for the Town of Glen for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID corresponds with locations shown in **Figure 1**.

Table 2. Community Assets in the Town of Glen

| | Asset ID | Subtype | Name |
|------------------------|----------|----------------------------------|------------------------------------|
| ECONOMY | 1 | Fuel | Pilot |
| | 18 | Fuel | Mobil |
| SOCIETAL | 2 | Historic Site | 1831 Wycophite Church |
| | 3 | Historic Site | Auriesville Shrine Museum |
| | 4 | Church | Our Lady of Martyrs Shrine |
| | 6 | Cemetery | Jesuit Cemetery |
| | 15 | Cemetery | Glen Village Cemetery – Logtown Rd |
| | 16 | Cemetery | Maple Avenue Cemetery |
| | 17 | Cemetery | Auriesville Cemetery |
| INFRASTRUCTURAL | 7 | Municipal / Public Safety | Glen Volunteer Fire Dept |
| | 8 | Municipal / Public Safety | New York State Police |
| | 10 | Municipal / Public Safety | Montgomery County Sherriff |
| | 12 | Water Tower | Fultonville Water Supply Tower |
| | 14 | Municipal / DPW / Highway | Montgomery County Building |

| | Asset ID | Subtype | Name |
|--|----------|--------------------------------|---|
| | 19 | Municipal Town Building | Town of Glen Office – 7 Erie St. |
| | 20 | DPW/Highway | Town of Glen Highway Dept – 30A |

Bold indicated asset is identified as an essential facility.

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are five essential facilities in town. There is no designated emergency shelter in Glen. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Town of Glen.

| Facility | Location | Emergency Power? | Shelter? | Floodplain? | Environmental Justice Area |
|--|--|------------------|----------|-------------|----------------------------|
| Glen Volunteer Fire Dept | 134 Auriesville Rd, Glen | Y | Y | N | Y |
| New York State Police | 3003 NY-5S, Fultonville | Y | N | N | Y |
| Montgomery County Sherriff | 200 Clark Drive. Fultonville | Y | N | N | Y |
| Montgomery County DPW | 113 Park Drive Fultonville | Y | N | N | Y |
| Town of Glen Municipal Building | 7 Erie St. Fultonville | N | N | Y | Y |
| Town of Glen DPW/Highway | 3773 State Highway 30 Fultonville | Y | Y | N | Y |

Town of Glen Annex

2023 Montgomery County Hazard Mitigation Plan

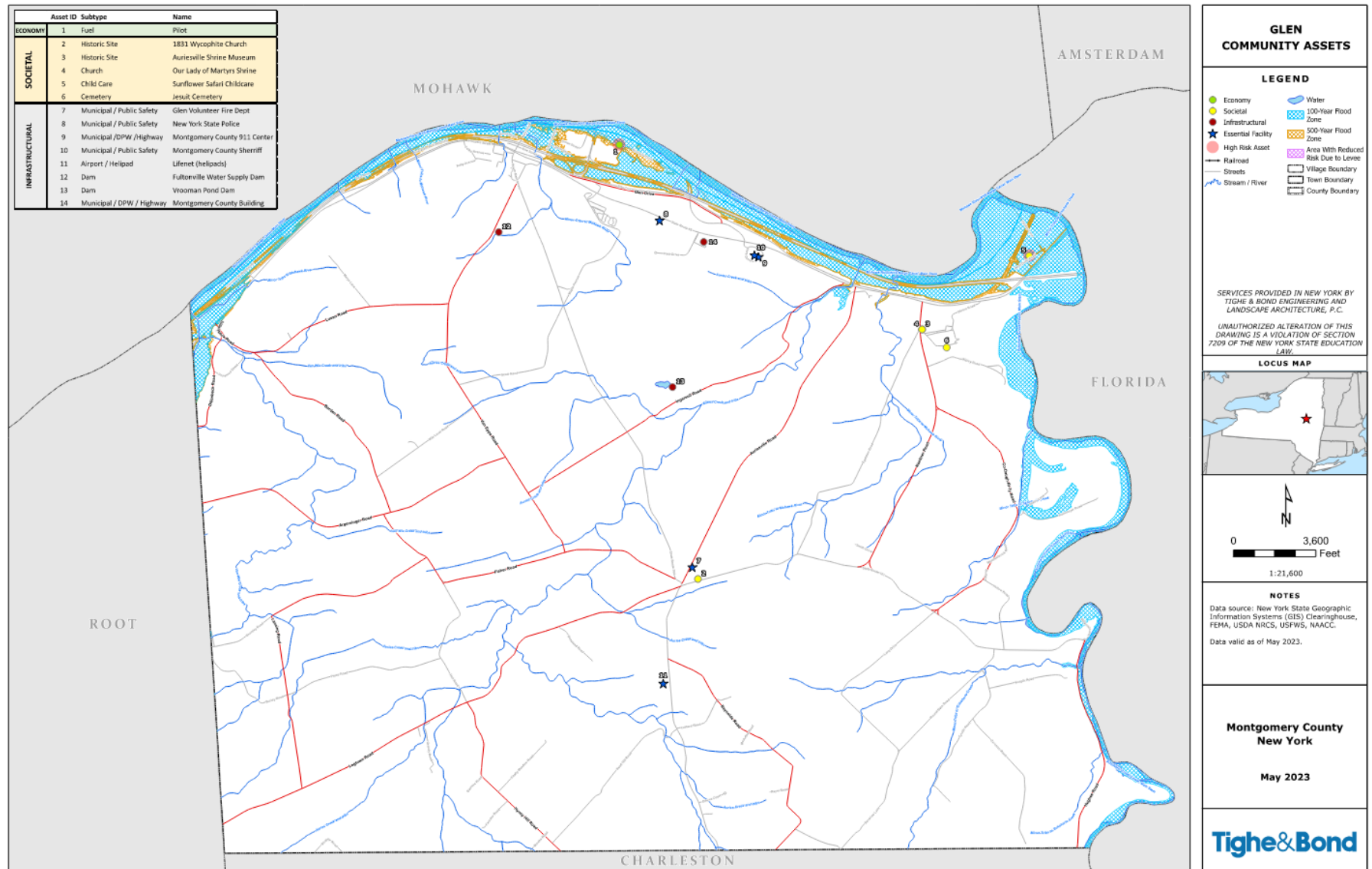


Figure 1. Town of Glen FEMA Flood Zones, Community Assets and Essential Facilities

2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there are no repetitive loss properties in the Town of Glen. As of December 31, 2022, 2 policies were in force. The Town of Glen had a total of 2 claims totaling \$181,539 in losses for all NFIP-insured structures. It should be noted that according to FEMA data there are 220 structures within the 100-year flood plain (including homes in Fultonville).

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Town, by hazard as shown in Table 4. The estimated value of at-risk assets is based on the Town's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Town of Glen Vulnerable Assets Exposure Analysis³.

| Hazard | At-Risk All Properties ⁴ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|---------------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$186,300,418 | 1,046 | \$25,099,427 | 5 | \$2,985,251 | 2 |
| Severe Thunderstorm | \$186,300,418 | 1,046 | \$25,099,427 | 5 | \$2,985,251 | 2 |
| Severe Winter Storm | \$186,300,418 | 1,046 | \$25,099,427 | 5 | \$2,985,251 | 2 |
| Tornado | \$186,300,418 | 1,046 | \$25,099,427 | 5 | \$2,985,251 | 2 |
| Flood | | | | | | |
| 1% Annual Chance | \$31,491,171 | 220 | - | 0 | - | 0 |
| 0.2% Annual Chance | \$18,142,092 | 116 | - | 0 | - | 0 |

³ Values based on 50% of assessor's full market value

⁴ Includes Villages of Fultonville

2.6 Townwide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Town of Glen. The totals include capital stock and economic loss estimates.

*Table 5 Town of Glen Earthquake Vulnerability Analysis**

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 1,046 | 1,046 |
| Total direct building economic loss | \$631,000 | \$8,448,000 |

**Hazus combines Glenn, Root and the Village of Fultonville, values above are for all communities*

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Glen Problem Statements.

| Problem Area | Description |
|-----------------------------|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. |
| Geographic Areas of Concern | |
| Schoharie Creek | Local Areas of Flooding- Roads and neighborhoods abutting Schoharie Creek and the Mohawk River. |
| Mohawk River | |
| Vulnerable Community Assets | |
| Shelters | Glen Fire Department and the Glen DPW/Highway dept have emergency generators so can act as shelters when needed. Hartley Road, Mill Point Lane Reed Hill Rd Bridge Dufel Road, Hartley Road, Mill Point Lane, Can Wagenen Drive, Hyney Hill Road- 23 properties were affected by Hurricane Irene |
| Road | |
| Bridges | |
| Neighborhoods | |
| | Stream bank stabilization, dredging the Mohawk, raising the locks before a flood, elevating homes above BFE, purchasing properties in floodplain aeras and strengthening building codes and zoning laws are all a priority for Glen. |

4. Capabilities

The Town of Glen is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Town's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Town of Glen completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for Glen:

- Comprehensive/Master Plan – *Local Planning Board*
- Watershed Management Plan – *Mohawk River Watershed Management Plan, 2015*
- Building Codes – *Must adopt Uniform Construction Codes and International Building Code*
- Land Use Planning
- Zoning Ordinance – *Must adopt Uniform Construction Codes and International Building Code*
- Subdivision Ordinance – *Must adopt Uniform Construction Codes and International Building Code*
- Real Estate Disclosure Requirements – *Building inspector, state mandated.*
- NFIP Flood Damage Prevention Ordinance – *Town of Glen Code Chapter 90, Adopted 2/16/2018.*

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

The Town of Glen has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

Town of Glen Annex

2023 Montgomery County Hazard Mitigation Plan

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for Glen:

- Planning Board
- Maintenance Programs to Reduce Risk
- Mutual Aid Agreements
- Chief Building Official – Code Enforcement Officer
- Civil Engineer – Prime AE
- GIS Coordinator - MCBDC
- Hazard Data

The Town of Glen is governed by a Town Board, Planning Board, Zoning Board of Appeals, and includes a Town Supervisor. The Town has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Town staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. Emergency management within Glen includes a volunteer fire department along with county-wide fire departments. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for Glen:

- Community Development Block Grant
- Federal Funding
- State Funding
- Hazard Mitigation Grant Programs

The Town of Glen has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concern with regard to the implementation of mitigation projects and related risk reduction activities.

Town of Glen Annex

2023 Montgomery County Hazard Mitigation Plan

The Town's Clerk is responsible for the accounting of all Town funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The Clerk provides budget monitoring and financial reports to the Supervisor throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

The Town of Glen does not currently have any education and outreach.

4.2 NFIP Participation and Compliance

The Town of Glen has actively participated in the National Flood Insurance Program (NFIP) since 1987. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there are a total of 2 NFIP policies in force. The total annual premium is \$1,173 for a total of \$654,000 in coverage. As of February 23, 2023, a total of 2 claims amounting to approximately \$181,539 have been paid to NFIP policyholders in Glen since joining the program.¹³ More information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 8 describes the Town of Glen's participation and continued compliance in accordance with NFIP requirements and as specified in FEMA's 2022 Local Mitigation Planning Policy Guide.¹⁴

Table 7. NFIP Participation and Compliance, Town of Glen.

| REQUIRED INFORMATION | RESPONSE |
|--|--|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2018 via Town of Glen Zoning Ordinance (Chapter 90 Flood Damage Protection Law). |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Ordinance (Section 3.2Basis for establishing the area of Special Flood Hazard) Latest effective FIRM is dated January 19, 2018. |
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Building Code Enforces of the Town of Glen administers the provisions of the Floodplain District. The Building Code Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |

| REQUIRED INFORMATION | RESPONSE |
|--|--|
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Building Code Enforcer of the Town of Glen has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 2 of the Town's Ordinance define substantial improvement/substantial damage as 50% of market value of the structure. |

Minimum standards set forth by FEMA and New York State have been adopted by the Town of Glen.

The Town of Glen requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

The Town of Glen does not participate in the Community Rating System (CRS), however, the Town has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Town's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.2.1 Improvement Opportunities

Despite the limitations and constraints faced by the Town of Glen when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Town is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Town during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov//reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Town to cope with potential unforeseen challenges in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Town staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout town.

Financial Capabilities

- Maximize opportunities through the Town's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Town's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Town to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Town's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Town Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Town should coordinate with the State NFIP Coordinator on possible updates or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- Glen's local Flood Damage Prevention regulations and building code enforcement procedures

could be further strengthened to include the following requirements that exceed minimum NFIP standards:

- Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood.
- Prohibit or minimize new development in floodplain areas.
- Prohibit or enforce higher standards for critical facilities subject to flood hazards.
- Add provisions that protect natural and beneficial functions of floodplains.

DRAFT

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status, actions brought forward to this 2023 plan are identified in the Keep for Plan Update? column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Town of Glen.

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|--|---------------------|---|-----------------------|
| 1 | Identify Vulnerable Structures for Retrofit | Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. | In progress | Remains ongoing and active | YES |
| 2 | Culvert Repair | Replace undersized culverts to increase conveyance and alleviate repetitive flooding problems at locations throughout the town. | In progress | Identify areas subject to erosion for possible installation of riprap to stabilize banks preventing soil and debris from plugging culverts and outflows | YES |
| 3 | Local Ditching and Culvert Clearing | Ditching in areas of 10% or greater (enhancement) | Status: In progress | The town is working on local ditching and culvert clearing in progress. | YES |

Town of Glen Annex

2023 Montgomery County Hazard Mitigation Plan Update

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|--|----------------|---|-----------------------|
| 4 | Bridge and Culvert Debris Removal and Maintenance | <p>Maintain and enhance program of debris removal at bridges and culverts to maintain conveyance.</p> <p>Maintain and enhance programs to clear litter from ditches and drainage areas.</p> <p>Beaver dams in the Town have been identified as a problem that leads to flooding.</p> | In progress | None provided | YES |
| 5 | Emergency Services and Planning | Continue to develop, enhance, and implement existing emergency plans to address all hazards of concern including a failure of Gilboa Dam.). | In progress | Identify roads with signage emergency travel routes | YES |
| 6 | Permanent Generator Installation | Purchase and install permanent generators for Town garage, Town offices and community center. | In progress | Review and pursue Emergency Generator for Town Hall offices | YES |

Town of Glen Annex

2023 Montgomery County Hazard Mitigation Plan Update

Please confirm estimated costs and implementation schedules.

Table 9. Updated Mitigation Actions (2023-2028) – Town of Glen.

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|---|---|--|----------------------|----------------|--------------------------|------------------------|-------------------------|----------|
| 1 | Identify Vulnerable Structures for Retrofit | Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. | Property Protection | Flood, Severe Storms | Medium | FEMA | Town / State / Federal | 2023 -2028 | Low |
| 2 | Culvert Repair | Replace undersized culverts to increase conveyance and alleviate repetitive flooding problems at locations throughout the town. | Structural Project | Flood, Severe Storms | Medium | Local / HMP | Town / County DPW's | 2023 -2028 | Medium |
| 3 | Local Ditching and Culvert Clearing | Ditching in areas of 10% or greater (enhancement) | Property Protection | Flood, Severe Storms | Low | Local budget | Town / County DPW's | 2023 -2028 | Low |
| 4 | Bridge and Culvert Debris Removal and Maintenance | Maintain and enhance program of debris removal at bridges and culverts to maintain conveyance. Maintain and enhance programs to clear litter from ditches and drainage areas. Beaver dams in the Town have been identified as a problem that leads to flooding. | Property Protection / Natural Resource Protection and Green Infrastructure | Flood, Severe Storms | Low | Local budget | Town / County DPW's | 2023 -2028 | Medium |

Town of Glen Annex

2023 Montgomery County Hazard Mitigation Plan Update

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|----------------------------------|---|---|------------------|----------------|----------------------------|---|-------------------------|----------|
| 5 | Emergency Services and Planning | Continue to develop, enhance, and implement existing emergency plans to address all hazards of concern including a failure of Gilboa Dam. | Prevention / Public Education and Awareness | All Hazards | Low | Local budget | Municipal Emergency Manager with support from County OEM and SEMO | 2023 -2028 | Low |
| 6 | Permanent Generator Installation | Purchase and install permanent generators for Town garage, Town offices and community center. | Property Protection | All Hazards | Medium | HMGP with local cost share | Town Administration | 2023 -2028 | High |

Capability Assessment Worksheet- Town of Glen

| Planning and Regulatory | | COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | T&B TO REVIEW OLD ANNEX |
|--|------------------------------------|---|---|
| Plans | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? | NOTES FROM 2016 Annex |
| Comprehensive/Master Plan | Yes | | via local planning board, year not listed |
| Capital Improvements Plan | No | | |
| Economic Development Plan | No | | |
| Local Emergency Response Plan | Yes | | Via County Plan, OEM |
| Continuity of Operations Plan | No | | |
| Transportation Plan | No | | |
| Stormwater Management Plan | No | | |
| Watershed Management Plan | Yes | | Via Mohawk River Watershed Management Plan, 2015 |
| Floodplain Management Basin Plan | No | | |
| Open Space and Recreation Plan | No | | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? | NOTES FROM 2016 Annex |
| Building Code | Yes | | Must adopt Uniform Construction Codes and International Building Code |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | | Annex notes not participating |
| Fire department ISO rating | No | | |
| Site plan review requirements | Yes | | Via Local Planning Board |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? | NOTES FROM 2016 Annex |
| Zoning ordinance | Yes | | Must adopt Uniform Construction Codes and International Building Code |
| Subdivision ordinance | Yes | | Must adopt Uniform Construction Codes and International Building Code |
| NFIP Flood Damage Prevention Ordinance | Yes | Town of Minden Code Chapter 54, Adopted 10/19/2017 | Via Town Code/code enforcement office |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | | |
| Flood insurance rate maps | Yes | Effective 1/19/2018 | |
| Acquisition of land for open space and public recreation uses | No | | |
| Stormwater Management Ordinance | No | | |
| Growth Management Ordinance | No | | |
| Real Estate Disclosure Requirements | Yes | | Via building inspector, state mandated |
| Administrative and Technical | | | |
| Administration | Yes/No | Describe capability Is coordination effective? | NOTES FROM 2016 Annex |
| Planning Commission | Yes | Planning Board | |
| Mitigation Planning Committee | No | | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | Yes | | |
| Mutual aid agreements | Yes | | |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| Chief Building Official | Yes | Code Enforcement Officer | |
| Floodplain Administrator | Yes | | Ron Hinkle, Code Enforcement Officer (per NYSDEC records) |
| Emergency Manager | Yes | | Via county |
| Community Planner | Yes | | Town and County |
| Civil Engineer | Yes | | Contractual, external agency |
| GIS Coordinator | Yes | | Via county |
| Other | | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| Warning systems/services | No | | |
| (Reverse 911, outdoor warning signals) | No | | |
| Hazard data and information | Yes | | County |
| Grant writing | Yes | | Contractual basis |
| Hazus analysis | No | | |
| Other | | | |
| Financial | | | |
| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | NOTES FROM 2016 Annex |
| Capital improvements project funding | No | | |
| Authority to levy taxes for specific purposes | Yes | | |
| Fees for water, sewer, gas, or electric services | Yes | | |
| Impact fees for new development | No | | |
| Storm water utility fee | No | | |
| Incur debt through general obligation bonds and/or special tax bonds | Yes | | |

| | | | |
|---------------------------------------|-----|------------|--|
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | | |
| Other federal funding programs | No | | |
| State funding programs | Yes | CFA Grants | |
| Hazard Mitigation Grant Programs | Yes | | |

Education and Outreach

| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
|---|--------|---|-----------------------------|
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | | |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | No | | |
| Natural disaster or safety related school programs | No | | |
| StormReady certification | No | | Not participating |
| Firewise Communities certification | No | | Not participating |
| Public-private partnership initiatives addressing disaster-related issues | No | | |
| Other | | | |

TOWN OF MINDEN

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Town of Minden
134 Highway 80
Fort Plain, NY 13339

<https://www.townofminden.org/>

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Town of Minden Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the Town of Minden not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Town of Minden.

| Primary Point of Contact | Alternate Point of Contact |
|---|---|
| Joe Hanifin, Superintendent of Highway 134 State Highway 80 Fort Plain, NY 13339 518-993-3443 townofmindenhighway@gmail.com | Cheryl Reese, Town Supervisor 134 Highway 80, Fort Plain, NY 13339 518-993-3443 townofmindensupervisor@gmail.com |

1. Municipality Profile

1.1 Brief History

This town was organized from the westerly part of Canajoharie, March 2, 1798. Tradition says it was named Minden at the suggestion of some early settlers, who came from a place of the same name in Germany. The Town, which is one of remarkable fertility, is about nine miles in length on the Mohawk, with an average breadth of eight miles southerly. The early permanent settlers were Germans, the first of whom came from Schoharie. They settled mainly in that part of town called, from their nationality, Dutchtown, and across the river in Palatine; the former community gradually extending, by accessions from Germany between the years 1723 and 1760, along the river the whole length of what in 1722 became known as the Canajoharie district, and which in 1788 became a township, bordering upon the river some twenty miles, its western border embracing the former home of Gen. Herkimer. Evidence of Indian occupancy are literally found all over the town, the rude stone implements lost in war and the chase, but the sites of their wigwams can never be known except as plow reveals evidence of their existence.

1.2 Location and Demographics

The Town of Minden is a sparsely populated agricultural community of approximately 51 square miles located in the southwestern portion of Montgomery County south of the Mohawk River, about 50 miles west of Albany. It shares its boundaries with the Village of Fort Plain and Town of St. Johnsville to the north, Towns of Palatine and Canajoharie to the east, Otsego County to the south and Herkimer County to the west. The Town of Minden has six Hamlets which include Hallsville, Mindenville, Freybush, Fordsbush, Salt Springville, and Brookmans Corners.

Land surface ranges from around 300 feet above mean sea level along the Mohawk River to a high of 1,600 feet above mean seal level on Quinn Road at the southwestern corner, but most of the land surface is rolling uplands. The Town is located in the Canajoharie Creek subwatershed to the Mohawk River with predominant drainage features including Otsquago Creek and Bowman's Creek. A more detailed description of the Eastern Alplaus Kill Subwatershed is included in the HMP Community Asset Inventory Section 5.6. Minden's societal and infrastructural resources, including critical assets, are highlighted in Figure 1.

Minden is home to 4,231 residents, with a population density of less than 83 people per square mile. According to the 2020 US Census¹, 76% of their 1,790 housing units are occupied, while 24% of the housing units remain vacant. Of the occupied units, 76% are owner occupied and 24% are renter occupied. 24% of the total population is below the poverty level, which includes 12% of seniors 65 and over and 38% of children under the age of 18. Approximately 15 percent of the town's residents have attained a four-year college degree or higher. The median household income for Minden is \$43,889. There is little racial or ethnic diversity in the community with 91% reporting as white, 3% as multi-racial and 5% as Hispanic.

1.3 Governance

The Town of Minden is governed by five members of the Town Council. This governing body will assume responsibility for adoption and implementation of this plan.

1.4 Land Use and Development

There are about 32,000 total acres of land in the town based on the 2023 real property data. The primary land use in the town is agricultural, which includes approximately 67% of the town. Agricultural land is approximately 22,000 acres with an average parcel size of 108 acres. Rural residential is the second largest use of land with approximately 4,900 acres devoted to this use or 15% of the total land area. Vacant land constitutes another 3,400 acres or 11% of the land area. Commercial and industrial use is less than 0.3% of land use.

Zoning includes a Right-to-Farm provision and four zoning districts are established for R-1 Residential, A-Agriculture, C-1 and a Planned Development District, but this is not yet mapped. Zoning includes a Floodplain overlay district and Wetland Overlay District. Most of the Town is zoned A. IN 2010 a conservation subdivision bylaw was enacted.

Virtually all residents and businesses in Town rely on groundwater for drinking and there are no public water supply or sewers except in the Village of Fort Plain. Those services extend out of the Village along Route 80 only to the Town Hall. Very few building permits are issued in a year and little if any growth is predicted over the next 5 years.

¹ <https://censusreporter.org/profiles/06000US3605747614-minden-town-montgomery-county-ny/>

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snowstorms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for Minden as evidenced during Hurricane Irene as evidenced by the horrific flooding in the Village of Fort Plain. Thunderstorm Winds have also been problematic for this area. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Town of Minden that is not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for earthquakes is included.

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Town in the past 10 years.

Table 1. Hazard Event History 2011-2021²

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------------------|--|---|
| August 26 – September 11, 2011 | Hurricane Irene and Remnants of Tropical Storm Lee | In 2016 plan damages were not calculated |
| October 27 – November 8, 2012 | Hurricane Sandy | In 2016 plan damages were not calculated |
| May 22, 2013 | Flash Flood | In 2016 plan damages were not calculated |
| June 26-July 10, 2013 | Severe Storms Flooding | In 2016 plan damages were not calculated |
| July 3, 2014 | Thunderstorm Wind | A warm and humid air mass was in place over the region on Thursday, July 3rd. As a strong cold front approached from the west, a broken line of thunderstorms developed over central New York and moved eastward during the afternoon hours. Aided by powerful winds aloft, the storms moved from west to east over the region between the late afternoon and early evening hours. Many of the storms produced strong winds, causing damage to trees and power lines over much of the region. The most concentrated damage occurred from one particularly severe thunderstorm, which caused intense damage between West Winfield in Herkimer County towards Minden in Montgomery County. A National Weather Service Storm Survey determined a series of microbursts produced wind damage up to 100 MPH in these areas. A few of the storms also produced large hail as well. A barn collapsed due to thunderstorm winds on Fordsbush Road in Minden. Trees and wires were also down as well. A tractor trailer was also blown over and across a road. |

² <https://www.ncdc.noaa.gov/stormevents/>

2.2 Community Assets

Ten Community Assets were identified for the Town of Minden for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID corresponds with locations shown in **Figure 1**.

Table 2. Community Assets in the Town of Minden

| | Asset ID | Subtype | Name |
|---|----------|---------------------------|---------------------------------------|
| SOCIETAL | 1 | School/ Private | Victory Christian Academy |
| INFRASTRUCTURAL | 2 | Cell Tower | NEW CINGULAR WIRELESS PCS, LLC |
| | 3 | Cell Tower | NEW CINGULAR WIRELESS PCS, LLC |
| | 4 | Cell Tower | Cellco Partnership |
| | 5 | Municipal / Public Safety | South Minden Fire Dept |
| | 6 | PWS Tank | Fisk Hill Road Water Storage Tank |
| | 7 | Airport / Helipad | Hickory Acres |
| | | | |
| | 9 | Dam | Walts Road Pond Dam |
| | | | |
| Bold indicated asset is identified as an essential facility | | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are five essential facilities in town. There is no designated emergency. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Town of Minden.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? | Enviro. Justice |
|--------------------------------|-----------------------------|------------------|----------|----------------|-----------------|
| NEW CINGULAR WIRELESS PCS, LLC | 349 Sanders Road | Y | N | N | Y |
| NEW CINGULAR WIRELESS PCS, LLC | 3636 STATE ROUTE 5S (64318) | Y | N | N | Y |
| Cellco Partnership | 0.41 Miles | Y | N | N | Y |

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2023 Montgomery County Hazard Mitigation Plan

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? | Enviro. Justice |
|-----------------------------------|--|------------------|----------|----------------|-----------------|
| | from the intersection of Route 5S and Sanders Road Bearing 4 | | | | |
| South Minden Fire Dept | 1029 State Highway 163, Fort Plain | Y | Y | N | Y |
| Fisk Hill Road Water Storage Tank | Fisk Hill Road, Fort Plain | N | N | N | Y |
| Hickory Acres | 187 Bauder Rd, Fort Plain, NY 13339 | N | N | N | Y |

Town of Minden Annex

2023 Montgomery County Hazard Mitigation Plan

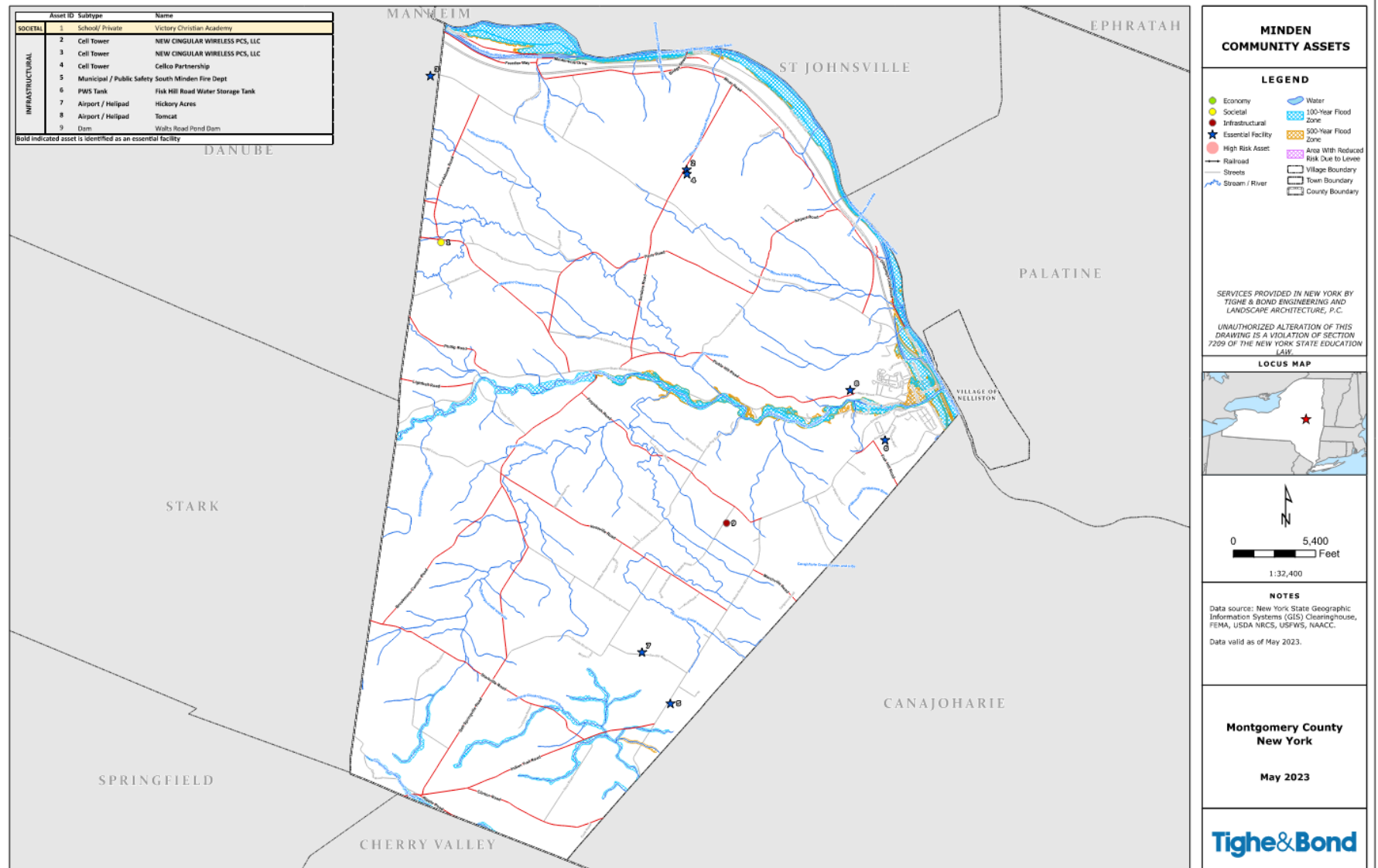


Figure 1. Town of Minden FEMA Flood Zones, Community Assets and Essential Facilities

2.4 Repetitive Loss and Severe Repetitive Loss Properties

There was one identified repetitive loss properties in Minden in the 2016 HMP. As of 2022, according to FEMA records there is still one repetitive loss, and no severe repetitive loss properties. As of December 31, 2022, 8 policies were in force. The Town of Minden had a total of 2 claims totaling \$33,481 in losses for all NFIP-insured structures. It should be noted that according to FEMA data there are 388 structures within the 100-year flood plain (including the Villages of Fort Plain).

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Town, by hazard as shown in Table 4. The estimated value of at-risk assets is based on the Town's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Town of Minden Vulnerable Assets Exposure Analysis³.

| Hazard | At-Risk All Properties ⁴ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|---------------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$228,029,253 | 1,651 | \$850,000 | 7 | \$0 | 0 |
| Severe Thunderstorm | \$228,029,253 | 1,651 | \$850,000 | 7 | \$0 | 0 |
| Severe Winter Storm | \$228,029,253 | 1,651 | \$850,000 | 7 | \$0 | 0 |
| Tornado | \$228,029,253 | 1,651 | \$850,000 | 7 | \$0 | 0 |
| Flood | | | | | | |
| 1% Annual Chance | \$37,396,290 | 388 | - | 0 | - | 0 |
| 0.2% Annual Chance | \$35,759,490 | 401 | - | 0 | - | 0 |

³ Values are determined based on 50% of full market value

⁴ Includes Villages of Fort Plain

2.6 Townwide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Town of Minden. The totals include capital stock and economic loss estimates.

*Table 5 Town of Minden Earthquake Vulnerability Analysis**

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 1,651 | 1,651 |
| Total direct building economic loss | \$623,000 | \$7,390,000 |

- *Hazus includes the Village of Fort Plain in these calculations.*

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Minden Problem Statements.

| Problem Area | Description |
|-----------------------------|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. |
| Geographic Areas of Concern | |
| Bowmans Creek | Local Areas of Flooding- The length of the creek and low-lying areas adjacent to the waterway flood. |
| Otsquago Creek | |
| Mohawk River | |
| Vulnerable Community Assets | |
| Shelters | South Minden Fire Department would become a shelter if needed. |
| Bridges | H. Moyer Rd Bridge is owned by the Town of Minden |
| Emergency Service | |

4. Capabilities

The Town of Minden is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Town's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Town of Minden completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

4.1 Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for Minden:

- Comprehensive/Master Plan
- Local Emergency Operations Plan – *County Plan*
- Transportation Plan – *County Plan*
- Watershed Management Plan – *County Plan*
- Floodplain Basin Management Plan – *Local law number 1. 1987 Town of Minden code, Chapter 54*
- Building Codes – *Code Enforcement Officer, Class 8*
- Zoning Ordinance – *Planning Board, Section 77*
- Subdivision Ordinance – *Planning Board, Local Law 1993*
- NFIP Flood Damage Prevention Ordinance – *Updated 10/19/2017 Town of Minden Code Chapter 54*

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

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The Town of Minden has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for Minden:

- Chief Building Official – Code Enforcement Officer
- Community Planner – *MCBDC*
- GIS Coordinator - *MCBDC*

The Town of Minden is governed by a Town Board, Planning Board, Zoning Board of Appeals, and Supervisor. The Town has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Town staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for Minden:

- Capital improvement project funding
- Community Development Block Grant
- Federal Funding
- State Funding
- Hazard Mitigation Grant Programs

The Town of Minden has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concerns with regard to the

implementation of mitigation projects and related risk reduction activities.

The Town's Clerk is responsible for the accounting of all Town funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The Clerk provides budget monitoring and financial reports to the Supervisor throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for Minden:

- StormReady Certification
- Website

4.2 NFIP Participation and Compliance

The Town of Minden has actively participated in the National Flood Insurance Program (NFIP) since 1983. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there were 8 NFIP policies in force. The total annual premium is \$7,802 for a total of \$745,000 in coverage. As of February 23, 2023, a total of 2 claims amounting to approximately \$33,481 have been paid to NFIP policyholders in Minden since joining the program.¹³ More information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 7 describes the Town of Minden's participation and continued compliance in accordance with NFIP requirements and as specified in FEMA's 2022 Local Mitigation Planning Policy Guide.¹⁴

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov/reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

Town of Minden Annex

2023 Montgomery County Hazard Mitigation Plan

Table 7. NFIP Participation and Compliance, Town of Minden.

| REQUIRED INFORMATION | RESPONSE |
|--|--|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2017 via Town of Minden Code Chapter 54. |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited General Code Section 54-6 Basis for establishing areas of special flood hazard. Latest effective FIRM is dated January 19, 2018. |
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Building Code Enforces of the Town of Minden administers the provisions of the Floodplain District. The Building Code Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Building Code Enforcer of the Town of Minden has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 54-4 of the Minden General Code define substantial improvement/substantial damage as 50% of market value of the structure. |

Minimum standards set forth by FEMA and New York State have been adopted by the Town of Minden. The Town of Minden requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

The Town of Minden does not participate in the Community Rating System (CRS), however, the Town has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Town's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.3 Improvement Opportunities

Despite the limitations and constraints faced by the Town of Minden when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Town is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Town during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into the Town's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Town to cope with potential unforeseen challenges in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Town staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout town.

Financial Capabilities

- Maximize opportunities through the Town's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Town's chances

for a grant award.

- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Town to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Town's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Town Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Town should coordinate with the State NFIP Coordinator on possible updates or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- Minden's local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood).
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplain.

Town of Minden Annex

2023 Montgomery County Hazard Mitigation Plan Update

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status (i.e. completed, in progress, deferred, deleted), actions brought forward to this 2023 plan are identified in the Keep for Plan Update? column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Town of Minden

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|---|---------------------|---|-----------------------|
| 1 | Spring Street Guard Rail Installation | Spring Street Guard Rail Installation-Spring Street | Completed | | NO |
| 2 | Town Hall Backup Generator | Backup Generator Town Hall | On hold due to fire | Town Barn destroyed December 2022 | YES |
| 3 | Unnamed Tributary Sediment Management | Sediment Management Plan and Implementation for the Unnamed Tributary | In progress | This area is always being monitored when levels rise by view and inspection | YES |
| 4 | Post-Storm Inspection Training for Code Enforcement | Code Enforcement Post-Storm Inspection Training | In progress | Ongoing, some completed but always more to do | YES |
| 5 | Floodwater Mitigation and Property Monitoring | Flood Water Mitigation Activities Town-Wide | In progress | Normal upkeep and monitoring near water properties | YES |

Town of Minden Annex

2023 Montgomery County Hazard Mitigation Plan Update

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|--|--|----------------|--|-----------------------|
| 6 | Otsquago Creek Debris Removal | Otsquago Creek Debris Removal West of the footbridge located at Spring Street South of Route 80. | In progress | Manage monitoring, creek debris removal done on a needed basis | YES |
| 7 | Fort Plain Oversight of Creek and Tributary Monitoring | Creek and Tributary Monitoring | In progress | Creek monitored by independent via the Village of Fort Plain | YES |

Town of Minden Annex

2023 Montgomery County Hazard Mitigation Plan Update

Table 9. Updated Mitigation Actions (2023-2028) – Town of Minden

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|---|--|---|------------------|----------------|---------------------------|--------------------------------|-------------------------|----------|
| 1 | Town Hall Backup Generator | Backup Generator Town Hall | Property Project | All hazards | Low | HMGP, Local budget | Town Highway | 2023-2028 | Low |
| 2 | Unnamed Tributary Sediment Management | Sediment Management Plan and Implementation for the Unnamed Tributary | Natural Resource Protection and Green Infrastructure | Flood | Low | HMGP | Town Highway/Montgomery County | 2023-2028 | High |
| 3 | Post-Storm Inspection Training for Code Enforcement | Code Enforcement Post-Storm Inspection Training | Prevention | N/A | Low | Local budget | Code Enforcement Officer | 2023-2028 | Med |
| 4 | Floodwater Mitigation and Property Monitoring | Flood Water Mitigation Activities Town-Wide | Property Protection/ Natural Resource Protection and Green Infrastructure | Flood | Low | Local budget, CHIPS, HMGP | Town of Minden | 2023-2028 | Med |
| 5 | Otsquago Creek Debris Removal | Otsquago Creek Debris Removal West of the footbridge located at Spring Street South of Route 80. | Natural Resource Protection and Green Infrastructure | Flood | Low | HMGP | Town Highway | 2023-2028 | Med |

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| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|--|--------------------------------|--------------------------------|------------------|----------------|--------------------------|-----------------|-------------------------|----------|
| 6 | Fort Plain Oversight of Creek and Tributary Monitoring | Creek and Tributary Monitoring | Public Education and Awareness | Flood | Low | HMGP | County OEM | 2023-2028 | Med |

Capability Assessment Worksheet- Town of Minden

Planning and Regulatory

| COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | | | T&B TO REVIEW OLD ANNEX |
|---|----------------|---|---|
| Plans | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? | NOTES FROM 2016 Annex |
| Comprehensive/Master Plan | Yes | Yes | Local comprehensive plan in place, 1999 by resolution |
| Capital Improvements Plan | No | No | |
| Economic Development Plan | No | No | |
| Local Emergency Response Plan | Yes | Yes | Via County (County plan in place) |
| Continuity of Operations Plan | No | | Not mentioned in annex |
| Transportation Plan | Yes | Yes | Via County Plan |
| Stormwater Management Plan | No | | Stormwater Management Plans required in accordance with the New York State MS4 Phase II implementation of the Clean Water Act. |
| Watershed Management Plan | Yes | Yes | Via County Plan |
| Floodplain Management Basin Plan | Yes | Yes | Via Local law number 1. 1987 Town of Minden code, Chapter 54 |
| Open Space and Recreation Plan | No | | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? | NOTES FROM 2016 Annex |
| Building Code | Yes | Yes | Via Code Enforcement Officer, Class 8 |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | | Not Participating |
| Fire department ISO rating | No | | Not indicated in annex |
| Site plan review requirements | Yes | Yes | Managed via Planning Boarsd, SEQRA might have some relevance here (prohibitions) |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? | NOTES FROM 2016 Annex |
| Zoning ordinance | Yes | Yes | Via Planning Board, Section 77 |
| Subdivision ordinance | Yes | Yes | Via Planning Board, Local Law 1993 |
| NFIP Flood Damage Prevention Ordinance | Yes | Updated 10/19/2017 Town of Minden Code Chapter 54 | Via Code Enforcement Officer, Local law number 1. 1987 Town of Minden code, Chapter 54 |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | | Not mentioned in annex table |
| Flood insurance rate maps | Yes | Effective 1/19/2018 | Not mentioned in annex table |
| Acquisition of land for open space and public recreation uses | No | | Not mentioned in annex table |
| Stormwater Management Ordinance | Yes | Yes | Via State DEC, Stormwater Management Plans required in accordance with the New York State MS4 Phase II implementation of the Clean Water Act. |
| Growth Management Ordinance | No | | Notes SEQRA might have some relevance here. |
| Real Estate Disclosure Requirements | Yes | No | Via Realtors, state mandated |

Administrative and Technical

| Administration | Yes/No | Describe capability is coordination effective? | NOTES FROM 2016 Annex |
|--|-------------------------|---|--|
| Planning Commission | No | | |
| Mitigation Planning Committee | No | | Not mentioned in annex table |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | No | | Not mentioned in annex table |
| Mutual aid agreements | Yes | | Not mentioned in annex table |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| Chief Building Official | Yes | Yes | Not listed in annex |
| Floodplain Administrator | Yes | Yes | Via Barry Vickers, Code and Zoning Enforcement |
| Emergency Manager | Yes | Yes | Via County Emergency Manager |
| Community Planner | No | MCBDC | External consultant? |
| Civil Engineer | No | | External consultant? |
| GIS Coordinator | No | MCBDC | |
| Other | | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| Warning systems/services (Reverse 911, outdoor warning signals) | No | | Not mentioned in annex |
| Hazard data and information | No | | Not mentioned in annex |
| Grant writing | No | MCBDC | Not mentioned in annex |
| Hazus analysis | No | | |
| Other | | | Not mentioned in annex |

Financial

| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | NOTES FROM 2016 Annex |
|---|------------------------------------|--|-----------------------|
| Capital improvements project funding | Yes | Future Funds can be obtained. | |
| Authority to levy taxes for specific purposes | No | | |

| | | | |
|--|-----------------------------------|-------------------------------|--|
| Fees for water, sewer, gas, or electric services | No | | |
| Impact fees for new development | No | | |
| Storm water utility fee | No | | <i>Not mentioned in annex</i> |
| Incur debt through general obligation bonds and/or special tax bonds | Obligation bonds - Y, special - N | | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | Future Funds can obtained. | <i>"Don't Know" mentioned in annex</i> |
| Other federal funding programs | Yes | Future Funds can obtained. | <i>Not mentioned in annex</i> |
| State funding programs | Yes | Future Funds can obtained. | <i>Not mentioned in annex</i> |
| Hazard Mitigation Grant Programs | Yes | 2023 hazard mitigation grant. | |

Education and Outreach

| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
|---|--------|---|--------------------------------------|
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | | <i>Not mentioned in annex</i> |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | No | | <i>Not mentioned in annex</i> |
| Natural disaster or safety related school programs | No | | <i>Not mentioned in annex</i> |
| StormReady certification | Yes | County wide certification. | <i>Annex notes not participating</i> |
| Firewise Communities certification | No | | <i>Annex notes not participating</i> |
| Public-private partnership initiatives addressing disaster-related issues | No | | <i>Not mentioned in annex</i> |
| Other | | | |

TOWN OF MOHAWK

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Town of Mohawk

2 Park Street

Fonda, NY 12068

<https://www.townofmohawkny.com/>

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Town of Mohawk Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the Town of Mohawk not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Town of Mohawk.

| Primary Point of Contact | Alternate Point of Contact |
|--|--|
| Bill Holvig, Highway Superintendent 2-4 Park Street, Fonda, NY 12068 518-853-3312 or 518-527-1719 'holvigb@gmail.com' | Janet DePalma, Town Supervisor 2-4 Park Street, Fonda, NY 12068 518-853-3031 or 518-496-1590 supervisor@townofmohawk.net |

1. Municipality Profile

1.1 Brief History

The Town of Mohawk is rich with local history reaching back to when the Indian tribe "Mohawks" inhabited the area and when the Jesuit priests came to set up the Kateri Tekakwitha Shrine we still know today. After the American Revolution, the area of New York State then known as Tryon County was renamed Montgomery County in honor of General Richard Montgomery. With the railroad being built in 1834, towns along its path became more prosperous, Fonda being one of those towns. With the increase in population and the county seat, which at the time was Johnstown (a city only accessible by stage), Fonda became the new county seat in 1836.

1.2 Location and Demographics

The Town of Mohawk is located in Montgomery County, New York. It includes the village of Fonda and part of Tribes Hill. The Town is bounded on the south by the Mohawk River. Fulton County is on the northern border, and the Towns of Palatine and Amsterdam represent the western and eastern borders, respectively. The Town is home to the County Seat, the Village of Fonda. Fonda is also home to the Fonda Fairgrounds and Speedway and Montgomery County Offices. The National Kateri Tekakwitha Shrine is located in the Town, as are several other historic landmarks.

Land surface ranges from around 300 feet above mean sea level along the Mohawk River to a high of 1000 feet above mean seal level along the western border of town, and 745 feet north of Old Trail Road. The Town is located across the Central Cayadutta Creek sub watershed to the Mohawk River with predominant drainage features including Cayadutta Creek, Danascara Creek and Briggs Run. A more detailed description of the Central Cayadutta Creek Sub watershed is included in the HMP Community Asset Inventory Section 5.6. The Town also includes the hamlets of Tribes Hill, Berryville and Yosts.

Town of Mohawk Annex

2023 Montgomery County Hazard Mitigation Plan

Mohawk's societal, economic, infrastructural and economic resources, including critical assets are highlighted in Figure 2.

Mohawk is home to 3,607 residents, with a population density of less than 35 people per square mile. According to the 2020 US Census¹, 81% of their 1,581 housing units are occupied, while 19% of the housing units remain vacant. Of the occupied units, 86% are owner occupied and 14% are renter occupied. 6.8% of the total population is below the poverty level, which includes 13% of seniors 65 and over. Approximately twenty percent of the town's residents have attained a four-year college degree or higher. The median household income for Mohawk is \$70,375. There is little racial or ethnic diversity in the community with 91% reporting as White, 4% Multi-racial and 4% as Hispanic.

1.3 Governance

The Town of Mohawk is governed by a supervisor and Town Board. This governing body will be responsible for the adoption and implementation of this plan.

1.4 Land Use and Development

There are 21,655 total acres of land in the town. The primary land use in the town is agricultural, which includes approximately 54% of the town. Agricultural land totals 11,633 acres with an average parcel size of 68 acres. Rural residential is the second largest use of land with 4,636 acres devoted to this use or 21% of the total land area. Vacant land constitutes another 2,784 acres or 13% of the land area. Commercial and industrial land use is just over 1% primarily located adjacent to the Village of Fonda and off of Yellowville Road and State Highway 334.

The majority of Mohawk rely on groundwater wells for water supply and septic systems for wastewater disposal.

According to the Town of Mohawk Comprehensive Plan update completed in 2015, the Town has experienced a change in both its economic and demographic condition. This change has been characterized by a reduction of small farms and agricultural production, an increased demand for undeveloped land, the loss of local job opportunities, and the loss of younger generations of Town residents to areas with more opportunities for education and employment.

Goals from the Comprehensive Plan that are relevant to the HMP include the following:

- Preserve the Town's rural character and open spaces
- Improve Infrastructure and Community Facilities
- Recognize the waterfront as a Unique Asset to the Community
- Preserve the Natural Environment
- Enhance and Encourage Preservation of the Town's Historical Character

¹ <https://censusreporter.org/profiles/06000US3605747834-mohawk-town-montgomery-county-ny/>

Town of Mohawk Annex

2023 Montgomery County Hazard Mitigation Plan

- Provide for Orderly Growth and Development
- Cooperate with Town's Adjacent Municipalities and With Montgomery County

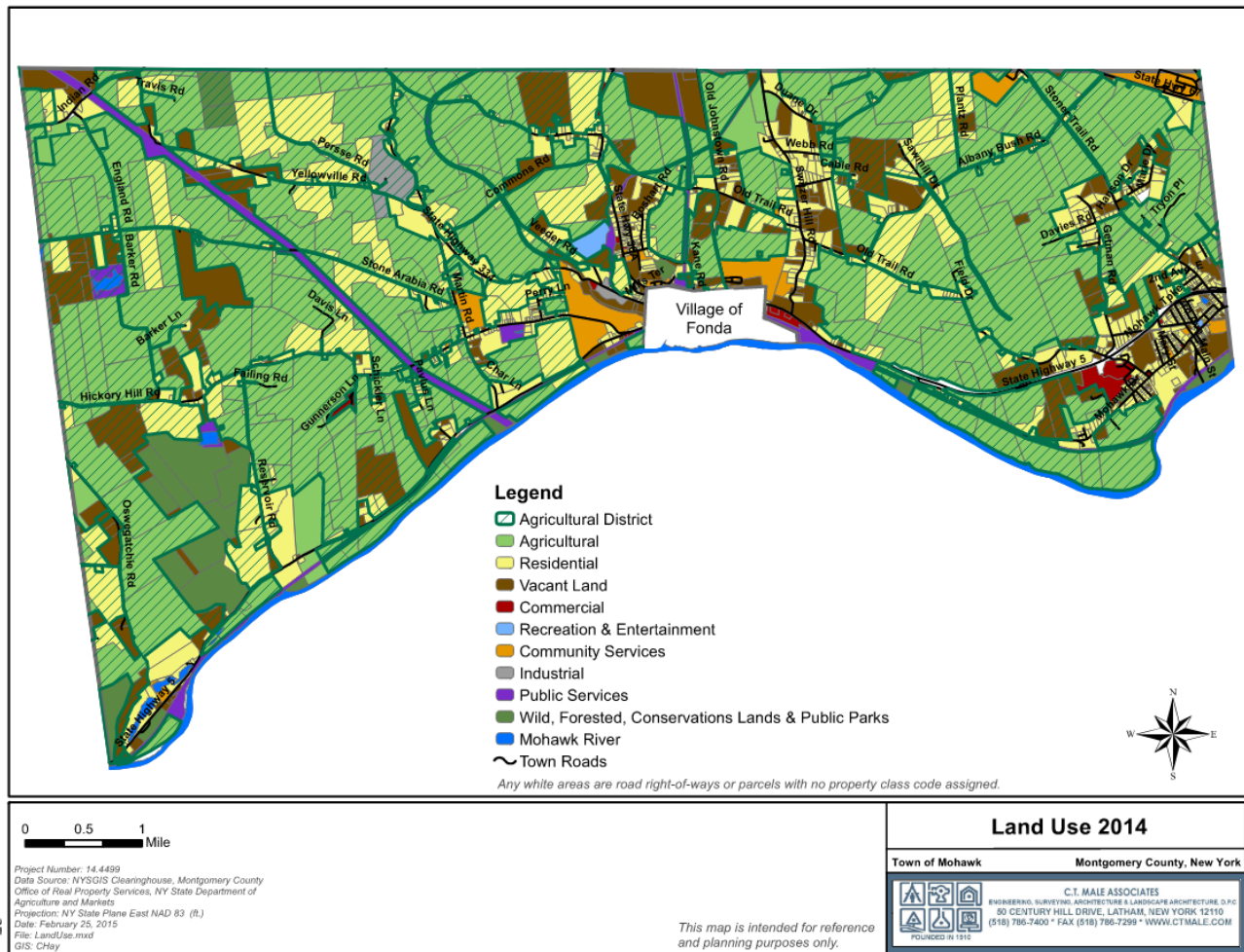


Figure 1 Town of Mohawk Land Use (2014)

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snowstorms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for Mohawk as evidenced during Hurricane Irene, especially to properties on the Mohawk River. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Town of Mohawk that are not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for earthquakes is included.

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Town in the past 10 years.

Table 1. Hazard Event History 2011-2021²

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------------------|--|---|
| August 26 – September 11, 2011 | Hurricane Irene and Remnants of Tropical Storm Lee | The Town Hall and Town Garage flooded as a result of this storm. The Town Hall had one foot of water and the Town Garage had 2.5 feet of water. There was also damage to numerous culverts, shoulders, and roads. Residential and commercial properties experienced damage. Public Assistance was requested by the Town. This event resulted in overtime by highway and fire due to cleanup |
| September 8, 2012 | Thunderstorm Winds | Several supercell thunderstorms developed earlier in the day in advance of the main squall line associated with the cold front with the potential for tornadoes, although none developed across the region. Trees were reported down due to thunderstorm winds approximately 1 mile north of Fonda |
| August 21, 2014 | Flash Flood | Heavy rainfall from thunderstorms led to flash flooding Fonda. Excessive flooding occurred on both Main Street and Broadway in Fonda. Flooding was also reported at the intersection of Route 5 (Main Street) and Route 334 (Cayadutta Street). A State of Emergency was issued for the town due to extent of the flooding. |
| May 1, 2017 | Thunderstorm Winds | A line of thunderstorms entered eastern New York around 7:30 pm, resulting in wind damage in the Southern Adirondacks, Mohawk Valley, Capital District, Schoharie Valley, and Lake George Saratoga region. Wires and trees were reported down in Fonda due to thunderstorm winds. |
| August 28-29, 2018 | Heat | Hazy, hot and humid conditions enveloped the region from Tuesday, August 28th through Wednesday, August 29th. This prompted a heat advisory to be issued both days for all locations below 1000 feet. Maximum heat index values ranged from the low 90's to the low 100's |

²<https://www.ncdc.noaa.gov/stormevents/>

| Dates of Event | Event Type | Summary of Damages/Losses |
|----------------|-------------------------|--|
| July 26, 2019 | Thunderstorm Winds | An isolated severe thunderstorm developed near Fonda on July 16th, resulting in a localized area of tree damage. Fifteen to twenty trees were reported down on Hickory Hill Road. |
| July 19, 2021 | Flash Flood, Heavy Rain | <p>A slow-moving thunderstorm produced torrential rainfall across the Village of Fonda on Monday, July 19, 2021. Between 3 and 4 inches of rain fell in just a couple of hours. A small creek north of the village overflowed its banks, sending water and mud downstream into the village. Storm drains became plugged up with debris, so water was unable to get through. Many roads were closed and impassable in and around the village until early Tuesday morning, July 20, 2021.</p> <p>A state of emergency was issued in the Village of Fonda as a result of the flooding. In addition, this thunderstorm produced 1 inch hail near Johnstown, NY. Multiple reports of flash flooding in and around the Village of Fonda. A small creek north of Fonda overflowed its banks causing 6 to 8 inches of water and mud to flow down Broadway (Route 30A) to Main Street (Route 5), causing multiple roads to be closed. Road shoulders were washed out on Old Johnson Road. The Interstate 90 off-ramps were closed at Exit 28 in the village of Fultonville due to flooding.</p> |

2.2 Community Assets

Forty-eight Community Assets were identified for the Town of Mohawk for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID corresponds with locations shown in **Figure 1**.

Table 2. Community Assets in the Town of Mohawk

| | Asset ID | Subtype | Name |
|----------|----------|------------------|---|
| ECONOMIC | 1 | Major Employer | HFM BOCES |
| | 2 | Major Employer | Fonda-Fultonville Central School District |
| | 3 | Major Employer | Fulton-Montgomery Community College |
| | 4 | Major Employer | Rode M-1 Industrial LLC |
| | 5 | Equipment Supply | Varin Enterprises LLC |
| | 6 | Energy | Regan Solar Farm |
| | 7 | Energy | Grissom Solar Farm |
| SOCIETAL | 8 | Church | Sacred Heart Church |
| | 9 | Cemetery | Pine Grove Cemetery |
| | 10 | School/ Public | Fonda-Fultonville Senior High School |
| | 11 | School/ Public | Fonda-Fultonville K-4 School |
| | 12 | School/ Public | Fonda-Fultonville 5-8 School |
| | 13 | Historic Site | Camp Mohawk - Civil War Training Grounds |
| | 14 | Historic Site | Sammons Estate |
| | 15 | Cemetery | Saint Kateri Tekakwitha Shrine |

Town of Mohawk Annex

2023 Montgomery County Hazard Mitigation Plan

| | Asset ID | Subtype | Name |
|-----------------|--|----------------------------------|--|
| | 16 | Cemetery | Evergreen Cemetery |
| | 17 | Cemetery | Sammons Cemetery |
| | 18 | Cemetery | St Cecelia Cemetery |
| | 19 | Museum | Tribes Hill Heritage Center |
| | 20 | Special Needs | NYSARC, In Mont Co Chapter |
| | 21 | Special Needs | NYSARC, Inc Mont Co Chapter |
| | 22 | Veterans Services | Veterans Of Foreign Wars |
| | 23 | Major Employer | New Dimensions in Living Inc |
| | 24 | Medical Facility | VA Health Clinic / Johnson Property Mgmt. |
| | 25 | Animal Clinic | Noah's Ark Animal Hospital |
| | 26 | Mobile Home Court | 2nd Driveway LLC Mobile Home Park |
| | 27 | Mobile Home Court | William Newkirk Manufacturing Housing Park |
| | 28 | Municipal/ Recreational | Tribes Hill Recreational Park |
| INFRASTRUCTURAL | 29 | Municipal / Public Safety | Tribes Hill Fire Dept. |
| | 30 | Municipal / Public Safety | Town of Mohawk Fire Dept |
| | 32 | Dam | Hinkle-Pavlus Wildlife Marsh Dam |
| | 33 | Dam | Barker Wildlife Marsh Dams A B & C |
| | 34 | Dam | Fonda Reservoir Dam |
| | 35 | Dam | Lock E-12 Dam At Tribes Hill |
| | 36 | Dam | Lock E-13 Dam At Fonda-Fultonville |
| | 37 | PWS Well | Fonda Filtration Plant |
| | 38 | Sub/Switching Station | Electrical Communication Substation |
| | 39 | Dam | Village of Fonda Small Reservoir |
| | 40 | Cell Tower | AT&T Tower Property |
| | 41 | Telecommunications | Frontier Communications Building |
| | 42 | Government Office | Montgomery County Fire Training Center |
| | Bold indicated asset is identified as an essential facility | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are nine essential facilities in town. Designated emergency shelters include the elementary, middle and Senior High Schools. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Town of Mohawk.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|--------------------------------------|-------------------------------|------------------|----------|----------------|
| Fonda-Fultonville Senior High School | 112 Old Johnstown Rd, Mohawk | Y | Y | N |
| Fonda-Fultonville K-4 School | 112 Old Johnstown Rd, Mohawk | Y | Y | N |
| Fonda-Fultonville 5-8 School | 112 Old Johnstown Rd, Mohawk | Y | Y | N |
| Tribes Hill Fire Dept. | 280 Mohawk Dr., Tribes Hill | Y | N | N |
| Town of Mohawk Fire Dept | 2553 State Highway 30A, Fonda | Y | Y | N |
| Fonda Filtration Plant | 361 Reservoir Rd | Y | N | N |
| Electrical Communication Substation | Mohawk | Y | N | N |
| AT&T Tower Property | Albany Bush Rd, Fonda | Y | N | N |

Town of Mohawk Annex

2023 Montgomery County Hazard Mitigation Plan

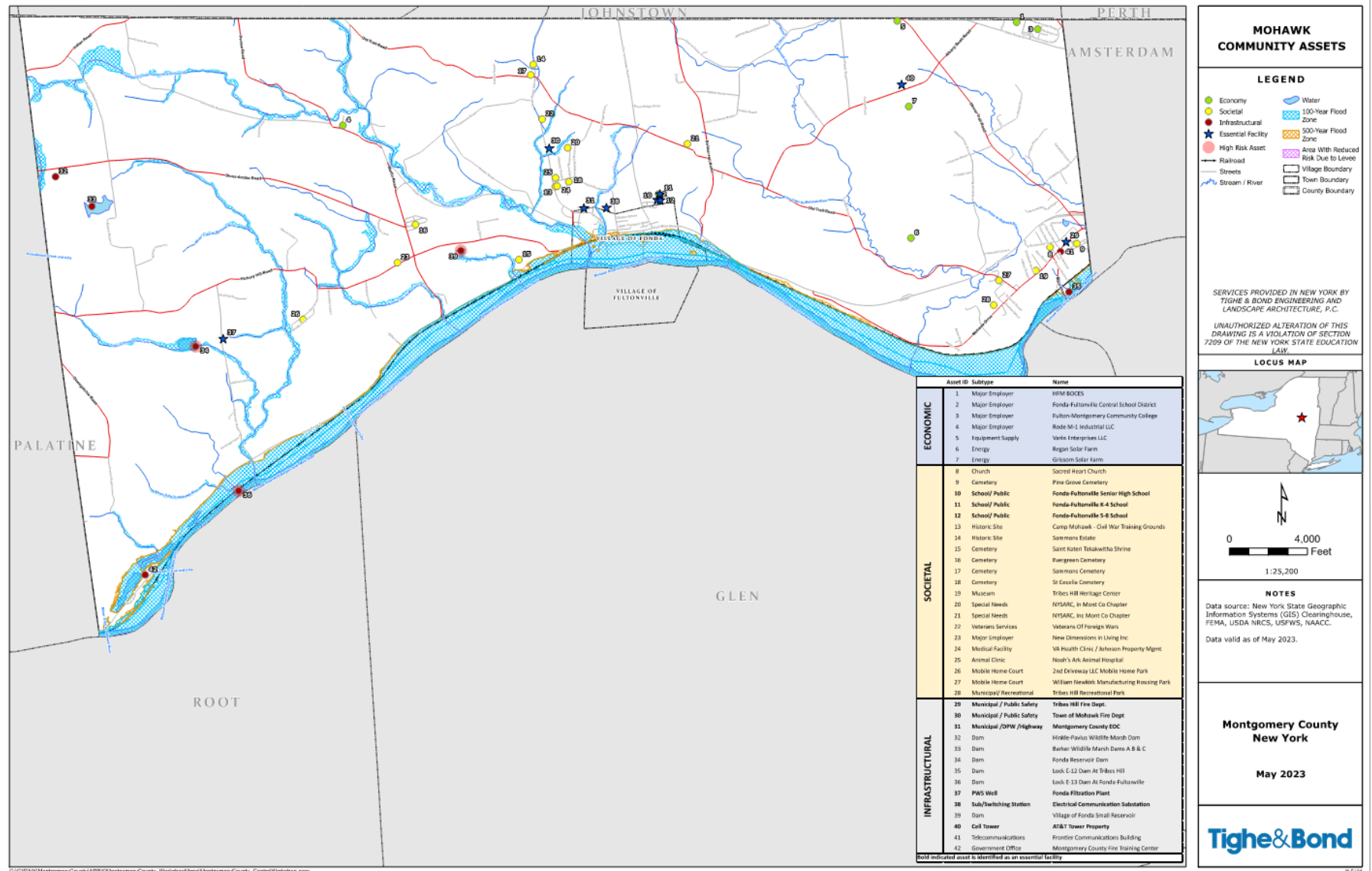


Figure 2. Town of Mohawk FEMA Flood Zones, Community Assets and Essential Facilities

2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there was one identified repetitive loss property in Mohawk as of 2016, and as of 2022, there was still just one repetitive loss property and no severe repetitive loss properties. As of December 31, 2022, 2 policies were in force. The Town of Mohawk had a total of 3 claims totaling \$26,150 in losses for all NFIP-insured structures. It should be noted that according to FEMA data there are 271 structures within the 100-year flood plain, including the Village of Fonda.

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Town, by hazard as shown in Table 4. The estimated value of at risk assets is based on the Town's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Town of Mohawk Vulnerable Assets Exposure Analysis³.

| Hazard | At-Risk All Properties ⁴ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|---------------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$363,845,457 | 1,510 | \$23,012,356 | 9 | \$506,752 | 2 |
| Severe Thunderstorm | \$363,845,457 | 1,510 | 23,012,356 | 9 | 506,752 | 2 |
| Severe Winter Storm | \$363,845,457 | 1,510 | 23,012,356 | 9 | 506,752 | 2 |
| Tornado | \$363,845,457 | 1,510 | 23,012,356 | 9 | 506,752 | 2 |
| Flood | | | | | | |
| 1% Annual Chance | \$66,587,194 | 271 | - | 0 | - | 0 |
| 0.2% Annual Chance | \$30,190,109 | 100 | - | 0 | - | 0 |

³ Values are based on 50% of assessor's full market values

⁴ Includes Villages of Fonda

2.6 Townwide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Town of Mohawk. The totals include capital stock and economic loss estimates.

*Table 5 Town of Mohawk Earthquake Vulnerability Analysis**

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 1,510 | 1,510 |
| Total direct building economic loss | \$505,000 | \$6,633,000 |

- *Hazus combines Mohawk with the Village of Fonda*

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Mohawk Problem Statements.

| Problem Area | Description |
|---|---|
| Primary Hazards of Concern: Floodings, High Wind Events and Severe Winter Storms | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. |
| Geographic Areas of Concern | |
| Mohawk River | Local Areas of Flooding- |
| Vulnerable Community Assets | |
| Bridges | Town Bridges County Rd 26 and Route 27 |
| Culverts and Roads | Culverts and roads throughout Town were the most damaged infrastructure from floods. Culverts on Hickory Hill Road and Old Trail Road are in poor condition. |
| Emergency Service | Town Hall and the Town Garage were impacted by the floods in 2007 and 2011 and could be hit again. |

4. Capabilities

The Town of Mohawk is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Town's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Town of Mohawk completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for Mohawk:

- Comprehensive/Master Plan – *Town of Mohawk Comprehensive Plan, 2014*
- Local Emergency Operations Plan – *County Plan/Department*
- Continuity of Operations Plan- Emergency Management Plan of 2014
- Transportation Plan – *County Plan/Department*
- Watershed Management Plan – *Mohawk River Watershed Management Plan, 2015*
- Building Codes – *New York State Building Code*
- Zoning Ordinance – *Planning Board and ZBA, last updated in 1998.*
- NFIP Flood Damage Prevention Ordinance – *Local Law 5, Adopted 11/20/2017.*
- Real Estate Disclosure Requirements – State and realtors, NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467
- Natural Hazard Specific Ordinance- Local Law #1 of 2019

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

The Town of Mohawk has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards.

The administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for Mohawk:

- Planning Board
- Mutual Aid Agreements
- Chief Building Official
- Floodplain Administrator
- Emergency Manager
- Community Planner
- GIS Coordinator
- Warning Systems
- Hazard Data

The Town of Mohawk is governed by a Town Board, Planning Board, Zoning Board of Appeals, and Supervisors Office. The Town has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Town staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for Mohawk:

- Community Development Block Grant
- Federal Funding
- State Funding
- Hazard Mitigation Grant Programs

The Town of Mohawk has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements

which may be difficult to meet. This lack of financial resources is a concerns with regard to the implementation of mitigation projects and related risk reduction activities.

The Town Bookkeeper is responsible for the accounting of all Town funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The bookkeeper provides budget monitoring and financial reports to the Supervisor throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for Mohawk:

- Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.
- Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)
- Natural disaster or safety related school programs
- CERT Team
- Public Education Program
- Citizen Group or Nonprofit Focused on Emergency Preparedness
- Human Services (*outreach/activities for seniors etc.*)
- Website
- Social Media

4.2 NFIP Participation and Compliance

The Town of Mohawk has actively participated in the National Flood Insurance Program (NFIP) since 1985. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there are a total of 2 NFIP policies in force. The total annual premium is \$1,425 for a total of \$380,000 in coverage. As of February 23, 2023, a total of 3 claims amounting to approximately \$26,150 have been paid to NFIP policyholders in Mohawk since joining the program¹³ More information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 8 describes the Town of Mohawk's participation and continued compliance in accordance with NFIP requirements and as specified in FEMA's 2022 Local Mitigation Planning Policy Guide.¹⁴

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov//reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

Town of Mohawk Annex

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Table 7. NFIP Participation and Compliance, Town of Mohawk.

| REQUIRED INFORMATION | RESPONSE |
|--|--|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2017 as Local Law #5 of 2017 Flood Damage Prevention. |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Zoning Ordinance (Section 3.2. Basis for establishing area of Special Flood Hazard). The latest effective FIRM is dated January 19, 2018. |
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Building Code Enforces of the Town of Mohawk administers the provisions of the Floodplain District. The Building Code Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Building Code Enforcer of the Town of Mohawk has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 2 of the Town's Local Law define substantial improvement/substantial damage as 50% of market value of the structure. |

Minimum standards set forth by FEMA and New York State have been adopted by the Town of Mohawk.

The Town of Mohawk requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

The Town of Mohawk does not participate in the Community Rating System (CRS), however, the Town has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Town's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.2.1 Improvement Opportunities

Despite the limitations and constraints faced by the Town of Mohawk when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Town is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Town during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated versions of the Town's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Town to cope with potential unforeseen challenges in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Town staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout town.

Financial Capabilities

- Maximize opportunities through the Town's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Town's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Town to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Town's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Town Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Town should coordinate with the State NFIP Coordinator on possible updates or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- Mohawk's local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood)
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

Town of Mohawk Annex

2023 Montgomery County Hazard Mitigation Plan

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status, actions brought forward to this 2023 plan are identified in the Keep for Plan Update? column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Town of Mohawk.

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|--|----------------|--|-----------------------|
| 1 | Identify Vulnerable Structures for Retrofit | <p>Support the mitigation of vulnerable structures via retrofit (e.g., elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario”.</p> <p>Phase 1: Identify appropriate candidates and determine the most cost-effective mitigation option (in progress).</p> <p>Phase 2: Work with the property owners to implement selected action based on available funding and local match availability.</p> | Deferred | More of a Village issue have not been pursuing. No county wide or larger scale studies completed. | No |
| 2 | Town Building Grade Assessment and Relocation | Relocate Town Hall and Town Highway Garage to higher ground to reduce flooding likelihood. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario”. | In progress | <p>Town hall and the Highway Department are in flood plain. Highway department floods to a depth of 2 feet. Both are located in Village.</p> <p>No progress in moving key Town infrastructure.</p> | YES |

Town of Mohawk Annex

2023 Montgomery County Hazard Mitigation Plan

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|---|----------------|---|-----------------------|
| 3 | Capital Improvement Plan | Develop Capital Improvement Plan | Completed | Have Capital improvement Plan. Completion Data NA | NO |
| 4 | Cayudta Creek Maintenance | Provide debris maintenance and removal at Cayudta Creek. | Completed | Cayudta is a (t) stream. Received a non-point pollution grant for clean-up. In progress bridge project across creek Completed November 2023 | NO |
| 5 | Public Outreach and Education Program Development | Develop a public outreach program on natural hazard mitigation activities. | Deferred | The county has a water quality committee. Invasives and erosion. Town participates with County. | NO |
| 6 | Bridge Flood Vulnerability Assessment | Evaluate the flood vulnerability of the bridges located within the Town and identify feasible mitigation options. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario". | Deleted | Not provided. | Deleted - NO |
| 7 | Route 15 Flooding Corrective Action | New Action – Flooding issue around Route 5. Engineering study was funded and completed. DEC has reviewed, but needs corrective action | In progress | To provide studies to Alex | YES |

Town of Mohawk Annex

2023 Montgomery County Hazard Mitigation Plan

Table 9. Updated Mitigation Actions (2023-2028) – Town of Mohawk.

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|---|--|---|----------------------|----------------|---|---|-------------------------|----------|
| 1 | Town Building Grade Assessment and Relocation | Relocate Town Hall and Town Highway Garage to higher ground to reduce flooding likelihood. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario”. | Property Protection | Flood | High | FEMA Mitigation Grant Programs and local budget | Town Supervisor and consulting engineer | 2023-2028 | High |
| 2 | Public Outreach and Education Program Development | Develop a public outreach program on natural hazard mitigation activities. | Prevention / Public Education and Awareness | All hazards | Low | Operating budget | Town Administration | 2023-2028 | Low |
| 3 | Route 15 Flooding Corrective Action | New Action – Flooding issue around Route 5. Engineering study was funded and completed. DEC has reviewed, but needs corrective action | Property Protection | Flood, severe storms | High | Local | Town | 2023-2028 | High |

Capability Assessment Worksheet- Town of Mohawk

Planning and Regulatory

| Plans | COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | | T&B TO REVIEW OLD ANNEX |
|---|---|---|---|
| | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? | NOTES FROM 2016 Annex |
| Comprehensive/Master Plan | Yes | | Via Town of Mohawk Comprehensive Plan, 2014 |
| Capital Improvements Plan | No | | Marked as No in annex |
| Economic Development Plan | No | | Marked as No in annex |
| Local Emergency Response Plan | Yes | | Via County Plan/Department |
| Continuity of Operations Plan | YES | | Not mentioned in annex |
| Transportation Plan | Yes | | Via County Plan/Department |
| Stormwater Management Plan | No | | Marked as No in annex |
| Watershed Management Plan | Yes | | Via Mohawk River Watershed Management Plan, 2015 |
| Floodplain Management Basin Plan | No | | Marked as No in annex |
| Open Space and Recreation Plan | No | | Marked as No in annex |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? | NOTES FROM 2016 Annex |
| Building Code | Yes | | Via New York State Building Code |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | NO | | Not participating? Annex table is unclear. |
| Fire department ISO rating | NO | | Not mentioned in annex |
| Site plan review requirements | Yes | | Via local planning board and ZBA |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? | NOTES FROM 2016 Annex |
| Zoning ordinance | Yes | | Via Planning Board and ZBA, last updates in 1998 |
| Subdivision ordinance | No | | |
| NFIP Flood Damage Prevention Ordinance | Yes | Local Law Number 5 adopted 11/20/2017. | Via Code Enforcement Officer, 2007 |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | YES | We have a local law and also follow NYS | Not mentioned in annex |
| Flood insurance rate maps | Yes | Effective 1/19/2018 | Not mentioned in annex |
| Acquisition of land for open space and public recreation uses | NO | | Not mentioned in annex |
| Stormwater Management Ordinance | No | | |
| Growth Management Ordinance | No | | |
| Real Estate Disclosure Requirements | Yes | | Via State and realtors, NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467 |

Administrative and Technical

| Administration | Yes/No | Describe capability Is coordination effective? | T&B TO REVIEW OLD ANNEX |
|--|-------------------------|---|--|
| | | | NOTES FROM 2016 Annex |
| Planning Commission | Yes | | |
| Mitigation Planning Committee | No | | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | No | | |
| Mutual aid agreements | Yes | | Via Surrounding municipalities |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| Chief Building Official | YES | | Bill Holvig, Highway Superintendent, Building and Grounds Official |
| Floodplain Administrator | Yes | | Stan Waddle, Code Enforcement Officer |
| Emergency Manager | Yes | | William Holvig, Emergency Manager |
| Community Planner | Yes | | Via McDonald Engineering |
| Civil Engineer | Yes | | Via McDonald Engineering |
| GIS Coordinator | Yes | | Provided via County |
| Other | Yes - Grant Writer | | Leberge Engineering, William D Holvig |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| Warning systems/services (Reverse 911, outdoor warning signals) | YES | | Provided via County |
| Hazard data and information | YES | | Not listed in annex |
| Grant writing | Yes | | Leberge Engineering, William D Holvig |
| Hazus analysis | NO | | Not listed in annex |
| Other | | | |

Financial

| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | T&B TO REVIEW OLD ANNEX |
|--|------------------------------------|--|-------------------------|
| | | | NOTES FROM 2016 Annex |
| Capital improvements project funding | No | | |
| Authority to levy taxes for specific purposes | Yes | | |
| Fees for water, sewer, gas, or electric services | No | | |
| Impact fees for new development | No | | |
| Storm water utility fee | NO | | Not listed in annex |

| | | | |
|---|---------------|---|------------------------------------|
| Incur debt through general obligation bonds and/or special tax bonds | No | | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | | |
| Other federal funding programs | YES | | <i>Not listed in annex</i> |
| State funding programs | YES | CHIPS, Bridge NY | <i>Not listed in annex</i> |
| Hazard Mitigation Grant Programs | Yes | | |
| Education and Outreach | | | |
| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | YES | | 2 VOLUNTEER FIRE DEPTS |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | YES | | <i>Not listed in annex</i> |
| Natural disaster or safety related school programs | YES | | <i>Not listed in annex</i> |
| StormReady certification | No | | Annex indicates no |
| Firewise Communities certification | No | | Annex indicates no |
| Public-private partnership initiatives addressing disaster-related issues | NO | | <i>Not listed in annex</i> |
| Other | | | |

TOWN OF PALATINE

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Town of Palatine

PO Box 40

Palatine Bridge, NY 13428

<https://townofpalatine.org/>

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Town of Palatine Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the Town of Palatine not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Town of Palatine.

| Primary Point of Contact | Alternate Point of Contact |
|---|--|
| William MacLauchlin, Supervisor PO Box 40 Palatine Bridge, NY 13428 518-673-4487 | Richard Becker, Highway Superintendent PO Box 40 Palatine Bridge, NY 13428 518-993-4154 |

1. Municipality Profile

1.1 Brief History

The Town of Palatine was established on March 7, 1788. This area was settled in the early 1700's by emigrants from the Palatine area of Germany. The town is home to a large Amish community, as well as a number of historic landmarks and buildings. The Town of Palatine has two incorporated villages, Nelliston and Palatine Bridge, with the majority of the population residing there. However, the Town of Palatine is rural in nature, with production agriculture as the major industry.

1.2 Location and Demographics

The Town of Palatine is located in the western portion of Montgomery County. It shares its boundaries with Fulton County to the north, Town of Mohawk to the east, Towns of Root and Canajoharie to the south and Towns of St. Johnsville and Minden to the west. The Villages of Nelliston and Palatine Bridge are located within its borders.

According to the Town of Palatine's website,

"Palatine is a welcoming, small-town community located in upstate New York between Albany and Utica, anchored by the villages of Palatine Bridge and Nelliston. We are home to many local-run businesses and farms that help our community thrive.

Our children attend Canajoharie and Fort Plain Central Schools, benefitting from vibrant communities of engaged parents and teachers, access to sports and recreational activities, and out-of-school activities such as theater and dance.

Palatine's multi-generational farming families are an essential part of the community and

Town of Palatine Annex

2023 Montgomery County Hazard Mitigation Plan

are being joined each year by a growing number of new small farmers and homesteaders interested in getting a start in local, sustainable agriculture.

Palatine is also home to a large Amish community. A team of draft horses working the fields 3-abreast, children in hats and bonnets on their way to an Amish schoolhouse, and buggies headed into town are common sights woven into the fabric of the community.

Some of the historic and well-known places throughout the Town of Palatine are: Big Nose Mountain, Christmans Corners, Cook Corners, Cranes Landing, Stone Arabia and East Stone Arabia, McKinley, Nelliston, Palatine Bridge, and Palatine Church.”

1.3 Governance

The Town of Palatine is governed by a supervisor and four council members. This governing body will be responsible for the adoption and implementation of this plan.

1.4 Land Use and Development

The town of Palatine is primarily agricultural in both character and land-use. Limited commercial development has been taking place on NYS Route 5.

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards for the Town of Palatine include flood, severe storms and severe winter storms.

Flood, Severe Storms, and Severe Winter Storms represent the largest natural hazard risk for Palatine. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Town of Palatine that are not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for Earthquakes is included.

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Town in the past 10 years.

Table 1. Hazard Event History 2011-2021¹

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------------------|--|--|
| August 26 – September 11, 2011 | Hurricane Irene and Remnants of Tropical Storm Lee | Damages not reported |
| October 27- November 8, 2012 | Hurricane Sandy | Damages not reported |
| June 26-July 10, 2013 | Severe Storms and Flooding | Damages not reported |
| August 22, 2014 | Flash Flood | Heavy rainfall from several rounds of slow-moving thunderstorms led to flash flooding in the Palatine Bridge Area. State Route 5 was closed at State Route 10 in Stone Arabia closed due to high water from flash flooding. |
| August 6, 2019 | Thunderstorm Wind | An upper-level disturbance sparked showers and scattered thunderstorms across eastern New York. Some of these storms became severe, mainly south of Albany, resulting on reports of trees and wires down in Christmas Corners. |

¹ <https://www.ncdc.noaa.gov/stormevents/>

2.2 Community Assets

Forty eight Community Assets were identified for the Town of Palatine for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID correspond with locations shown in **Figure 1**.

Table 2. Community Assets in the Town of Palatine

| | Asset ID | Subtype | Name |
|---|----------|-------------------|-------------------------------------|
| SOCIETAL | 1 | School/ Private | McKinley Crossing Amish School |
| | 2 | School/ Private | Dygert Road Amish School |
| | 3 | School/ Private | Stone Arabia Amish Parochial School |
| | 4 | Historic Site | Stone Arabia Battlefield |
| | 5 | Historic Site | Stone Arabia Reformed Church |
| | 6 | Historic Site | Kilts Homestead of 1840 |
| | 7 | Historic Site | Fort Wagner |
| | 8 | Cell Tower | NEW CINGULAR WIRELESS PCS, LLC |
| INFRASTRUCTURAL | 9 | Cell Tower | Cellco Partnership |
| | 10 | PWS Treatment | Fort Plain Potable Water Facility |
| | 11 | PWS Treatment | Canajoharie WTP |
| | 12 | Airport / Helipad | Hiserts Airpark Inc. |
| | 13 | Dam | Fort Plain Reservoir Dam |
| | 14 | Dam | Canajoharie Water Supply Dam |
| | 15 | Dam | (158-0483) |
| | 16 | Dam | (158-0484) |
| | 17 | Dam | Beech-nut Dam |
| | 18 | Dam | Phillip Mueller Wildlife Marsh Dam |
| | 19 | Dam | Leonard Logan Pond Dam |
| | 20 | Pump Station | Fort Plain Reservoir/Pump |
| | 21 | PWS Well | Village of Palatine Bridge |
| Bold indicated asset is identified as an essential facility | | | |

Town of Palatine Annex

2023 Montgomery County Hazard Mitigation Plan

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are seven essential facilities in town, with three additional schools. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Town of Palatine.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|-------------------------------------|--|------------------|----------|----------------|
| NEW CINGULAR WIRELESS PCS, LLC | 264 Horning Road | Y | N | N |
| Cellco Partnership | 1.1 mile north of Route 5 | Y | N | N |
| Fort Plain Potable Water Facility | Budnick Road, Fort Plain | Y | N | N |
| Canajoharie WTP | 419 Gerhartz Road, | Y | N | N |
| Hiserts Airpark Inc. | Palatine | N | N | N |
| Fort Plain Reservoir/Pump | Budnick Road | Y | N | N |
| McKinley Crossing Amish School | Corner of McKinley & Oswegatchie Road, Palatine Bridge | N | N | N |
| Dygert Road Amish School | Dygert Road, near the corner of Gerhartz Road, Palatine Bridge | N | N | N |
| Stone Arabia Amish Parochial School | Stone Arabia Rd, Palatine | N | N | N |

2023 Montgomery County Hazard Mitigation Plan

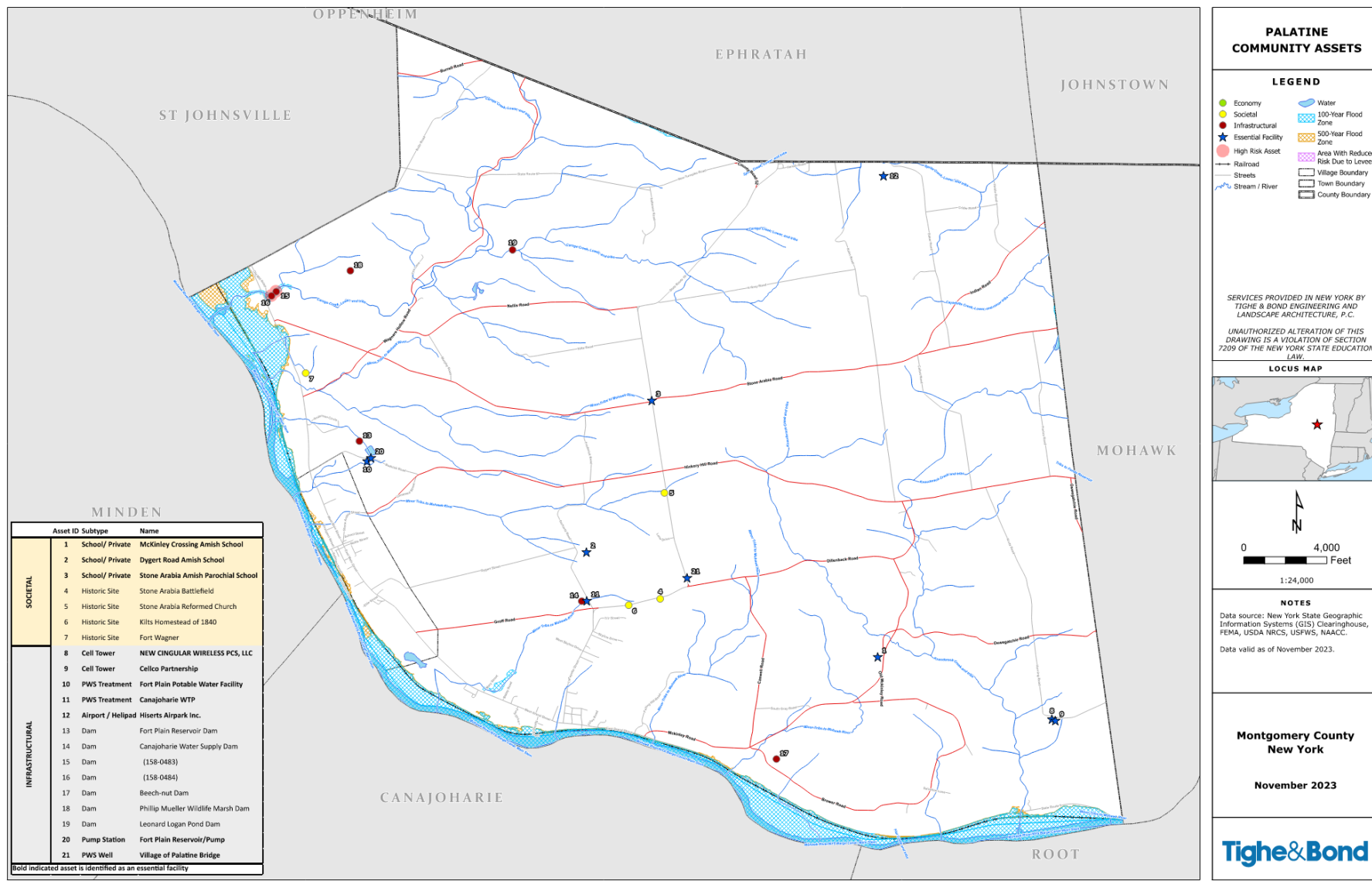


Figure 1. Town of Palatine FEMA Flood Zones, Community Assets and Essential Facilities

2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there were no identified repetitive loss properties in Palatine as of 2016, and as of 2022, this has not changed. As of December 31, 2022, 3 policies were in force. The Town of Palatine zero claims and \$0 in losses for all NFIP-insured structures. It should be noted that according to FEMA data there are 63 structures within the 100-year flood plain.

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Town, by hazard as shown in Table 4. The estimated value of at risk assets is based on the Town's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Town of Palatine Vulnerable Assets Exposure Analysis².

| Hazard | At-Risk All Properties ³ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|---------------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$179,880,013 | 1,249 | \$6,688,133 | 7 | \$532,560 | 3 |
| Severe Thunderstorm | \$179,880,013 | 1,249 | \$6,688,133 | 7 | \$532,560 | 3 |
| Severe Winter Storm | \$179,880,013 | 1,249 | \$6,688,133 | 7 | \$532,560 | 3 |
| Tornado | \$179,880,013 | 1,249 | \$6,688,133 | 7 | \$532,560 | 3 |
| Flood | | | | | | |
| 1% Annual Chance | \$16,234,086 | 63 | - | - | - | - |
| 0.2% Annual Chance | \$15,572,968 | 64 | - | - | - | - |

² Based on 50% of assessor's full market value

³ Includes Villages of Hagan & Fort Johnson

2.6 Townwide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Town of Palatine. The HAZUZ data includes the Village of Nelliston. The totals include capital stock and economic loss estimates.

Table 5 Town of Palatine Earthquake Vulnerability Analysis

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 1,249 | 1,249 |
| Total direct building economic loss | \$774,000 | \$8,643,000 |

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Palatine Problem Statements.

| Problem Area | Description |
|------------------------------------|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. There are many diseased trees that create an additional threat to wires. |
| Geographic Areas of Concern | |
| | Local Areas of Flooding- Wagner's Hollow Rd would flood with major rain. |
| Vulnerable Community Assets | |
| Shelters | No public shelters are available. |
| Culverts | Culverts are undersized are vulnerable to flooding. |
| Dams | Dams #158-0483 and #158-0484 are in flood zone. |

4. Capabilities

The Town of Palatine is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Town's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Town of Palatine completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for Palatine:

- Comprehensive/Master Plan - *The plan addresses hazards and can be used to identify mitigation projects.*
- Building Codes – *State and local building codes in place and being followed by Code Enforcement Officer*
- Local Emergency Response Plan – County OEM
- Transportation Plan – *County Transportation Plan*
- Land Use Planning
- Zoning Ordinance
- Subdivision Ordinance
- NFIP Flood Damage Prevention Ordinance – *Local Law No. 6 of 2017, Adopted 10/25/2017.*

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

The Town of Palatine has important mitigation capabilities in places that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The

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administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for Palatine:

- Planning Board
- Maintenance Programs to Reduce Risk - *As part of regular maintenance programs DPW proactively addresses aspects of the Town's infrastructure that could pose risk and implements these activities both on a planned and response basis.*
- Mutual Aid Agreements
- Chief Building Official – *Code Enforcement Officer*
- GIS Coordinator – MCBDC

The Town of Palatine is governed by a Town Council, Planning Board, and Supervisor. The Town has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Town staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for Palatine:

- Capital improvement project funding - *The capital program has been used for roadway maintenance activities and other projects and could be used in the future to fund mitigation projects.*
- Community Development Block Grant - *The Town has in the past obtained assistance for NY Rising Community Reconstruction (NYRCR) Plan-related efforts.*
- State Funding - *The Town has in the past obtained assistance for sewer engineering studies and for NY Rising Community Reconstruction (NYRCR) Plan efforts.*
- Hazard Mitigation Grant Programs

The Town of Palatine has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be

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2023 Montgomery County Hazard Mitigation Plan

a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concern with regard to the implementation of mitigation projects and related risk reduction activities.

The Town book keeper is responsible for the accounting of all Town funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The bookkeeper provides budget monitoring and financial reports to the Supervisor throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for Palatine:

- Website

4.2 NFIP Participation and Compliance

The Town of Palatine has actively participated in the National Flood Insurance Program (NFIP) since 1987. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there are a total of 3 NFIP policies in force. The total annual premium is \$7,593 for a total of \$1,514,000 in coverage. As of February 23, 2023, a no claims were submitted or paid to NFIP policyholders in Palatine since joining the program.¹³ more information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 8 describes the Town of Palatine's participation and continued compliance in accordance with NFIP requirements and as specified in FEMA's 2022 Local Mitigation Planning Policy Guide.¹⁴

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov/reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

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Table 7. NFIP Participation and Compliance, Town of Palatine.

| REQUIRED INFORMATION | RESPONSE |
|--|---|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2017 via Town of Palatine Local Law #6 of 2017 -Flood Damage Prevention. |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Local Law (Section 3.2 Basis for establishing areas of Special Flood Hazard). The latest effective FIRM is dated January 19, 2018. |
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Planning Board of the Town of Palatine administers the provisions of the Floodplain Development Permit. The Planning Board Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Planning Board Enforcer of the Town of Palatine has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 2 of the Town's Local Law define substantial improvement/substantial damage as 50% of market value of the structure. |

Minimum standards set forth by FEMA and New York State have been adopted by the Town of Palatine. The Town of Palatine requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

The Town of Palatine does not participate in the Community Rating System (CRS), however, the Town has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Town's limited administrative capabilities and the low number of NFIP policies currently in force.

Town of Palatine Annex

2023 Montgomery County Hazard Mitigation Plan

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.2.1 Improvement Opportunities

Despite the limitations and constraints faced by the Town of Palatine when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Town is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Town during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated versions of the Town's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Town to cope with potential unforeseen challenges in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Town staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout town.

Financial Capabilities

- Maximize opportunities through the Town's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Town's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Town to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Town's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current regulations indicate the Town Planning Board is responsible for administering the provisions of the Floodplain District.
- The Town should coordinate with the State NFIP Coordinator on possible updates or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- Palatines' local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood).
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the current status of the mitigation actions (completed, ongoing/in process, deleted, or modified) included in the 2016 version of this plan. Besides current status, actions brought forward to this 2023 plan are identified in the Keep for Plan Update? Column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Town of Palatine.

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|----------------------------|--|----------------|---|-----------------------|
| 1 | Culvert Enlargement | Selective culvert enlargement on town roads. | In Progress | Still need to complete Eacker Rd and Wagner's Hollow Rd | YES |
| 2 | Land Use Regulation Review | Review of all local land-use regulations to prevent development in hazard areas. | In Progress | Under Review – Planning board | YES |

Table 9. Updated Mitigation Actions (2023-2028) – Town of Palatine.

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|----------------------------|--|---------------------|------------------|----------------|--------------------------|-----------------|-------------------------|----------|
| 1 | Culvert Enlargement | Selective culvert enlargement on town roads. | Structural Projects | Flood | High | Local | Town | 2023-2028 | Medium |
| 2 | Land Use Regulation Review | Review of all local land-use regulations to prevent development in hazard areas. | Prevention | All | Low | Local | Town | 2023-2028 | Low |

Capability Assessment Worksheet- Town of Palatine

Planning and Regulatory

| COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | | | T&B TO REVIEW OLD ANNEX |
|---|----------------|---|---|
| Plans | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? | NOTES FROM 2016 Annex |
| Comprehensive/Master Plan | Yes | | Local laws |
| Capital Improvements Plan | No | | |
| Economic Development Plan | No | | |
| Local Emergency Response Plan | Yes | | Montgomery County emergency response plan |
| Continuity of Operations Plan | No | | |
| Transportation Plan | No | | |
| Stormwater Management Plan | No | | |
| Watershed Management Plan | No | | |
| Floodplain Management Basin Plan | No | | |
| Open Space and Recreation Plan | No | | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? | NOTES FROM 2016 Annex |
| Building Code | Yes | | Via Code Officer |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | | |
| Fire department ISO rating | No | | |
| Site plan review requirements | Yes | | Via Planning Board |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? | NOTES FROM 2016 Annex |
| Zoning ordinance | Yes | | Planning Board enforces |
| Subdivision ordinance | Yes | | Planning Board enforces |
| NFIP Flood Damage Prevention Ordinance | Yes | Local Law No. 6 of 2017, Adopted 10/25/2017 | Floodplain administrator enforces |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | | |
| Flood Insurance rate maps | Yes | Effective 1/19/2018 | |
| Acquisition of land for open space and public recreation uses | No | | |
| Stormwater Management Ordinance | No | | |
| Growth Management Ordinance | No | | |
| Real Estate Disclosure Requirements | Yes | | NYS Ed enforces |

Administrative and Technical

| Administration | Yes/No | Describe capability Is coordination effective? | NOTES FROM 2016 Annex |
|--|-----------------|--|------------------------------|
| Planning Commission | Yes | Planning Board | |
| Mitigation Planning Committee | No | | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | Yes | | |
| Mutual aid agreements | Yes | | |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| Chief Building Official | Yes | Code Enforcement Officer | |
| Floodplain Administrator | No | | Code Enforcement Officer |
| Emergency Manager | No | | County OEM |
| Community Planner | No | | County |
| Civil Engineer | No | | Various consulting engineers |
| GIS Coordinator | No | | |
| Other | No | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| Warning systems/services (Reverse 911, outdoor warning signals) | No | | |
| Hazard data and information | No | | |
| Grant writing | No | | |
| Hazus analysis | No | | |
| Other | No | | |

Financial

| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | NOTES FROM 2016 Annex |
|------------------|------------------------------------|--|-----------------------|
|------------------|------------------------------------|--|-----------------------|

| | | | |
|--|----------------------------------|--|------------|
| Capital improvements project funding | Yes | | |
| Authority to levy taxes for specific purposes | Yes | | In village |
| Fees for water, sewer, gas, or electric services | Yes | | |
| Impact fees for new development | No | | |
| Storm water utility fee | No | | |
| Incur debt through general obligation bonds and/or special tax bonds | obligation yes, special no | | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | No | | |
| Other federal funding programs | No | | |
| State funding programs | Yes | | |
| Hazard Mitigation Grant Programs | Yes | | |

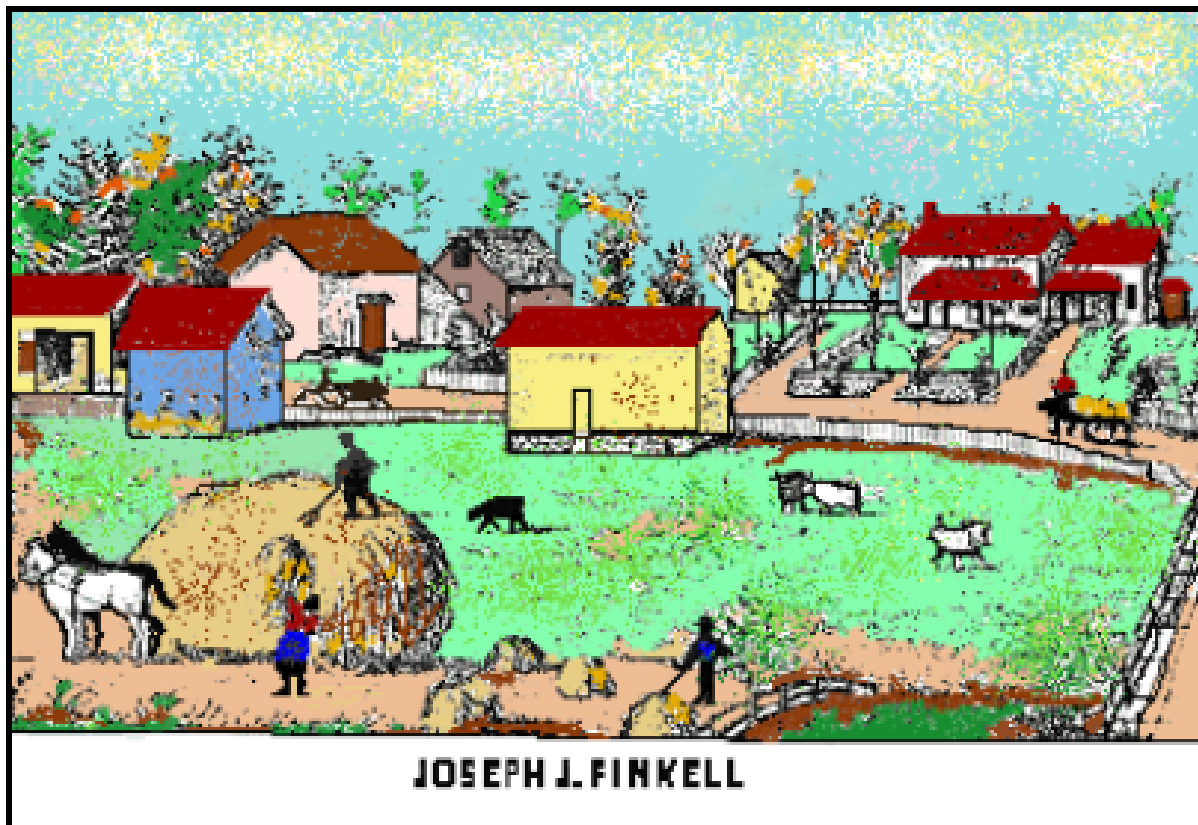
Education and Outreach

| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
|---|--------|---|-----------------------------|
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | | |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | No | | |
| Natural disaster or safety related school programs | No | | |
| StormReady certification | No | | |
| Firewise Communities certification | No | | |
| Public-private partnership initiatives addressing disaster-related issues | No | | |
| Other | No | | |

TOWN OF ROOT

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Town of Root

1048 Carlisle Road

Sprakers, NY 12166

<https://www.co.montgomery.ny.us/web/municipal/root/default.asp>

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This municipality Annex includes details regarding the Town of Root not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Town of Root.

| Primary Point of Contact | Alternate Point of Contact |
|--|--|
| Gary Kamp, Supervisor 1048 Carlisle Rd., Sprakers, NY 12166 (518) 673-3021 Supervisorroot@yahoo.com | Town Councilmember LuEmma Quackenbush 1048 Carlisle Road, Sprakers, NY 12166 Fax & Phone: 518-673-3422 lquackenbush001@nycap.rr.com |

1. Municipality Profile

1.1 Brief History

The Town of Root was once part of the original Town of Mohawk. It was created in 1823 from the Towns of Charleston and Canajoharie. The town was named for Erastus Root, a legislator. Root was in Corry's patent. The first British settler located near Currytown before the American Revolution but this was very much the frontier. During the Revolution, the small colonial community was raided and burned by Iroquois allies of the British.

1.2 Location and Demographics

The Town of Root is located in the southern-central portion of Montgomery County. It shares its boundaries with the Towns of Palatine and Mohawk to the north; Towns of Glen and Charleston to the east; County of Schoharie to the south; and Town of Canajoharie to the west. The Mohawk River forms the northern town boundary and the southern boundary is Schoharie County. Hamlets within Root include Sprakers and Randall, located near the Mohawk River, as well as Root Center, Rural Grove, Brown's Hollow and Currytown, located at higher elevation in central and southern Root.

According to the U.S. Census, the 2010 population for the Town of Root was 1,715, of which 246 are citizens over the age of 65. That encompasses 14.3 percent of the population.

1.3 Governance

The Town of Root is governed by a town supervisor and four members of the town board. This governing body will be responsible for the adoption and implementation of this plan.

Town of Root Annex

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1.4 Land Use and Development

The Town of Root has a total area of 51 square miles and is predominantly a residential and agricultural community. 92% of the homes are owner occupied. The Town Center is located in Root Center. A significant tract of protected open space is found at Yateville Falls State Forest which links with Rural Grove State Forest to encompass over 2000 acres of State Land. The main feature is a 30 foot waterfall known as Buttermilk Falls

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snow storms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for Root. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Town of Root that are not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for Earthquakes is included.

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Town in the past 10 years.

Table 1. Hazard Event History 2011-2021¹

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------|-----------------|---|
| August – Sept 2011 | Hurricane Irene | Sprakers was under water, several roads flooded. |
| June 14, 2013 | Flash Flood | Several roads were reportedly closed near Flat Creek due to flash flooding. |
| June 13, 2014 | Flooding | Residents from five homes along Argersinger Road had to be evacuated due to rising flood waters. Currytown Road was closed, and several nearby homes had water in their basements. Media reported that Lusso Road and Borden Road were closed. |
| August 21-22, 2014 | Flash Flood | Slow moving thunderstorms produced two to four inches of rain across the Mohawk Valley and Sacandaga Region on August 20th. Another batch of thunderstorms on August 21st brought several inches of rain across the central Mohawk Valley, causing small streams to overflow their banks. At least 15 roads were closed in Montgomery County, including an onramp for the New York State Thruway. A state of emergency was issued due to the flooding. The flooding caused sewage treatment plants to be inundated and a boil water advisory was issued for several days. In some parts of the County, residents had to evacuate their homes. Rainfall totals in the County ranged from 2.41 inches in Hessville to 4.35 inches in Fonda. |

¹ <https://www.ncdc.noaa.gov/stormevents/>

Town of Root Annex

2023 Montgomery County Hazard Mitigation Plan

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------|----------------------|---|
| August 2021 | High Winds, Flooding | Hurricane Henri |
| September 15, 2021 | Flooding | A trained spotter reported a road closure due to flooding near Route 5S and Sprakers Hill Road. |

2.2 Community Assets

Thirteen Community Assets were identified for the Town of Root for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID correspond with locations shown in **Figure 1**.

Table 2. Community Assets in the Town of Root

| | Asset ID | Subtype | Name |
|---|----------|----------------------------------|---------------------------------------|
| SOCIETAL | 1 | Church | River of Jubilee Church |
| | 2 | School/ Private | Faith Bible Academy (Church & School) |
| | 14 | Church | Rural Grove Church |
| | 15 | Church | Currytown Church |
| | 16 | Church | Sprakers Reformed Church |
| INFRASTRUCTURAL | 3 | Municipal / Public Safety | Rural Grove Fire Dept. |
| | 4 | Post Office | USPS Sprakers Office |
| | 5 | Municipal /DPW /Highway | Root Highway Garage |
| | 6 | Municipal /DPW /Highway | Root Town Hall |
| | 7 | Airport / Helipad | Russel |
| | 8 | Dam | Smith Wildlife Marsh Dam |
| | 9 | Dam | Young Wildlife Marsh Dam |
| | 10 | Dam | Klemme Farm Pond Dam |
| | 11 | Dam | Montgomery County Pond Dams A B & C |
| | 12 | Dam | Lou Bellinger Pond Dam |
| | 13 | Dam | George Vosburgh Pond Dam |
| Bold indicated asset is identified as an essential facility | | | |

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2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are four essential facilities in town, Russel Airport, Root Town Hall, Root Highway Garage and Rural Grove Fire Department. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Town of Root.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|-------------------------|----------------------------|------------------|----------|----------------|
| Root Highway Garage | 1048 Carlisle Street | Y | N | N |
| Root Town Hall | 1048 Carlisle Street | Y | N | N |
| Rural Grove Fire Dept. | 1192 State Highway 132 | Y | N | N |
| Russel Airport/ Helipad | 262A3 Rappa Road, Sprakers | N | N | N |

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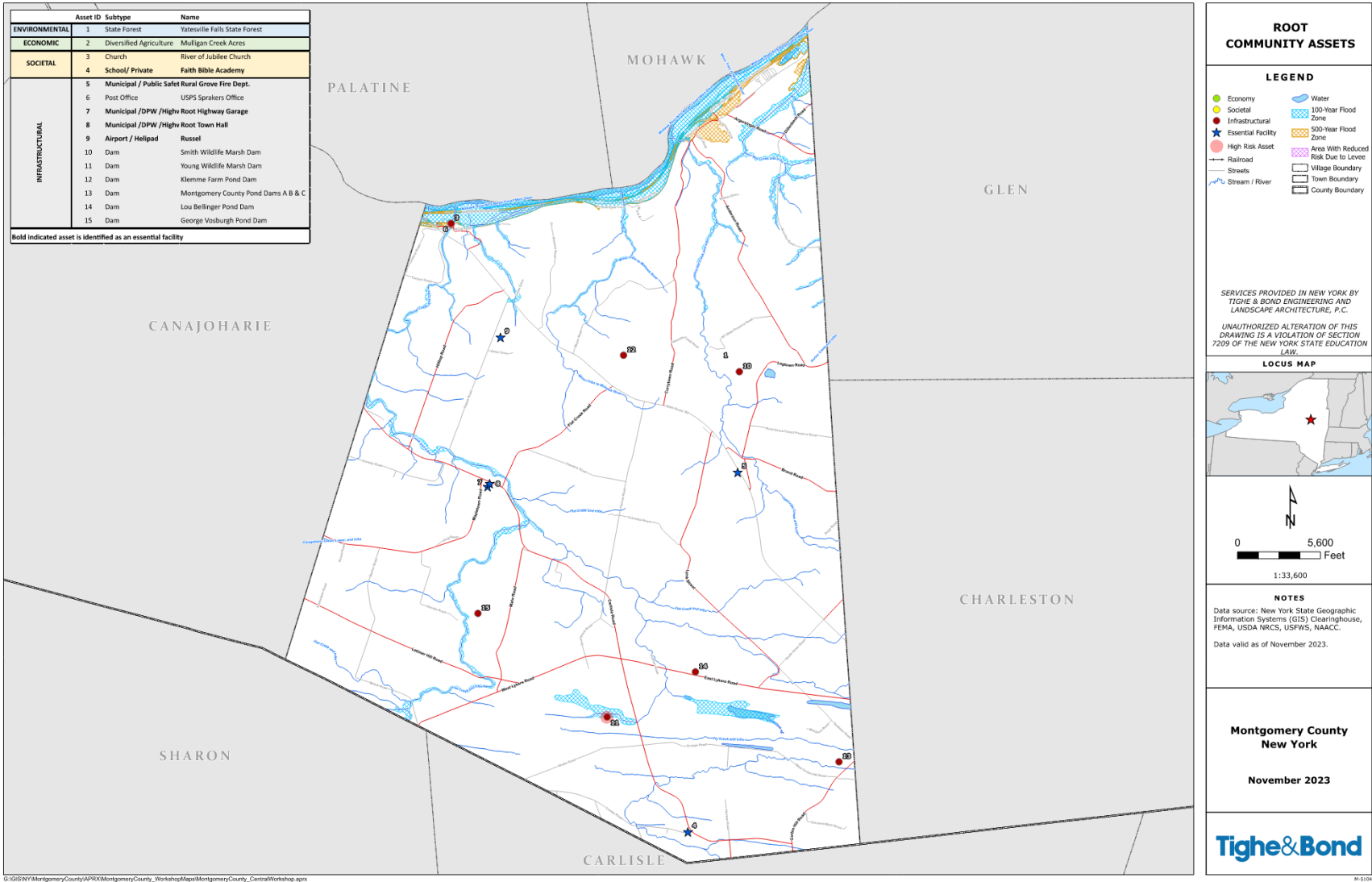


Figure 1. Town of Root FEMA Flood Zones, Community Assets and Essential Facilities

2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there were no identified repetitive loss properties in Root as of 2016, and as of 2022, this has not changed. As of December 31, 2022, 5 policies were in force. The Town of Root had a total of 5 claims totaling \$23,294 in losses for all NFIP-insured structures. It should be noted that according to FEMA data there are 158 structures within the 100-year flood plain.

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Town, by hazard as shown in Table 4. The estimated value of at risk assets is based on the Town's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Town of Root Vulnerable Assets Exposure Analysis².

| Hazard | At-Risk All Properties | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|---------------------------------|------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value ³ | Number |
| Hurricane/Tropical Storm | \$103,594 | 849 | \$42,016,778 | 4 | N/A | 0 |
| Severe Thunderstorm | \$103,594 | 849 | \$42,016,778 | 4 | N/A | 0 |
| Severe Winter Storm | \$103,594 | 849 | \$42,016,778 | 4 | N/A | 0 |
| Tornado | \$103,594 | 849 | \$42,016,778 | 4 | N/A | 0 |
| Flood | | | | | | |
| 1% Annual Chance | \$19,361,956 | 158 | - | - | - | - |
| 0.2% Annual Chance | \$6,857,955 | 80 | - | - | - | - |

² Based on 50% of assessor's full market value

³ Values not available

2.6 Townwide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Town of Root. Hazus combines the Town of Glenn & Root including the village of Fultonville in the data. The totals include capital stock and economic loss estimates.

Table 5 Town of Root Earthquake Vulnerability Analysis

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 849 | 849 |
| Total direct building economic loss | \$631,000 | \$8,448,000 |

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Root Problem Statements.

| Problem Area | Description |
|--------------------------------|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. There are many diseased trees that create an additional threat to wires. |
| Geographic Areas of Concern | |
| Hamlet of Sprakers and Randall | - Local Areas of Flooding Flooding along Currytown and Argersinger Roads. Roads near Flat Creek have been closed due to flash flooding. Route 5S and Sprakers Hill Road |
| Flat Creek | |
| Mohawk River | |
| Vulnerable Community Assets | |
| Shelters | There are no shelters in Root. |
| Culverts & Bridges | The Hill Top Road culvert was identified as in poor condition and vulnerable to flooding. Highway Bridges on Rte. 5S, Sprakers Rd, Rappa Rd, CR94 Carlisle Rd and 90IX have also been listed as vulnerable to flooding. |
| Dams | Young Wildlife Marsh Dam is in flood zone |

4. Capabilities

The Town of Root is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Town's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Town of Root completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for Root:

- Comprehensive/Master Plan - *The plan addresses hazards and can be used to identify mitigation projects.*
- Local Emergency Response Plan
- Transportation Plan – *County Plan*
- Floodplain Management Basin Plan - *The plan addresses hazards and can be used to identify mitigation projects.*
- Building Codes
- Land Use Planning
- Subdivision Ordinance
- NFIP Flood Damage Prevention Ordinance – *Town of Root Code Chapter 43, adopted 1987.*

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

The Town of Root has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered

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2023 Montgomery County Hazard Mitigation Plan

among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for Root:

- Planning Board
- Maintenance Programs to Reduce Risk - *As part of regular maintenance programs DPW proactively addresses aspects of the Town's infrastructure that could pose risk and implements these activities both on a planned and response basis.*
- Mutual Aid Agreements
- Code Enforcement Officer (*part-time*)
- Flood Damage Prevention Ordinance- Adopted 11/8/2017 as Chapter 30 of Town Code.
- GIS Coordinator - MCBDC

The Town of Root is governed by a Town Board, Council Members, and Supervisor. The Town has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Town staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for Root:

- Capital improvement project funding - *The capital program has been used for roadway maintenance activities and other projects and could be used in the future to fund mitigation projects.*
- Hazard Mitigation Grant Programs

The Town of Root has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. However, the lack of local funding is a major constraint as many outside funding sources have local cost-share (cash match) requirements that the Town is unable to meet. This lack of financial resources is among the Town's biggest concerns with regard to the implementation of mitigation projects and related risk reduction activities.

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The Town Budget Officer is responsible for the accounting of all Town funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The Town Budget Officer provides budget monitoring and financial reports to the Town Board throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

The Town of Root does not currently have any education and outreach capabilities.

4.2 NFIP Participation and Compliance

The Town of Root has actively participated in the National Flood Insurance Program (NFIP) since 1988. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there are a total of 5 NFIP policies in force. The total annual premium is \$4,443 for a total of \$826,000 in coverage. As of February 23, 2023, a total of 5 claims amounting to approximately \$23,294 have been paid to NFIP policyholders in Root since joining the program.¹³ More information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 8 describes the Town of Root's participation and continued compliance in accordance with NFIP requirements and as specified in FEMA's 2023 Local Mitigation Planning Policy Guide.¹⁴

Table 7. NFIP Participation and Compliance, Town of Root.

| REQUIRED INFORMATION | RESPONSE |
|--|---|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2017 via Town of Root Town Code (Chapter 30 Flood Damage Prevention Regulations). |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Town Code (Chapter 30-3.2. Basis for Establishing Areas of Special Flood Hazard. The latest effective FIRM is dated January 19, 2018. |
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Code Enforcement Official of the Town of Root administers the provisions of the Floodplain District. The Code Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. The Town adopted and implemented the NY State Building Code. |

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov//reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2023. P. 26.

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| REQUIRED INFORMATION | RESPONSE |
|--|---|
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Code Enforcer of the Town of Root has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Flood Damage Prevention Regulations. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 30-2 of the Town's Flood Damage Prevention Regulations define substantial improvement/substantial damage as 50% of market value of the structure. |

The Town of Root does not participate in the Community Rating System (CRS), however, the Town has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Town's limited administrative capabilities and the low number of NFIP policies currently in force.

The Town of Root requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibit any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.2.1 Improvement Opportunities

Despite the limitations and constraints faced by the Town of Root when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Town is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Town during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated versions of the Town's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Town to cope with potential unforeseen

challenges in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.

- Seek and implement more capacity building initiatives for Town staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout town.

Financial Capabilities

- Maximize opportunities through the Town's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Town's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Town to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Town's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Town Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Town should coordinate with the State NFIP Coordinator on possible updates or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- Root's local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood)
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the current status of the mitigation actions (completed, ongoing/in process, deleted, or modified) included in the 2016 version of this plan. Besides current status, actions brought forward to this 2023 plan are identified in the Keep for Plan Update? column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Town of Root.

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|-----------------------------|--|----------------|---|-----------------------|
| 1 | Darrow Road Bridge | Design, construction and construction inspection for the replacement of the Darrow Road Bridge over East Creek. | Deleted | Bridges are determined by the county not the Town | NO |
| 2 | Rappa Road Bridge | Design, construction and construction inspection for the replacement of the Rappa Road Bridge over Flat Creek. | Deleted | Bridges are determined by the county not the Town | NO |
| 3 | County HMP Review & Updates | Prior to the update of the Comprehensive plan, review the approved County HMP and incorporate relevant hazard mitigation to support smart development in the Town. | Deleted | The county was going to do this | NO |
| 4 | Bridge Assessment | Review of the adequacy of design of the six bridges in the floodplain areas include: 5S, Sprakers Road, Carlisle Rd, and 90IX. | Deleted | Bridges are determined by the county not the Town | NO |

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| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|---|----------------|---|-----------------------|
| 5 | Education and Outreach | Develop a public outreach/education program, on the local level. | Deleted | The town has no public schooling | No |
| 6 | Beaver Dam & Local Species Assessment | Identify solutions to the flooding caused by beaver dams in the Town. | In Progress | This is a yearly permit that is filed for. | YES |
| 7 | Lock Maintenance and Support | Form focus group to interact with the NYS Canal Corp. to open the locks or to clear debris and maintain the locks. (#13 in Randall on eastern end of Town). | Deleted | This is determined by the state not the town | NO |
| 8 | Town Staff Certifications for Flood Services and Management | Pursue continuing professional education and certification (e.g., Certified Floodplain Manager under the Association of State Floodplain Managers) of Code Enforcement Officers and NFIP FPAs in floodplain management and hazard risk reduction. | In Progress | The town uses the county floodplain manager as they do not have one. The code enforcement officer continues education and certification yearly. | YES |
| 9 | Bridge Flood Vulnerability and Mitigation Assessment | Evaluate the bridges in the Town and their flood vulnerability; identify feasible mitigation options. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario." | Deleted | The town is not qualified to do this, they rely on the county | NO |

Town of Root Annex

2023 Montgomery County Hazard Mitigation Plan

Table 9. Updated Mitigation Actions (2023-2028) – Town of Root

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|---|---|--------------------------------|------------------|----------------|--------------------------|-----------------|---|----------|
| 1 | Beaver Dam & Local Species Assessment | Identify solutions to the flooding caused by beaver dams in the Town. | Structural Projects | Flooding | \$\$ | Municipal | Town or Root | Continuous throughout the years when needed | High |
| 2 | Town Staff Certifications for Flood Services and Management | Pursue continuing professional education and certification (e.g., Certified Floodplain Manager under the Association of State Floodplain Managers) of Code Enforcement Officers and NFIP FPAs in floodplain management and hazard risk reduction. | Public Education and Awareness | All | \$ | Municipal | Town or Root | Throughout the next 5 years | High |

Capability Assessment Worksheet- Town of Root

Planning and Regulatory

| Plans | COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | | T&B TO REVIEW OLD ANNEX |
|---|---|---|--|
| | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? | NOTES FROM 2016 Annex |
| Comprehensive/Master Plan | Yes | | Town of Root Comprehensive Plan – adopted 2004 |
| Capital Improvements Plan | No | | |
| Economic Development Plan | No | | |
| Local Emergency Response Plan | Yes | | Via county, Emergency Management Office |
| Continuity of Operations Plan | NO | | |
| Transportation Plan | No | | |
| Stormwater Management Plan | No | | |
| Watershed Management Plan | Yes | | Mohawk River Watershed Management Plan, 2015 |
| Floodplain Management Basin Plan | No | | |
| Open Space and Recreation Plan | No | | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? | NOTES FROM 2016 Annex |
| Building Code | Yes | | via Code Enforcement Office |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | | |
| Fire department ISO rating | No | | |
| Site plan review requirements | No | | |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? | NOTES FROM 2016 Annex |
| Zoning ordinance | Yes | | Zoning Board of Appeals enforces. |
| Subdivision ordinance | Yes | | ZBA enforces. Land Subdivision Regulations, 1993 Chapter 37, 1991 |
| NFIP Flood Damage Prevention Ordinance | Yes | Town Code Chapter 30, Adopted in 2017 | Enforced via Code Enforcement Officer. Chapter 43 – Flood Damage Prevention |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | | |
| Flood insurance rate maps | Yes | Effective 1/19/2018 | |
| Acquisition of land for open space and public recreation uses | No | | |
| Stormwater Management Ordinance | No | | |
| Growth Management Ordinance | No | | |
| Real Estate Disclosure Requirements | Yes | | Enforce via realtor. NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467 |

Administrative and Technical

| | | | |
|--|-------------------------|---|------------------------------|
| Administration | Yes/No | Describe capability Is coordination effective? | NOTES FROM 2016 Annex |
| Planning Commission | Yes | | |
| Mitigation Planning Committee | No | | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | Yes | | DPW Road Maintenance |
| Mutual aid agreements | Yes | | Volunteer fire departments |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| Chief Building Official | Yes | Code Enforcement Officer | |
| Floodplain Administrator | Yes | | via Code Enforcement Office |
| Emergency Manager | Yes | | Via County Emergency Manager |
| Community Planner | Yes | | Via Consultant Engineer |
| Civil Engineer | Yes | | Via Consultant Engineer |
| GIS Coordinator | No | | |
| Other | No | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| Warning systems/services (Reverse 911, outdoor warning signals) | No | | |
| Hazard data and information | No | | |
| Grant writing | No | | |
| Hazus analysis | No | | |
| Other | No | | |
| Financial | Access/ | Has the funding resource been used in past and for what type of activities? | NOTES FROM 2016 Annex |

| Funding Resource | Eligibility (Yes/No) | Could the resource be used to fund future mitigation actions? | |
|--|-------------------------|---|--|
| Capital improvements project funding | Yes | | |
| Authority to levy taxes for specific purposes | No | | |
| Fees for water, sewer, gas, or electric services | No | | |
| Impact fees for new development | No | | |
| Storm water utility fee | No | | |
| Incur debt through general obligation bonds and/or special tax bonds | Yes | | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | No | | |
| Other federal funding programs | Yes | ARPA 2020 | |
| State funding programs | No | | |
| Hazard Mitigation Grant Programs | No | | |

Education and Outreach

| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
|---|--------|---|-----------------------------|
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | | |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | No | | |
| Natural disaster or safety related school programs | No | | |
| StormReady certification | No | | |
| Firewise Communities certification | No | | |
| Public-private partnership initiatives addressing disaster-related issues | No | | |
| Other | No | | |

TOWN OF ST. JOHNSVILLE

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Town of St. Johnsville
7431 State Highway 5
St. Johnsville, NY 13452
www.stjohnsville.com

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Cover Photo credit: Gail Welter- Fort Klock

Town of St. Johnsville Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the Town of St. Johnsville not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Town of St. Johnsville.

| Primary Point of Contact | Alternate Point of Contact |
|---|--|
| Phoebe Sitterly, Supervisor 7431 State Highway 5, P.O. Box 28, Saint Johnsville, NY 13452 sitterly.phoebe@gmail.com | Lynn Stever, Clerk 7431 State Highway 5, P.O. Box 28, Saint Johnsville, NY 13452 Tnstjohn1@yahoo.com |

1. Municipality Profile

1.1 Brief History

The town was first settled around 1725. The territory was part of the Palatine District. In 1769, Sir William Johnson built a church in the town for the benefit of his Indian allies. A brief skirmish was fought in the town in 1780 near Fort Klock, a fortified house. The Town of Saint Johnsville was formed in 1838 from the Town of Oppenheim, which then became part of the newly created Fulton County. In 1857, the community of Saint Johnsville set itself off from the town by incorporating as a village. According to the *Enterprise and News*, Nov. 17, 1937, by 1934, Mr. and Mrs. Joseph H. Reaney had given 120 acres of land to the Village of Saint Johnsville. This land was named Klock Park after Dr. Charles M. Klock, a highly regarded local physician. A document created for the 150th celebration of St. Johnsville provides additional information about the history.¹

1.2 Location and Demographics

The Town of St. Johnsville is a rural community of approximately 16.5 square miles located in the north western portion of Montgomery County. The Mohawk River makes up its southern border. It shares its boundaries with the Town of Palatine to the east and Fulton and Herkimer County's serves as its northern and western border, respectively. The Village of St. Johnsville is located in the center of the Town along the mohawk River. Hamlets within the town's boundaries West St. Johnsville and Krigsbush.

Land surface ranges from around 300 feet above mean sea level along the Mohawk River to a high point of approximately 1,040 feet above mean seal level near Baum Road in the northeastern section of the

¹ <http://www.threerivershms.com/Town.htm>

Town of St. Johnsville Annex

2023 Montgomery County Hazard Mitigation Plan

Town. The Town is located across multiple subwatershed to the Mohawk River with predominant drainage features including Caroga, Crum, East Canada, Gravenstine, Mother, Timmerman, and Zimmerman Creek. The Mothers Creek Watershed entails approximately 3,184 acres and is the largest of the seven watersheds found within Town. Predominant land use in the watershed is agricultural, with some of the steepest agricultural lands in the County. Timmermans covert the next greatest area of land in St. Johnsville at 2.409 acres and includes many waterfalls as it descends to the Mohawk River. A more detailed description of the Western Canajoharie Creek Subwatershed is included in the HMP Community Asset Inventory Section 5.6 . St. Johnsville’ s economic, societal and infrastructural resources, including critical assets are highlighted in Figure 1.

St. Johnsville is home to 2,582 residents, with a population density of 153 people per square mile. According to the 2020 US Census², 82% of their 1,134 housing units are occupied, while 18% of the housing units remain vacant. Of the occupied units, 69% are owner occupied and 31% are renter occupied. 23.8% of the total population is below the poverty level, which includes 51% of children under the age of 18, and 13% of seniors 65 and over. Approximately 11 percent of the town’s residents have attained a four-year college degree or higher. The median household income for St. Johnsville is \$48,625. There is little racial or ethnic diversity in the community with 92% reporting as White, 2% multi-racial and 5% Hispanic. There is a large Amish population living in St. Johnsville, most of whom do not drive cars.

1.3 Governance

The Town of St. Johnsville is governed by a supervisor and four-member Town Council. This governing body will assume responsibility for adoption and implementation of this plan.

1.4 Land Use and Development

There are 10,567 total acres of land in the town³. The primary land use in the town is agricultural, which includes approximately 66% of the town with 6,981 acres. Rural residential is the second largest use of land with 1,069 acres devoted to this use or 10% of the total land area. Commercial and Industrial land make up about 4% of the Town and Vacant land constitutes another 700 acres or 7% of the land area.

² <https://censusreporter.org/profiles/06000US3605764650-st-johnsville-town-montgomery-county-ny/>

³ St. Johnsville Comprehensive Plan 2005

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snow storms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for St. Johnsville as evidenced during Hurricane Irene flooding along the Mohawk River and East Canada Creek. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Town of St. Johnsville that is not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for Earthquakes is included

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Town in the past 10 years.

Table 1. Hazard Event History 2011-2021⁴

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------------------|--|--|
| August 26 – September 11, 2011 | Hurricane Irene and Remnants of Tropical Storm Lee | No damages reported |
| September 8, 2012 | Thunderstorm Winds | Trees were reported down due to thunderstorm winds in St. Johnsville. |
| June 28, 2013 | Flash Flood | Significant flash flooding occurred throughout St. Johnsville due to heavy rainfall. Several homes were affected by flood waters. |
| October 1, 2019 | Heavy Rain Flood | Heavy rainfall resulted in a record high flood stage on the Mohawk River at Little Falls. The river reached moderate flood stage by 0055EST 1 November and exceeded major flood stage shortly thereafter by 0150EST. The first crest occurred at 0516EST 1 November at 19.73 feet before it receded slightly, but a second, higher crest of 19.86 feet occurred at 0345EST 2 November. The river fell below major flood stage by 1915EST 2 November, and below moderate flood stage by 0022EST 3 November. The high water impacted nearby rail tracks such that Amtrak service was suspended on some routes between Albany and Syracuse, and some inbound passengers were transferred to buses. The high water also resulted in the closure of the Mohawk Valley Welcome Center in Fultonville along the New York State Thruway. |

⁴ <http://ncdc.noaa.gov/stormevents>.

2.2 Community Assets

Ten Community Assets were identified for the Town of St. Johnsville for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID correspond with locations shown in **Figure 1**.

Table 2. Community Assets in the Town of St. Johnsville

| | Asset ID | Subtype | Name |
|--|-----------|-----------------------|--|
| ECONOMIC | 1 | Food/ Grocery | Dollar General |
| SOCIETAL | 2 | Historic Site | Fort Haus |
| | 3 | Historic Site | Inn by the Mill |
| | 4 | Historic Site | 1747 Nellis Tavern |
| | 5 | Historic Site | Fort Klock |
| | 6 | Church | First Methodist Episcopal Church of St. Johnsville |
| | 7 | Cemetery | Nellis Cemetery |
| | 8 | Cemetery | Klock Cemetery |
| | 9 | Cemetery | Edwards Cemetery |
| | 10 | Cemetery | Bellinger Cemetery |
| | 11 | Food/Grocery/Pharmacy | Kinney's |
| INFRASTRUCTURAL | 11 | PWS Treatment | Lasselville Pump Station |
| | 12 | Dam | (157-0515) |
| | 13 | Dam | St Johnsville Reservoir Dam A |
| | 14 | Dam | (157-0515d) |
| | 15 | Dam | (157-0515e) |
| | 16 | PWS Well | Village of St Johnsville |
| Bold indicated asset is identified as an essential facility | | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are five essential facilities in town. There is no designated emergency shelter in the Town, but there is an emergency shelter located at the St. Johnsville High School in the Village. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Town of St. Johnsville.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|------------------------------|------------------------------------|------------------|----------|----------------|
| Lasselville Pump Station | Lasselville Road, St. Johnsonville | N | N | N |
| PSW Village of St Johnsville | State Hwy 5 | N | N | N |
| Town of St. Johnsville DPW | 1 Marina Dr. | Y | N | Y |

Town of St. Johnsville Annex

2023 Montgomery County Hazard Mitigation Plan

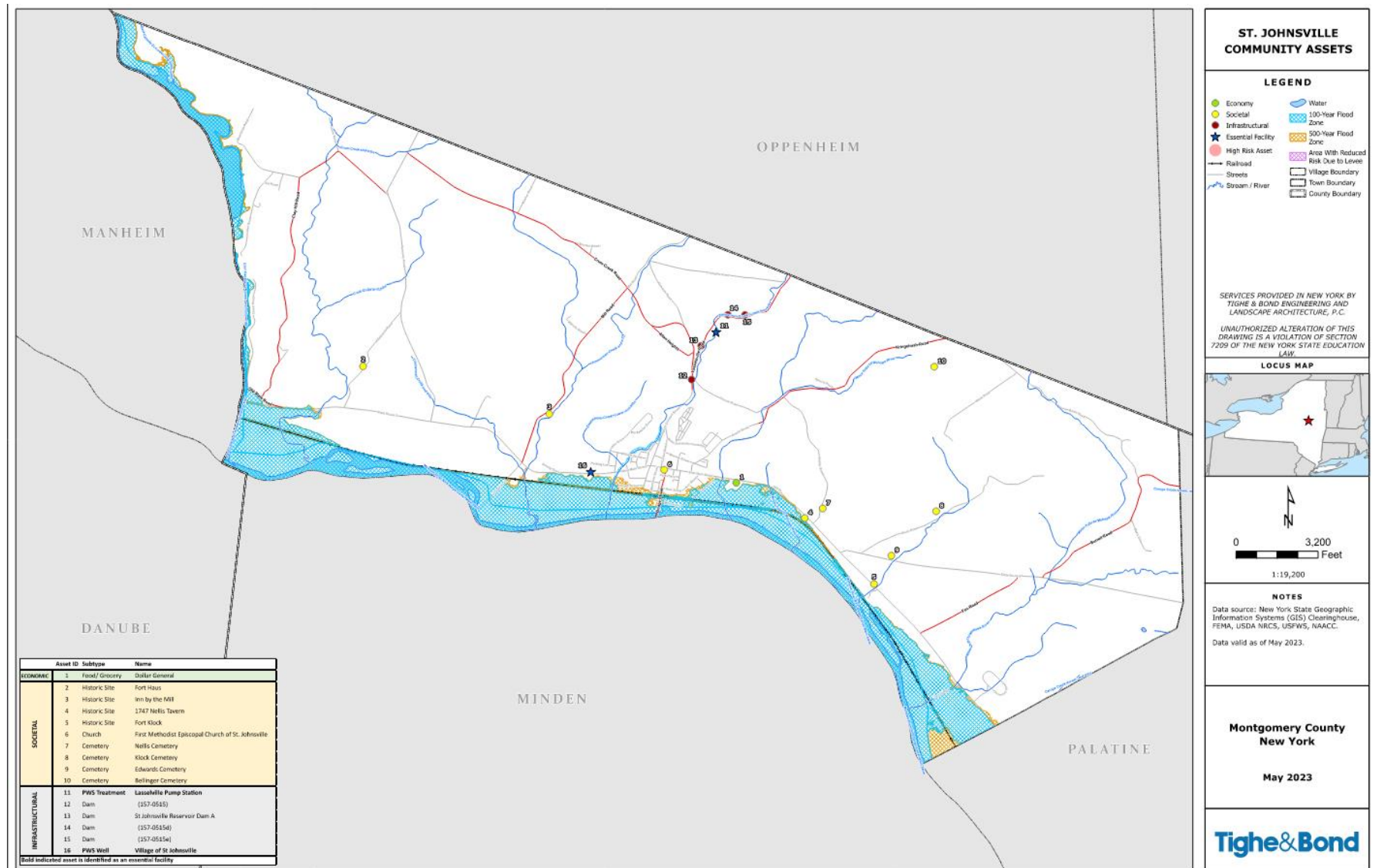


Figure 1. Town of St. Johnsville FEMA Flood Zones, Community Assets and Essential Facilities

2.4 Repetitive Loss and Severe Repetitive Loss Properties

There were no repetitive loss properties in St. Johnsville in the 2016 HMP. As of 2022, according to FEMA records there was one repetitive loss property identified as a non-residential structure. As of December 31, 2022, 5 policies were in force. The Town of St. Johnsville had a total of 1 claim totaling \$13,700 in losses for all NFIP-insured structures⁵. It should be noted that according to FEMA data there are 117 structures within the 100-year flood plain (including the Villages of St. Johnsville).

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Town, by hazard as shown in Table 4. The estimated value of at risk assets is based on the Town's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Town of St. Johnsville Vulnerable Assets Exposure Analysis⁶

| Hazard | At-Risk All Properties ⁷ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|--------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$121,656,159 | 1,068 | \$1,027,500 | 2 | \$229,719 | 4 |
| Severe Thunderstorm | 121,656,159 | 1,068 | \$1,027,500 | 2 | \$229,719 | 4 |
| Severe Winter Storm | 121,656,159 | 1,068 | \$1,027,500 | 2 | \$229,719 | 4 |
| Tornado | 121,656,159 | 1,068 | \$1,027,500 | 2 | \$229,719 | 4 |
| Flood | | | | | | |
| 1% Annual Chance | \$17,714,773 | 117 | - | 0 | - | 0 |
| 0.2% Annual Chance | \$17,906,222 | 124 | - | 0 | - | 0 |

⁵ FEMA data does not separate out Village versus Town on NFIP claims

⁶ Values are based on 50% of assessor's full market value

⁷ Includes Villages of St. Johnsville

2.6 Townwide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Town of St. Johnsville. The totals include capital stock and economic loss estimates.

*Table 5 Town of St. Johnsville Earthquake Vulnerability Analysis**

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 1,068 | 1,068 |
| Total direct building economic loss | \$333,000 | \$4,796,000 |

- *Hazus includes the Village of St. Johnsville in these calculations*

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. St. Johnsville Problem Statements.

| Problem Area | Description |
|-----------------------------|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. |
| Geographic Areas of Concern | |
| East Canada Creek | Local Areas of Flooding- The length of the two waterways and low-lying areas adjacent to the waterways flood. |
| Mohawk River | |
| Vulnerable Community Assets | |
| Bridges | Rt 5 over E. Canada Creek, Crum and Timmerman Creek, Bridge CR61 over Erie Canal |
| Roads | State Highway 5, Thumb Rd/ Crum Creek Rd |
| Emergency Service | Town of St. Johnsville DPW |
| Railroad | East Canada Lake Dam is a High Hazard Dam |
| Dam | |

4. Capabilities

The Town of St. Johnsville is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Town's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Town of St. Johnsville completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

4.1 Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for St. Johnsville:

- Comprehensive/Master Plan – *Town of St. Johnsville Comprehensive Plan, 2005*
- Building Codes
- Land Use Planning
- Zoning Ordinance – *Local ZBA, 1993*
- Subdivision Ordinance – *Local ZBA, 1993*
- NFIP Flood Damage Prevention Ordinance – *Local Law No. 3 of 2017, Adopted 12/14/2017.*
- Real Estate Disclosure Requirements – *State - realtors, NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467*

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

The Town of St. Johnsville has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered among

the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for St. Johnsville:

- Planning Board
- Maintenance Programs to Reduce Risk
- Mutual Aid Agreements
- Chief Building Official

The Town of St. Johnsville is governed by a Town Board, Planning Board, Zoning Board of Appeals, and Town Supervisor. The Town has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Town staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for St. Johnsville:

- Capital improvement project funding
- Community Development Block Grant
- Federal Funding
- State Funding
- Hazard Mitigation Grant Programs

The Town of St. Johnsville has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concern with regard to the implementation of mitigation projects and related risk reduction activities.

The Town Budget Officer is responsible for the accounting of all Town funds, maintaining financial

Town of St. Johnsville Annex

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records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The Budget Officer provides budget monitoring and financial reports to the Supervisor and Town Board throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for St. Johnsville:

- CodeRed – Through Village Fire Department
- Website

4.2 NFIP Participation and Compliance

The Town of St. Johnsville has actively participated in the National Flood Insurance Program (NFIP) since 1983. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there were 5 NFIP policies in force. The total annual premium is \$5,801 for a total of \$709,500 in coverage. As of February 23, 2023, a total of 1 claim amounting to approximately \$13,700 was paid to NFIP policyholders in the Town of St. Johnsville since joining the program.¹³ More information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 7 describes the Town of St. Johnsville's participation and continued compliance in accordance with NFIP requirements and as specified in FEMA's 2022 Local Mitigation Planning Policy Guide.¹⁴

Table 7. NFIP Participation and Compliance, Town of St. Johnsville.

| REQUIRED INFORMATION | RESPONSE |
|--|---|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2017 via Local Law No. 3 of 2017 Flood Damage Prevention. |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Local Law (Section 3.2 Basis for establishing areas of Special Flood Hazard.). The latest effective FIRM is dated January 19, 2018. |

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov//reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

| REQUIRED INFORMATION | RESPONSE |
|--|---|
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Local Code Enforcement Officer enforces of the Town of St. Johnsville administers the provisions of the Floodplain District. The Building Code Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Local Code Enforcer of the Town of St. Johnsville has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 2 of the Local Law define substantial improvement/substantial damage as 50% of market value of the structure. |

Minimum standards set forth by FEMA and New York State have been adopted by the Town of St. Johnsville. The Town of St. Johnsville requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

The Town of St. Johnsville does not participate in the Community Rating System (CRS), however, the Town has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Town's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.3 Improvement Opportunities

Despite the limitations and constraints faced by the Town of St. Johnsville when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Town is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to

reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Town during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated versions of the Town's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Town to cope with potential unforeseen challenges in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Town staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout town.

Financial Capabilities

- Maximize opportunities through the Town's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Town's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Town to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Town's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Town Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Town should coordinate with the State NFIP Coordinator on possible updates or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).

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- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- St. Johnsville's local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

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Town of St. Johnsville Annex

2023 Montgomery County Hazard Mitigation Plan Update

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status (i.e completed, in progress, deferred or deleted), actions brought forward to this 2023 plan are identified in the Keep for Plan Update? column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update.. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Town of St. Johnsville

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|--|----------------|---|-----------------------|
| 1 | St. Johnsville Fire Dive Rescue and Recovery Unit Expansion | Expansion of St. Johnsville Fire Department Dive Rescue and Recovery Unit. | Deleted | No Town Fire Department | NO |
| 2 | Business Flood Protection Initiative | Protect business from flooding in the Town, with initial focus on businesses between NYS Route 5 and the Mohawk River. | In Progress | The new supervisor will revisit this, no record of anything done. | YES |
| 3 | Zoning Ordinance Update with Hazard Mitigation Integration | Update the zoning ordinance; review the county hazard mitigation plan and incorporate hazard information where appropriate | In Progress | We are beginning to talk about this, no record of anything done. | YES |

Town of St. Johnsville Annex

2023 Montgomery County Hazard Mitigation Plan Update

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|---|----------------|--|-----------------------|
| 4 | NFIP Compliance through Local Code Enforcement | Strive to maintain compliance with, and good standing in the NFIP. | In Progress | The Town enforces their NFIP Flood Damage Prevention Ordinance through local code enforcement. | YES |
| 5 | NFIP Community Rating System (CRS) Program Participation Support | Support participation in the NFIP Community Rating System (CRS) program by attending CRS workshop(s) if offered within the county. Join the CRS program if adequate resources to support long term participation can be dedicated. See following related Community Assistance Visit (CAV) initiative. | Deleted | No funding | NO |
| 6 | Critical Facility Flood Vulnerability Assessment and Mitigation Support | Encourage the owners of the critical facilities identified in Table 9.21-5 to assess the flood vulnerabilities of these facilities and identify feasible mitigation options. Assure that any mitigation addresses the 500- year flood event or "worst damage scenario." | Deleted | No critical facilities are located in the areas vulnerable to flooding | NO |

Town of St. Johnsville Annex

2023 Montgomery County Hazard Mitigation Plan Update

Table 9. Updated Mitigation Actions (2023-2028) – Town of St. Johnsville

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|--|--|---------------------|----------------------|----------------|---|-------------------|-------------------------|----------|
| 1 | Business Flood Protection Initiative | Protect business from flooding in the Town, with initial focus on businesses between NYS Route 5 and the Mohawk River. | Property Protection | Flood, Severe Storms | Medium | Potential funding from NYS ESD Grant Funds, Market NY, NYS HCR Main Street, Rural Area Revitalization Program, HCR CDBG Microbusiness Program, US Department of Commerce Economic Development Administration, USDA Rural Assistance, Industrial Development Agencies, FEMA HMGP | Montgomery County | 3-5 Years | Mid |
| 2 | Zoning Ordinance Update with Hazard Mitigation Integration | Update the zoning ordinance; review the county hazard mitigation plan and incorporate hazard information where appropriate | Prevention | All Hazards | Low | Municipal budget | Local | 1-3 years | High |
| 3 | NFIP Compliance through Local Code Enforcement | Strive to maintain compliance with, and good standing in the NFIP. | Prevention | All Hazards | Low | Municipal budget | Local | Continuous | High |

Capability Assessment Worksheet- Town of St. Johnsville

Planning and Regulatory

| COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | | T&B TO REVIEW OLD ANNEX |
|---|----------------|---|
| Plans | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? |
| Comprehensive/Master Plan | Yes | Yes |
| Capital Improvements Plan | No | |
| Economic Development Plan | Yes | Yes |
| Local Emergency Response Plan | Yes | Yes |
| Continuity of Operations Plan | No | |
| Transportation Plan | Yes | Yes |
| Stormwater Management Plan | No | |
| Watershed Management Plan | Yes | Yes |
| Floodplain Management Basin Plan | No | |
| Open Space and Recreation Plan | | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? |
| Building Code | Yes | Yes |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | |
| Fire department ISO rating | No | |
| Site plan review requirements | Yes | Yes |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? |
| Zoning ordinance | Yes | Yes |
| Subdivision ordinance | Yes | Yes |
| NFIP Flood Damage Prevention Ordinance | Yes | Local Law No. 3 of 2017, Adopted 12/14/2017. |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | |
| Flood insurance rate maps | Yes | Effective 1/19/2018 |
| Acquisition of land for open space and public recreation uses | No | |
| Stormwater Management Ordinance | No | |
| Growth Management Ordinance | No | |
| Real Estate Disclosure Requirements | Yes | No |

Administrative and Technical

| Administration | Yes/No | Describe capability Is coordination effective? |
|--|-----------------|--|
| Planning Commission | Yes | Yes |
| Mitigation Planning Committee | No | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | Yes | Yes |
| Mutual aid agreements | Yes | no |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? |
| Chief Building Official | Yes | Yes |
| Floodplain Administrator | Yes | Yes |
| Emergency Manager | Yes | Yes |
| Community Planner | Yes | Yes |
| Civil Engineer | Yes | No |
| GIS Coordinator | No | MCBDC |
| Other | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? |
| Warning systems/services (Reverse 911, outdoor warning signals) | No | |
| Hazard data and information | Yes | 2023 hazard mitigation plan |
| Grant writing | Yes | MCBDC |
| Hazus analysis | No | |
| Other | | |

Financial

| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? |
|--|------------------------------------|--|
| Capital improvements project funding | Yes | Future funding can be obtained. |
| Authority to levy taxes for specific purposes | Yes | No |
| Fees for water, sewer, gas, or electric services | Yes | No |
| Impact fees for new development | No | No |

| | | | |
|--|----------------------------------|---------------------------------|---------------------|
| Storm water utility fee | no | No | Not listed in annex |
| Incur debt through general obligation bonds and/or special tax bonds | Obligation bonds yes, special no | | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | Future funding can be obtained. | |
| Other federal funding programs | Yes | Future funding can be obtained. | |
| State funding programs | Yes | Future funding can be obtained. | Not listed in annex |
| Hazard Mitigation Grant Programs | Yes | 2023 hazard mitigation plan | Not listed in annex |

Education and Outreach

| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
|---|--------|--|-----------------------------|
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | | |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | No | | Through county |
| Natural disaster or safety related school programs | No | | |
| StormReady certification | Yes | County wide Certification | |
| Firewise Communities certification | No | | |
| Public-private partnership initiatives addressing disaster-related issues | No | | |
| Other | | | |

VILLAGE OF AMES

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX NOVEMBER 2023



Village of Ames

595 Latimer Hill Road

Ames, NY 13317

www.co.montgomery.ny.us/web/sites/municipal/default.asp?muni=1765

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Village of Ames Annex

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This municipality Annex includes details regarding the Village of Ames not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Village of Ames.

| Primary Point of Contact | Alternate Point of Contact |
|--|---|
| Tom Kilcullen, Mayor 7451 St. Hwy. 10, Ames, NY 13317 518-527-3444 kilcullen.tom@yahoo.com | Brenda Rava, Clerk PO Box 186, Canajoharie, NY 13317 518-774-4387 amesvillageclerk@gmail.com |

1. Municipality Profile

1.1 Brief History

According to the Canajoharie-Palatine Chamber of Commerce website:

'The Village of Ames was settled around the end of the 17th century by people from New England, in contrast to the German and Dutch who settled in the Mohawk Valley area. About the middle of the 17th century, Capt. Mills, General Keyes, and Ebenezer Hibbard purchased one thousand acres of land where the village of Ames now stands for a price of three shillings per acre [\$8.80 US in 2015]. This whole area, including Buel and Sprout Brook was known as Bowman's Creek.'

1.2 Location and Demographics

The Village of Ames is a small rural village, situated in the southwestern corner of Montgomery County. The land surface is around 700 feet above mean sea level. The Village is located in the Canajoharie Creek sub watershed to the Mohawk River with predominant drainage features including Brimstone Creek which runs through the Village. A more detailed description of the Western Canajoharie Creek Sub watershed is included in the HMP Community Asset Inventory Section 5.4.

The Village of Ames is located within the borders of the Town of Canajoharie. It shares its boundaries with the Town of Canajoharie to the north, south, east, and west. The Village of Ames's societal and infrastructural resources, including critical assets are highlighted in Figure 1.

The Village of Ames is home to 163 residents. According to the 2020 US Census¹, 78% of their 78 housing units are occupied, while 22% of the housing units remain vacant. Of the occupied units, 97% are owner occupied and 3

¹ <https://censusreporter.org/profiles/16000US3612111-canajoharie-ny/>

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% are renter occupied. 9% of the total population is below the poverty level, which includes 8% of seniors 65 and over, and 12% of children under the age of 18. Approximately 23% of the town's residents have attained a four-year college degree or higher. The median household income for the Village of Ames is \$95,469. There is some racial or ethnic diversity in the community with 93% reporting as White, 6% Two+, and 1% as Hispanic.

1.3 Governance

The Village of Ames is governed by a three-person Village Board consisting of a mayor and two trustees. This governing body will be responsible for the adoption and implementation of this plan.

1.4 Land Use and Development

Ames is one of the smallest villages in New York State, with a total area of 0.1 square miles. The Village is fully developed and there is currently no known proposed future development in the municipality.

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snow storms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for The Village of Canajoharie as evidenced during Hurricane Irene, especially to Fort Hunter and properties on the Schoharie Creek. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Village of Ames that is not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for Earthquakes is included

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Town in the past 10 years.

Table 1. Hazard Event History 2011-2021²

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------------------|--|---|
| August 26 – September 11, 2011 | Hurricane Irene and Remnants of Tropical Storm Lee | Brimstone Creek flooded and groundwater inundation impacted homes along West Ames Road and Latimer Hill Road. Fire department responded to pump out basements. |
| Summer 2014 | Flooding | Flooding of the Brimstone Creek in the Village damaged the town highway garage and neighboring residences. The garage washed out and the town experienced loss of equipment and supplies. The neighboring home lost all contents of their home. |
| July 14, 2016 | Thunderstorm Winds | A portion of County Route 10 between Latimer Hill Road and Old Sharon Road in Ames was closed due to downed power lines from thunderstorm winds |
| July 12, 2017 | Flash Floods | Heavy rainfall resulted in approximately 6 inches of flowing water over all lanes of Route 10 near the Montgomery/Schoharie County border. |
| June 28, 2020 | Lightning/ Thunderstorm Wind | Half of a large barn steel roof was damaged. Another single-story barn had about 24 feet of roof peel back from the eaves and an old garage with corrugated steel roof lost metal on both sides. |

2.2 Community Assets

Two community assets were identified for the Village of Ames for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID correspond with locations shown in **Figure 1**.

² <http://ncdc.noaa.gov/stormevents>

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Table 2. Community Assets in the Village of Ames

| | Asset ID | Subtype | Name |
|--|----------|----------------------------------|---|
| SOCIETAL | 1 | Church | Ames-Sprout Brook United Methodist Church |
| INFRASTRUCTURAL | 2 | Municipal / Public Safety | Ames Fire Dept |
| Bold indicated asset is identified as an essential facility | | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There is one essential facility in the Village. There is no designated emergency shelter in Ames. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Village of Ames.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|-----------------|------------------------------|------------------|----------|----------------|
| Ames Fire Dept. | 595 Latimer Hill Rd, Ames | Y | Y | N |

Village of Ames Annex

2023 Montgomery County Hazard Mitigation Plan

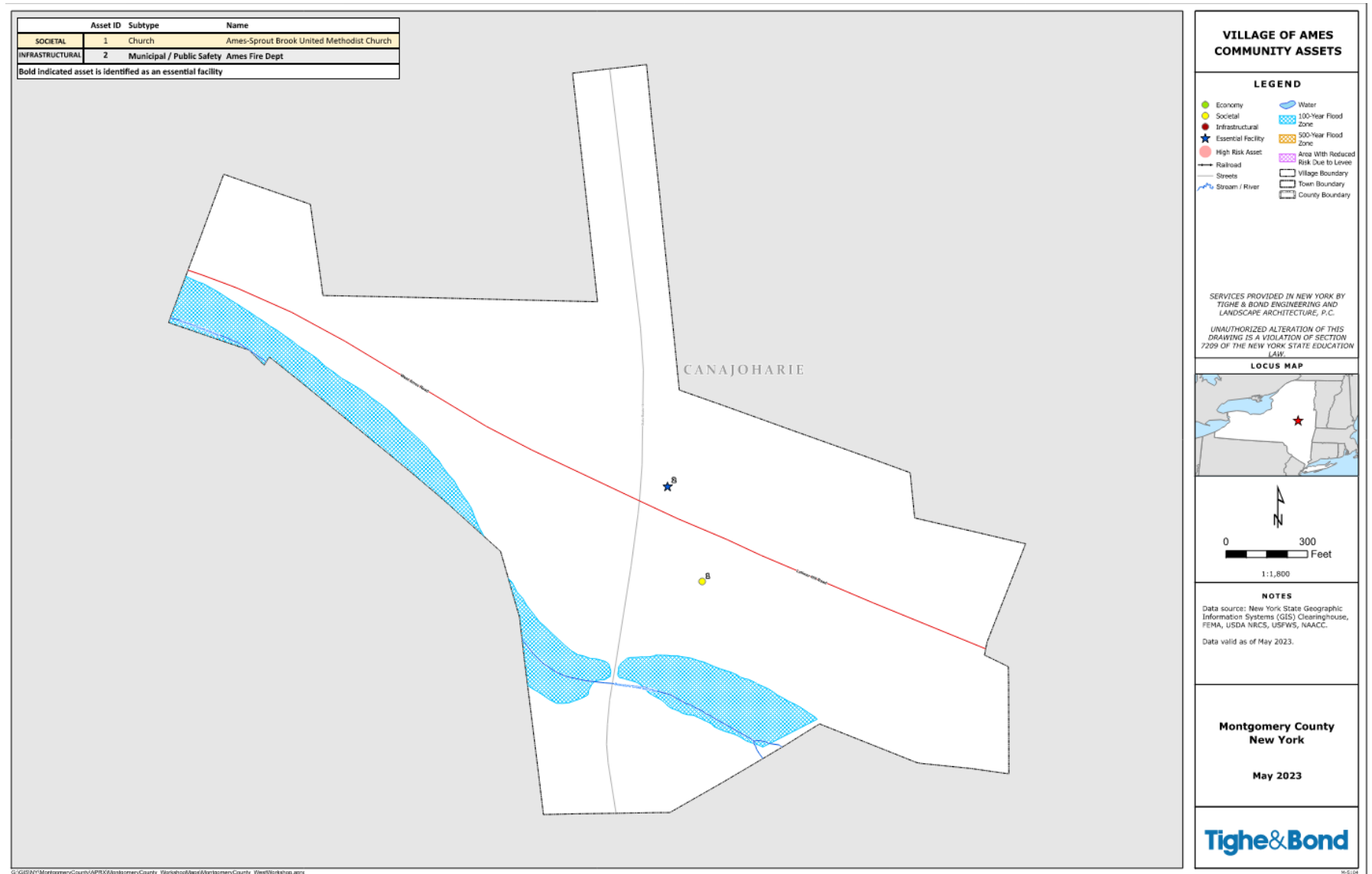


Figure 1. Village of Ames FEMA Flood Zones, Community Assets and Essential Facilities

2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there was one identified repetitive loss properties in the Village of Ames as of December 31, 2022. As of February 23, 2023, 1 policies were in force and the Village of Ames had a total of 2 claims totaling \$15,270 in losses for all NFIP-insured structures.

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Village, by hazard as shown in Table 4. The estimated value of at risk assets is based on the Village's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Village of Ames Vulnerable Assets Exposure Analysis³.

| Hazard | At-Risk All Properties ⁴ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|--------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$257,990,179 | 1,446 | \$159,000 | 1 | \$0 | 0 |
| Severe Thunderstorm | \$257,990,179 | 1,446 | \$159,000 | 1 | \$0 | 0 |
| Severe Winter Storm | \$257,990,179 | 1,446 | \$159,000 | 1 | \$0 | 0 |
| Tornado | \$257,990,179 | 1,446 | \$159,000 | 1 | \$0 | 0 |
| Flood | | | | | | |
| 1% Annual Chance | \$50,743,787 | 184 | - | 0 | - | 0 |
| 0.2% Annual Chance | \$27,617,350 | 75 | - | 0 | - | 0 |

2.6 Village Wide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Village of Ames. The totals include capital stock and economic loss estimates.

³ Values are based on 50% of assessor's full market value

⁴ Includes the Town and Village of Canajoharie

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*Table 5 Village of Ames Earthquake Vulnerability Analysis**

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|----------------|------------------|
| Estimated total number of buildings | 1,446 | 1,446 |
| Total direct building economic loss | \$427,000 | \$5,986,000 |

- *Hazus combines the Villages of Canajoharie, Ames & Town of Canajoharie, values above are for all communities*

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions.

These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Village of Ames Problem Statements.

| Problem Area | Description |
|---------------------------------------|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. |
| Geographic Areas of Concern | |
| Brimstone Creek | Local Areas of Flooding- DPW located on W. Ames Road adjacent to Brimstone Creek which overflows banks (Town Canajoharie DPW will re-locate to new facility on St. Hwy. 163 upon completion). |
| Vulnerable Community Assets | |
| Shelters Road Emergency Service | There are no local shelters identified in Ames. West Ames Rd. and Latimer Hill Rd- backyards and basements flood |

4. Capabilities

The Village of Ames is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Village's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Village of Ames completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

4.1 Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for The Village of Ames:

- Transportation Plan – *County Plan*
- Building Codes – *Local code enforcement, currently being updated.*
- Land Use Planning
- Zoning Ordinance – *Local ZBA, currently being updated.*
- NFIP Flood Damage Prevention Ordinance – *Local Law No. 2 of 2017, Adopted 12/6/2017.*
- Growth Management Ordinance – *Local ZBA and ordinance*
- Real Estate Disclosure Requirements – *State - realtor, NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467*
- Local Emergency Response Plan

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

The Village of Ames has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for The Village of Ames:

- Mutual Aid Agreements (*Fire Department*)
- Chief Building Official
- Emergency Manager (*County OEM*)
- Community Planner (*MCBDC*)
- GIS Coordinator (*MCBDC*)

The Village of Ames is governed by a Village Board, Zoning Board, and Mayor. The Village has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Village staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for The Village of Ames:

- Capital improvement project funding (*future funds can be obtained*)
- Community Development Block Grant (*future funds can be obtained*)
- Federal Funding (*future funds can be obtained*)
- State Funding (*future funds can be obtained*)
- Hazard Mitigation Grant Programs (*future funds can be obtained*)

The Village of Ames has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concern with regard to the implementation of mitigation projects and related risk reduction activities.

The Village Clerk is responsible for the accounting of all Village funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The Clerk provides budget monitoring and financial reports to the Mayor throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for The Village of Ames:

- CERT Team - *County*
- Email Listserv
- Social Media

4.2 NFIP Participation and Compliance

The Village of Ames has actively participated in the National Flood Insurance Program (NFIP) since 1987. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there are a total of 1 NFIP policy in force. The total annual premium is \$111 for a total of \$5,000 in coverage. A total of 2 claims amounting to \$15,270 have been paid to NFIP policyholders in the Village of Ames since joining the program.¹³ more information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 8 describes the Village of Ames's participation and continued compliance in accordance with NFIP requirements and as specified in FEMA's 2022 Local Mitigation Planning Policy Guide.¹⁴

Table 7 NFIP Participation and Compliance, Village of Ames.

| REQUIRED INFORMATION | RESPONSE |
|--|---|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2017 via Village of Ames Local Law #2 of 2017 Flood Damage Prevention. |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Local Law (Section 3, Basis for establishing areas of Special Flood Hazard). Latest effective FIRM is dated January 19, 2018. |
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Building Code Enforces of the Village of Ames administers the provisions of the Floodplain District. The Building Code Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov//reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

| REQUIRED INFORMATION | RESPONSE |
|--|---|
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Building Code Enforcer of the Village of Ames has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 2 of the Local Law define substantial improvement/substantial damage as 50% of market value of the structure. |

Minimum standards set forth by FEMA and New York State have been adopted by the Village of Ames.

The Village of Ames requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

The Village of Ames does not participate in the Community Rating System (CRS), however, the Village has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Village's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.2.1 Improvement Opportunities

Despite the limitations and constraints faced by the Village of Ames when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Village is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Village during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated versions of the Village's plans, especially as they relate to transportation and environmental policies that can reduce

risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Village to cope with potential unforeseen challenges in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Village staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout town.

Financial Capabilities

- Maximize opportunities through the Village's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Village's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Village to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Village's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Village Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Village should coordinate with the State NFIP Coordinator on possible updates or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- Ames's local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood)
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status (i.e. completed, in progress, deferred, or deleted), actions brought forward to this 2023 plan are identified in the Keep for Plan Update? column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Village of Ames.

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|--|--|----------------|---|-----------------------|
| 1 | Enhancing Flood Resilience: NFIP Reapplication Focus | Prioritize reapplication to the NFIP program. | Completed | Town is participating in NFIP | NO |
| 2 | Flood-Resistant Structural Retrofitting and Intervention | <p>Support the mitigation of vulnerable structures via retrofit (e.g., elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario.”</p> <p>Phase 1: Identify appropriate candidates and determine the most cost-effective mitigation option (in progress).</p> <p>Phase 2: Work with the property owners to implement selected action based on available funding and local match availability.</p> | In Progress | Looking at the floodplain there are only a few residents that are in the floodplain. These property owners will be notified and provided with information on options for flood insurance. | YES |

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| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|--|----------------|---|-----------------------|
| 3 | Comprehensive Mapping Update | Work with the County Planning to update maps for the Village that include flood, overall area, agriculture maps. | In Progress | Working with the county to have an updated map done | YES |
| 4 | Town Garage Relocation for Flood Resilience | Work with the Town of Canajoharie to relocate the Town garage. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario”. | In Progress | Waiting for Town of Canajoharie to start relocation process | YES |

Table 9. Updated Mitigation Actions (2023-2028) – Village of Ames

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|--|--|---------------------|--|----------------|---|--|-------------------------|----------|
| 1 | Flood-Resistant Structural Retrofitting and Intervention | <p>Support the mitigation of vulnerable structures via retrofit (e.g., elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario.”</p> <p>Phase 1: Identify appropriate candidates and determine the most cost-effective mitigation option (in progress).</p> <p>Phase 2: Work with the property owners to implement selected action based on available funding and local match availability.</p> | Property Protection | Flood, Severe Storm, Severe Winter Storm | Low | FEMA Mitigation Grant Programs and local cost share | Village Administration with NYS DHSES and FEMA support | 2023-2028 | Low |

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| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|---|--|---------------------|------------------|----------------|-------------------------------------|--|-------------------------|----------|
| 2 | Comprehensive Mapping Update | Work with the County Planning to update maps for the Village that include flood, overall area, agriculture maps. | Prevention | All Hazards | Low | Municipal and County budget | Village Administration and County Planning | 2023 - 2028 | Low |
| 3 | Town Garage Relocation for Flood Resilience | Work with the Town of Canajoharie to relocate the Town garage. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario." | Property Protection | Flood | High | Grant funding with local cost share | Village Administration and Town of Canajoharie | 2023 - 2028 | High |

Capability Assessment Worksheet- Village of Ames

Planning and Regulatory

| | | COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | T&B TO REVIEW OLD ANNEX |
|---|----------------|---|--|
| Plans | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? | NOTES FROM 2016 Annex |
| Comprehensive/Master Plan | No | | |
| Capital Improvements Plan | No | | |
| Economic Development Plan | No | | |
| Local Emergency Response Plan | No | | |
| Continuity of Operations Plan | No | | |
| Transportation Plan | Yes | | Via County Plan |
| Stormwater Management Plan | No | | |
| Watershed Management Plan | Yes | Yes | Via Mahawk River Watershed Management Plan, 2015 |
| Floodplain Management Basin Plan | No | | |
| Open Space and Recreation Plan | No | | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? | NOTES FROM 2016 Annex |
| Building Code | Yes | Yes | Via Local code enforcement, currently being updated |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | | |
| Fire department ISO rating | No | | |
| Site plan review requirements | Yes | Yes | Local ZBA and ordinance |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? | NOTES FROM 2016 Annex |
| Zoning ordinance | Yes | Yes | Via local ZBA, currently being updated |
| Subdivision ordinance | No | | |
| NFIP Flood Damage Prevention Ordinance | Yes | Local Law No. 2 of 2017, Adopted 12/6/2017 | |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | | |
| Flood insurance rate maps | Yes | Fema flood zones, effective 1/19/2018 | |
| Acquisition of land for open space and public recreation uses | No | | |
| Stormwater Management Ordinance | No | | |
| Growth Management Ordinance | Yes | Yes | Via local ZBA and ordinance |
| Real Estate Disclosure Requirements | Yes | No | Via State - realtor, NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467 |

Administrative and Technical

| Administration | Yes/No | Describe capability Is coordination effective? | NOTES FROM 2016 Annex |
|--|-------------------------|---|--------------------------------------|
| Planning Commission | No | | |
| Mitigation Planning Committee | No | | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | No | | |
| Mutual aid agreements | Yes | Yes | Via Fire Departments |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| Chief Building Official | Yes | Yes | |
| Floodplain Administrator | No | | Village does not participate in NFIP |
| Emergency Manager | Yes | Yes | Via County OEM |
| Community Planner | Yes | MCBDC | External consultant? |
| Civil Engineer | No | | External consultant? |
| GIS Coordinator | Yes | MCBDC | |
| Other | | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| Warning systems/services (Reverse 911, outdoor warning signals) | No | | |
| Hazard data and information | No | | |
| Grant writing | Yes | MCBDC | Via local staff |
| Hazus analysis | No | | |
| Other | | | |

Financial

| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | NOTES FROM 2016 Annex |
|--|------------------------------------|--|-----------------------|
| Capital improvements project funding | Yes | Future funds can be obtained. | |
| Authority to levy taxes for specific purposes | Yes | | |
| Fees for water, sewer, gas, or electric services | No | | |
| Impact fees for new development | No | | |
| Storm water utility fee | No | | |

| | | | |
|---|----------------------------------|---|-----------------------------|
| Incur debt through general obligation bonds and/or special tax bonds | Obligation yes, special no | | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | Future funds can be obtained. | |
| Other federal funding programs | Yes | Future funds can be obtained. | |
| State funding programs | Yes | Future funds can be obtained. | |
| Hazard Mitigation Grant Programs | Yes | Future funds can be obtained. | |
| Education and Outreach | | | |
| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | | |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | Yes | no | |
| Natural disaster or safety related school programs | No | | |
| StormReady certification | No | | |
| Firewise Communities certification | No | | |
| Public-private partnership initiatives addressing disaster-related issues | No | | |
| Other | | | |

VILLAGE OF CANAJOHARIE

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Village of Canajoharie

75 Erie Blvd.

Canajoharie, NY 13317

www.villageofcanajoharie.org/

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This municipality Annex includes details regarding the Village of Canajoharie not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Village of Canajoharie.

| Primary Point of Contact | Alternate Point of Contact |
|--|---|
| Peter Briele, WWTP Superintendent 75 Erie Boulevard, Canajoharie, NY 13317 518- 673-2017 wwtp@villageofcanajoharie.org | Ron Dievendorf, Mayor 75 Erie Blvd Canajoharie NY 13317 518- 673-5512 mayor@villageofcanajoharie.org |

1. Municipality Profile

1.1 Brief History

A settlement of the Mohawk Tribe was located at the site of the current village. On April 30, 1829, the New York State (NYS) Legislature incorporated the Village of Canajoharie. With the Mohawk River, the Canajoharie Creek, and the old Erie Canal, early settlers depended on ferries and bridges to get from one side of the village to the other and across to Village of Palatine Bridge.

1.2 Location and Demographics

The Village of Canajoharie is a rural village community situated in the western area of Montgomery County. The Village of Canajoharie is located within the borders of the Town of Canajoharie, south of the Mohawk River. It shares its boundaries with the Village of Palatine Bridge to the north, Town of Canajoharie to the east, south, and west.

Land surface ranges from around 239 feet above mean sea level along the Mohawk River to a high of 600 feet above mean seal level as the topography rises southerly. The Village is located where Canajoharie Creek discharges to the Mohawk River. A more detailed description of the Western Canajoharie Creek Subwatershed is included in the HMP Community Asset Inventory Section 5.4.

The Village's societal, infrastructural and economic resources, including critical assets, are highlighted in Figure 1.

The Village of Canajoharie is home to 1,608 residents, with a population density of 1,208 people per square mile. According to the 2020 US Census¹, 84% of their 855 housing units are occupied, while 16% of

¹ <https://censusreporter.org/profiles/16000US3612111-canajoharie-ny/>

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the housing units remain vacant. Of the occupied units, 58% are owner occupied and 42% are renter occupied. 10% of the total population is below the poverty level, which includes 9% of seniors 65 and over, and 3% of children under the age of 18. Approximately 13% of the village's residents have attained a four-year college degree or higher. The median household income for the Village of Canajoharie is \$47,250. There is some racial or ethnic diversity in the community with 92% reporting as White, 3% Native American, 2% as Hispanic and 1% as Asian.

1.3 Governance

The Village of Canajoharie is governed by a mayor and four trustees. This governing body will be responsible for the adoption and implementation of this plan.

1.4 Land Use and Development

The Village is approximately 1.4 square miles in size. In 2015 most of the village was listed on the National Register of Historic Places as the Canajoharie Historic District, due to its importance as a transportation hub over the century and the well-preserved architecture from different eras. In the 2016 HMP, no major residential/commercial development or major infrastructure development were identified for the next five years.

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snowstorms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for The Village of Canajoharie as evidenced during Hurricane Irene, especially to Fort Hunter and properties on the Schoharie Creek. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Village of Canajoharie that are not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for earthquakes is included.

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Village in the past 10 years.

Table 1. Hazard Event History 2011-2021²

| Dates of Event | Event Type | Summary of Damages/Losses |
|-------------------------------|--------------------------------|---|
| August 26 – September 5, 2011 | Hurricane Irene and Remnants | Hurricane Irene led to the evacuation of the municipal building (computers, files, equipment) and homes required basement pump outs. Between the 28 th and 28 th , Interstate- 90 (local) was closed. Police and fire were used to ensure compliance with the closure of the New York State Thruway entrance and re-routing traffic. Some local roads were also closed due to debris. The Third Avenue Creek goes into an underground culvert to continue the flow down to the Canajoharie Creek. The culvert suffered a partial collapse which then caused damage to the sidewalk and driveway that flows under Orchard Street. Riverfront Park needs its floating docks repaired and the removal of silt from benches and sidewalks. Public Assistance from FEMA was requested by the Village. |
| September 7, 2011 | Remnants of Tropical Storm Lee | During Tropical Storm Lee, the Village had to evacuate its municipal building (equipment, files and computers). There were numerous basement pump outs in the community. Many local roads were closed due to flooding and debris. The Village's wastewater treatment plant suffered equipment losses (electrical outlets, sludge pump motors, trash pump, stored copper wiring and a pickup truck was destroyed). In addition, the Village had to replace insulation on waterlines crossing the Canajoharie Creek, suspended under Mill Street Bridge, flood water ripped the insulation out. Other losses/costs to the Village included police/fire protective labor, removal of silt from Riverfront Park, repair to floating docks, filling of sandbags, and set up of EOC. The Village requested public assistance from FEMA. |
| June 6, 2013 | Flash Flooding | Flash flooding occurred in the village of Canajoharie and the town of Root as a result of heavy rainfall. Roads were washed out and closed as a result of the flooding. |

² [Http://ncdc.noaa.gov/stormevents](http://ncdc.noaa.gov/stormevents)

2.2 Community Assets

Twenty-nine community assets were identified for the Village of Canajoharie for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID corresponds with locations shown in **Figure 1**.

Table 2. Community Assets in the Village of Canajoharie

| | Asset ID | Subtype | Name |
|------------------------|----------|----------------------------------|---|
| ECONOMY | 1 | Fuel | One Stop Shop Gas |
| | 2 | Fuel | Sunoco Gas Station |
| | 3 | Fuel | Betty Beavers |
| | 4 | Major Employer | Richardson Brands |
| | 5 | Major Employer | Canajoharie Central School District |
| SOCIETAL | 6 | School/ Public | Canajoharie Senior High School |
| | 7 | School/ Public | Canajoharie East Hill / Middle School |
| | 8 | Church | Church of the Good Shepherd |
| | 9 | Church | Community Bible Church |
| | 10 | Historic Site | Van Alstyne Homestead Museum |
| | 11 | Senior Services | Arkell Hall |
| | 12 | Historic Site/Library | Arkell Museum/The Canajoharie Library & Art Gallery |
| | 13 | Church | St. John's & St. Mark's Lutheran Church |
| | 15 | Church | Canajoharie United Methodist Church |
| | 16 | Church | Reformed Church |
| | 17 | Church | Upstate Chapel |
| | 21 | Mortuaries | Lenz & Betz Funeral Home |
| | 22 | Medical Facility | St. Mary's Healthcare - Canajoharie Health Center |
| | 23 | Medical Facility | Bassett Health Center Canajoharie |
| | 30 | Mortuaries | Houghtaling & Hanley Funeral Home |
| INFRASTRUCTURAL | 24 | Post Office | USPS Canajoharie Office |
| | 25 | Municipal / Public Safety | Canajoharie Fire Department |
| | 26 | Municipal / Public Safety | Canajoharie Police Department |
| | 27 | WWTP | Canajoharie Wastewater Treatment Plant |

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| | Asset ID | Subtype | Name |
|---|----------|-----------|-------------------------|
| | 28 | Reservoir | Smith St. Reservoir |
| | 29 | PWS Well | Canajoharie Water Works |
| Bold indicated asset is identified as an essential facility. | | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are seven essential facilities in the Village. The High School and Middle School are designated emergency shelters. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Village of Canajoharie.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? | Environmental Justice |
|--|------------------------------------|------------------|----------|----------------|-----------------------|
| Canajoharie Senior High School | 136 Scholastic Way, Canajoharie | Y | Y | N | Y |
| Canajoharie East Hill / Middle School | 25 School District Rd, Canajoharie | Y | Y | N | Y |
| Arkell Hall | 55 Montgomery St, Canajoharie | Y | N | Y | Y |
| Canajoharie Fire Department | 75 Erie Blvd, Canajoharie | Y | Y | Y | Y |
| Canajoharie Police Department | 75 Erie Boulevard, Canajoharie | Y | N | Y | Y |
| Canajoharie Wastewater Treatment Plant | 63 Incinerator Road, Canajoharie | Y | N | Y | Y |
| PWS Well | Canajoharie Water Works | Y | N | N | Y |

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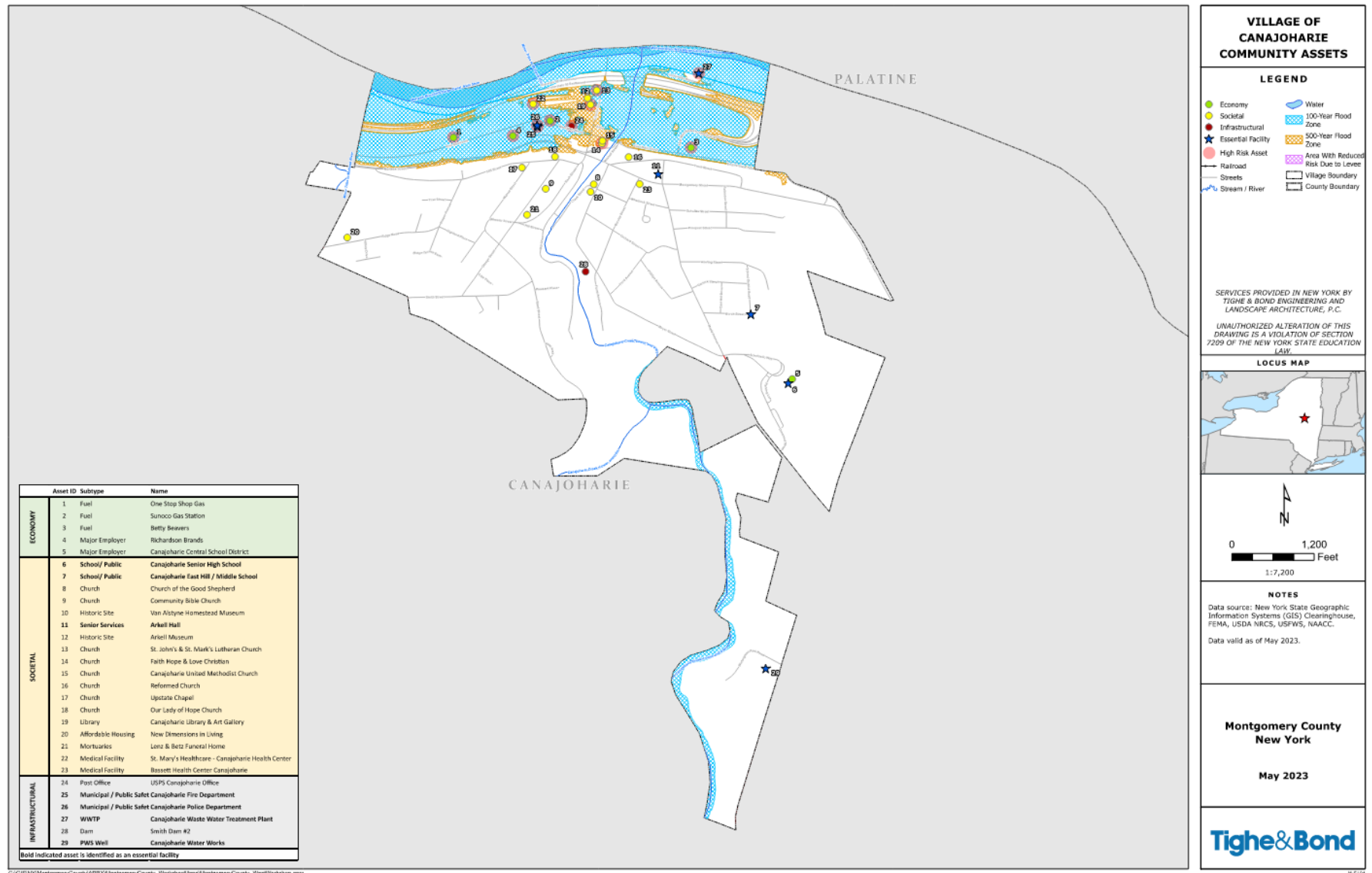


Figure 1. Village of Canajoharie FEMA Flood Zones, Community Assets and Essential Facilities

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2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there were no identified repetitive loss or severe repetitive loss properties in the Village of Canajoharie in 2016, or 2022. As of February 23, 2023, 9 policies were in force and the Village of Canajoharie had a total of 4 claims totaling \$403,735 in losses for all NFIP-insured structures. It should be noted that according to FEMA data there are 184 structures within the 100-year flood plain (including the Town of Canajoharie).

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Village, by hazard as shown in Table 4. The estimated value of at-risk assets is based on the Village's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Village of Canajoharie Vulnerable Assets Exposure Analysis³.

| Hazard | At-Risk All Properties ⁴ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|---------------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$257,990,179 | 1,446 | \$46,673,550 | 7 | \$2,726,900 | 2 |
| Severe Thunderstorm | \$257,990,179 | 1,446 | \$46,673,550 | 7 | \$2,726,900 | 2 |
| Severe Winter Storm | \$257,990,179 | 1,446 | \$46,673,550 | 7 | \$2,726,900 | 2 |
| Tornado | \$257,990,179 | 1,446 | \$46,673,550 | 7 | \$2,726,900 | 2 |
| Flood | | | | | | |
| 1% Annual Chance | \$50,743,787 | 184 | - | 0 | - | 0 |
| 0.2% Annual Chance | \$27,6171,350 | 75 | - | 0 | - | 0 |

³ Values are based on 50% of assessor's full market value

⁴ Includes Villages of Ames & Town of Canajoharie

2.6 Village Wide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Village of Canajoharie. The totals include capital stock and economic loss estimates.

*Table 5 Village of Canajoharie Earthquake Vulnerability Analysis**

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 1,446 | 1,446 |
| Total direct building economic loss | \$427,000 | \$5,986,000 |

- *Hazus combines the Villages of Canajoharie, Ames & Town of Canajoharie, values above are for all communities.*

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Village of Canajoharie Problem Statements.

| Problem Area | Description |
|-----------------------------|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. |
| Geographic Areas of Concern | |
| Mohawk River | Local Areas of Flooding- |
| Errigos Creek | |
| Vulnerable Community Assets | |
| Shelters | Two Canajoharie school locations are shelters. |
| Bridges | |
| Emergency Service | |

4. Capabilities

The Village of Canajoharie is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Village's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Village of Canajoharie completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

4.2 Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for The Village of Canajoharie:

- Comprehensive/Master Plan – Updated 2023
- Capital Improvements Plan
- Local Emergency Operations Plan – County Emergency Operations Plan
- Stormwater Management Plan
- Floodplain Management Basin Plan – NFIP Compliant
- Building Codes – State Code
- Zoning Ordinance – Adopted 1990
- Subdivision Ordinance – Planning Board, 2006
- NFIP Flood Damage Prevention Ordinance – Village Code 63, Adopted 2017, administered by Code Officer
- Stormwater Management Ordinance – Compliant with NYS MS4 Phase II Implementation of the Clean Water Act
- Real Estate Disclosure Requirements – State NYSDOS, State Mandated

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

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The Village of Canajoharie has important mitigation capabilities that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events. Some additional information on how effectively these regulatory tools and methods are being used for hazard mitigation purposes can be found under the NFIP Participation and Compliance sections of this annex. Some specific opportunities to enhance these tools are identified at the end of this Capabilities annex.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for The Village of Canajoharie:

- Planning Board
- Mutual Aid Agreements
- Chief Building Official (*Part-time*)
- Emergency Manager (*Police and Fire Chiefs*)
- Community Planner (*Chair on Planning Board*)
- Civil Engineer (*Delaware Engineering, contractor*)
- GIS Coordinator (*MCBDC*)
- Warning Systems/Services (*Montgomery County & Fire Department*)
- Hazard Data (*Early Warning Flood System, Mohawk River info sign Erriso Creek*)
- Hazus Analysis (*Canajoharie Fire Department, Canajoharie Police, Montgomery County EMO*)

The Village of Canajoharie is governed by a Village Board. The Village has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Village staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services including the Town of Canajoharie. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters. Emergency management programming is integrated within town and village initiatives, seeking to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for The Village of Canajoharie:

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- Capital improvement project funding – *Can go after future funding.*
- Community Development Block Grant – *Can go after future funding.*
- Federal Funding – *Can go after future funding.*
- State Funding – *Can go after future funding.*
- Hazard Mitigation Grant Programs – *Can go after future funding.*

The Village of Canajoharie has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. However, the lack of local funding is a major constraint as many outside funding sources have local cost-share (cash match) requirement that the Village is unable to meet. This lack of financial resources is among the Village's biggest concerns with regard to the implementation of mitigation projects and related risk reduction activities.

The Villages' clerk is responsible for the accounting of all Village funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget, process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The clerk provides budget monitoring and financial reports to the Mayor and Village Board throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for The Village of Canajoharie:

- StormReady Certification
- CERT Team – team between Fire Department and County
- Public Education Program
- Natural Disaster Program in Schools
- Website
- Social Media

4.2 NFIP Participation and Compliance

The Village of Canajoharie has actively participated in the National Flood Insurance Program (NFIP) since 1987. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there are a total of 9 NFIP policies in force. The total annual premium is \$28,484 for a total of \$2,501,000 in coverage. A total of 4 claims amounting to approximately \$403,735 have been paid to NFIP policyholders in the Village of Canajoharie since joining the program.¹³ More information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 8 describes the Village of Canajoharie's participation and continued

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compliance in accordance with NFIP requirements and as specified in FEMA's 2022 Local Mitigation Planning Policy Guide.¹⁴ Minimum standards set forth by FEMA and New York State have been adopted by the Village of Canajoharie.

Table 7. NFIP Participation and Compliance, Village of Canajoharie.

| REQUIRED INFORMATION | RESPONSE |
|--|--|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 1988 via Village of Canajoharie General Provisions Chapter 63 Flood Damage Prevention . Updated 2017 and 2018. |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Ordinance Section 63-6 Basis for establishing areas of special flood hazard . Latest effective FIRM is dated January 19, 2018. |
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Building Code Enforces of the Village of Canajoharie administers the provisions of the Floodplain District. The Building Code Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Building Code Enforcer of the Village of Canajoharie has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Village follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 63-4 define substantial improvement/substantial damage as 50% of market value of the structure. |

The Village of Canajoharie requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov/reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

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The Village of Canajoharie does not participate in the Community Rating System (CRS), however, the Town has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Town's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.2.1 Improvement Opportunities

Despite the limitations and constraints faced by the Village of Canajoharie when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Town is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Town during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into the Village's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Village to better cope with staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Village staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies should be pursued to support tree pruning along major roadways throughout the village.

Financial Capabilities

- Maximize opportunities through the Village's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Village's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.

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- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Village to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Village's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Village Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Village should coordinate with the State NFIP Coordinator on possible updates or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- Canajoharie's local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood)
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

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5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status, actions brought forward to this 2023 plan are identified in the Keep for Plan Update? column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Village of Canajoharie

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|--|---|----------------|---|-----------------------|
| 1 | River and Creek Dredging for Enhanced Flood and Storm Protection | Dredge Mohawk River and mouth of Canajoharie Creek | Completed | This work was done over 10 years ago | NO |
| 2 | Creek Manhole Installation for Enhanced Problem Identification | Install manholes at Errigo Creek (sub-terrain) which would provide access to identify imminent problem areas. | In Progress | This needs an engineer study, hoping to get one in the future with funding opportunities. | Yes |
| 3 | Mohawk Street Piping Upgrade for Heightened Flood Resilience | Larger capacity piping for Mohawk Street | In progress | Pending Funding | YES |

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| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|--|--|----------------|--------------------------------|-----------------------|
| 4 | Improving Drainage on Cunningham Road for Property and Infrastructure Protection | Cunningham Road drainage – increase size to reduce impacts to private properties and street infrastructure | Deleted | Road closed due to erosion | NO |
| 5 | Floodplain Mitigation for Village Wastewater Treatment Plan | Village Wastewater Treatment Plan is in the 100-year floodplain. | Completed | 2015 | NO |
| 6 | Transformer Relocation for Canajoharie Wastewater Treatment Plant Preparedness | Relocation of transformer at Village of Canajoharie Wastewater Treatment Plant. | Completed | 2015/2016 | NO |
| 7 | Generator Replacement for Wastewater Treatment Plant | Wastewater Treatment Plant Generator Replacement | Completed | 2015/2016 | NO |

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| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|---|---------------------|--|-----------------------|
| 8 | Certification and Training in Floodplain Management | Pursue continuing professional education and certification (e.g., Certified Floodplain Manager under the Association of State Floodplain Managers) of Code Enforcement Officers and NFIP FPAs in floodplain management and hazard risk reduction. | Ongoing | Wastewater, code enforcement, fire safety, etc. regularly updated. | YES |
| 9 | Improving Flood and Severe Storm Resilience | Canajoharie Creek Wall Restoration – replacement of damaged retaining wall along the Creek | In Progress | Pending Funding | YES |
| 10 | Storm System Structural Resilience | Canajoharie Storm System – Shaper Avenue, Orchard Street and Moyer Street | In Progress | Pending Funding | YES |
| 11 | Climate Control and Flood Proofing | Arkell Museum Artwork Protection – design and construct above ground, flood proof and climate control | Partially Completed | Climate Control in place, flood proofing is still needed | YES |
| 12 | Canajoharie Police Department Flood Vulnerability Evaluation and Mitigation Support | Notify and provide needed support to the facility manager/operator of the Canajoharie Police Department building to evaluate the facility's flood vulnerability and identify feasible mitigation actions. Assure that any mitigation addresses the 500- year flood event or “worst 0damage scenario.” | In Progress | Managed in-house at Municipal Building – funding pending | Yes |

Village of Canajoharie Annex

2023 Montgomery County Hazard Mitigation Plan Update

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|--|--|----------------|--|-----------------------|
| 13 | Bridges Flood Vulnerability Assessment and Mitigation Support | Notify and provide needed support to the facility manager/operator of the bridges at Incinerator Road and 90IX to evaluate the bridge's flood vulnerability and identify feasible mitigation actions. Assure that any mitigation addresses the 500- year flood event or "worst damage scenario." | Completed | Flood sensors installed along creek; bridge closed | No |
| 14 | Village Wastewater Treatment Plant Flood Vulnerability Assessment and Mitigation Support | Notify and provide needed support to the facility Manager/operator of the Village wastewater treatment plant to evaluate the facility's flood vulnerability and identify feasible mitigation actions. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario." | Ongoing | Sensors installed, floodgates | YES |
| 15 | Firemen Club Rooms Flood Vulnerability Assessment and Mitigation Support | Notify and provide needed support to the facility manager/operator of the Firemen Club Rooms to evaluate the facility's flood vulnerability and identify feasible mitigation actions. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario." | Completed | Managed in-house at Municipal Building | NO |

Village of Canajoharie Annex

2023 Montgomery County Hazard Mitigation Plan Update

Table 9. Updated Mitigation Actions (2023-2028) – Town of Amsterdam.

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|--|---|---|----------------------|----------------|--|------------------------|-------------------------|----------|
| 1 | Mohawk Street Piping Upgrade for Heightened Flood Resilience | Larger capacity piping for Mohawk Street | Structural Project | Flood, Severe Storms | High | Grant Funding where available; municipal budget | Village | 2023-2028 | Medium |
| 2 | Certification and Training in Floodplain Management | Pursue continuing professional education and certification (e.g., Certified Floodplain Manager under the Association of State Floodplain Managers) of Code Enforcement Officers and NFIP FPAs in floodplain management and hazard risk reduction. | Prevention / Public Education and Awareness | All Hazards | Low | Municipal Budget | Village Administration | 2023-2028 | Medium |
| 3 | Improving Flood and Severe Storm Resilience | Canajoharie Creek Wall Restoration – replacement of damaged retaining wall along the Creek | Structural Project | Flood, Severe Storms | High | Potential funding source from NYS Department of State Office of Planning and Development, CDBG Infrastructure Grants, NYSDEC, Montgomery County Soil and Water Conservation Service, FEMA HMGP | Village of Canajoharie | 2023-2028 | High |
| 4 | Storm System Structural Resilience | Canajoharie Storm System – Shaper Avenue, Orchard Street and Moyer Street | Structural Project | Flood, Severe Storms | High | Potential funding source from NYS CDBG Public Infrastructure program, USDA Rural Facilities, NYS Clean Water Revolving Fund, FEMA HMGP | Village of Canajoharie | 2023-2028 | Medium |

Village of Canajoharie Annex

2023 Montgomery County Hazard Mitigation Plan Update

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|--|---|---|----------------------|----------------|---|---------------------------------------|-------------------------|----------|
| 5 | Climate Control and Flood Proofing | Arkell Museum Artwork Protection – design and construct above ground, flood proof and climate control | Property Protection | Flood, Severe Storms | High | NYS ESD Grant Funds, Market NY | Arkell Museum | 2023-2028 | Medium |
| 6 | Canajoharie Police Department Flood Vulnerability Evaluation and Mitigation Support | Notify and provide needed support to the facility manager/operator of the Canajoharie Police Department building to evaluate the facility's flood vulnerability and identify feasible mitigation actions. Assure that any mitigation addresses the 500- year flood event or “worst Odamage scenario.” | Property Protection | Flood, Severe Storms | Medium | Municipal and State grants | Village | 2023-2028 | Medium |
| 7 | Village Wastewater Treatment Plant Flood Vulnerability Assessment and Mitigation Support | Notify and provide needed support to the facility Manager/operator of the Village wastewater treatment plant to evaluate the facility's flood vulnerability and identify feasible mitigation actions. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario.” | Prevention / Public Education and Awareness | Flood, Severe Storms | High | Staff Time, FEMA, NYS DHSES, County, Municipality | Municipal NFIP FPA; Property Operator | 2023-2028 | Medium |
| 8 | Creek Manhole Installation for Enhanced Problem Identification | Need an engineer study to possibly install manholes at Errigo creek (sub-terrain) which would provide access to identify imminent problem areas | Property Protection | Flood, Severe Storms | High | State Grants, FEMA | Village | 2023-2028 | Medium |
| 9 | Dredging/Dig into bedrock | Dredging or digging into bedrock to prevent the service water from the village from coming down into DPW garage property and across Old Fort Plain Rd causing closure of road. | Property Protection | Flood, Severe Storms | High | State Grants, FEMA | Village | 2023-2028 | Medium |

Capability Assessment Worksheet- Village of Canajoharie

Planning and Regulatory

| Plans | COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | | T&B TO REVIEW OLD ANNEX |
|---|---|---|---|
| | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? | NOTES FROM 2016 Annex |
| Comprehensive/Master Plan | Yes; 2023 | Yes | Planning Board last update was 2006 |
| Capital Improvements Plan | Yes | Yes | Notes Village Board/Annual Budget needs |
| Economic Development Plan | No | No | |
| Local Emergency Response Plan | Yes | Yes , County | County EMC/CEMP noted in 2016 Annex |
| Continuity of Operations Plan | No | | |
| Transportation Plan | No | | Does county plan include municipality? |
| Stormwater Management Plan | Yes | Stormwater Management Plans required in accordance with the NYS MS4 Phase II implementation of the Clean Water Act. | |
| Watershed Management Plan | Yes | | 2016 Annex doesn't note Mohawk River Watershed Management Plan, 2015? |
| Floodplain Management Basin Plan | Yes | Limited by requirements under NFIP. | |
| Open Space and Recreation Plan | No | | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? | NOTES FROM 2016 Annex |
| Building Code | Yes | Must adopt Uniform Construction Codes and International Building Code | |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | | |
| Fire department ISO rating | Yes | 5 village of Canajoharie, 9 Town of Canajoharie | |
| Site plan review requirements | Yes | SEORA & Zoning Ordinance | |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? | NOTES FROM 2016 Annex |
| Zoning ordinance | Yes, 1990 | Village of Canajoharie Zoning Ordinance 1990 | |
| Subdivision ordinance | Yes, 2006 | Planning Board | |
| NFIP Flood Damage Prevention Ordinance | Yes | Pg. 6301 Village Code 63-1 through 63-17, LL#2-4-3-82, administed by Code Officer | |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | Yes | Stormwater system in place, stormdrains need to be expanded. | |
| Flood insurance rate maps | Yes | effective 1/19/2018 | |
| Acquisition of land for open space and public recreation uses | No | Extensive park area already exists within village limits. Designs are in progress. | |
| Stormwater Management Ordinance | Yes | Stormwater Management Plans required in accordance with the NYS MS4 Phase II implementation of the Clean Water Act. | |
| Growth Management Ordinance | No | Need help for private buisness/property owners with flood mitigation planning. | |
| Real Estate Disclosure Requirements | Yes | State NYSDOS, State Mandated | |

Administrative and Technical

| Administration | Yes/No | Describe capability Is coordination effective? | NOTES FROM 2016 Annex |
|--|--------------|--|--|
| | | | |
| Planning Commission | Yes | Yes | |
| Mitigation Planning Committee | No | | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | Yes | | |
| Mutual aid agreements | Yes | | |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| | | | |
| Chief Building Official | Yes | yes , part time | |
| Floodplain Administrator | Yes | Yes , Code Enforcer Cliff Dorrough | Clifton Dorrough, Code Enforcement Officer |
| Emergency Manager | Yes | Yes , Police and Fire Chiefs | Through County |
| Community Planner | Yes | Part Time on Planning Board | |
| Civil Engineer | Yes | Deleware Engineering, contractor | County planning staff and consulting engineers |
| GIS Coordinator | Yes | MCBDC | |
| Other | | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| | | | |
| Warning systems/services (Reverse 911, outdoor warning signals) | Yes | Montgomery County | |
| Hazard data and information | Yes | Early Warning Flood System, Mohawk River info sign Erriso Creek | |
| Grant writing | yes | Engineering FIRM, Western Montgomery County could benefit from grant writing workshops for both the public and local officials to increase the number of active and trained grant writers. | |
| Hazus analysis | Yes | Canajoharie Fire Departme, Canajoharie Police, Montgomery County EMO | |
| Other | | | |

Financial

| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | NOTES FROM 2016 Annex |
|--|------------------------------------|--|-----------------------------------|
| | | | |
| Capital improvements project funding | Yes | Can go after future funding. | |
| Authority to levy taxes for specific purposes | Yes | | Yes, Water/Sewer Line Improvement |
| Fees for water, sewer, gas, or electric services | Yes | | Yes, water and sewer |
| Impact fees for new development | No | | |

| | | | |
|---|--|---|----------------------------------|
| Storm water utility fee | no | | |
| Incur debt through general obligation bonds and/or special tax bonds | Obligation Bonds - Yes, tax bonds - No | | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | Can go after future funding. | <i>Hazard mitigation at WWTP</i> |
| Other federal funding programs | Yes | Can go after future funding. | |
| State funding programs | Yes | Can go after future funding. | |
| Hazard Mitigation Grant Programs | Yes | Can go after future funding. | <i>HMP</i> |
| Education and Outreach | | | |
| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | Parks committee Environmental Protection | |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | Yes | Fire Saet instruction | |
| Natural disaster or safety related school programs | Yes | School resource officer | |
| StormReady certification | yes | County wide certification | <i>Not participating</i> |
| Firewise Communities certification | No | | <i>Not participating</i> |
| Public-private partnership initiatives addressing disaster-related issues | yes | Re-development of Beechnut site | |
| Other | | | |

VILLAGE OF FONDA

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Village of Fonda

8 E Main St

Fonda, NY 12068

www.villageoffonda.ny.gov/

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Cover Photo credit: Peter R. Barber, The Daily Gazette (7/23/21)

Village of Fonda Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the Village of Fonda not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Village of Fonda.

| Primary Point of Contact | Alternate Point of Contact |
|--|--|
| Bill Peeler, Mayor 8 E. Main Street, PO Box 447 Fonda, NY 12068 518-853-4335 bpeeler@villageoffonda.ny.gov | Christine Kerns, Clerk 8 E. Main Street, PO Box 447 Fonda, NY 12068 518-853-4335 villageclerk@villageoffonda.ny.gov |

1. Municipality Profile

1.1 Brief History

Douw Fonda, considered to be the founder of the village, originally known as Caughnawaga, settled in Fonda in about 1750. The village itself extended from the old stone church and parsonage to Douw Fonda's trading post near the river within the circle of the present race track. The east end of the village is still to this day often referred to as Caughnawaga. Its name in the Iroquois language is "Kanawake" and means "above the rapids." One of Douw Fonda's three sons, Jelles (or Giles), born in 1727 was an extensive landholder and trader in the village and during the Revolutionary War he served as a major in the Tryon County Militia. His home was burned with others during the raid on Caughnawaga. In 1836, Fonda became the county seat as a result of its geographical location in the center of the county, growth in population and construction of the Utica and Schenectady railroad. The Village of Fonda was incorporated in 1850. The only industry in the village now is Kasson and Keller, manufacturers of aluminum products.

1.2 Location and Demographics

The Village of Fonda is a small village community, situated in central Montgomery County. Land surface ranges from around 250 feet above mean sea level along the Mohawk River to a high of 350 feet above mean sea level at the Fonda/Fultonville Central Schools. The Village is located in the Cayadutta Creek sub watershed to the Mohawk River where the Creek and other small tributaries drain to the Mohawk. A more detailed description of the Central Cayadutta Creek/ Fly Creek/Schoharie Creek Sub watershed is included in the HMP Community Asset Inventory Section 5.5.

Village of Fonda Annex

2023 Montgomery County Hazard Mitigation Plan

The Village is located within the Town of Mohawk. It shares its boundaries with the Town of Mohawk to the northeast and west and the Village of Fultonville to the south

The Village of Fonda is home to 531 residents with a housing density of 985 people per square mile. According to the 2020 US Census¹, 77% of their 285 housing units are occupied, while 23% of the housing units remain vacant. Of the occupied units, 65% are owner occupied and 35% are renter occupied. 9% of the total population is below the poverty level, which includes 10% of seniors 65 and over, and 10% of children below the age of 18. Approximately twenty percent of the town's residents have attained a four-year college degree or higher. The median household income for the Village of Canajoharie is \$42,262. There is some racial or ethnic diversity in the community with 83% reporting as White, 16% as Hispanic, and 1% Black.

1.3 Governance

The Village of Fonda is the seat of Montgomery County. The Village is governed by the Mayor and Board comprised of four Trustees. This governing body will be responsible for the adoption and implementation of this plan.

1.4 Land Use and Development

The Village is about 1.4 square mile in size. In the 2016 HMP, it was stated that no major residential/commercial development or major infrastructure development was identified for the next five years, with the exception for a possible healthcare facility that would be located outside of a flood hazard area.

¹<https://censusreporter.org/profiles/16000US3626924-fort-plain-ny/>

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snow storms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for The Village of Fonda as evidenced during Hurricane Irene, especially to Fort Hunter and properties on the Schoharie Creek. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Village of Fonda that is not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for Earthquakes is included

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Town in the past 10 years.

Table 1. Hazard Event History 2011-2021²

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------------------|--|--|
| August 26 – September 11, 2011 | Hurricane Irene and Remnants of Tropical Storm Lee | Hurricane Irene caused road closures in the Park Street area which led to the closure of three county offices, town offices, Fonda fairgrounds, a wastewater treatment plant, Browns Bus, Dairy Isle, and other businesses. The Fonda-Fultonville Central School was opened up as a shelter. The Park Street area and the Fonda Fairgrounds were evacuated. The sewer plant was damaged as well. Public and private structures were damaged by floods. |
| August 21, 2014 | Flash Flood | Heavy rainfall from thunderstorms led to flash flooding Fonda. Excessive flooding occurred on both Main Street and Broadway in Fonda. Flooding was also reported at the intersection of Route 5 (Main Street) and Route 334 (Cayadutta Street). A State of Emergency was issued for the town due to extent of the flooding. |
| May 1, 2017 | Thunderstorm Winds | A line of thunderstorms entered eastern New York around 7:30 pm, resulting in wind damage in the Southern Adirondacks, Mohawk Valley, Capital District, Schoharie Valley, and Lake George Saratoga region. Wires and trees were reported down in Fonda due to thunderstorm winds. |
| July 19, 2021 | Flash Flood, Heavy Rain | A slow-moving thunderstorm produced torrential rainfall across the Village of Fonda on Monday, July 19, 2021. Between 3 and 4 inches of rain fell in just a couple of hours. A small creek north of the village overflowed its banks, sending water and mud downstream into the village. Storm drains became plugged up with debris, so water was unable to get through. Many roads were closed and impassable in and around the village until early Tuesday morning, July 20, 2021. A state of emergency was issued in the Village of Fonda as a result of the flooding. In addition, this thunderstorm produced 1 inch hail near Johnstown, NY. Multiple reports of flash flooding in and around the Village of Fonda causing multiple roads to be closed including Broadway (Route 30A) to Main Street (Route 5. road shoulders were washed out on Old Johnson Road. The Interstate 90 off-ramps were closed at Exit 28 in the village of Fultonville due to flooding. |

² <https://cdc.noaa.gov/stormevents>, NY Rising Report for Amsterdam and Florida

2.2 Community Assets

Thirty one community assets were identified for the Village of Fonda for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID correspond with locations shown in **Figure 1**.

Table 2. Community Assets in the Village of Fonda

| | Asset ID | Subtype | Name |
|----------|----------|-----------------------------|---|
| ECONOMIC | 1 | Food/ Grocery | Dollar General |
| | 2 | Fuel | Stewarts |
| | 3 | Fuel | Cumberland Farms |
| | 4 | Fuel | Mobil |
| | 5 | Major Employer | Kasson Keller Keymark |
| | 6 | Major Employer | Montgomery County |
| | 7 | Fuel | Mancini Oil Depot |
| SOCIAL | 8 | Historic Site/ Government | 1836 Montgomery County Courthouse |
| | 9 | Library | Frothingham Free Library |
| | 10 | Shelters | Haven of Hope Farm and Residence |
| | 11 | Historic Site | Caughnawaga Reformed Church |
| | 12 | Church | St Cecilia Roman Catholic Church |
| | 13 | Food Pantry | Food Bank |
| | 14 | Apartments/Mobile Home Park | Apartments/Mobile Home Park |
| | 15 | Senior Services | Fonda Terrace Apartments |
| | 16 | Cemetery | Fonda Cemetery |
| | 17 | Medical Facility | Nathan Littauer Hospital |
| | 18 | Apartments | Robinhood Properties LLC |
| | 19 | Apartments/Mobile Home Park | CJT Properties, LLC |
| | 20 | Fairgrounds/Race Track | Montgomery County Ag Society |
| | 22 | WWTP | Fonda Fultonville WWTP |
| | 24 | Post Office | USPS Fonda Office |
| | 25 | Municipal /DPW /Highway | Town of Mohawk Office Bldg/Highway Department |
| | 26 | Municipal /DPW /Highway | Town of Mohawk DPW |

Village of Fonda Annex

2023 Montgomery County Hazard Mitigation Plan

| | Asset ID | Subtype | Name |
|--|----------|----------------------------------|--------------------------------------|
| | 27 | Government Office | NYS Canal Corp |
| | 28 | Municipal/ Park | Village of Fonda Canal Park |
| | 29 | Bus/Truck Terminal | SKT Realty Corporation |
| | 31 | Municipal / DPW / Highway | Village of Fonda Office Bldg. |
| | 32 | Municipal / DPW / Highway | Village of Fonda DPW |
| | 33 | Switching Station | Frontier Switching Facility |
| | 34 | Rail | Fulton Railroad Properties Inc |
| Bold indicated asset is identified as an essential facility | | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are four essential facilities in the Village. There is no designated emergency shelter for the Village. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Village of Fonda.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|-------------------------------|--------------------------|------------------|----------|----------------|
| Senior Services | Fonda Terrace Apartments | Y | N | N |
| WWTP | Fonda Fultonville WWTP | Y | N | N |
| Village of Fonda Office Bldg. | 8 East Main St. | Y | N | Y |
| Village of Fonda DPW | | N | N | Y |

Village of Fonda Annex

2023 Montgomery County Hazard Mitigation Plan

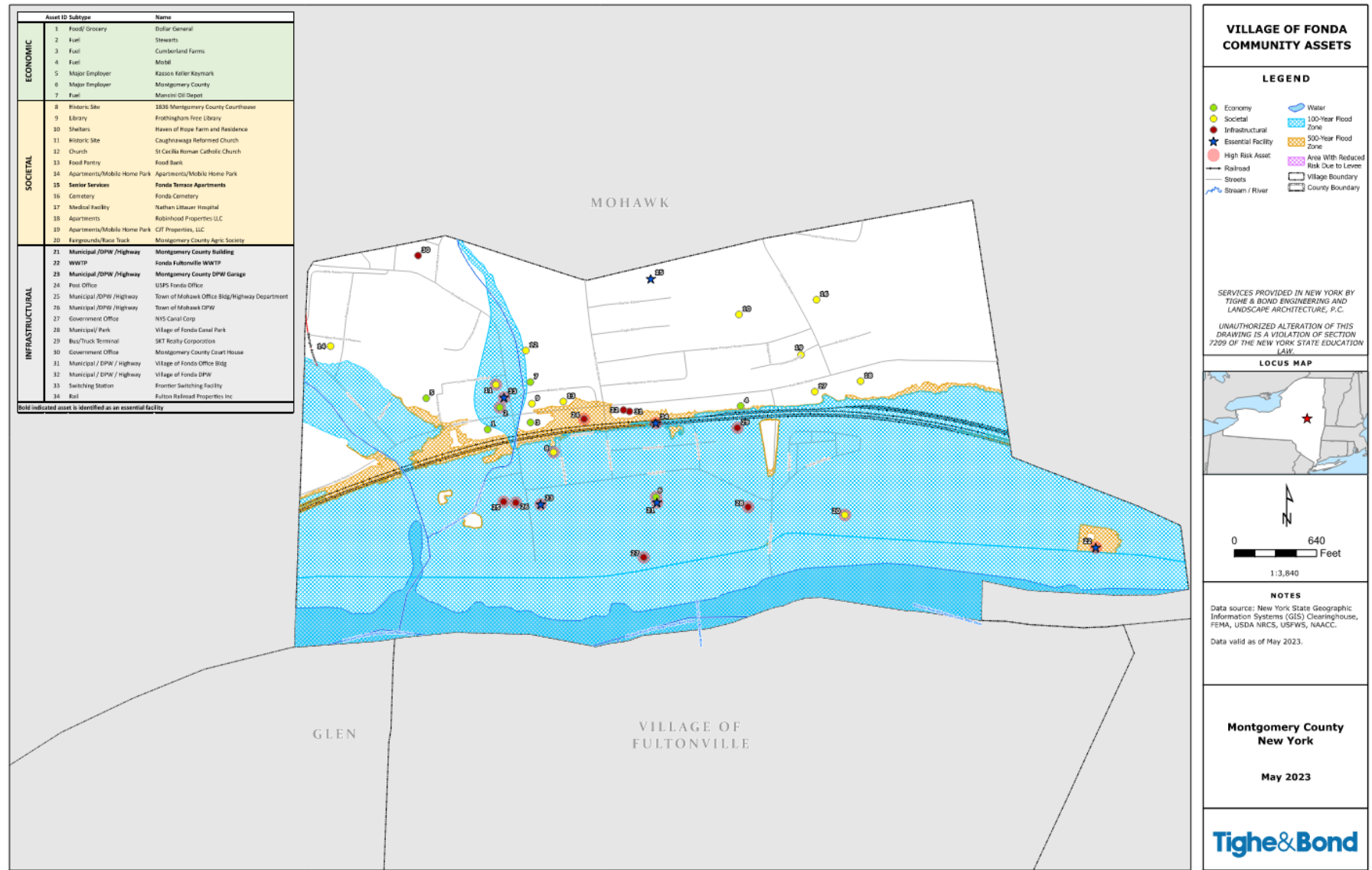


Figure 1. Village of Fonda FEMA Flood Zones, Community Assets and Essential Facilities

2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there were 10 identified repetitive loss properties in the Village of Fonda as of 2016, and as of 2022, there were 12 identified repetitive loss properties both adjacent to Schoharie Creek. As of February 23, 2023, 30 policies were in force and the Village of Fonda had a total of 60 claims totaling \$1,674,589 in losses for all NFIP-insured structures. It should be noted that according to FEMA data there are 271 structures within the 100-year flood plain (including the Town of Mohawk).

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Village, by hazard as shown in Table 4. The estimated value of at risk assets is based on the Village's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Village of Fonda Vulnerable Assets Exposure Analysis³.

| Hazard | At-Risk All Properties ⁴ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|--------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$363,845,457 | 1,510 | \$1,193,862 | 5 | \$1,060,268 | 1 |
| Severe Thunderstorm | \$363,845,457 | 1,510 | \$1,193,862 | 5 | \$1,060,268 | 1 |
| Severe Winter Storm | \$363,845,457 | 1,510 | \$1,193,862 | 5 | \$1,060,268 | 1 |
| Tornado | \$363,845,457 | 1,510 | \$1,193,862 | 5 | \$1,060,268 | 1 |
| Flood | | | | | | |
| 1% Annual Chance | \$66,587,194 | 271 | - | 0 | - | 0 |
| 0.2% Annual Chance | \$30,190,109 | 100 | - | 0 | - | 0 |

³ Values are based on 50% of assessor's full market values

⁴ Includes Town of Mohawk

2.6 Village Wide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Village of Fonda. The totals include capital stock and economic loss estimates.

*Table 5 Village of Fonda Earthquake Vulnerability Analysis**

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 1,510 | 1,510 |
| Total direct building economic loss | \$505,000 | \$6,633,000 |

- *Hazus combines the Town of Mohawk with Village of Fonda, values above are for both communities*

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Village of Fonda Problem Statements.

| Problem Area | Description |
|-----------------------------|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. |
| Geographic Areas of Concern | |
| Cayadutta Creek | Local Areas of Flooding- Low lying areas along the confluence of the Creek and River flood. |
| Mohawk River | |
| Vulnerable Community Assets | |
| Shelters | There are no designated shelters in the Village of Fonda. |
| Bridges | |
| Emergency Service | |

4. Capabilities

The Village of Fonda is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Village's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Village of Fonda completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

4.1 Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for The Village of Fonda:

- Comprehensive/Master Plan – *Master Plan, June 1966. Joint plan with Village of Fonda, Village of Fultonville, Town of Mohawk, and Town of Glen.*
- Local Emergency Response Plan – *County OEM*
- Transportation Plan – *County Transportation Plan*
- Watershed Management Plan – *Mohawk River Watershed Management Plan, 2015*
- Floodplain Management Basin Plan – *Adopted in 1982 and amended in 1987.*
- Building Codes – *Adopted in 1985, amended in 1982, and revised in 1994.*
- Real Estate Disclosure Requirements – *NYS mandate, Property Condition Disclosure Act, NY Code – Article 14 §460-467*
- NFIP Flood Damage Prevention Ordinance – *Adopted in 2017 Town Code Section 54.*

The Village of Fonda has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events. Some additional information on how effectively these regulatory tools and methods are being used for hazard mitigation purposes can be found under the NFIP Participation and Compliance sections of this annex. Some specific opportunities to enhance these tools are identified at the end of this Capabilities annex.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for The Village of Fonda:

- Planning Board
- Mutual Aid Agreements (*Surrounding municipalities*)
- Chief Building Official (Stanley Waddle)
- Floodplain Administrator (*Stanley Waddle*)
- Emergency Manager (*Mayor Peeler*)
- Warning Systems (digital community sign)

The Village of Fonda is governed by a Mayor and four Trustees. The Village has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Village staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for The Village of Fonda:

- Capital improvement project funding
- Federal Funding
- State Funding
- Hazard Mitigation Grant Programs

The Village of Fonda has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is among the Village's biggest concerns with regard to the implementation of mitigation projects and related risk reduction activities.

The village Treasurer is responsible for the accounting of all village funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters,

Village of Fonda Annex

2023 Montgomery County Hazard Mitigation Plan

insurance, and the issuance of bonds. The Treasurer provides budget monitoring and financial reports to the Board of Trustees throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for The Village of Fonda:

- CERT Team - County
- Human Services (*outreach/activities for seniors etc.*)
- Website
- Email Listserv

4.2 NFIP Participation and Compliance

The Village of Fonda has actively participated in the National Flood Insurance Program (NFIP) since 1987. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there are a total of 30 NFIP policies in force. The total annual premium is \$48,501 for a total of \$4,228,900 in coverage. A total of 60 claims amounting to approximately \$1,674,589 have been paid to NFIP policyholders in the Village of Fonda since joining the program.⁵ More information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 8 describes the Village of Fonda's participation and continued compliance in accordance with NFIP requirements and as specified in FEMA's 2022 Local Mitigation Planning Policy Guide.⁶

Table 8. NFIP Participation and Compliance, Village of Fonda.

| REQUIRED INFORMATION | RESPONSE |
|--|--|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2017 via Village of Fonda Town Code Section 54: Flood Damage Prevention. |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Ordinance (Section 54-6. Basis for establishing areas of special flood hazard). Latest effective FIRM is dated January 19, 2018. |

⁵ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov//reports-flood-insurance-data>

⁶ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

| REQUIRED INFORMATION | RESPONSE |
|--|--|
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Building Code Enforces of the Village of Fonda administers the provisions of the Floodplain District. The Building Code Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Building Code Enforcer of the Village of Fonda has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 54-4 of the Town's Ordinance define substantial improvement/substantial damage as 50% of market value of the structure. |

Minimum standards set forth by FEMA and New York State have been adopted by the Village of Fonda. The Village of Fonda requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

The Village of Fonda does not participate in the Community Rating System (CRS), however, the Village has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Village's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

- **Improvement Opportunities**

Despite the limitations and constraints faced by the Village of Fonda when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Village is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below.

Each of these opportunities were then considered by the Village during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into the Village's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Village to better cope with staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Village staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies should be pursued to support tree pruning along major roadways throughout the village.

Financial Capabilities

- Maximize opportunities through the Village's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Village's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Village to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Village's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Village Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Village should coordinate with the State NFIP Coordinator on possible updates

or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).

- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- Fonda's local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood)
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

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5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status, actions brought forward to this 2023 plan are identified in the Keep for Plan Update? Column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Village of Fonda.

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|---|----------------|---|-----------------------|
| 1 | Structural Resilience Initiative: Retrofit and Acquisition for Flood Protection | Support the mitigation of vulnerable structures via retrofit (e.g., elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario”. <ul style="list-style-type: none">Phase 1: Identify appropriate candidates and determine the most cost-effective mitigation option (in progress).Phase 2: Work with the property owners to implement selected action based on available funding from FEMA and local match availability. | In Progress | One property owner on Park Street has reached out to the Village to date. | YES |
| 2 | Fonda-Fultonville WWTP Floodplain Retrofit and Road Elevation | Fonda-Fultonville Wastewater Treatment Plant is in the 100-year floodplain. It has been retrofitted to reduce interior flooding of structure. Design and implement a road elevation project to ensure access to facility. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario.” | In Progress | Continuing discussion with Fonda Fair / Raceway and FFJWWTP | YES |

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| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|--|--|----------------|---|-----------------------|
| 3 | Fonda Village Deteriorated Floodwalls Task Force | Deteriorated floodwalls along the Mohawk River- NYS Barge Canal in the Village of Fonda. These belong to NYS. Create a watchdog task force to advise NYS to pursue improvements to the deteriorated floodwalls in the Village. | Deferred | Need to engage volunteers for watchdog task force | no |
| 4 | CRS Program Participation and CAV Initiative | Support participation in the NFIP Community Rating System (CRS) program by attending CRS workshop(s) if offered within the county. Join the CRS program if adequate resources to support long term participation can be dedicated. See following related Community Assistance Visit (CAV) Initiative. | In Progress | Waiting for notice of a CRS program workshop. | YES |
| 5 | Village Storm water Management: Erosion and Sedimentation Mitigation | Storm water management systems project – examine measures to mitigate in- stream erosion and sedimentation, which reduces the capacity of three culverts in the Village. | In Progress | Capacity analysis of these 3 culverts is included in the Draft Engineering Report for the item below. | YES |
| 6 | Midway Alley Creek Mitigation Project | Stream mitigation project to improve conditions on Midway Alley Creek to reduce flooding that impacts sections of Broadway, residential properties at sections of Broadway and on South Broadway at Town of Mohawk DPW, Town of Mohawk Office Building, Montgomery County DPW South Broadway businesses, railroad crossing at South Broadway, and businesses on Main St. | In Progress | Draft Engineering Report completed with recommend mitigation alternatives including addition of storm water storage volume, measures to reduce the rate of flow through the creek to the Village, and increased culvert sizes. The Village is currently seeking funding to install the recommended mitigation measures. | YES |
| 7 | Fonda Municipal Building Backup Generator Acquisition | Obtain back-up generator for Village of Fonda Municipal Building. | In Progress | Village is seeking funding. | YES |
| 8 | Fonda/Fultonville WWTP Flood Vulnerability Assessment and Mitigation | Encourage the property owner of Fonda/Fultonville WWTP to evaluate the facility's flood vulnerability and identify feasible mitigation options. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario." | In Progress | The FFJWWTP has applied for CWSRF funding for WWTP improvements that would consider the 500-year flood event in the design of new treatment units. | YES |

Village of Fonda Annex

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| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|---|----------------|---|-----------------------|
| 9 | Critical Facility Flood Vulnerability Assessment and Mitigation | Encourage the property owners of the critical facilities identified in Table 9.9-5 to evaluate the facility's flood vulnerability and identify feasible mitigation options. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario." | In Progress | The Village board emphasizes flood resiliency throughout the community. | YES |

Village of Fonda Annex

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Table 9. Updated Mitigation Actions (2023-2028) – Village of Fonda.

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|---|---|----------------------------------|------------------|----------------|--|---|-------------------------|----------|
| 1 | Structural Resilience Initiative: Retrofit and Acquisition for Flood Protection | <p>Support the mitigation of vulnerable structures via retrofit (e.g., elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario”.</p> <ul style="list-style-type: none"> Phase 1: Identify appropriate candidates and determine the most cost-effective mitigation option (in progress). Phase 2: Work with the property owners to implement selected action based on available funding from FEMA and local match availability. | Prevention / Property Protection | All Hazards | Low | FEMA Mitigation Grant Programs and local budget (or property owner) for cost share | Town Engineering via NFIP FPA) with NYS DHSES, FEMA support | 2023-2028 | Medium |
| 2 | Fonda-Fultonville WWTP Floodplain Retrofit and Road Elevation | Fonda-Fultonville Wastewater Treatment Plant is in the 100-year floodplain. It has been retrofitted to reduce interior flooding of structure. Design and implement a road elevation project to ensure access to facility. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario.” | Property Protection | Flood | High | HMA (Hazard Mitigation Assistance) | Fonda and Fultonville DPW’s | 2023-2028 | High |

Village of Fonda Annex

2023 Montgomery County Hazard Mitigation Plan Update

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|--|--|---|----------------------|----------------|--|--|-------------------------|----------|
| 4 | CRS Program Participation and CAV Initiative | Support participation in the NFIP Community Rating System (CRS) program by attending CRS workshop(s) if offered within the county. Join the CRS program if adequate resources to support long term participation can be dedicated. See following related Community Assistance Visit (CAV) Initiative. | Prevention | Flood | Low | Municipal budget | Village NFIP FPA, as fully supported by local government officials | 2023-2028 | Low |
| 5 | Village Storm water Management: Erosion and Sedimentation Mitigation | Storm water management systems project – examine measures to mitigate in- stream erosion and sedimentation, which reduces the capacity of three culverts in the Village. | Property Protection/ Natural Resource Protection and Green Infrastructure/ Structural Project | Flood, Severe Storms | Medium | Potential funding sources: NYS CDBG Public Infrastructure program, USDA Rural Facilities, NYS Clean Water Revolving Funding, FEMA HMGP | Village of Fonda | 2023-2028 | Medium |
| 6 | Midway Alley Creek Mitigation Project | Stream mitigation project to improve conditions on Midway Alley Creek to reduce flooding that impacts sections of Broadway, residential properties at sections of Broadway and on South Broadway at Town of Mohawk DPW, Town of Mohawk Office Building, South Broadway businesses, railroad crossing at South Broadway, and businesses on Main St. | Property Protection/ Natural Resource Protection and Green Infrastructure/ Structural Project | Flood, Severe Storms | High | Potential funding sources: NYS CDBG Public Infrastructure program, USDA Rural Facilities, NYS Clean Water Revolving Funding, FEMA HMGP | Village of Fonda | 2023-2028 | High |
| 7 | Fonda Municipal Building Backup Generator Acquisition | Obtain back-up generator for Village of Fonda Municipal Building. | Property Protection | All Hazards | Low | HMA | Village of Fonda | 2023-2028 | Medium |

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| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|--|---|---|----------------------|----------------|---|--------------------|-------------------------|----------|
| 8 | Fonda/Fultonville WWTP Flood Vulnerability Assessment and Mitigation | Encourage the property owner of Fonda/Fultonville WWTP to evaluate the facility's flood vulnerability and identify feasible mitigation options. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario." | Public Education and Awareness/Prevention | Flood, Severe Storms | Low | Staff Time, FEMA, NYS DHSES, County, Municipality | Municipal NFIP FPA | 2023-2028 | Low |
| 9 | Critical Facility Flood Vulnerability Assessment and Mitigation | Encourage the property owners of the critical facilities identified in Table 9.9-5 to evaluate the facility's flood vulnerability and identify feasible mitigation options. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario." | Public Education and Awareness/Prevention | Flood, Severe Storms | Low | Staff Time, FEMA, NYS DHSES, County, Municipality | Municipal NFIP FPA | 2023-2028 | Low |

Capability Assessment Worksheet- Village of Fonda

Planning and Regulatory

| COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | | T&B TO REVIEW OLD ANNEX |
|---|----------------|---|
| Plans | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? |
| Comprehensive/Master Plan | Yes | Master Plan, June, 1966 Joint plan with Village of Fonda, Village of Fultonville, Town of Mohawk, and Town of Glen. |
| Capital Improvements Plan | No | |
| Economic Development Plan | No | |
| Local Emergency Response Plan | Yes | Via County OEM |
| Continuity of Operations Plan | No | We need to create Not listed in annex |
| Transportation Plan | Yes | County Transpo Plan |
| Stormwater Management Plan | No | |
| Watershed Management Plan | Yes | |
| Floodplain Management Basin Plan | Yes | Mohawk River Watershed Management Plan, 2015 Adopted in 1982 and amended in 1987. |
| Open Space and Recreation Plan | No | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? |
| Building Code | Yes | NOTES FROM 2016 Annex Adopted 1985, amended 1982, revised 1994. |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | |
| Fire department ISO rating | Yes | 06/6Y Not listed in annex table |
| Site plan review requirements | No | |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? |
| Zoning ordinance | No | |
| Subdivision ordinance | No | |
| NFIP Flood Damage Prevention Ordinance | Yes | Adopted 2017 Village of Fonda Code Section 54 Adopted in 1982 and amended in 1987. |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | Not mentioned |
| Flood insurance rate maps | Yes | Effective 1/19/2018 |
| Acquisition of land for open space and public recreation uses | No | |
| Stormwater Management Ordinance | No | |
| Growth Management Ordinance | No | |
| Real Estate Disclosure Requirements | Yes | NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467 |

Administrative and Technical

| Administration | Yes/No | Describe capability Is coordination effective? | NOTES FROM 2016 Annex |
|--|-----------------|--|----------------------------|
| Planning Commission | Yes | | |
| Mitigation Planning Committee | No | | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | No | | |
| Mutual aid agreements | Yes | | Surrounding municipalities |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| Chief Building Official | Yes | Stanley Waddle | Not mentioned |
| Floodplain Administrator | Yes | Stanley Waddle | Ronald Hinkle |
| Emergency Manager | Yes | | Mayor Peeler |
| Community Planner | Yes | Steering Committee and Montgomery County | County Provided? |
| Civil Engineer | No | | "TBD" |
| GIS Coordinator | No | | |
| Other | | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| Warning systems/services (Reverse 911, outdoor warning signals) | Yes | Digital Signage at Village Park | Not mentioned |
| Hazard data and information | No | | |
| Grant writing | No | | |
| Hazus analysis | No | | |
| Other | | | |

Financial

| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | NOTES FROM 2016 Annex |
|---|------------------------------------|--|-----------------------|
| Capital improvements project funding | Yes | | |
| Authority to levy taxes for specific purposes | Yes | | |

| | | | |
|--|-----------------|--|--------------------------------------|
| Fees for water, sewer, gas, or electric services | Yes | | <i>Rent fees for water and sewer</i> |
| Impact fees for new development | No | | |
| Storm water utility fee | No | | |
| Incur debt through general obligation bonds and/or special tax bonds | 1) Yes 2) no | | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | | |
| Other federal funding programs | No | We are currently working with our engineering firm "Prime" to identify funding for the Broadway Creek. | <i>Not mentioned</i> |
| State funding programs | No | | <i>Not mentioned</i> |
| Hazard Mitigation Grant Programs | Yes | | |

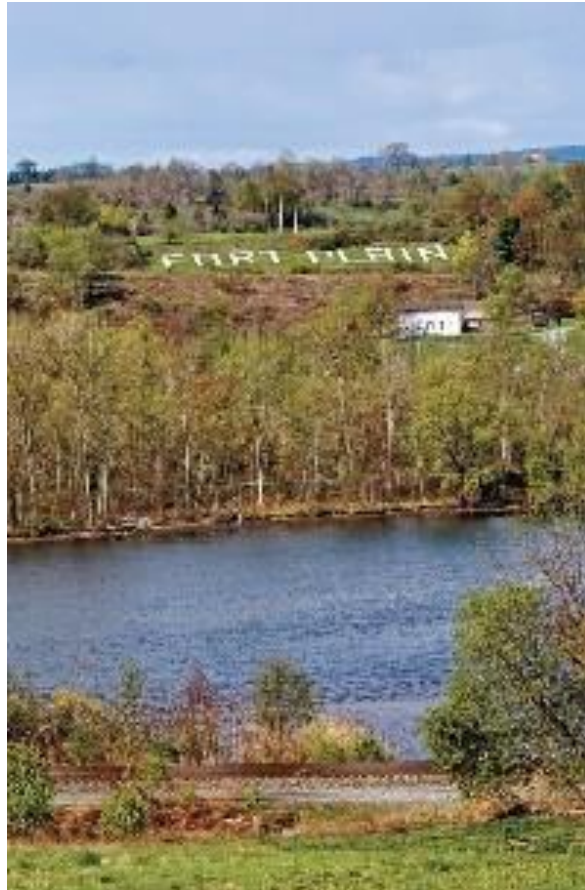
Education and Outreach

| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
|---|--------|---|-----------------------------|
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | | <i>Not mentioned</i> |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | No | | <i>Not mentioned</i> |
| Natural disaster or safety related school programs | No | | <i>Not mentioned</i> |
| StormReady certification | No | | <i>Not participating</i> |
| Firewise Communities certification | No | | |
| Public-private partnership initiatives addressing disaster-related issues | No | | <i>Not mentioned</i> |
| Other | | | |

VILLAGE OF FORT PLAIN

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Village of Fort Plain

204 Canal Street

Fort Plain, NY 13339

www.villageoffortplain.com/

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Village of Fort Plain Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the Village of Fort Plain not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Village of Fort Plain.

| Primary Point of Contact | Alternate Point of Contact |
|---|--|
| Pat Hanifin, Mayor 168 Canal Street Fort Plain, NY 13339 518-993-4271 villageoffpmayor@gmail.com | David Briggs, Clerk 168 Canal Street Fort Plain, NY 13339 518-993-4271 fortplain.clerk@gmail.com |

1. Municipality Profile

1.1 Brief History

The Village of Fort Plain is built on the site of a Revolutionary War fort. The fort was constructed in 1776 and a blockhouse was maintained here throughout the war. The Village of Fort Plain became an incorporated village in 1823. The opening of the Erie Canal was an economic boon. It became a center of manufacturing during the nineteenth century for textiles and furniture for the Village.

1.2 Location and Demographics

The Village of Fort Plain is a small village community, situated in north western Montgomery County. The Village is located within the borders of the Town of Minden in the western portion of Montgomery County. It shares its boundaries with the Towns of Minden and Palatine to the north, Village of Nelliston to the east, Towns of Minden and Canajoharie to the south and the Town of Minden to the west.

Land surface ranges from around 300 feet above mean sea level along the Mohawk River to a high of 500 feet above mean sea level as the topography rises to the west. The Village is located in the Otsquago Creek Subwatershed, where the Creek discharges to the Mohawk River. A more detailed description of the Western Canajoharie Creek Subwatershed is included in the HMP Community Asset Inventory Section 5.4. The Village of Fort Plain's societal, infrastructural and economic resources, including critical assets, are highlighted in Figure 1.

The Village of Fort Plain is home to 1,833 residents. According to the 2020 US Census¹, 68% of their 1,043 housing units are occupied, while 32% of the housing units remain vacant. Of the occupied units, 65% are owner occupied and 35% are renter occupied. 27% of the total population is below the poverty

¹<https://censusreporter.org/profiles/16000US3626924-fort-plain-ny/>

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2023 Montgomery County Hazard Mitigation Plan

level, which includes 51% of children under the age of 18, and 9% of seniors 65 and over. Approximately 16% of the village's residents have attained a four-year college degree or higher. The median household income for the Village of Fort Plain is \$36,466. There is some racial or ethnic diversity in the community with 91% reporting as White, and 7% as Hispanic.

1.3 Governance

The Village of Fort Plain is governed by the Village Board, consisting of four trustees and the mayor. This governing body will be responsible for the adoption and implementation of this plan.

1.4 Land Use and Development

The Village is about 1.4 square miles in size. In the 2016 HMP, it was stated that the village was fully developed and there was no major residential/ commercial development or major infrastructure development identified for the next five years.

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snowstorms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for The Village of Fort Plain as evidenced during Hurricane Irene, especially to Fort Hunter and properties on the Schoharie Creek. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Village of Fort Plain that is not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for earthquakes is included.

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Village in the past 10 years.

Table 1. Hazard Event History 2011-2021²

| Dates of Event | Event Type | Summary of Damages/Losses |
|------------------|------------------------|--|
| June 28, 2013 | Flash Flood | Flash flooding occurred throughout Fort Plain due to heavy rainfall. Fifty to one hundred people were trapped in homes and water rescues needed to take place. Media reported up to two hundred homes were damaged or destroyed by flooding. Every road within the village was under water and some bridges were damaged or destroyed. Over 100 homes and numerous businesses in the Village of Fort Plain along the Otsquago Creek were inundated by floodwaters, which undermined building foundations, destroyed belongings, and in some cases washed entire structures away. Many businesses in the Village of Fort Plain were destroyed. One fatality occurred as flood waters swept a woman from a trailer away. |
| July 1, 2013 | Severe Storms Flooding | Significant flash flooding occurred throughout Fort Plain as a result of heavy rainfall. The Otsquago Creek rose over its banks and impacted a section of Route 80. Multiple roads were washed out and closed and evacuations took place, as homes were impacted by the flood waters. |
| August 3, 2015 | Thunderstorm Winds | The National Weather Service Storm Survey was conducted in Fort Plain. Multiple trees were downed in Fort Plain due to a thunderstorm microburst, especially between Center Street and Lydius Street. Several of the trees fell on homes. A utility pole was snapped at the intersection of Central Street and Orchard Street and a chimney was partially toppled as well. |
| November 1, 2019 | Heavy Rain Flood | Route 55 was closed between Route 80 and Rouse Road due to flooding. |
| October 7, 2020 | Tornado | A high-end severe weather event unfolded across the Northeast on Wednesday October 7, 2020. This event was classified as a serial derecho based on the 320-mile-long damage swath and distribution of significant wind gusts (75 mph and above). The fact that trees across the region were fully leafed exacerbated the resulting wind damage and produced widespread |

² <http://ncdc.noaa.gov/stormevents>

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| Dates of Event | Event Type | Summary of Damages/Losses |
|-------------------|------------------|--|
| | | power outages. As a result of this storm, there were over 160,000 power outages across the region. Schools closed the next day due to lack of power, and dry ice was distributed to the public while power was being restored over the next few days. The NWS Storm Survey team observed a nearly destroyed barn with metal siding strewn about the property in Fort Plain. A tree was also toppled. The was the only damage as the tornado was very short lived. It spun up on the QLCS line moving through the area. |
| February 18, 2022 | Heavy Rain Flood | The warm and rainy weather ahead of the cold front resulted in some snow melting as well as some ice to break up on area rivers and streams. As the colder weather returned, localized ice jams formed, some of which led to flooding, including in Dolgeville and Canajoharie. The westbound lane of State Highway 5 (West Main Street) between Water Street and Budnick Road was closed due to flooding. |

2.2 Community Assets

Twenty-six community assets were identified for the Village of Fort Plain for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID corresponds with locations shown in **Figure 1**.

Table 2. Community Assets in the Village of Fort Plain

| | Asset ID | Subtype | Name |
|------------------------|----------|---------------------------|---|
| ECONOMIC | 1 | Food/ Grocery | Family Dollar |
| | 2 | Fuel | Stewarts |
| | 3 | Fuel | Stewarts |
| | 4 | Hardware | Fort Plain True Value Hardware |
| | 5 | Major Employer | Fort Plain Central School District |
| SOCIETAL | 6 | School/ Public | Harry Hoag School |
| | 7 | School/ Public | Fort Plain High School |
| | 8 | Historic Site | The Fort Plain Museum & Historical Park |
| | 9 | Church | Victorious Life Church of RMI |
| | 10 | Church | Grandview Baptist Church |
| | 11 | Food Pantry | Fulmont Community Actin Agc |
| | 12 | Library | Fort Plain Free Library |
| | 13 | Historic Site | Otsquago Aqueduct |
| | 14 | Future Housing Complex | Masonic Temple Building |
| INFRASTRUCTURAL | 15 | Municipal / Public Safety | Fort Plain Fire Dept. |
| | 16 | Municipal / Public Safety | Fort Plain Police Headquarters |

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| | Asset ID | Subtype | Name |
|---|----------|--------------------|--------------------------------------|
| | 17 | Post Office | USPS Fort Plain Office |
| | 18 | PWS Tank | Clyde Street Water Storage Tank |
| | 19 | Pump Station | Willett St Sewer Pump Station |
| | 20 | Pump Station | Rouse St Sewer Pump Station |
| | 21 | Dam | Lock E-15 Dam at Fort Plain |
| | 22 | PWS Tank | Garfield Street Water Storage Tank |
| | 23 | PWS Well | Village of Fort Plain/ Lincoln Wells |
| | 24 | Water Pump Station | Fort Plain Pumping Station |
| | 25 | Pump Station | Canal Street Pumping Station |
| | 26 | Pump Station | Hancock Pumping Station |
| Bold indicated asset is identified as an essential facility | | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are twelve essential facilities in the Village. Harry Hoag and the High School are designated emergency shelters. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Village of Fort Plain.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|---------------------------------|--------------------------------------|------------------|----------|----------------|
| Harry Hoag School | 25 High St, Fort Plain | Y | Y | N |
| Fort Plain High School | 1 West St, Fort Plain | Y | Y | N |
| Fort Plain Fire Dept. | 168 Canal St., Fort Plain | Y | N | Y |
| Fort Plain Police Headquarters | 168 Canal Street, Fort Plain | Y | N | Y |
| Clyde Street Water Storage Tank | Wiles Park, Clyde Street, Fort Plain | N | N | N |
| Willett St Sewer Pump Station | Willett St | N | N | Y |

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| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|---|--------------------------|------------------|----------|----------------|
| Rouse St Sewer Pump Station | Near Rouse Rd/ Clark Ave | N | N | N |
| Garfield Street Water Storage Tank | Garfield St, Fort Plain | N | N | N |
| Village of Fort Plain/ Lincoln Wells | | Y | N | Y |
| Fort Plain Pumping Station | 13 River Street | N | N | N |
| Canal Street Pumping Station | Canal Street | N | N | Y |
| Hancock Pumping Station | Hancock Street | N | N | N |

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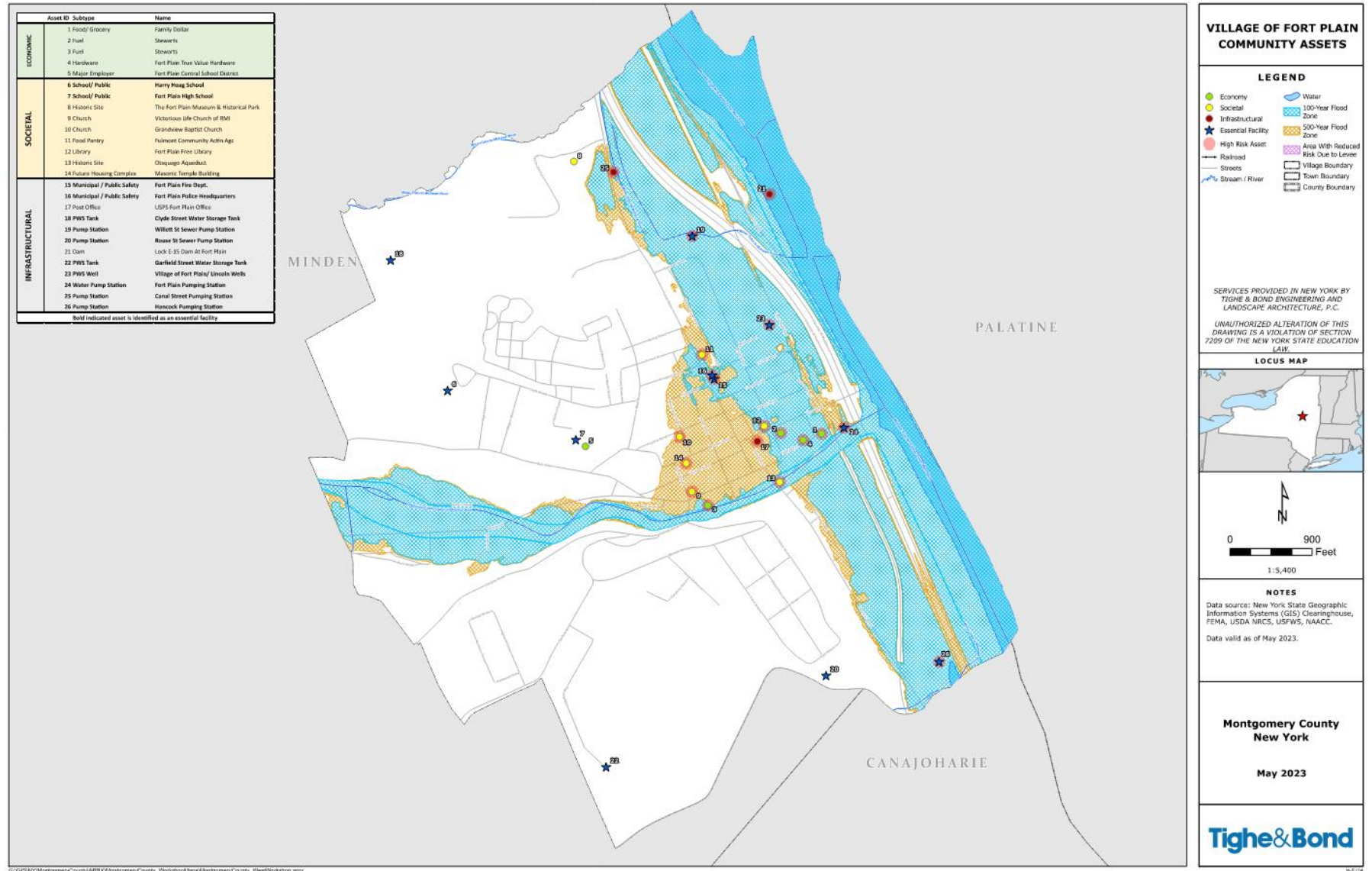


Figure 1. Village of Fort Plain FEMA Flood Zones, Community Assets and Essential Facilities

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2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there were 4 identified repetitive loss properties in the Village of Fort Plain as of 2016, and as of 2022, there were 14 identified repetitive loss. As of February 23, 2023, 35 policies were in force and the Village of Fort Plain had a total of 108 claims totaling \$3,576,933 in losses for all NFIP-insured structures. It should be noted that according to FEMA data there are 388 structures within the 100-year flood plain (including the Town of Minden).

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Village, by hazard as shown in Table 4. The estimated value of at risk assets is based on the Village's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Village of Fort Plain Vulnerable Assets Exposure Analysis³.

| Hazard | At-Risk All Properties ⁴ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|--------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$228,029,253 | 1,651 | \$13,133,980 | 12 | \$158,000 | 2 |
| Severe Thunderstorm | \$228,029,253 | 1,651 | \$13,133,980 | 12 | \$158,000 | 2 |
| Severe Winter Storm | \$228,029,253 | 1,651 | \$13,133,980 | 12 | \$158,000 | 2 |
| Tornado | \$228,029,253 | 1,651 | \$13,133,980 | 12 | \$158,000 | 2 |
| Flood | | | | | | |
| 1% Annual Chance | \$37,396,290 | 388 | - | 0 | - | 0 |
| 0.2% Annual Chance | \$35,759,490 | 401 | - | 0 | - | 0 |

³ Values are determined based on 50% of full market value

⁴ Includes the Town of Minden

2.6 Village Wide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Village of Fort Plain. The totals include capital stock and economic loss estimates.

*Table 5 Village of Fort Plain Earthquake Vulnerability Analysis**

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 1,651 | 1,651 |
| Total direct building economic loss | \$623,000 | \$7,390,000 |

- *Hazus combines The Town of Minden and Village of Fort Plain, values above are for both communities.*

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Village of Fort Plain Problem Statements.

| Problem Area | Description |
|-----------------------------|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. |
| Geographic Areas of Concern | |
| Otsquago Creek | Local Areas of Flooding- The confluence of the Creek and Mohawk River are flood prone especially the low-lying areas along the banks of both the creek and the river |
| Mohawk River | |
| Vulnerable Community Assets | |
| Shelters | The two Fort Plain schools act as shelters when needed. |
| Bridges | None owned by the village, all bridges in village are state owned |
| Emergency Service | |

4. Capabilities

The Village of Fort Plain is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Village's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Village of Fort Plain completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

4.1 Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for The Village of Fort Plain:

- Comprehensive/Master Plan – *Local Planning Board. Updated in 2016.*
- Local Emergency Response Plan – *County OEM*
- Transportation Plan – *County Plan*
- Floodplain Management Basin Plan – *NY Rising*
- Building Codes – *State and local enforcement. Accept minimum NYS code. Must adopt state building code and can enhance if wanted.*
- Zoning Ordinance – *Local ZBA, Chapter 192*
- Subdivision Ordinance – *Local ZBA, Chapter 192*
- Real Estate Disclosure Requirements – *State, realtors - NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467*

NFIP Flood Damage Prevention Ordinance- *Adopted 10/17/2017 Town Code Chapter 102*The Village of Fort Plain has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events. Some additional information on how effectively these regulatory tools and methods are being used for hazard mitigation purposes can be found under the NFIP Participation and Compliance sections of this annex. Some specific opportunities to enhance these tools are identified at the end of this Capabilities annex.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for The Village of Fort Plain:

- Planning Board
- Mutual Aid Agreements
- Chief Building Official
- Emergency Manager
- GIS Coordinator (MCBDC)

The Village of Fort Plain is governed by the Village Board, consisting of four trustees and the mayor. The Village has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Village staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters. Emergency management programming is integrated within village initiatives, seeking to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for The Village of Fort Plain:

- Community Development Block Grant – *Future grants can be obtained.*
- Federal Funding – *ARPA funds*
- State Funding – *Future grants can be obtained.*
- Hazard Mitigation Grant Programs – *2023 Hazard Mitigation Plan*

The Village of Fort Plain has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concern with regard to the implementation of mitigation projects and related risk reduction activities.

The Village Clerk/treasurer is responsible for the accounting of all Village funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related

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matters, insurance, and the issuance of bonds. The clerk/treasurer provides budget monitoring and financial reports to the mayor and board throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for The Village of Fort Plain:

- StormReady Certification
- Human Services (*outreach/activities for seniors etc.*)
- Website
- Social Media

4.2 NFIP Participation and Compliance

The Village of Fort Plain has actively participated in the National Flood Insurance Program (NFIP) since 1987. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there are a total of 35 NFIP policies in force. The total annual premium is \$50,759 for a total of \$4,415,900 in coverage. A total of 108 claims amounting to approximately \$3,576,933 have been paid to NFIP policyholders in the Village of Fort Plain since joining the program.¹³ More information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 8 describes the Village of Fort Plain's participation and continued compliance in accordance with NFIP requirements and as specified in FEMA's 2022 Local Mitigation Planning Policy Guide.¹⁴

Table 7. NFIP Participation and Compliance, Village of Fort Plain.

| REQUIRED INFORMATION | RESPONSE |
|--|--|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2017 via Village of Fort Plain General Ordinance (Chapter 102 Flood Damage Prevention). |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Zoning Ordinance (Chapter 102-6. Basis for establishing areas of special flood hazard). Latest effective FIRM is dated January 19, 2018. |

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov//reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

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| REQUIRED INFORMATION | RESPONSE |
|--|--|
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Building Code Enforcers of the Village of Fort Plain administers the provisions of the Floodplain District. The Building Code Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Building Code Enforcer of the Village of Fort Plain has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Chapter 102-4 of the Town's Zoning Regulations define substantial improvement/substantial damage as 50% of market value of the structure. |

Minimum standards set forth by FEMA and New York State have been adopted by the Village of Fort Plain.

The Village of Fort Plain requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

The Village of Fort Plain does not participate in the Community Rating System (CRS); however, the Village has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Village's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

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4.2.1 Improvement Opportunities

Despite the limitations and constraints faced by the Village of Fort Plain when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Village is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Village during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into the Village's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Village to better cope with staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Village staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies should be pursued to support tree pruning along major roadways throughout the village.

Financial Capabilities

- Maximize opportunities through the Village's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Village's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Village to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Village's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

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Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Village Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Village should coordinate with the State NFIP Coordinator on possible updates or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- Fort Plain's local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood)
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status (i.e. completed, in progress, deferred, or deleted), actions brought forward to this 2023 plan are identified in the Keep for Plan Update? column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Village of Fort Plain.

| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|--|---|--|----------------------|------------------------------|---|--|-----------------------|
| Prevention / Public Education and Awareness | Notify and provide needed support to the facility manager/operator of the Fort Plain Fire Department building to evaluate its flood vulnerability and identify feasible mitigation options. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario”. | Municipal NFIP FPA | Flood, severe storms | Short-term / Medium priority | Staff time, FEMA, NYS DHSES, County, Municipality | Completed | |

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| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|--|---|--|----------------------|--|---|--|-------------------------|
| Prevention / Public Education and Awareness | Willett Street Storm Sewer Repairs Project. | Village of Fort Plain | Flood, severe storms | Short-term / Medium priority | Staff time, FEMA, NYS DHSES, County, Municipality | Completed | |
| Prevention / Public Education and Awareness | Notify and provide needed support to the facility manager/operator the bridges on Route 80 and 90IX to evaluate their flood vulnerabilities and identify feasible mitigation options. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario". | Municipal NFIP FPA | Flood, severe storms | Short-term / Medium priority | Staff Time, FEMA, NYS DHSES, County, Municipality | Delete | This is a state highway |
| Property Protection | Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. | Village, NYS DHSES, FEMA | Flood, severe storms | Long-term depending on funding / Medium to high priority | HMGP, municipal budget for cost share | Delete | No funding |
| Structural Project | Streambank renewal and stabilization along Otsquago Creek around Abbott Street and Reid Street all the way to the mouth of the Mohawk River. Severe erosion has impacted 6-8 residential properties along | Village | Flood, severe storms | Depending on funding / High priority | HMGP with municipal budget for cost share | Completed | |

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| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|----------------------------|---|--|----------------------|---|--|--|--|
| | Abbott Street and has damaged the foundation of one house. There is evidence of concrete on the Abbott Street side of the Creek. One remedy may be to recondition and enhance this apparent flood structure. Excessive amounts of gravel need to be removed from Creek and large rip placed on slopes to stabilize banks. | | | | | | |
| Structural Project | Replace approximately 140 feet of undersized culvert pipe on Beck Street to alleviate flooding in this area. | Village DPW | Flood, severe storms | Short-term depending on funding / High priority | Municipal budget, grant funding where available | Completed | |
| Structural Project | Replace undersized box culvert and piping at the intersection of Garfield Street and Waddel Avenue to alleviate flooding affecting several hundred acres in this area. | Village DPW | Flood, severe storms | Short-term depending on funding / High priority | Municipal budget, grant funding where available | In Progress | This has not been started but still on the radar to be done. |
| Property Protection | Identify, engineer, and upgrade flood gate system at western end of Willet Street to address flooding in the lowest point of the Village where floodwater exits. | Village DPW and Engineer | Flood, severe storms | Short-term depending on funding / Medium priority | Grant Funding with municipal budget for cost share | Delete | This area is owned and maintained by thruway authority. |

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| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|----------------------------|--|--|----------------------|---|--|--|--|
| Structural Project | Identify, engineer, and implement a solution to improve stormwater discharge from the area between Canal Street and Willet Street into the Old Erie Canal. The current stormwater outlet in this area empties into a ditch that lacks sufficient capacity, resulting in flooding in this area. | Village DPW and Engineer | Flood, severe storms | Short-term depending on funding / Medium priority | Municipal Budget; grant funding where available | Completed | |
| Property Protection | Consider flood-proofing options for the Municipal Building consisting of the Village Hall, Fire Department, and Police Headquarters which is in the 100-year floodplain. | Village Board | Flood | Short-term depending on funding / High priority | Grant Funding with municipal budget for cost share | In progress | New Village Hall purchased August 2023. Police and fire still in old building. |
| Structural Project | Drainage outlet for stormwater on Willet Street to be upsized from 12 inch to 18-inch pipe and realigned to remedy the discharge elevation problem. | Village DPW and Engineer | Flood, severe storm | Short-term depending on funding / Medium priority | Municipal Budget; grant funding where available | Completed | |
| Structural Project | Honey Hill Road Culvert Repairs Project | Village DPW and Engineer | Flood | Short-term depending on funding / Medium priority | Municipal Budget; grant funding where available | Completed | |

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| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|--|---|--|---------------------|---|---|--|------------------------|
| Emergency Services Protection | Conduct a study to identify why the police station floods and identify mitigation actions to correct the issue. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario”. | Village Engineer | Flood | Short-term depending on funding / High priority | Municipal Budget; grant funding where available | In Progress | No study has been done |
| Property Protection | Housing Rehabilitation Program | Village of Fort Plain | Flood | Short-term | Local budget | Delete | No funding |
| Structural Project / Natural Resource Protection and Green Infrastructure | Willet Street Storm Sewer Upgrade and Green Infrastructure Improvements | Village of Fort Plain | Flood, severe storm | Short-term | Local budget | Completed | |
| Structural Project | Honey Hill Road Outfall Channel | Village of Fort Plain | Flood, severe storm | Short-term | Local budget | Completed | |
| Prevention / Public Education and Awareness | H. Moyer Road Feasibility Study and Implementation | Town of Minden | All hazards | Short-term | Local budget | Delete | In the Town of Minden |

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| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|----------------------------|--|---|----------------------|---|--|--|--|
| Property Protection | Unsafe Flood Damaged Building Demolition Project | Various Montgomery County agencies including Soil and Water Conservation District and Planning Departments for identification of relocation site and administration of HMGP buyout program. Montgomery County or local Rural Preservation Corporation like Valley Housing Corporation for administration of homebuyer gap funding incentives. | Flood, severe storms | Immediately following relocation of families and demolition of properties through Hazard Mitigation Grant Program | HMGP Potential funding sources: New York State Housing and Community Renewal CDBG Program and Rural Area Revitalization Program (for relocation sites land acquisition, demolition and gap financing assistance); Mohawk Valley Flood Buyout Program, NYS Affordable Housing Corporation (for single family and/or multi-family homebuyer gap financing assistance); NYS Low Income Tax Credit Program for multifamily mixed income housing); NYS Environmental Facilities Corporation Green Infrastructure Grant Program (for evaluation and design of potential post-relocation mitigation measures. This requires feasibility study to be completed prior to 2015 CFA round); FEMA HMGP (for direct buyout assistance); private equity from affordable housing developers and property owners. | Completed | described under "Residential Relocation and Assistance Program" in the Montgomery County NYRCR |

Village of Fort Plain Annex

2023 Montgomery County Hazard Mitigation Plan

| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|---|---|--|---------------------|---------------------|--|--|--|
| Structural Project/ Natural Resource Protection and Green Infrastructure | Clinton Avenue Embankment Repairs Project | | | | | Completed | |
| Structural Project/ Natural Resource Protection and Green Infrastructure | Otsuqago Creek Bank Stabilization Project | Village of Fort Plain | Flood, severe storm | Short-term | Potential funding sources: NYS Department of State Office of Planning and Development, CDBG Infrastructure Grants, NYSDEC, Montgomery County Soil and Water Conservation Service, FEMA HMGP, USEPA Green Innovation Grant Program (GIGP) | Completed | |
| | Montgomery County Sanitary Sewer District #1 Wastewater Project | | | | | | Move to County |
| Property Protection | Acquisitions of 40 properties | Various Montgomery County agencies including: Soil and Water Conservation District and Planning Departments for identification of relocation sites and administration of HMGP buyout program. Montgomery County or | Flood | Short-term | Potential funding sources: New York State Housing and Community Renewal CDBG Program and Rural Area Revitalization Program (for relocation sites land acquisition, demolition and gap financing assistance); Mohawk Valley Flood Buyout Program, NYS Affordable Housing Corporation (for single family and/or multi- | Completed | Residential Relocation and Assistance Program" section of the NY rising countywide rcr |

Village of Fort Plain Annex

2023 Montgomery County Hazard Mitigation Plan

| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|----------------------------|--|--|----------------------|---------------------|--|--|---|
| | | local Rural Preservation Corporation like Valley Housing Corporation for administration of homebuyer gap funding incentives. | | | family homebuyer gap financing assistance); NYS Low Income Tax Credit Program for multifamily mixed income housing); NYS Environmental Facilities Corporation Green Infrastructure Grant Program (for evaluation and design of potential post-relocation mitigation measures. This requires feasibility study to be completed prior to 2015 CFA round); FEMA HMGP (for direct buyout assistance); private equity from affordable housing developers and property owners. | | |
| Property Protection | Evaluate Levee Modification Near Village of Fort Plain | Village of Fort Plain | Flood, severe storms | Short-term | Local budget | In Progress | This is evaluated whenever there is heavy rainfall or melting of snow |
| Property Protection | Village Office/Barn Drainage Improvements and Landscaping Improvements | | | | | Delete | Village Offices have relocated |

Village of Fort Plain Annex

2023 Montgomery County Hazard Mitigation Plan

| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|---------------------|---|--|------------------|---------------------|---------------------|--|---|
| Property Protection | Village Barn 2 nd Floor Expansion to Create Records Room | | | | | Delete | Village Hall has moved to a bigger location |

Table 9. Updated Mitigation Actions (2023-2028) – Village of Fort Plain.

| Action # | Action Title | Action Description | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|---------------------|--|----------------|--|-----------------------|-------------------------|----------|
| 1 | Culvert replacement | Replace undersized box culvert and piping at the intersection of Garfield Street and Waddel Avenue to alleviate flooding affecting several hundred acres in this area. | Medium | Municipal budget, grant funding when available | Village of Fort Plain | 2023-2028 | Medium |
| 2 | Flood Proofing | Consider flood-proofing options for the Municipal Building consisting of the Village Hall, Fire Department, and Police Headquarters which is in the 100-year floodplain. | High | Grant Funding with municipal budget for cost share | Village of Fort Plain | 2023-2028 | Medium |
| 3 | Flood Proofing | Evaluate Levee Near Village of Fort Plain | Low | Local budget | Village of Fort Plain | 2023-2028 | Low |

Capability Assessment Worksheet- Village of Fort Plain

Planning and Regulatory

| COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | | | T&B TO REVIEW OLD ANNEX |
|---|----------------|---|--|
| Plans | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? | NOTES FROM 2016 Annex |
| Comprehensive/Master Plan | Yes | Yes | Via local planning board, being updated in 2016 |
| Capital Improvements Plan | yes | No | Via Village Board, No formalized plan; capital improvement and village budget are updated annually |
| Economic Development Plan | Yes | Yes | REDC Strategic Plan / updated in Village 2016 Comprehensive Plan |
| Local Emergency Response Plan | Yes | Yes | County OEM |
| Continuity of Operations Plan | No | | |
| Transportation Plan | Yes | Yes | County Plan |
| Stormwater Management Plan | No | No | |
| Watershed Management Plan | Yes | Yes | Mohawk River Watershed Plan, 2015 |
| Floodplain Management Basin Plan | Yes | Yes | Via State, NY Rising |
| Open Space and Recreation Plan | No | No | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? | NOTES FROM 2016 Annex |
| Building Code | Yes | Yes | Via state and local code enforcement, Accept minimum NYS code; have to adopt state building code and can enhance if wanted |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | Yes | Yes | |
| Fire department ISO rating | No | | |
| Site plan review requirements | Yes | Yes | Local Planning Board regs |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? | NOTES FROM 2016 Annex |
| Zoning ordinance | Yes | Yes | Via local ZBA, Chater 192 |
| Subdivision ordinance | Yes | Yes | Via local ZBA, Chater 192 |
| NFIP Flood Damage Prevention Ordinance | Yes | Adopted 10/17/2017 Town Code Chapter 102 | Via local code enforcement office |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | no | |
| Flood insurance rate maps | Yes | Effective 1/19/2018 | |
| Acquisition of land for open space and public recreation uses | No | No | |
| Stormwater Management Ordinance | No | NO | |
| Growth Management Ordinance | No | No | |
| Real Estate Disclosure Requirements | Yes | No | Via State, realtors - NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467 |

Administrative and Technical

| Administration | Yes/No | Describe capability Is coordination effective? | NOTES FROM 2016 Annex |
|--|------------------------------------|--|--|
| Planning Commission | Yes | Yes | |
| Mitigation Planning Committee | No | No | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | No | No | |
| Mutual aid agreements | Yes | Yes | With surrounding municipalities and County EOC |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| Chief Building Official | Yes | Yes | |
| Floodplain Administrator | Yes | Yes | Barry Vickers, Code Enforcement Officer |
| Emergency Manager | Yes | Yes | |
| Community Planner | Yes | Yes | MacDonald Engineering |
| Civil Engineer | Yes | Yes | MacDonald Engineering |
| GIS Coordinator | Yes | Yes, MCBDC | |
| Other | | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| Warning systems/services (Reverse 911, outdoor warning signals) | Yes | | |
| Hazard data and information | Yes | 2023 Hazard mitigation plan | Via MacDonald Engineering |
| Grant writing | Yes | Yes | |
| Hazus analysis | No | | Via MacDonald Engineering |
| Other | | | |
| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | NOTES FROM 2016 Annex |
| Capital improvements project funding | No | | |
| Authority to levy taxes for specific purposes | No | | Annex notes "Don't Know" |

| | | | |
|--|-----|--------------------------------|--------------------------|
| Fees for water, sewer, gas, or electric services | Yes | | |
| Impact fees for new development | No | | Annex notes "Don't Know" |
| Storm water utility fee | No | | Annex notes "Don't Know" |
| Incur debt through general obligation bonds and/or special tax bonds | No | | Annex notes "Don't Know" |
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | Future grants can be obtained. | |
| Other federal funding programs | Yes | ARPA funds | Annex noted "In Process" |
| State funding programs | Yes | Future grants can be obtained. | Annex noted "In Process" |
| Hazard Mitigation Grant Programs | No | 2023 hazard mitigation plan | Not listed in annex |

Education and Outreach

| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
|---|--------|---|--------------------------------|
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | | |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | No | | Annex notes through the County |
| Natural disaster or safety related school programs | No | | |
| StormReady certification | Yes | County wide certification | |
| Firewise Communities certification | No | | |
| Public-private partnership initiatives addressing disaster-related issues | No | | |
| Other | | | |

VILLAGE OF FULTONVILLE

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Village of Fultonville

10 Erie Street

Fultonville, NY 12072

www.fultonville.org

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Cover photo credit: Getty Images March 13, 2023, Snowstorm

Village of Fultonville Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the Village of Fultonville not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Village of Fultonville.

| Primary Point of Contact | Alternate Point of Contact |
|--|---|
| Tim Morford, Mayor 10 Erie Street, Fultonville, NY 12072 518-770-1317 (cell) morfordtim@gmail.com | Vickie Romano, Clerk 10 Erie Street, Fultonville, NY 12072 518-853-3815 Fultonvillevillageclerk@gmail.com |

1. Municipality Profile

1.1 Brief History

The area near Fultonville was first settled around 1750 and was originally called "Van Epps Swamp" because of the swampland near the river. The village is named after Robert Fulton, inventory of the steamboat. The Village itself was incorporated in 1848 and is home to many historic structures, such as the Cobblestone Hall and Free Library.

In 2019, the area of the village that had been developed in the 19th and early 20th centuries was listed on the National Register of Historic Places as the Fultonville Historic District in recognition of its well-preserved architecture from its original settlement, the era centering around the development of the Erie Canal, and afterwards.¹

1.2 Location and Demographics

The Village of Fultonville is a rural village of approximately 0.5 square miles, located in the northern-central portion of Montgomery County. The Fultonville Village is on the south bank of the Mohawk River in the Town of Glen. It shares its boundaries with the Town of Mohawk to the east and west and the Village of Fonda to the north. Land surface ranges from around 250 feet above mean sea level along the Mohawk River to a high of 500 feet above mean sea level as topography rises to the southwest. The Village is located in the Dry Dock Creek sub watershed to the Mohawk River where the Creek and other small tributaries drain to the Mohawk. A more detailed description of the Central Cayadutta Creek/ Fly Creek/Schoharie Creek Sub watershed is included in the HMP Community Asset Inventory Section 5.5.

¹ https://en.wikipedia.org/wiki/Fultonville,_New_York

Village of Fultonville Annex

2023 Montgomery County Hazard Mitigation Plan

The Village of Fultonville is home to 656 residents. According to the 2020 US Census², 87% of their 290 housing units are occupied, while 13% of the housing units remain vacant. Of the occupied units, 67% are owner occupied and 33% are renter occupied. 12% of the total population is below the poverty level, which includes 20% of children under the age of 18, and 13% of seniors 65 and over. Approximately 16% of the town's residents have attained a four-year college degree or higher. The median household income for Village of Fultonville is \$76,528. There is little racial or ethnic diversity in the community with 95% reporting as White, 1% Black and 3% as Hispanic.

1.3 Governance

The Village of Fultonville is governed by the Village Board of Trustees. This governing body will be responsible for the adoption and implementation of this plan.

1.4 Land Use and Development

The Village is less than one square mile in size, and in 2019 most of the developed sections of the village were listed on the National Register of Historic Places as the Palatine Bridge Historic District. In the 2016 HMP there was no major residential/ commercial development or major infrastructure development identified for the next five years.

<https://censusreporter.org/profiles/16000US3627859-fultonville-ny/>

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snowstorms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for The Village of Fultonville as evidenced during Hurricane Irene, especially to Fort Hunter and properties on the Schoharie Creek. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Village of Fultonville that is not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for earthquakes is included.

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Town in the past 10 years.

Table 1. Hazard Event History 2011-2021³

| Dates of Event | Event Type | Summary of Damages/Losses |
|-------------------------------|--------------------------------|---|
| August 26 – September 5, 2011 | Hurricane Irene | One hundred twenty-three dwellings' basements were flooded by the flood and many homes and businesses were damaged. There was damage to infrastructure, green space, and the WWTP. The approximate damage cost was around \$2,600, |
| September 7-11, 2011 | Remnants of Tropical Storm Lee | The Village flooded again, incurring more damage on top of Hurricane Irene, a couple of weeks before. Damage was approximately \$30,000 with basements being pumped. Actual property damage is not included |
| October 27 – November 8, 2012 | Hurricane Sandy | Hurricane Sandy brought more flooding and the closure of all bridges in Montgomery County. Homes and businesses were under water for a prolonged time. |
| June 26-July 10, 2013 | Severe Storms Flooding | Heavy rainfall led to flash flooding within the Village and many homes and businesses needed to be pumped out. |
| June 17, 2014 | Thunderstorm Winds | Trees were reported down at the intersection of Route 30A and Van Epps Road in Fultonville as a result of thunderstorm winds. |
| October 7, 2020 | Tornado/ Thunderstorm Wind | A high-end severe weather event unfolded across the Northeast on Wednesday October 7, 2020. A line of thunderstorms originated across New York state and moved eastward into New England during the afternoon hours, producing widespread damage. New York State Mesonet weather stations recorded widespread wind gusts between 50 and 60mph down the Mohawk Valley. As a result of this storm, there were over 160,000 power outages across the region. Schools closed the next day due to lack of power, and dry ice was distributed to the public |

³ <http://ncdc.noaa.gov/stormevents>

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------|------------|---|
| | | while power was being restored over the next few days. Numerous trees downed and snapped in the Hamlet of Auriesville. |
| September 15, 2021 | Hail | A line of showers and thunderstorms resulted in widespread severe weather and flash flooding over eastern New York on Wednesday September 15, 2021. Trained weather spotter indicated one inch hail. East Street and Park Street were closed due to flooding. |

2.2 Community Assets

Seven community assets were identified for the Village of Fultonville for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID corresponds with locations shown in **Figure 1**.

Table 2. Community Assets in the Village of Fultonville

| | Asset ID | Subtype | Name |
|--|----------|----------------------------------|--|
| SOCIETAL ECONOMY | 1 | Fuel | Betty Beavers |
| | 2 | Mortuaries | Jackson & Betz Funeral Home |
| INFRASTRUCTURAL | 3 | Municipal / Public Safety | Fultonville Fire Dept. |
| | 4 | Post Office | USPS Fultonville Office |
| | 5 | PWS Well | Village of Fultonville #1 under building |
| | 6 | PWS Well | Village of Fultonville #2 just east of property |
| | 7 | PWS Tank | Village of Fultonville Water Storage Tank |
| Bold indicated asset is identified as an essential facility | | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are four essential facilities in the Village. There is no designated emergency shelter in the Village of Fultonville. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Village of Fultonville Annex
2023 Montgomery County Hazard Mitigation Plan

Table 3. Essential Facilities in the Village of Fultonville.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|----------|---|------------------|----------|----------------|
| PWS Well | Village of Fultonville #1 under building | N | N | N |
| PWS Well | Village of Fultonville #2 just east of property | N | N | N |
| PWS Tank | Village of Fultonville Water Storage Tank | N | N | N |
| PWS Well | Village of Fultonville #1 under building | N | N | N |

Village of Fultonville Annex

2023 Montgomery County Hazard Mitigation Plan

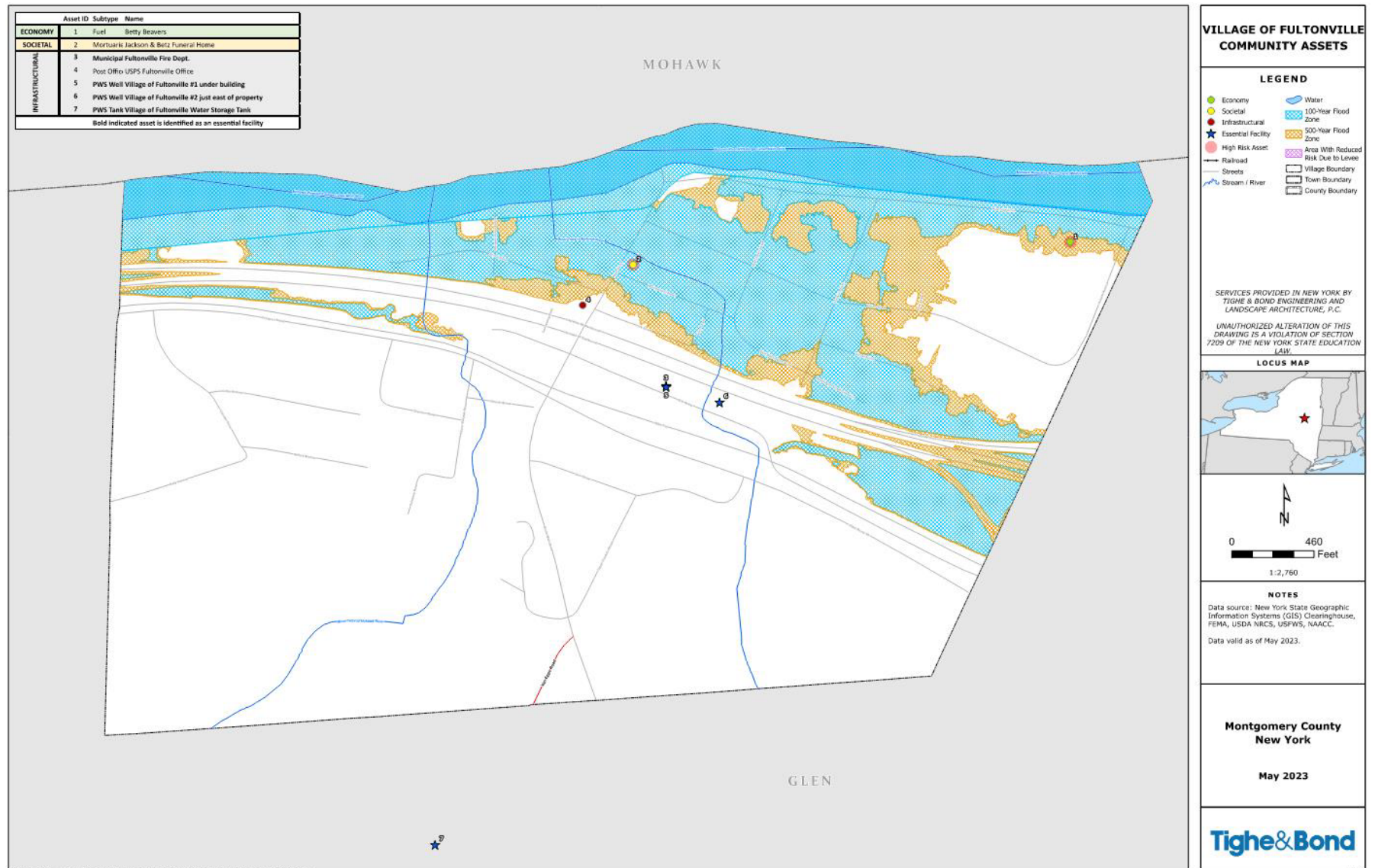


Figure 1. Village of Fultonville FEMA Flood Zones, Community Assets and Essential Facilities

Village of Fultonville Annex

2023 Montgomery County Hazard Mitigation Plan

2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there were 5 identified repetitive loss properties in The Village of Fultonville as of 2016, and as of 2022, there were 4 identified repetitive loss properties. As of December 31, 2022, 32 policies were in force. The Village of Fultonville had a total of 20 claims totaling \$1,446,366 in losses for all NFIP-insured structures. It should be noted that according to FEMA data there are 220 structures within the 100-year flood plain (this includes properties in the Town of Glen).

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Village, by hazard as shown in Table 4. The estimated value of at-risk assets is based on the Village's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Village of Fultonville Vulnerable Assets Exposure Analysis⁴.

| Hazard | At-Risk All Properties ⁵ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|---------------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$186,300,418 | 1,046 | \$472,9984 | 4 | \$0 | 0 |
| Severe Thunderstorm | \$186,300,418 | 1,046 | \$472,9984 | 4 | \$0 | 0 |
| Severe Winter Storm | \$186,300,418 | 1,046 | \$472,9984 | 4 | \$0 | 0 |
| Tornado | \$186,300,418 | 1,046 | \$472,9984 | 4 | \$0 | 0 |
| Flood | | | | | | |
| 1% Annual Chance | \$31,491,171 | 220 | - | 0 | - | 0 |
| 0.2% Annual Chance | \$18,142,092 | 116 | - | 0 | - | 0 |

⁴ Values based on 50% of assessor's full market value

⁵ Includes Town of Glen

2.6 Village Wide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Village of Fultonville, including the Town of Glen and Root. The totals include capital stock and economic loss estimates.

*Table 5 Village of Fultonville Earthquake Vulnerability Analysis**

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 1,046 | 1,046 |
| Total direct building economic loss | \$631,000 | \$8,448,000 |

**Hazus combines Glen, Root and the Village of Fultonville, values above are for both communities*

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Village of Fultonville Problem Statements.

| Problem Area | Description |
|-----------------------------|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. |
| Geographic Areas of Concern | |
| Dry Dock Creek | Local Areas of Flooding- The Mohawk River floods Village infrastructure and properties on nearly an annual basis. Over the past 20 years, the Village has been flooded an estimated 15 times, with the four most devastating recent events occurring in 2006 and 2011 and followed by Hurricane Sandy in 2012. In 2006, severe storms and flooding damaged infrastructure and private property, with costs exceeding \$3 million. In 2011, the Village saw Hurricane Irene and Tropical Storm Lee cause over \$775,000 in damage to the area. The most frequent flooding occurs from Dry Dock Creek to the west of the Village, through two thruway culverts to the south When the water elevation of the Mohawk River rises by even small amounts thruway culverts back up and flood homes and business |
| Mohawk River | |
| Vulnerable Community Assets | |
| Shelters | There are no designated Shelters in Fultonville. |

4. Capabilities

The Village of Fultonville is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Town's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Village of Fultonville completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for The Village of Fultonville:

- Comprehensive/Master Plan – *Local Planning Board, 1996. Updated in 2006.*
- Economic Development Plan – *Included in Comprehensive Plan*
- Local Emergency Response Plan – *County OEM*
- Transportation Plan – *County Plan*
- Stormwater Management Plan – *Local NYSDEC State mandate*
- Watershed Management Plan – *Mohawk River Watershed Plan*
- Floodplain Management Basin Plan – *Local Mohawk Basin Management Plan*
- Building Codes – *Local Code Enforcement Office, Chapter 68, Adopted 9/16/1997.*
- Zoning Ordinance – *Local Code Enforcement Office, Chapter 145, Adopted 2/7/1968.*
- Subdivision Ordinance – *Local Planning Board, 1993*
- NFIP Flood Damage Prevention Ordinance – *Local Code, Chapter 72, Adopted 12/28/2017 by Local Law 3-2018.*
- Stormwater Management Ordinance – *State mandated.*
- Real Estate Disclosure Requirements – *State mandated.*

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

The Village of Fultonville has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The

administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for The Village of Fultonville:

- Planning Board
- Maintenance Programs to Reduce Risk
- Mutual Aid Agreements
- Floodplain Administrator
- Emergency Manager (County)
- Community Planner (*Laberge Inc.*)
- Civil Engineer (*Laberge Inc.*)
- GIS Coordinator (*County Office*)
- Warning Systems
- Hazard Data (*Laberge Inc., County*)
- Grant Writing (*Laberge Inc., County*)

The Village of Fultonville is governed by a Board of Selectmen, Town Meeting, and Board of Finance form of government. The Town has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Town staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for The Village of Fultonville:

- Community Development Block Grant
- Federal Funding
- State Funding
- Hazard Mitigation Grant Programs

The Village of Fultonville has limited financial capabilities due to its size and relatively small income-

Village of Fultonville Annex

2023 Montgomery County Hazard Mitigation Plan

generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concern with regard to the implementation of mitigation projects and related risk reduction activities.

The Village Clerk is responsible for the accounting of all Town funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The Village Board and Treasurer provides budget monitoring and financial reports to the Village Board and Mayor throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for The Village of Fultonville:

- 911 Service
- Website
- Email Listserv
- Social Media

4.2 NFIP Participation and Compliance

The Village of Fultonville has actively participated in the National Flood Insurance Program (NFIP) since 1987. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there are a total of 32 NFIP policies in force. The total annual premium is \$44,916 for a total of \$5,332,500 in coverage. As of February 23, 2023, a total of 20 claims amounting to approximately \$1,226,366 have been paid to NFIP policyholders in The Village of Fultonville since joining the program.¹³ more information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 8 describes the Village of Fultonville's participation and continued compliance in accordance with NFIP requirements and as specified in FEMA's 2022 Local Mitigation Planning Policy Guide.¹⁴

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov/reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

Village of Fultonville Annex

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Table 8. NFIP Participation and Compliance, Village of Fultonville.

| REQUIRED INFORMATION | RESPONSE |
|--|--|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2017 via Village of Fultonville General Ordinance (Chapter 72: Flood Damage Prevention). |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Zoning Ordinance (Chapter 72-7 Basis for determining area of Special Flood Hazard). Latest effective FIRM is dated January 19, 2018, and updated 12/16/2019. |
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Building Code Enforces of the Village of Fultonville administers the provisions of the Floodplain District. The Building Code Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Building Code Enforcer of the Village of Fultonville has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Chapter 72-5 of the Town Code define substantial improvement/substantial damage as 50% of market value of the structure. |

Minimum standards set forth by FEMA and New York State have been adopted by the Village of Fultonville. The Village of Fultonville requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

The Village of Fultonville does not participate in the Community Rating System (CRS), however, the Town has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Town's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.2.1 Improvement Opportunities

Despite the limitations and constraints faced by the Village of Fultonville when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Town is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Town during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated versions of the Town's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Town to cope with potential unforeseen challenges in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Town staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout town.

Financial Capabilities

- Maximize opportunities through the Town's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Town's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Town to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Town's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Town Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Village should coordinate with the State NFIP Coordinator on possible updates or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- Fultonville's local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood)
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

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2023 Montgomery County Hazard Mitigation Plan Update

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status (i.e. completed, in progress, deferred or deleted), actions brought forward to this 2023 plan are identified in the Keep for Plan Update? Column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 9 Status of Previous Mitigation Actions – Village of Fultonville

| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|---------------------|--|--|------------------|----------------------------|--|---|--|
| Structural Project | Priority Flood Mitigation Project at Dry Dock Creek and Thruway Culverts | Village of Fultonville | Flood | Short-term / High priority | HMGP (Hazard Mitigation Grant Program) | Completed | The dry dock is up and running with backup generator as backup and the trenches are cleaned every year |
| Structural Project | 2006 Storm Level Flood Mitigation Project | Village of Fultonville | Flood | Short-term / High priority | HMGP | In progress | New Administration. This is something we will be reviewing in the next 5 years |
| Property Protection | Purchase and install a back generator for the Fultonville Fire Department | Village Fire Department | All hazards | Short-term / High priority | Local budget, HMGP | Completed | |
| Property Protection | Purchase larger pumps and portable lighting for the fire department to use in the event of flood events. This would benefit the Village, the fire department, and surrounding communities. | Village Fire Department | Flood | Short-term / High priority | Local budget, HMGP | Completed | |

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| Category of Action | Description of Action | Implementation Responsibility and Status | Hazard Addressed | Timeframe/ Priority | Resources/Funding * | Status: Completed/ In Progress/ Deleted Deferred/ Modified | Explanation of Status |
|---|--|---|------------------|----------------------------|---------------------|---|--|
| Prevention / Natural Resource Protection and Green Infrastructure / Property Protection | Support implementation of actions to mitigated identified critical facilities at risk of flooding | County Office of Emergency Management (OEM), Village of Fultonville | Flood | Short-term / High priority | Local, HMGP | In progress | New Administration. This is something we will be reviewing in the next 5 years |
| All Categories | 7: Support County-wide initiatives identified in Section 9.1 of the County Annex. Support county-wide initiatives identified in the Montgomery County Hazard Mitigation Plan | County, Village | All hazards | Short-term / High priority | County, HMGP | In progress | New Administration. This is something we will be reviewing in the next 5 years |

Village of Fultonville Annex

2023 Montgomery County Hazard Mitigation Plan Update

Table 10. Updated Mitigation Actions (2023-2028) – Village of Fultonville- EXAMPLES.

| Action # | Action Title | Action Description | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|--------------------|--|----------------|--------------------------|-----------------|-------------------------|----------|
| 1 | Mitigation Project | 2006 Storm Level Flood Mitigation Project | Medium | HMGP | Village | 2023-2028 | Medium |
| 2 | Support | Support implementation of actions to mitigated identified critical facilities at risk of flooding | Low | Local, HGMP | Village | 2023-2028 | Medium |
| 3 | Support | 7: Support County-wide initiatives identified in Section 9.1 of the County Annex. Support county-wide initiatives identified in the Montgomery County Hazard Mitigation Plan | Low | County, HMGP | Village, County | 2023-2028 | Low |

Capability Assessment Worksheet- Village of Fultonville

Planning and Regulatory

| COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | | T&B TO REVIEW OLD ANNEX |
|---|----------------|---|
| Plans | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? |
| Comprehensive/Master Plan | Yes | |
| Capital Improvements Plan | No | we have no plans at this time, maybe in the future |
| Economic Development Plan | Yes | |
| Local Emergency Response Plan | Yes | |
| Continuity of Operations Plan | No | |
| Transportation Plan | Yes | |
| Stormwater Management Plan | Yes | |
| Watershed Management Plan | Yes | |
| Floodplain Management Basin Plan | Yes | |
| Open Space and Recreation Plan | No | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? |
| Building Code | Yes | |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | |
| Fire department ISO rating | No | |
| Site plan review requirements | No | |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? |
| Zoning ordinance | Yes | |
| Subdivision ordinance | Yes | |
| NFIP Flood Damage Prevention Ordinance | Yes | Updated December 28, 2017, Chapter 72, by Local Law 3-2018 |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | |
| Flood insurance rate maps | Yes | Effective 1/19/2018 |
| Acquisition of land for open space and public recreation uses | No | |
| Stormwater Management Ordinance | Yes | |
| Growth Management Ordinance | No | |
| Real Estate Disclosure Requirements | Yes | |

Administrative and Technical

| Administration | Yes/No | Describe capability Is coordination effective? |
|--|-----------------|--|
| Planning Commission | Yes | Planning Board |
| Mitigation Planning Committee | No | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | Yes | this is done as needed and twice a year |
| Mutual aid agreements | Yes | town of glen and village of fonda |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? |
| Chief Building Official | No | We will look in to this this year |
| Floodplain Administrator | Yes | |
| Emergency Manager | Yes | |
| Community Planner | Yes | |
| Civil Engineer | Yes | |
| GIS Coordinator | Yes | |
| Other | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? |
| Warning systems/services (Reverse 911, outdoor warning signals) | Yes | via 911 system |
| Hazard data and information | Yes | |
| Grant writing | Yes | |
| Hazus analysis | No | |
| Other | No | |

Financial

| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? |
|--|------------------------------------|--|
| Capital improvements project funding | No | |
| Authority to levy taxes for specific purposes | Yes | |
| Fees for water, sewer, gas, or electric services | Yes | |
| Impact fees for new development | No | |
| Storm water utility fee | No | We will look in to this this year |

| | | | |
|---|----------------------------------|---|------------------------------------|
| Incur debt through general obligation bonds and/or special tax bonds | Obligation bonds yes, special no | | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | | |
| Other federal funding programs | No | We will look in to this year | <i>Not listed in annex table</i> |
| State funding programs | No | We will look in to this year | <i>Not listed in annex table</i> |
| Hazard Mitigation Grant Programs | Yes | | |
| Education and Outreach | | | |
| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | We will look in to this year | <i>Not listed in annex table</i> |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | No | We will look in to this year | <i>Not listed in annex table</i> |
| Natural disaster or safety related school programs | No | We will look in to this year | <i>Not listed in annex table</i> |
| StormReady certification | No | | |
| Firewise Communities certification | No | | |
| Public-private partnership initiatives addressing disaster-related issues | No | We will look in to this year | <i>Not listed in annex table</i> |
| Other | No | | |

VILLAGE OF HAGAMAN

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Village of Hagaman

16 William Street PO Box 283

Hagaman, NY 12086

<https://www.co.montgomery.ny.us/web/municipal/hagaman/default.asp>

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Village of Hagaman Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the Village of Hagaman not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Village of Hagaman.

| Primary Point of Contact | Alternate Point of Contact |
|--|---|
| Robin Ricci, Trustee 431 Maple Ave. Hagaman, NY 12086 518-369-4649 riccirobin@yahoo.com | Robert Krom, Mayor 44 Haskell Street, Hagaman, NY 12086 (518) 843-5654 Rkrom1958@yahoo.com |

1. Municipality Profile

1.1 Brief History

The Village of Hagaman was formerly called "Hagaman Mills" and was a textile community. It was founded in approximately 1777 by Joseph Hagaman.

1.2 Location and Demographics

The Village of Hagaman is located in the northeast section of Montgomery County. It is located near the east-west geographic center of the Town of Amsterdam along the Chuctanunda Creek.

1.3 Governance

The Village of Hagaman is governed by a Board of Trustees which is composed of four (4) trustees and a mayor. There is also a Planning Board and a Zoning Board of Appeals. The Village has adopted subdivision regulations, zoning regulations and site plan review. Actions by the Village Board of Trustees and the Planning Board are to preserve elements of the scenic and historical heritage of the community for future generations. Adoption of Capital Improvement Programs by the Village Board and of Village Land Development Plans by the Planning Board serve as long-range guides for orderly development in the Village. This governing body will be responsible for the adoption and implementation of this plan.

1.4 Land Use and Development

According to the Village of Hagaman 2016 Annex, the Village did not identify any proposed growth or development for the municipality at the time of the 2016 plan update.

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include severe storms and severe winter storms.

Severe Storms and Severe Winter Storms represent the largest natural hazard risk for Hagaman. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Village of Hagaman that are not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for Earthquakes is included.

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Village in the past 10 years.

Table 1. Hazard Event History 2011-2021.¹

| Dates of Event | Event Type | Summary of Damages/Losses |
|------------------|-------------------|---|
| May 18, 2020 | Thunderstorm Wind | Numerous reports of downed trees and powerlines occurred in this area. The worst damage occurred from Queensbury in Warren County to Kingsbury in Washington County. These storms produced a microburst, or concentrated area of straight-line wind damage. These winds were measured at 68 mph at the Glens Falls New York State Mesonet site and were estimated to be as high as 90 mph, resulting in widespread tree damage, destroying a barn, and damaging the roofs of a couple of other buildings. A tree was blown onto a trailer in Hagaman. |
| October 10, 2020 | Hail | <p>A line of thunderstorms originated across New York state and moved eastward into New England during the afternoon hours, producing widespread damage. New York State Mesonet weather stations recorded widespread wind gusts between 50 and 60mph down the Mohawk Valley into the Greater Capital District with a 67mph wind gust measurement at the Albany International Airport. This ranks as the highest gust for the month of October with records dating back to 1987. Microbursts were confirmed by storm surveys in Root, Pittstown, and Johnsonville, NY, with estimated wind speeds of 80, 90, and 100 mph, respectively. In addition, a brief EF0 tornado occurred in Canajoharie, NY. There was also one fatality when a tree fell onto a man's car while driving on the Taconic Parkway.</p> <p>This event was classified as a serial derecho based on the 320-mile-long damage swath and distribution of significant wind gusts (75 mph and above). The fact that trees across the region were fully leafed exacerbated the resulting wind damage and produced widespread power outages. As a result of this storm, there were over 160,000 power outages across the region. Schools closed the next day due to lack of power, and dry ice was distributed to the public while power was being restored over the next few days. Hail was reported in Hagaman</p> |
| July 07, 2022 | Thunderstorm Wind | Clusters of strong to severe thunderstorms along and ahead of an approaching cold front from the west resulted in a few damaging wind reports including a few downed trees and wires across eastern New York Friday night July 1, 2022. A tree was reported down near Church Street and Northern Boulevard in Hagaman. |

¹ <https://www.ncdc.noaa.gov/stormevents/>

2.2 Community Assets

Ten Community Assets were identified for the Village of Hagaman for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID correspond with locations shown in **Figure 1**.

Table 2. Community Assets in the Village of Hagaman.

| | Asset ID | Subtype | Name |
|--|----------|--------------------------|---|
| ECONOMY | 1 | Major Employer | Rama — Home Helpers |
| SOCIETAL | 2 | Childcare | Building Blocks |
| | 4 | Church | St. Stephen's Catholic Church |
| | 6 | Cemetery | Hagaman Mills Cemetery |
| | 7 | Church | Calvary Reform Church |
| | 8 | Childcare | Little Red Wagon Daycare |
| | 9 | Cemetery | St. Stephens Catholic Church |
| | 10 | Cemetery | Old Hagaman Cemetery |
| | | | |
| INFRASTRUCTURAL | 8 | Public Safety | Hagaman Fire Dept |
| | 9 | Post Office | USPS Hagaman Office |
| | 10 | Dam | Harrower Dam #1 |
| | 11 | Dam | Harrower Lower Dam |
| | 12 | Municipal | Village of Hagaman Offices and DPW |
| | 13 | Municipal | Old DPW Building |
| | 14 | Municipal/Society | Pawling Hall |
| | | | |
| Bold indicated asset as identified as an essential facility | | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are three essential facilities in the Village: Hagaman Fire Department, Pawling Hall and Village Office DPW. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Village of Hagaman Annex

2023 Montgomery County Hazard Mitigation Plan

Table 3. Essential Facilities in the Village of Hagaman.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|--------------------------|--------------------------------|------------------|----------|----------------|
| Hagaman Fire Department. | 126 S Pawling St, Hagaman | Y | N | N |
| Pawling Hall | 82 N Pawling Street Hagaman | N | Y | N |
| Village Office - DPW | 16 William Street Hagaman | Y | N | N |

Village of Hagaman Annex

2023 Montgomery County Hazard Mitigation Plan

This needs to be updated w the new and ones not located in the village removed

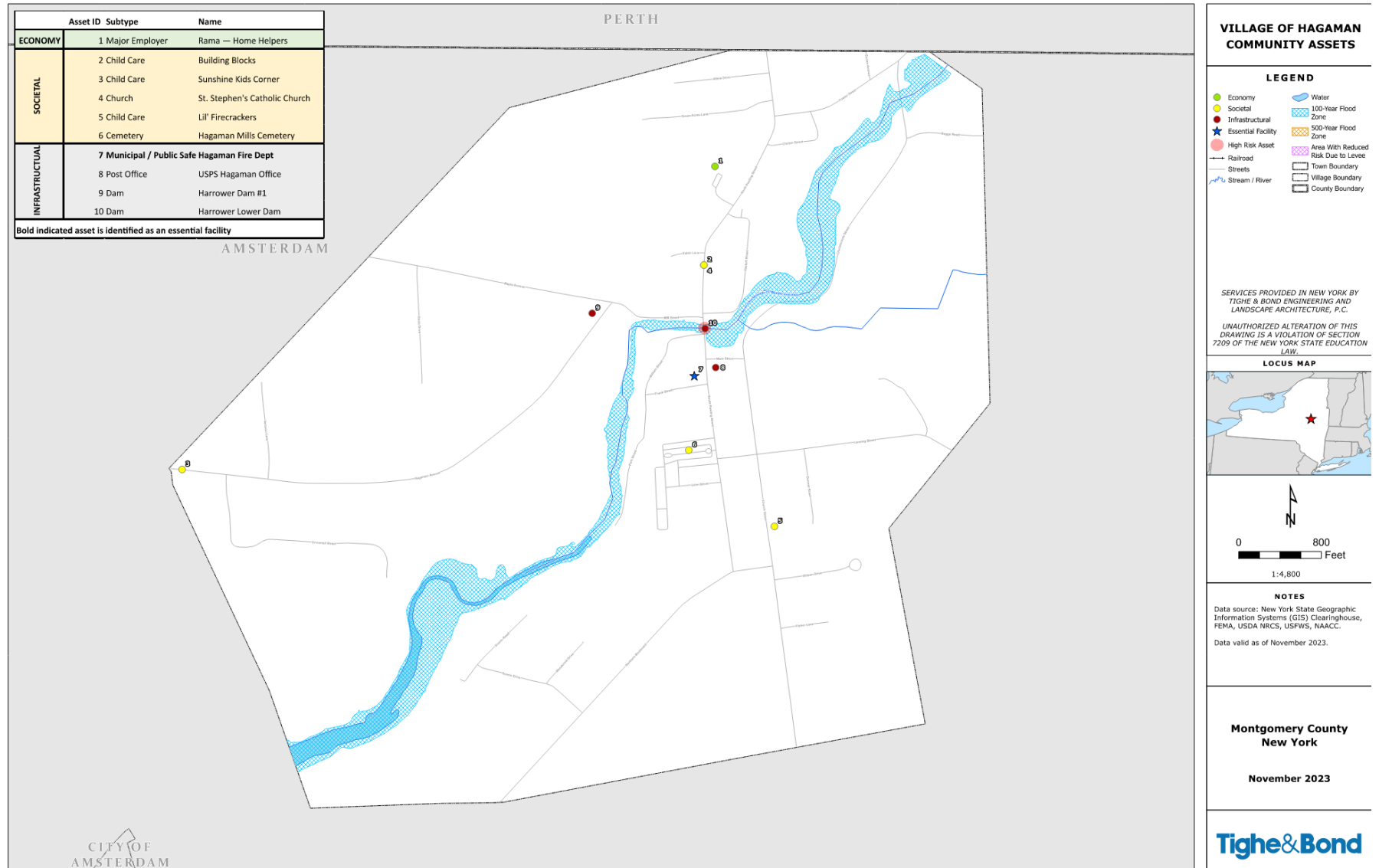


Figure 1. Village of Hagaman FEMA Flood Zones, Community Assets and Essential Facilities

2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there were no repetitive loss properties in Haganan as of 2016, and as of 2022, this has not changed. As of December 31, 2022, there were 3 policies in force. The Village of Haganan had a total of 4 claims totaling \$38,263 in losses for all NFIP-insured structures. It should be noted that according to FEMA data there are very few structures within the 100-year flood plain.

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets are shown for the Town of Amsterdam which include the Village of Haganan, by hazard as shown in Table 4. The estimated value of at risk assets is based on the Town's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Town of Amsterdam and Village of Haganan Vulnerable Assets Exposure Analysis.²

| Hazard | At-Risk All Properties ³ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|--------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value ⁴ | Number |
| Hurricane/Tropical Storm | \$553,867,141 | 2,507 | \$42,016,778 | 16 | N/A | 2 |
| Severe Thunderstorm | \$553,867,141 | 2,507 | \$42,016,778 | 16 | N/A | 2 |
| Severe Winter Storm | \$553,867,141 | 2,507 | \$42,016,778 | 16 | N/A | 2 |
| Tornado | \$553,867,141 | 2,507 | \$42,016,778 | 16 | N/A | 2 |
| Flood | | | | | | |
| 1% Annual Chance | \$17,511,398 | 145 | - | - | - | 1 |
| 0.2% Annual Chance | \$11,691,822 | 67 | - | - | - | - |

² Based on 50% of assessor's full market value

³ Includes Villages of Haganan & Fort Johnson

⁴ Values not available

2.6 Village Wide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Town of Amsterdam, including the Village of Haganan. The totals include capital stock and economic loss estimates.

Table 5 Town of Amsterdam & Village of Haganan Earthquake Vulnerability Analysis.

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-------------|--------------|
| Estimated total number of buildings | 2,507 | 2,507 |
| Total direct building economic loss | \$1,218,000 | \$14,619,000 |

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Hagaman Problem Statements.

| Problem Area | Description |
|------------------------------------|--|
| Primary Hazards of Concern | |
| Trees | <p>Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout the village and pose life/safety threat due to a lack of emergency access. Hazardous trees on Village - owned property are also a significant and costly concern. There are many diseased trees that create an additional threat to wires.</p> <p>The Village of Hagaman is very susceptible to tree damage from thunderstorm winds as evidenced by the number of damage reports on NOAA Extreme storm events database.</p> |
| Geographic Areas of Concern | |
| | <p>Local Areas of Flooding-</p> <p>Possibly the areas along the Chuctanunda Creek</p> |
| Vulnerable Community Assets | |
| Shelters | No designated shelter in the Village of Hagaman/ hoping to designate Pawling Hall in the future. |
| Bridges | No vulnerable bridges in Village of Hagaman. |
| Pump Stations | None in the Village of Hagaman. |

4. Capabilities

The Village of Hagaman is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Village's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Village of Hagaman completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for Hagaman:

- Comprehensive/Master Plan -. *This has been updated – July 2022*
- Capital Improvements Plan – *working on getting one*
- Transportation Plan - *County Plan reportedly includes municipality; A transportation plan is incorporated into Chapter 6 of the 2004 Comprehensive Plan.*
- Watershed Management Plan – *County Plan reportedly includes municipality*
- Open Space and Recreation Plan – *there is a plan for the expansion of the Hagaman Park*
- Building Codes – *Code Enforcement Officer*
- Land Use Planning – *Planning Board and the Village Board*
- Zoning Ordinance – *Zoning Board of Appeals*
- Subdivision Ordinance – *Planning Board Reviews subdivisions*
- Acquisition of Land for Open Space & Recreation – *land has been acquired for the expansion of the Hagaman Park on Chuctanunda St.*
- NFIP Flood Damage Prevention Ordinance – *Local Law No. 4 of 2017, Adopted 11/28/2017.*

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

The Village of Hagaman has important mitigation capabilities in place that work to reduce hazard risk.

Village of Hagaman Annex

2023 Montgomery County Hazard Mitigation Plan

This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for Hagaman:

- Planning Board
- Maintenance Programs to Reduce Risk - *As part of regular maintenance programs DPW proactively addresses aspects of the Village's infrastructure that could pose risk and implements these activities both on a planned and response basis.*
- Mutual Aid Agreements – Our DPW works with the Town of Perth DPW, Montgomery County DPW and the Town of Amsterdam DPW – sharing equipment and services.
- The Hagaman Fire Dept services the Village and the Town of Amsterdam and works with all the other Fire Departments in the local area with mutual assistance.
- Chief Building Official (*part-time*) - *Zoning Enforcement Officer*
- Community Planner – *Village uses Crawford & Associates Engineering & Land Surveying, PC*
- Civil Engineer - *Village uses Crawford & Associates Engineering & Land Surveying, PC*
- GIS Coordinator - *Village uses Crawford & Associates Engineering & Land Surveying, PC*
- Warning Systems – *Village will be getting a digital sign to notify residents of any news or updates, along with the implementation of a village website.*

The Village of Hagaman is governed by a Board of Trustees, and Mayor. The Village has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Village staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for Hagaman:

- Capital improvement project funding - *The capital program has been used for roadway maintenance activities and other projects and could be used in the future to fund mitigation projects.*

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- Community Development Block Grant - *The Village has in the past obtained assistance for NY Rising Community Reconstruction (NYRCR) Plan-related efforts.*
- State Funding - *The Village has in the past obtained assistance for sewer engineering studies and for NY Rising Community Reconstruction (NYRCR) Plan efforts, and is currently working on a grant to update their sewer pipes.*
- Hazard Mitigation Grant Programs

The Village of Hagaman has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concern with regard to the implementation of mitigation projects and related risk reduction activities.

The Village Clerk/Treasurer is responsible for the accounting of all Village funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The “Village Clerk/Treasurer” provides budget monitoring and financial reports to the “Mayor and the Board of Trustees” on a monthly basis and as needed.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for Hagaman:

- Village Planning Board focused on environmental protection, emergency preparedness, access and functional needs populations, etc.
- Ongoing public education or information programs (e.g., responsible water use, fire safety, household preparedness, environmental education) is currently on social media and in the future a new digital sign and a village website will also be used.
- Website
- Email Listserv
- Social Media

4.2 NFIP Participation and Compliance

The Village of Hagaman has actively participated in the National Flood Insurance Program (NFIP) since 1987. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there are a total of 5 NFIP policies in force. The total annual premium is \$7,096 for a total of \$957,000 in coverage. As of February 23, 2023, a total of 7 claims amounting to approximately \$109,695 have been paid to NFIP policyholders in Hagaman since joining the program.¹³ More information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex.

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Table 8 describes the Village of Haganan’s participation and continued compliance in accordance with NFIP requirements and as specified in FEMA’s 2022 Local Mitigation Planning Policy Guide.¹⁴

Table 7. NFIP Participation and Compliance, Town of Haganan.

| REQUIRED INFORMATION | RESPONSE |
|--|---|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2017 via Village of Haganan Local Law #4 of 2017 FEMA Law for the Prevention of Flood Damage. |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Local Law -Section 3.2 Basis for establishing areas of Special Flood Hazard. The latest effective FIRM is dated January 19, 2018. |
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Building Code Enforcer of the Village of Haganan administers the provisions of the Floodplain District. The Building Code Enforcer (Code Enforcement Officer) shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Building Code Enforcer (Code Enforcement Officer) of the Village of Haganan has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Village follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 2 of the Village’s Local Law define substantial improvement/substantial damage as 50% of the market value of the structure. |

Minimum standards set forth by FEMA and New York State have been adopted by the Village of Haganan.

The Village of Haganan requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov//reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

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The Village of Hagaman does not participate in the Community Rating System (CRS), however, the Village has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Village's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.2.1 Improvement Opportunities

Despite the limitations and constraints faced by the Village of Hagaman when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Village is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Village during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated versions of the Village's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Village to cope with potential unforeseen challenges in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Village staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout village.

Financial Capabilities

- Maximize opportunities through the Village's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Village's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.

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- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Village to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Village's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Village Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Village should coordinate with the State NFIP Coordinator on possible updates or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood)
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the current status of the mitigation actions (completed, ongoing/in process, deleted, or modified) included in the 2016 version of this plan. Besides current status, actions brought forward to this 2023 plan are identified in the Keep for Plan Update? column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Village of Hagaman.

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|--|---|----------------|--|-----------------------|
| 1 | Northern Church Street Storm Sewer | Repair and upgrade aging storm sewer system. | Completed | Storm sewers issue was resolved with the repairs and will be monitored for any additional issues. | NO |
| 2 | Hagaman Fire Department Generator | Purchase and install generator for Hagaman Fire Department. | Completed | Hagaman Fire Department purchased a generator which has been installed at the fire house. | NO |
| 3 | County-Wide HMP Initiative Support | Support County-wide initiatives identified in Section 9.1 of the County Annex (2016). | Completed | The Village of Hagaman has supported the 2016 initiative of the county-wide plan and will continue to in the future. | YES |
| 4 | Village Staff Certifications for Flood Services and Management | Pursue continuing professional education and certification (e.g., Certified Floodplain Manager under the Association of State Floodplain Managers) of Code Enforcement Officers and NFIP FPAs in floodplain management and hazard risk reduction. | In Progress | Staff have attended training and will continue to maintain appropriate professional certifications. Staff will attend future training. | YES |

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Table 9. Updated Mitigation Actions (2023-2028) – Village of Hagaman.

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|--|---|--------------------------------|------------------|---|--------------------------|--------------------|--|----------|
| 1 | County-Wide HMP Initiative Support | Support County-wide initiatives identified in Section 9.1 of the County Annex (2023) | Public Education and Awareness | All | \$ | Municipal budget | Village of Hagaman | This would be an ongoing process over the time of this plan. | High |
| 2 | Village Staff Certifications for Flood Services and Management | Pursue continuing professional education and certification (e.g., Certified Floodplain Manager under the Association of State Floodplain Managers) of Code Enforcement Officers and NFIP FPAs in floodplain management and hazard risk reduction. | Public Education and Awareness | All | Cost for education and any certifications | Municipal budget | Village of Hagaman | This would be an ongoing process over the time of this plan. | High |
| 3 | Village wide storm sewers | Maintain the continuation of repairing and replacing the aging storm sewers on an as needed basis. In addition develop a regular maintenance schedule to update the storm sewers on a yearly basis. | Structural Projects | All | Unknown cost currently. This will depend on the cost of supplies at the time of implementation. | State Grant | Village of Hagaman | Repairs will be an ongoing process over the time of this plan and in the future. Would like to develop a regular maintenance plan in the next 3 years. | High |
| 4 | Tree related hazards to reduce the risk to infrastructure in the Village | Continue to work on tree related hazards throughout the village. The Village of Hagaman DPW identifies issues and addresses them and National Grid will address any issues that will hamper electrical lines that are identified. | Property Protection | All | No additional cost unless, the village needs to hire a professional tree service and this cost will be subject to their charges | Municipal budget | Village of Hagaman | Any issues identified are addressed at that time. This would be an ongoing process over the time of this plan. | Mid |

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| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|--|--|-------------------------------|------------------|---|--|--------------------|--|----------|
| 5 | Establish safety shelter(s) where village residents can go in the case of emergency | Establish safety shelter(s) where village residents can go in case of emergencies. Also get and install a generator or other back up power supply. | Emergency Services Protection | All | \$\$ Cost of a generator and the installation of the generator | Municipal budget/State Historical grants | Village of Hagaman | Would like to this accomplished in the next 5 years | Low |
| 6 | Address the beaver situation in the Chuctanunda Creek causing damage to trees along the creek and road. Increasing the possibility of flooding | Work on ways to eliminate this hazard – working with the State DEC | Prevention | Flood | \$ Unknown cost currently. Possible cost of a trapper | Municipal budget | Village of Hagaman | Would like to address this as soon as possible. This issue cannot be given a time frame d/t the unknown factors of beavers and if they will re-inhabit the area again. | Mid |

Capability Assessment Worksheet- Village of Hagaman

Planning and Regulatory

| | | COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | T&B TO REVIEW OLD ANNEX |
|---|----------------|---|---|
| Plans | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? | NOTES FROM 2016 Annex |
| Comprehensive/Master Plan | Yes | | Comprehensive Plan for the Village of Hagaman, 2004 |
| Capital Improvements Plan | No | | |
| Economic Development Plan | No | | |
| Local Emergency Response Plan | Yes | | Emergency Manager enforces |
| Continuity of Operations Plan | No | | |
| Transportation Plan | No | | |
| Stormwater Management Plan | No | | |
| Watershed Management Plan | Yes | | NYSDOS enforces. Mohawk River Watershed Management Plan, 2015 |
| Floodplain Management Basin Plan | No | | |
| Open Space and Recreation Plan | No | | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? | NOTES FROM 2016 Annex |
| Building Code | Yes | | Via Code Enforcement Officer |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | | |
| Fire department ISO rating | No | | |
| Site plan review requirements | No | | |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? | NOTES FROM 2016 Annex |
| Zoning ordinance | Yes | | Zoning Board of Appeals enforces |
| Subdivision ordinance | Yes | | Zoning Board of Appeals enforces |
| NFIP Flood Damage Prevention Ordinance | Yes | Local Law No. 4 of 2017, Adopted 11/28/2017 | Code Officer enforces |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | | |
| Flood insurance rate maps | Yes | Effective 1/19/2018 | |
| Acquisition of land for open space and public recreation uses | Yes | land has been acquired for the expansion of the Hagaman Park on Chuctanunda St. | |
| Stormwater Management Ordinance | No | | |
| Growth Management Ordinance | No | | |
| Real Estate Disclosure Requirements | Yes | | Realtor enforces. NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467 |

Administrative and Technical

| | | | NOTES FROM 2016 Annex |
|--|-----------------|--|-----------------------|
| Administration | Yes/No | Describe capability Is coordination effective? | |
| Planning Commission | Yes | | |
| Mitigation Planning Committee | No | | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | No | | |
| Mutual aid agreements | Yes | | |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| Chief Building Official | Yes | Code Enforcement Officer | |
| Floodplain Administrator | Yes | | Code Officer enforces |
| Emergency Manager | Yes | | County OEM enforces |
| Community Planner | No | | |
| Civil Engineer | Yes | DPW, Robert Rogers 317 Smith Rd | |
| GIS Coordinator | No | MCBDC | |
| Other | No | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| Warning systems/services (Reverse 911, outdoor warning signals) | No | | |
| Hazard data and information | No | | |
| Grant writing | No | MCBDC | |
| Hazus analysis | No | | |
| Other | No | | |
| Financial | | | |

| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | NOTES FROM 2016 Annex |
|--|------------------------------------|--|-----------------------|
| Capital improvements project funding | Yes | | |
| Authority to levy taxes for specific purposes | No | | |
| Fees for water, sewer, gas, or electric services | No | | |
| Impact fees for new development | No | | |
| Storm water utility fee | No | | |
| Incur debt through general obligation bonds and/or special tax bonds | obligation yes, special yes | | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | | |
| Other federal funding programs | Yes | | |
| State funding programs | Yes | | |
| Hazard Mitigation Grant Programs | No | | |

Education and Outreach

| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
|---|--------|---|-----------------------------|
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | | |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | No | | |
| Natural disaster or safety related school programs | No | | |
| StormReady certification | No | | |
| Firewise Communities certification | No | | |
| Public-private partnership initiatives addressing disaster-related issues | No | | |
| Other | No | | |

VILLAGE OF NELLISTON

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Village of Nelliston

11 River Street

Nelliston, NY 13410

www.nelliston.org/home

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Cover Photo credit: Mohawk Valley Today (<https://mohawkvalley.today/location/nelliston-ny/>)

Village of Nelliston Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the Village of Nelliston not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Village of Nelliston.

| Primary Point of Contact | Alternate Point of Contact |
|---|----------------------------|
| Edward Watt, Clerk 11 River Street P.O. Box 305 Nelliston, NY 13410 518-993-2862 clerk@nelliston.org | |

1. Municipality Profile

1.1 Brief History

Andrew Nellis, founder of the Nellis family in the area, came to the Town of Palatine in 1722. Fort Fox and Fort Wagner were built at this location during the late colonial period. The Village was not well-developed until the time of the American Civil War.

1.2 Location and Demographics

The Village of Nelliston is located within the borders of the Town of Palatine in the western portion of Montgomery County. It shares its boundaries with the Town of Palatine to the north and east, Towns of Canajoharie to the south and the Village of Fort Plain to the west. The Village is located on the northeast side of the Mohawk River and the Erie Canal passes through the Village.

Land surface ranges from around 300 feet above mean sea level along the Mohawk River to a high of 500 feet above mean sea level as the topography rises to the northeast. The Village of Nelliston's societal, infrastructural and economic resources, including critical assets are highlighted in Figure 1.

The Village of Nelliston is home to 682 residents, with a population density of 617 people per square mile. According to the 2020 US Census¹, 85% of their 417 housing units are occupied, while 15% of the housing units remain vacant. Of the occupied units, 65% are owner occupied and 35% are renter occupied. 16% of the total population is below the poverty level, which includes 16% of seniors 65 and over. Approximately 17% of the town's residents have attained a four-year college degree or higher. The median household income for the Village of Nelliston is \$38,750. There is some racial or ethnic diversity in

¹<https://censusreporter.org/profiles/16000US3649748-nelliston-ny/>

Village of Nelliston Annex

2023 Montgomery County Hazard Mitigation Plan

the community with 86% reporting as White, 10% Two+, and 4% as Hispanic.

1.3 Governance

The Village of Nelliston is governed by the mayor and four trustees. This governing body will be responsible for the adoption and implementation of this plan.

1.4 Land Use and Development

The Village is 1.20 square miles in size. In the 2016 HMP there was no major residential/ commercial development or major infrastructure development identified for the next five years.

DRAFT

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snowstorms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for The Village of Nelliston as evidenced during Hurricane Irene, especially to Fort Hunter and properties on the Schoharie Creek. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Village of Nelliston that are not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for earthquakes are included.

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Village in the past 10 years.

Table 1. Hazard Event History 2011-2021.²

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------------------|--|--|
| August 26 – September 11, 2011 | Hurricane Irene and Remnants of Tropical Storm Lee | Damages not reported |
| October 27 - November 8, 2012 | Hurricane Sandy | Damages not reported |
| June 26 - July 10, 2013 | Severe Storms and Flooding | Damages not reported |
| 2019 | Heavy Rain/Flooding | Dygart Rd flooding due to heavy rain and bad culvert |

² [Http://ncdc.noaa.gov/stormevents](http://ncdc.noaa.gov/stormevents)

2.2 Community Assets

Ten Community Assets were identified for the Village of Nelliston for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID corresponds with locations shown in **Figure 1**.

Table 2. Community Assets in the Village of Nelliston.

| | Asset ID | Subtype | Name |
|--|-----------|---------------------|--|
| ECONOMY | 1 | Fuel | Sunoco Gas Station |
| | 2 | Hardware | Hatchet Hardware of Palatine Bridge |
| | 4 | Food/ Grocery | Fiehoffer's Bakery & Outlet |
| | 5 | Major Employer | Eisenadler Brauhaus |
| SOCIETAL | 6 | Church | Valley Alliance Church |
| INFRASTRUCTURAL | 7 | Post Office | USPS Nelliston Office |
| | 8* | WWTP | Montgomery CO SD#1 STP |
| | 9* | Pump Station | Nelliston Pump Station |
| | 10 | Pump Station | Railroad Street Pumping Station |
| Bold indicated asset is identified as an essential facility. *Asset located in 100-year flood | | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are three essential facilities in the Village. There is no designated emergency shelter in the Village of Nelliston. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Village of Nelliston.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|---------------------------------|---|------------------|----------|----------------|
| Montgomery CO SD#1 STP | 28 Old Station Rd, Nelliston, NY 13410 | Y | N | Y |
| Nelliston Pump Station | River Street | Y | N | Y |
| Railroad Street Pumping Station | Railroad Street | Y | N | Y |

Village of Nelliston Annex

2023 Montgomery County Hazard Mitigation Plan



Figure 1. Village of Nelliston FEMA Flood Zones, Community Assets and Essential Facilities

2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there were no identified repetitive loss properties in the Village of Nelliston in either 2016, or 2022. As of February 23, 2023, FEMA records show 0 policies in force, however 2 claims were identified totaling \$1,160 in losses for all NFIP-insured structures.

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Village, by hazard as shown in Table 4. The estimated value of at-risk assets is based on the Village's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Village of Nelliston Vulnerable Assets Exposure Analysis.³

| Hazard | At-Risk All Properties ⁴ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|---------------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$179,880,013 | 1,249 | \$968,696 | 3 | \$0 | 0 |
| Severe Thunderstorm | \$179,880,013 | 1,249 | \$968,696 | 3 | \$0 | 0 |
| Severe Winter Storm | \$179,880,013 | 1,249 | \$968,696 | 3 | \$0 | 0 |
| Tornado | \$179,880,013 | 1,249 | \$968,696 | 3 | \$0 | 0 |
| Flood | | | | | | |
| 1% Annual Chance | \$16,234,086 | 63 | - | 0 | - | 0 |
| 0.2% Annual Chance | \$15,572,968 | 64 | - | 0 | - | 0 |

³ Values are based on 50% of assessor's full market value

⁴ Includes Villages of Palatine Bridge and Town of Palatine

2.6 Village Wide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Village of Nelliston. The totals include capital stock and economic loss estimates.

*Table 5 Village of Nelliston Earthquake Vulnerability Analysis**

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 1,249 | 1,249 |
| Total direct building economic loss | \$774,000 | \$8,643,000 |

- *Hazus combines the Town of Palatine with the Villages of Palatine Bridge and Nelliston, values above are for both communities.*

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Village of Nelliston Problem Statements.

| Problem Area | Description |
|-----------------------------|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. |
| Geographic Areas of Concern | |
| Tributary Creek | Local Areas of Flooding- Dygert Road |
| Mohawk River | |
| Vulnerable Community Assets | |
| Shelters | There are no designated shelters in the Village of Nelliston. Stone Arabia St. Bridge |
| Bridges | |
| Emergency Service | |

4. Capabilities

The Village of Nelliston is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Village's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Village of Nelliston completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for The Village of Nelliston:

- Capital Improvements Plan – *Currently working on wastewater, water and sidewalk infrastructure upgrades. The Daycare is the only other capital improvement, and the Sheriff's Office will be allowed to use it in case of a state of emergency, e.g. floods.*
- Economic Development Plan – *Working on Comprehensive/Zoning Plans, Brownfield application, preparing for NY Forward in next few years.*
- Continuity of Operations Plan – *Clerk has detailed system on how to maintain operations in the event of emergency (e.g. fire, COVID pandemic).*
- Transportation Plan - *Working with REDC and MVEDD on a regional/inter-region transportation plan via the USDOT Thriving Communities Program*
- Watershed Management Plan – *County Mohawk River Watershed Management Plan, 2015.*
- Building Codes – *Local Code Enforcement. Must adopt Uniform Construction Codes and International Building Code. Will be updated with new zoning/planning rules from the comp/zoning project.*
- Land Use Planning - *Will be updated with new zoning/planning rules from the comp/zoning project.*
- Subdivision Ordinance – *Local Planning Board. Subdivision Regulations of Village, 1965. Will be updated with new zoning/planning rules from the comp/zoning project.*
- Real Estate Disclosure Requirements – *NY Code - Article 14 §460-467. - Will be updated with new zoning/planning rules from the comp/zoning project.*

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

Village of Nelliston Annex

2023 Montgomery County Hazard Mitigation Plan

The Village of Nelliston has important mitigation capabilities in places that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for The Village of Nelliston:

- Chief Building Official (*Trustee is assigned to oversee buildings. They work in conjunction with codes officer and DPW superintendent*)
- Mutual Aid Agreements (*With surrounding municipalities*)

The Village of Nelliston is governed by a Village Board. The Village has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Village staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for The Village of Nelliston:

- Capital improvement project funding
- Community Development Block Grant
- Federal Funding – *NBRC awarded funding for wastewater system.*
- State Funding – *NYS awarded funding for childcare/emergency center.*
- Hazard Mitigation Grant Programs

The Village of Nelliston has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concern with regard to the implementation of mitigation projects and related risk reduction activities.

Village of Nelliston Annex

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The Village Clerk is responsible for the accounting of all Village funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The Clerk provides budget monitoring and financial reports to the Mayor and Village Board throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for The Village of Nelliston:

- Website – www.nelliston.org

4.2 NFIP Participation and Compliance

The Village of Nelliston does not participate in the National Flood Insurance Program (NFIP).¹³ More information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex.

4.2.1 Improvement Opportunities

Despite the limitations and constraints faced by the Village of Nelliston when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Village is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Village during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated versions of the Village's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Village to cope with potential unforeseen challenges in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov//reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

2023 Montgomery County Hazard Mitigation Plan

- Seek and implement more capacity building initiatives for Village staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout town.

Financial Capabilities

- Maximize opportunities through the Village's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Village's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Village to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Village's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Village of Nelliston Annex

2023 Montgomery County Hazard Mitigation Plan Update

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status (i.e. completed, in progress, deferred or deleted), actions brought forward to this 2023 plan are identified in the Keep for Plan Update? column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 7 Status of Previous Mitigation Actions – Village of Nelliston.

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|--|----------------|--|-----------------------|
| 1 | NFIP Reapplication Program | Prioritize reapplication to the NFIP program. | Unknown | Nelliston is not in the flood plain | YES |
| 2 | Mitigation in Municipal Plans: Planning Grant | Prior to the update of any municipal plans, the Village will review the current HMP and integrate mitigation where applicable. | In Progress | Applying for comprehensive planning grant | YES |
| 3 | Zoning Update with Palatine Bridge | When updating the municipal zoning regulations, the Village will review the current HMP and incorporate mitigation where applicable. | In Progress | Applying for shared zoning grant with Palatine Bridge | YES |
| 4 | Community Hazard Communication Platform | Establish a municipal website or social media page to communicate with residents of hazard events, emergencies, etc. | Completed | See www.nelliston.org | NO |
| 5 | Culvert Capacity Review and Upgrades | Review culvert sizes in the Village to ensure capacity during major storm events. If undersized, replace with increased capacity. | Completed | Culverts on Dygert Rd. & Stone Arabia St were replaced. | NO |

Village of Nelliston Annex

2023 Montgomery County Hazard Mitigation Plan Update

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|--|----------------|---|-----------------------|
| 6 | Village Tree Trimming Program for Hazard Resilience | Establish a tree trimming program for the Village to reduce tree damage during hazard events. These efforts support countywide emergency management (response) capabilities, including the maintenance of routes that may be used to facilitate evacuations and other emergency support functions. | Ongoing | Trees cut as needed with help from Town of Palatine | YES |

Village of Nelliston Annex

2023 Montgomery County Hazard Mitigation Plan Update

Table 8. Updated Mitigation Actions (2023-2028) – Village of Nelliston.

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|---|--|---------------------|-------------------------------------|----------------|--------------------------|-----------------------------|-------------------------|----------|
| 1 | NFIP Reapplication Program | Prioritize reapplication to the NFIP program. | Prevention | Flood | Low | Municipal budget | Village Administration | 2023-2028 | High |
| 2 | Mitigation in Municipal Plans: Planning Grant | Prior to the update of any municipal plans, the Village will review the current HMP and integrate mitigation where applicable. | Prevention | All Hazards | Low | Municipal budget | Village Administration | 2023-2028 | Medium |
| 3 | Zoning Update with Palatine Bridge | When updating the municipal zoning regulations, the Village will review the current HMP and incorporate mitigation where applicable. | Prevention | All Hazards | Low | Municipal budget/ Grants | Village Administration | 2023-2028 | Medium |
| 4 | Village Tree Trimming Program for Hazard Resilience | Establish a tree trimming program for the Village to reduce tree damage during hazard events. These efforts support countywide emergency management (response) capabilities, including the maintenance of routes that may be used to facilitate evacuations and other emergency support functions. | Property Protection | Severe Storms, Severe Winter Storms | Low | Municipal budget | DPW, Village Administration | 2023-2028 | Low |

Capability Assessment Worksheet- Village of Nelliston

Planning and Regulatory

| | | COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | T&B TO REVIEW OLD ANNEX |
|---|---------------|---|---|
| Plans | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? | NOTES FROM 2016 Annex |
| Comprehensive/Master Plan | No | Applying to 2023 CFA for Smart Growth Comprehensive and Zoning Plan with Palatine Bridge, will be in plan | |
| Capital Improvements Plan | Yes | Currently working on wastewater, water and sidewalk infrastructure upgrades | |
| Economic Development Plan | Yes | Working on Comprehensive/Zoning Plans, Brownfield application, preparing for NY Forward in next few years | |
| Local Emergency Response Plan | Yes | | Via County Department/Plan |
| Continuity of Operations Plan | Yes | Clerk has detailed system on how to maintain operations in the event of emergency (e.g. fire, COVID pandemic) | Not mentioned in annex |
| Transportation Plan | Yes | | Via County Department/Plan |
| Stormwater Management Plan | No | | |
| Watershed Management Plan | Yes | | Via county Mohawk River Watershed Management Plan, 2015 |
| Floodplain Management Basin Plan | No | | |
| Open Space and Recreation Plan | No | | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? | NOTES FROM 2016 Annex |
| Building Code | Yes | | Via local Code Enforcement, Must adopt Uniform Construction Codes and International Building Code |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | | Annex table notes "No" |
| Fire department ISO rating | No | | Annex table notes "No" |
| Site plan review requirements | No | | |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? | NOTES FROM 2016 Annex |
| Zoning ordinance | No | | |
| Subdivision ordinance | Yes | | Via Local Planning Board, Subdivision Regulations of Village, 1965 |
| NFIP Flood Damage Prevention Ordinance | No | | Annex notes Village does not participate in NFIP |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | | |
| Flood insurance rate maps | Yes | Effective 1/19/2018 | Annex notes Village does not participate in NFIP |
| Acquisition of land for open space and public recreation uses | Yes | Applying to 2023 CFA for Smart Growth Comprehensive and Zoning Plan with Palatine Bridge, will be in plan | Annex doesn't appear to note |
| Stormwater Management Ordinance | No | | |
| Growth Management Ordinance | No | | |
| Real Estate Disclosure Requirements | Yes | | Via State, realtors - NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 |

Administrative and Technical

| Administration | Yes/No | Describe capability Is coordination effective? | NOTES FROM 2016 Annex |
|--|-------------------------|---|--------------------------------------|
| Planning Commission | No | | |
| Mitigation Planning Committee | No | | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | No | | |
| Mutual aid agreements | Yes | | With surrounding municipalities |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| Chief Building Official | Yes | Trustee is assigned to oversee buildings. They work in conjunction with codes officer and DPW superintendent | Annex doesn't appear to note |
| Floodplain Administrator | No | | Village does not participate in NFIP |
| Emergency Manager | Yes | | Via County OEM |
| Community Planner | Yes | | Via Consultant |
| Civil Engineer | Yes | | Via Consultant |
| GIS Coordinator | No | | |
| Other | | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| Warning systems/services (Reverse 911, outdoor warning signals) | No | | Not listed in annex |
| Hazard data and information | No | | Understanding via consultant? |
| Grant writing | Yes | Village has a grant writer on staff (clerk) | |
| Hazus analysis | No | | Understanding via consultant? |
| Other | | | |

Financial

| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | NOTES FROM 2016 Annex |
|--|------------------------------------|--|-----------------------|
| Capital improvements project funding | Yes | | |
| Authority to levy taxes for specific purposes | Yes | | |
| Fees for water, sewer, gas, or electric services | No | | |
| Impact fees for new development | No | | |
| Storm water utility fee | No | | Not listed in annex |

| | | | |
|--|----------------------------------|--|-------------------|
| Incur debt through general obligation bonds and/or special tax bonds | Obligation bonds yes, special no | | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | | |
| Other federal funding programs | Yes | NBRC awarded funding for wastewater system | <i>Not listed</i> |
| State funding programs | Yes | NYS awarded funding for childcare/emergency center | <i>Not listed</i> |
| Hazard Mitigation Grant Programs | Yes | | |

Education and Outreach

| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
|---|--------|---|-----------------------------|
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | Yes | Village works closely with Mohawk Valley Economic Development District on environmental/energy plans and upgrades | <i>Not listed in annex</i> |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | Yes | | <i>Through county</i> |
| Natural disaster or safety related school programs | Yes | | |
| StormReady certification | No | | |
| Firewise Communities certification | No | | |
| Public-private partnership initiatives addressing disaster-related issues | No | | |
| Other | | | |

VILLAGE OF PALATINE BRIDGE

MONTGOMERY COUNTY HAZARD

MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Village of Palatine Bridge

11 W. Grand Street

Palatine Bridge, NY 13428

www.villageofpalatinebridge.org/

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Cover Photo credit: Mohawk Valley Today (<https://mohawkvalley.today/location/palatine-bridge-ny/>)

Village of Palatine Bridge Annex

2023 Montgomery County Hazard Mitigation Plan

This municipality Annex includes details regarding the Village of Palatine Bridge not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Village of Palatine Bridge.

| Primary Point of Contact | Alternate Point of Contact |
|--|--|
| James F. Post, Mayor 2 Humbert Lane, Palatine Bridge, NY 13428 518-673-2917 mayor.post@gmail.com or postj@lexcenter.org | Anthony Howland, Code Enforcement 11 W. Grand St. Palatine Bridge, NY 13428 518-673-2918 clerk@villageofpalatinebridge.org |

1. Municipality Profile

1.1 Brief History

The basis of the name is the community's location in a region settled by Palatine Germans. The Village of Palatine Bridge is in the Town of Palatine. Palatine Bridge was settled in 1723. A bridge across the Mohawk River, built in 1798, gave the community its name. The Village was incorporated in 1867. The Frey House, Palatine Bridge Freight House, and Webster Wagner House are listed on the National Register of Historic Places.

1.2 Location and Demographics

The Village of Palatine Bridge is located within the borders of the Town of Palatine in the western portion of Montgomery County. It shares its boundaries with the Town of Palatine to the north, east, and west; and the Town and Village of Canajoharie to the south. The Village is located on the northeast side of the Mohawk River. Land surface ranges from around 300 feet above mean sea level along the Mohawk River to a high of 600 feet above mean sea level as the topography rises to the north. The Village of Palatine Bridge's societal, infrastructural and economic resources, including critical assets are highlighted in Figure 1.

The Village of Palatine Bridge is home to 684 residents, with a population density of 742 people per square mile. According to the 2020 US Census¹, 89% of their 369 housing units are occupied, while 11% of the housing units remain vacant. Of the occupied units, 61% are owner occupied and 39% are renter

¹ <https://censusreporter.org/profiles/16000US3656110-palatine-bridge-ny/>

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occupied. 10.5% of the total population is below the poverty level, which includes 31% of children under the age of 18, and 10% of seniors 65 and over. Approximately 24% of the town's residents have attained a four-year college degree or higher. The median household income for Village of Palatine Bridge is \$55,909. There is little racial or ethnic diversity in the community with 95% reporting as White, 1% Black, 3% Two+, and 1% as Hispanic.

1.3 Governance

The Village of Palatine Bridge is governed by the mayor and four trustees. This governing body will be responsible for the adoption and implementation of this plan.

1.4 Land Use and Development

The Village is less than one square mile in size, and in 2019 most of the developed sections of the village were listed on the National Register of Historic Places as the Palatine Bridge Historic District. In the 2016 HMP there was no major residential/ commercial development or major infrastructure development identified for the next five years.

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snowstorms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for The Village of Palatine Bridge as evidenced during Hurricane Irene, especially to Fort Hunter and properties on the Schoharie Creek. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Village of Palatine Bridge that is not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for earthquakes is included.

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Town in the past 10 years.

Table 1. Hazard Event History 2011-2021.²

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------------------|--|---|
| August 26 – September 11, 2011 | Hurricane Irene and Remnants of Tropical Storm Lee | Damages not reported |
| October 27 - November 8, 2012 | Hurricane Sandy | Damages not reported |
| June 26 - July 10, 2013 | Severe Storms and Flooding | Damages not reported |
| August 22, 2014 | Flash Flood | Heavy rainfall from several rounds of slow-moving thunderstorms led to flash flooding in the Palatine Bridge Area. State Route 5 was closed at State Route 10 in Palatine Bridge due to high water. |

2.2 Community Assets

Nineteen community assets were identified for the Village of Palatine Bridge for inclusion in the HMP. Table 2 below lists all the assets by FEMA asset categories, subtypes and name. The asset ID corresponds with locations shown in **Figure 1**.

² <http://ncdc.noaa.gov/stormevents>

Village of Palatine Bridge Annex

2023 Montgomery County Hazard Mitigation Plan

Table 2. Community Assets in the Village of Palatine Bridge.

| | Asset ID | Subtype | Name |
|--|----------|------------------------|--|
| ECONOMY | 1 | Food/ Grocery | Price Chopper |
| | 2 | Food/ Grocery | Dollar General |
| | 3 | Fuel | Country Farms |
| | 4 | Fuel | Stewarts |
| | 5 | Hardware | Tractor Supply Co. |
| SOCIAL | 6 | Senior Services | Palatine Nursing Home |
| | 7 | Senior Services | Palatine Village Apartments |
| | 8 | Historic Site | Fort Frey |
| | 9 | Childcare | Wee Care Daycare |
| | 10 | Food Pantry | Meals of Montgomery |
| | 11 | Affordable Housing | Lafayette Court, Brookside Apartments |
| | 12 | Cemetery | Palatine Bridge Cemetery |
| | 13 | Cemetery | Hees Cemetery |
| INFRASTRUCTURAL | 14 | Post Office | USPS Palatine Bridge Office |
| | 15 | Dam | Lock E-14 Dam at Canajoharie |
| | 16* | Pump Station | Village of Palatine Bridge Pump Station |
| | 17 | Pump Station | Palatine Bridge Pumping Station |
| | 18 | Pump Station | Spring Street Pumping Station |
| | 19 | Pump Station | Palatine Bridge Pumping Station |
| Bold indicated asset is identified as an essential facility. *Asset located in 100-year flood | | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are six essential facilities in the Village. There is no designated emergency shelter in the Village of Palatine Bridge. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Village of Palatine Bridge Annex

2023 Montgomery County Hazard Mitigation Plan

Table 3. Essential Facilities in the Village of Palatine Bridge.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? |
|---|-----------------------------------|------------------|----------|----------------|
| Palatine Nursing Home | 154 Lafayette St, Palatine Bridge | Y | N | N |
| Brookside Apartments | Mary St, Palatine Bridge | Y | N | Y |
| Village of Palatine Bridge Pump Station | Mary Street | N | N | Y |
| Palatine Bridge Pumping Station | Route 5 / West Grand St | N | N | N |
| Spring Street Pumping Station | Spring Street | N | N | N |
| Palatine Bridge Pumping Station | Route 5 / East Grand St | N | N | N |

Village of Palatine Bridge Annex

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Figure 1. Village of Palatine Bridge FEMA Flood Zones, Community Assets and Essential Facilities

Village of Palatine Bridge Annex

2023 Montgomery County Hazard Mitigation Plan

2.4 Repetitive Loss and Severe Repetitive Loss Properties

According to FEMA records, there were no identified repetitive or severe repetitive loss properties in the Village of Palatine Bridge as of 2016, or in 2022. As of February 23, 2023, there were no policies in force within the Village of Palatine Bridge.

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Village, by hazard as shown in Table 4. The estimated value of at risk assets is based on the Village's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Village of Palatine Bridge Vulnerable Assets Exposure Analysis³.

| Hazard | At-Risk All Properties ⁴ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|---------------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$179,880,013 | 1,249 | \$2,020,242 | 5 | \$62,802 | 1 |
| Severe Thunderstorm | \$179,880,013 | 1,249 | \$2,020,242 | 5 | \$62,802 | 1 |
| Severe Winter Storm | \$179,880,013 | 1,249 | \$2,020,242 | 5 | \$62,802 | 1 |
| Tornado | \$179,880,013 | 1,249 | \$2,020,242 | 5 | \$62,802 | 1 |
| Flood | | | | | | |
| 1% Annual Chance | \$16,234,086 | 63 | - | 0 | - | 0 |
| 0.2% Annual Chance | \$15,572,968 | 64 | - | 0 | - | 0 |

2.6 Village Wide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for

³ Values are based on 50% of assessor's full market value

⁴ Includes Villages of Nelliston and Town of Palatine

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damages from earthquakes for the Village of Palatine Bridge. The totals include capital stock and economic loss estimates.

*Table 5 Village of Palatine Bridge Earthquake Vulnerability Analysis**

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 1,249 | 1,249 |
| Total direct building economic loss | \$774,000 | \$8,643,000 |

- *Hazus combines Florida and Charleston, values above are for both communities.*

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions. These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Village of Palatine Bridge Problem Statements.

| Problem Area | Description |
|---|--|
| Primary Hazards of Concern | |
| Trees | Downed trees due to severe weather might pose a threat to accessibility throughout the village. |
| Geographic Areas of Concern | |
| Mohawk River | Local Areas of Flooding- Lock 14 Wetlands, above lock 14 The creek behind the Car Wash |
| West Grand St. between Rt 10 and Center Street also West Grand Street near Dollar General | |
| Mary Street; the creek behind the car wash | |
| Vulnerable Community Assets | |
| Shelters | There are no local shelters identified in the Village of Palatine Bridge. |
| Bridges | The Village of Palatine Bridge does not own any bridges. |

4. Capabilities

The Village of Palatine Bridge is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Town's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Village of Palatine Bridge completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surrounding local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for The Village of Palatine Bridge:

- Local Emergency Response Plan – *County Emergency Management*
- Transportation Plan – *County Department/Plan*
- Building Codes – *Local Code Enforcement and State NYS Building Codes 1984.*
- Zoning Ordinance - *Local Code Enforcement. Adopted in 1966 and update in progress.*
- Subdivision Ordinance – *Adopted in 1965. Local ZBA.*
- NFIP Flood Damage Prevention Ordinance – *Local Law No. 1 of 2017, Adopted 10/17/2017.*

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

The Village of Palatine Bridge has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

Village of Palatine Bridge Annex

2023 Montgomery County Hazard Mitigation Plan

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for The Village of Palatine Bridge:

- Planning Board
- Mutual Aid Agreements (*Surrounding municipalities*)
- Chief Building Official (*Anthony Howland, Code Enforcement Office*)
- Floodplain Administrator (*Anthony Howland, Code Enforcement Officer*)
- Community Planner (*LAMONT Engineering*)
- Civil Engineer (*Anthony Howland, Code Enforcement Officer*)
- GIS Coordinator (*MCBDC Alex Kuttesch*)
- Hazard Data – *2023 Hazard Mitigation Plan. LAMONT Engineering.*
- Grant Writing – (*MCBDC Alex Kuttesch / LAMONT Engineering*)

The Village of Palatine Bridge is governed by a Mayor and four Trustees. The Village has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Town staff are supported by numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for The Village of Palatine Bridge:

- Capital improvement project funding (*future funding can be obtained*)
- Community Development Block Grant (*future funding can be obtained*)
- Federal Funding (*future funding can be obtained*)
- State Funding (*future funding can be obtained*)
- Hazard Mitigation Grant Programs (*future funding can be obtained*)

The Village of Palatine Bridge has limited financial capabilities due to its size and relatively small income- generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concerns

Village of Palatine Bridge Annex

2023 Montgomery County Hazard Mitigation Plan

with regard to the implementation of mitigation projects and related risk reduction activities.

The Village Clerk is responsible for the accounting of all Village funds, maintaining financial records and preparing financial reports. Other responsibilities include overseeing the budget process, assisting with the year-end audit, long term financial planning, handling insurance related matters, insurance, and the issuance of bonds. The “Clerk/Treasurer Department” provides budget monitoring and financial reports to the “Mayor and the Board of Trustees” throughout the fiscal year.

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for The Village of Palatine Bridge:

- StormReady Certification
- Natural Disaster Program in Schools
- Website
- Social Media

4.2 NFIP Participation and Compliance

The Village of Palatine Bridge has actively participated in the National Flood Insurance Program (NFIP) since 1987. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there were no NFIP policies in force.¹³ More information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 8 describes the Village of Palatine Bridge’s participation and continued compliance in accordance with NFIP requirements and as specified in FEMA’s 2022 Local Mitigation Planning Policy Guide.¹⁴

Table 7. NFIP Participation and Compliance, Village of Palatine Bridge.

| REQUIRED INFORMATION | RESPONSE |
|--|---|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2017 via Village of Palatine Bridge Local Law #1 of 2017 Flood Damage Prevention. |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Local Law (Section 3.2. Basis for establishing the areas of Special Flood Hazard). The latest effective FIRM is dated January 19, 2018. |

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov//reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

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2023 Montgomery County Hazard Mitigation Plan

| REQUIRED INFORMATION | RESPONSE |
|--|--|
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Building Code Enforces of the Village of Palatine Bridge administers the provisions of the Floodplain District. The Building Code Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Building Code Enforcer of the Village of Palatine Bridge has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 2 of the Local Law define substantial improvement/substantial damage as 50% of market value of the structure. |

Minimum standards set forth by FEMA and New York State have been adopted by the Village of Palatine Bridge.

The Village of Palatine Bridge requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

The Village of Palatine Bridge does not participate in the Community Rating System (CRS), however, the Town has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Town's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.2.1 Improvement Opportunities

Despite the limitations and constraints faced by the Village of Palatine Bridge when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Town is aware of its strengths and challenges in terms of mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Town during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated versions of the Village's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Village to cope with potential unforeseen challenges in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Town staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout town.

Financial Capabilities

- Maximize opportunities through the Town's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Town's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Town to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Village's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Town Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Town should coordinate with the State NFIP Coordinator on possible updates or revisions to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).
- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- Palatine Bridges's local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood)
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

Village of Palatine Bridge Annex

2023 Montgomery County Hazard Mitigation Plan Update

5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status (i.e. completed, in progress, deferred or deleted), actions brought forward to this 2023 plan are identified in the Keep for Plan Update? column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Village of Palatine Bridge.

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|--|--|----------------|----------------------------------|-----------------------|
| 1 | Support for Section 9.1 Initiatives | Support County-wide initiatives identified in Section 9.1 of the County Annex | In Progress | Ongoing process | YES |
| 2 | Professional Education for Code Enforcement and FPA's in Floodplain Management | Pursue continuing professional education and certification (e.g., Certified Floodplain Manager under the Association of State Floodplain Managers) for Code Enforcement Officer and FPA's to support enhanced floodplain management and hazard risk reduction. | Ongoing | Code officer continues education | YES |
| 3 | Catch Basin Replacement | Replace the catch basins on Center Street. They are old and collapsing. | Completed | | NO |
| 4 | Stormwater Engineering Study | Prepare an engineering study to address stormwater flooding caused by Dutch Town Plaza which are impacted properties by unnamed creek. | Completed | Storm sewers rebuilt | NO |

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| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|---|----------------|--------------------------------|-----------------------|
| 5 | Permanent Generator Installation | Purchase and install a permanent generator at the Village Hall which is used as a central location during events. | Deferred | Storm sewers rebuilt | YES |
| 6 | I & I Studies and Sewer System Repair Funding Initiative | Seek funding for continued I and I studies and sewer system repair. | Ongoing | Relined 5500' Replaced 500' | YES |
| 7 | Palatine Village Apartments Flood Vulnerability Assessment and Mitigation Support | Encourage the owners of the Palatine Village Apartments to evaluate its flood vulnerability and identify feasible mitigation options. Assure that any mitigation addresses the 500-year flood event or "worst-damage scenario." | Completed | | NO |
| 8 | Route 10 Road Bridge Flood Vulnerability Assessment and Mitigation | Evaluate the bridge on Route 10 Road and its flood vulnerability; identify feasible mitigation options. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario." | Completed | Bridge replaced by NYS DOT | NO |

Village of Palatine Bridge Annex

2023 Montgomery County Hazard Mitigation Plan Update

Table 9. Updated Mitigation Actions (2023-2028) – Village of Palatine Bridge- EXAMPLES.

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|--|--|--------------------------------|------------------|----------------|------------------------------------|--------------------------------|-------------------------|----------|
| 1 | Support for Section 9.1 Initiatives | Support County-wide initiatives identified in Section 9.1 of the County Annex | Prevention | All Hazards | Low | Municipal budget | Village Administration | 2023 - 2028 | Medium |
| 2 | Professional Education for Code Enforcement and FPA's in Floodplain Management | Pursue continuing professional education and certification (e.g., Certified Floodplain Manager under the Association of State Floodplain Managers) for Code Enforcement Officer and FPA's to support enhanced floodplain management and hazard risk reduction. | Public Education and Awareness | All Hazards | Low | Municipal budget | Village Administration | 2023 - 2028 | Medium |
| 3 | Permanent Generator Installation | Purchase and install a permanent generator at the Village Hall which is used as a central location during events. | Property Protection | All Hazards | Medium | HMGP funding with local cost share | DPW | 2023 - 2028 | High |
| 4 | I & I Studies and Sewer System Repair Funding Initiative | Seek funding for continued I and I studies and sewer system repair. | Property Protection | All Hazards | High | Municipal budget | DPW and Engineering Consultant | 2023 - 2028 | High |

Capability Assessment Worksheet- Village of Palatine Bridge

Planning and Regulatory

| Plans | COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | | T&B TO REVIEW OLD ANNEX |
|---|---|---|--|
| | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? | NOTES FROM 2016 Annex |
| Comprehensive/Master Plan | No | | Annex notes none on file. |
| Capital Improvements Plan | No | | Annex notes none on file. |
| Economic Development Plan | No | | Annex notes none on file. |
| Local Emergency Response Plan | Yes | Yes | Via County Emergency Manager/Management |
| Continuity of Operations Plan | No | | Not noted in annex |
| Transportation Plan | Yes | No | Via County Department/Plan |
| Stormwater Management Plan | No | | Annex notes none on file. |
| Watershed Management Plan | Yes | yes | Via Mohawk River Watershed Management Plan, 2015 |
| Floodplain Management Basin Plan | No | | Annex notes none on file. |
| Open Space and Recreation Plan | No | | Annex notes none on file. |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? | NOTES FROM 2016 Annex |
| Building Code | Yes | Yes | Via Local Code Enforcement and State NYS Building Codes 1984 |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | No | Annex table says "no" |
| Fire department ISO rating | 5 | No | Not listed in annex table. |
| Site plan review requirements | No | No | |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? | NOTES FROM 2016 Annex |
| Zoning ordinance | Yes | No | Via local code enforcementm, Adopted in 1966 and an update is in progress |
| Subdivision ordinance | Yes | No | Via local ZBA, Adopted in 1965 |
| NFIP Flood Damage Prevention Ordinance | Yes | Local Law No. 1 of 2017, Adopted 10/31/2017. | Palatine code of ordinances – appendix b – Subdivision, site development and floodplain regulations B- 2 Article i. General provisions |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | No | table lists "no" |
| Flood insurance rate maps | Yes | Effective 1/19/2018 | Village does not participate in NFIP |
| Acquisition of land for open space and public recreation uses | No | No | No indication in annex |
| Stormwater Management Ordinance | No | No | |
| Growth Management Ordinance | Yes | No | Via local ordinance adopted in 1966, ZBA |
| Real Estate Disclosure Requirements | Yes | No | Via State, realtor - NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467 |

Administrative and Technical

| Administration | Yes/No | Describe capability Is coordination effective? | NOTES FROM 2016 Annex |
|--|-------------------------|---|---|
| | | | |
| Planning Commission | Yes | Yes | Municipal Planning Board |
| Mitigation Planning Committee | No | No | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | No | No | |
| Mutual aid agreements | Yes | Yes | Via surrounding municipalities |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? | NOTES FROM 2016 Annex |
| Chief Building Official | Yes | Yes | Anthony Howland, Code Enforcement Officer |
| Floodplain Administrator | Yes | Yes | Anthony Howland, Code Enforcement Officer |
| Emergency Manager | No | No | Montgomery County noted as reference |
| Community Planner | Yes | Yes | LAMONT Engineering |
| Civil Engineer | Yes | Yes | Anthony Howland, Code Enforcement Officer |
| GIS Coordinator | Yes | Yes | MCBDC Alex Kutttesch |
| Other | | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? | NOTES FROM 2016 Annex |
| Warning systems/services (Reverse 911, outdoor warning signals) | Yes | | Montgomery County Sheriffs Office |
| Hazard data and information | Yes | 2023 hazard mitigation plan | LAMONT Engineering |
| Grant writing | Yes | Yes | MCBDC Alex Kutttesch/ LAMONT Engineering |
| Hazus analysis | Yes | Yes | LAMONT Engineering |
| Other | | | |

Financial

| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | NOTES FROM 2016 Annex |
|--|------------------------------------|--|-----------------------|
| | | | |
| Capital improvements project funding | Yes | Yes future money can be obtained. | |
| Authority to levy taxes for specific purposes | Yes | Yes future money can be obtained. | |
| Fees for water, sewer, gas, or electric services | Yes | | |

| | | | |
|--|--------------------------------------|-----------------------------------|--|
| Impact fees for new development | No | | |
| Storm water utility fee | No | | <i>Not listed in annex table</i> |
| Incur debt through general obligation bonds and/or special tax bonds | Obligation bonds - yes, special - no | | |
| Incur debt through private activities | Yes | | |
| Community Development Block Grant | Yes | Yes future money can be obtained. | <i>Listed as "don't know" in annex table</i> |
| Other federal funding programs | Yes | Yes future money can be obtained. | <i>Not listed in annex table</i> |
| State funding programs | No | Yes future money can be obtained. | <i>Not listed in annex table</i> |
| Hazard Mitigation Grant Programs | Yes | Yes future money can be obtained. | <i>2023 hazard mitigation plan</i> |

Education and Outreach

| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
|---|--------|---|--------------------------------------|
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | | <i>Not listed in annex table</i> |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | No | | <i>Not listed in annex table</i> |
| Natural disaster or safety related school programs | No | | <i>Not listed in annex table</i> |
| StormReady certification | Yes | County wide certification | |
| Firewise Communities certification | No | | <i>Annex notes not participating</i> |
| Public-private partnership initiatives addressing disaster-related issues | No | | <i>Not listed in annex table</i> |
| Other | | | |

VILLAGE OF ST. JOHNSVILLE

MONTGOMERY COUNTY HAZARD MITIGATION PLAN UPDATE ANNEX

NOVEMBER 2023



Village of St. Johnsville

16 Washington St

St Johnsville, NY 13452

www.sjvny.org/

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Village of St. Johnsville Annex

2023 Montgomery County Hazard Mitigation Plan Update

This municipality Annex includes details regarding the Village of St. Johnsville not included in the main body of the 2023 Montgomery County Multi-Hazards Mitigation Plan 5-Year Update (HMP). The municipality annexes were developed to assist municipalities with the process of implementing and maintaining their portion of the 2023 HMP. The Annex includes a Municipality Profile, Community Asset Vulnerability-Risk Analysis, National Flood Insurance Program (NFIP) Summary, Capability Assessment, and Mitigation Actions.

The following individuals have been identified as the hazards mitigation plan's primary and alternate point of contact for the Village of St. Johnsville.

| Primary Point of Contact | Alternate Point of Contact |
|---|--|
| Dawn White, Mayor 16 Washington Street St. Johnsville, NY 13452 518-568-2221 | Shannon Countryman, Fire Chief 6 West Main Street St. Johnsville, NY 13452 518-982-4291 |

1. Municipality Profile

1.1 Brief History

The area was within the territory of the Mohawk Tribe when Europeans first entered the Mohawk Valley. Palatine Germans began settling the area in the early 18th Century. The community was first settled around 1775. A small battle was fought during the American Revolution in 1780 near Fort Klock, which lies to the east of Saint Johnsville. The Village of Saint Johnsville was incorporated in 1857. On June 28, 2006, Saint Johnsville faced its worst flood in one hundred years.'

1.2 Location and Demographics

The Village of St. Johnsville is small community of approximately 576 acres, situated in the northwestern corner of the Montgomery County. The Village of Saint Johnsville is located within the Town of Saint Johnsville in the northwestern portion of Montgomery County. It shares its boundaries with Town of Saint Johnsville to the north, east, and west and the Town of Minden to the south.

Land surface ranges from around 300 feet above mean sea level along the Mohawk River to a high of 600 feet above mean sea level as the topography rises to the north. The Village is located in the Zimmerman sub watershed to the Mohawk River. A more detailed description of the Western Cayadutta Sub watershed is included in the HMP Community Asset Inventory Section 5.6. The Village of St. Johnsville societal, infrastructural and economic resources, including critical assets are highlighted in Figure 1.

The Village of St. Johnsville is home to 1,838 residents, with a population density of 2,094 people per

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square mile. According to the 2020 US Census¹, 84% of their 764 housing units are occupied, while 16% of the housing units remain vacant. Of the occupied units, 61% are owner occupied and 39% are renter occupied. 28.9% of the total population is below the poverty level, which includes 54% of children under the age of 18, and 16% of seniors 65 and over. Approximately 14% of the town's residents have attained a four-year college degree or higher. The median household income for Village of St. Johnsville is \$40,446. There is little racial or ethnic diversity in the community with 92% reporting as White, 4% as Hispanic, 2% Two+, and 1% Asian.

1.3 Governance

The Village of Saint Johnsville is governed by the mayor and a four-member Board of Trustees. The Village consists of seven departments: Finance, Police, Water, Sewer, Public Works, Marine and Cemetery. This governing body will be responsible for the adoption and implementation of this plan.

1.4 Land Use and Development

This small community is only 0.9 square miles in size. Based on the wealth of historic structures, almost the entire village was listed on the National Register of Historic Places in 2019. The village reported construction of the Erie Canal RV Resort & Campground in 2015.

¹<https://censusreporter.org/profiles/16000US3664639-st-johnsville-ny/>

2. Natural Hazard Risk and Vulnerability Assessment

Natural Hazard risk was calculated for all of Montgomery County in Section 4. The highest-ranked natural hazards include flooding due to heavy rain, ice jams and flash flooding, extreme temperatures, high winds, lightning, snow storms, and ice storms.

Local risk for flooding is typically dependent on the location of critical assets in relation to the special flood hazard areas. Flooding represents the largest natural hazard risk for The Village of Canajoharie as evidenced during Hurricane Irene, especially to Fort Hunter and properties on the Schoharie Creek. When coupled with climate change, this risk is anticipated to be elevated in the future. This section highlights specific vulnerability assessments completed for the Village of Canajoharie that is not already included in the HMP. In addition to jurisdiction specific flood vulnerability analysis for all built structures including essential facilities and historic properties, the jurisdiction specific Hazus analysis for earthquakes is included.

2.1 Natural Hazard Event History Specific to the Municipality

Montgomery County has a history of natural and non-natural hazard events as detailed in Volume I, Section 4.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the Town in the past 10 years.

Table 1. Hazard Event History 2011-2021.²

| Dates of Event | Event Type | Summary of Damages/Losses |
|--------------------------------|--|--|
| August 26 – September 11, 2011 | Hurricane Irene and Remnants of Tropical Storm Lee | No damages reported |
| June 28, 2013 | Flash Flood | Interstate 90 (The New York State Thruway) was closed between exits 29 and 29A. Fifty to one hundred people were trapped in homes and water rescues needed to take place. Media reported up to two hundred homes were damaged or destroyed by flooding. Every road within Fort Plain was under water and some bridges were damaged or destroyed. One fatality occurred as flood waters swept a woman away from a trailer. State of emergency was declared. |
| September 8, 2012 | Thunderstorm Winds | Trees were reported down due to thunderstorm winds in St. Johnsville. |
| June 28, 2013 | Flash Flood | Significant flash flooding occurred throughout St. Johnsville due to heavy rainfall. Several homes were affected by flood waters. |
| October 1, 2019 | Heavy Rain Flood | Heavy rainfall resulted in a record high flood stage on the Mohawk River at Little Falls. The river reached moderate flood stage by 0055EST 1 November and exceeded major flood stage shortly thereafter by 0150EST. The first crest occurred at 0516EST 1 November at 19.73 feet before it receded slightly, but a second, higher crest of 19.86 feet occurred at 0345EST 2 November. The river fell below major flood stage by 1915EST 2 November, and below moderate flood stage by 0022EST 3 November. The high water impacted nearby rail tracks such that Amtrak service was suspended on some routes between Albany and Syracuse, and some inbound passengers were transferred to buses. The high water also resulted in the closure of the Mohawk Valley Welcome Center in Fultonville along the New York State Thruway. |

² <http://ncdc.noaa.gov/stormevents>, NY Rising Report for Amsterdam and Florida

| Dates of Event | Event Type | Summary of Damages/Losses |
|----------------|--------------------|--|
| April 7, 2022 | Heavy Rain Flood | Several roads throughout Montgomery County were closed due to flooding, some of which included the villages of Hagaman and Fultonville and the towns of Palatine, Canajoharie, Root, Charleston and Glen. Overall, the county experienced 21 road closures, 2 damaged road culverts, 2 mudslides, 1 foundational collapse of a home and 3 motor vehicle accidents. |
| July 21, 2022 | Thunderstorm Winds | Wires were downed along with a fire in the backyard along West Main Street in the Village of St. Johnsville. |

2.2 Community Assets

Twenty-four Community Assets were identified for the Village of St. Johnsville for inclusion in the HMP. Table 2 below lists all of the assets by FEMA asset categories, subtypes and name. The asset ID corresponds with locations shown in **Figure 1**.

Table 2. Community Assets in the Village of St. Johnsville.

| | Asset ID | Subtype | Name |
|-----------------|----------|---------------------------|--|
| ECONOMY | 1 | Fuel | Stewarts |
| | 2 | Fuel | Gulf |
| | 3 | Major Employers | Oppenheim-Ephratah-St. Johnsville Central School District, Gehring Tricot- Helmont Mills |
| SOCIETAL | 4 | Medical Facility | St. Mary's Urgent Care |
| | 5 | Historic Site | Municipal Building, Community House |
| | 6 | Church | St Paul's Lutheran Church |
| | 7 | Church | St John's Reformed Church |
| | 8 | Cemetery | West St Johnsville Cemetery, St. Johnsville Cemetery |
| | 9 | Medical Facility | St. Johnsville Rehabilitation and Nursing Center, Inc. |
| | 10 | Medical Facility | Bassett Healthcare St Johnsville |
| | 11 | School/ Public | OESJ High School |
| | 12 | Historic Site | Margaret Reaney Memorial Library and Museum |
| | 13 | Church | Grace Christian Church |
| | 14 | Church | Seekers Fellowship |
| | 15 | Telephone sub-station | Frontier Communications |
| INFRASTRUCTURAL | 16 | Post Office | USPS Saint Johnsville Office |
| | 17 | Municipal / Public Safety | St. Johnsville Police Department |
| | 18 | Municipal / Public Safety | St. Johnsville Fire Dept |
| | 19 | Major employer | St. Johnsville Nursing Home |

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| | Asset ID | Subtype | Name |
|--|------------|-------------------------------|--|
| | 20* | WWTP | St. Johnsville Wastewater Treatment Plant |
| | 21 | Dam | (157-0515b) |
| | 22 | Dam | (157-0515c) |
| | 23 | Cell Tower | St Johnsville Cell Tower |
| | 24* | Electrical Sub station | National Grid Substation |
| Bold indicated asset is identified as an essential facility. *Asset located in 100-year flood | | | |

2.3 Essential/ Critical Facilities

Essential facilities are defined in Section 5.7 of the HMP including facilities that are important to ensure a full recovery following the occurrence of a hazard event. There are ten essential facilities in the Village. The St. Johnsville High School is the designated emergency shelter. Table 3 provides a summary of essential facilities, and the status of emergency power supplies, shelter availability and flooding hazard. Essential facilities are included in **Figure 1** along with the 100-year and 500-year floodplain.

Table 3. Essential Facilities in the Village of St. Johnsville.

| Facility | Location | Emergency Power? | Shelter? | In Floodplain? | Environmental Justice |
|--|--------------------------------------|------------------|----------|----------------|-----------------------|
| St. Mary's Urgent Care | 7 Timmerman Ave, St. Johnsville | Y | N | N | Y |
| St. Johnsville Rehabilitation and Nursing Center, Inc. | 7 Timmerman Ave, St Johnsville | Y | N | N | Y |
| Bassett Healthcare St Johnsville | 8 Park Place St. St. Johnsville | Y | N | N | Y |
| OESJ High School | 44 Center St, St. Johnsville | Y | Y | N | Y |
| St. Johnsville Police Department | 16 Washington Street, St. Johnsville | Y | N | N | Y |
| St. Johnsville Fire Dept | 6 West Main Street, St. Johnsville | Y | N | N | Y |
| Community House | 16 Washington St. St. Johnsville | Y | Y | N | Y |
| St. Johnsville Wastewater Treatment Plant | Marina Dr. St Johnsville, NY 13452 | Y | N | Y | Y |
| St Johnsville Cell Tower | 300 Thumb Road | N | N | N | Y |
| Electrical Substation | 61 Hough St | N | N | Y | Y |

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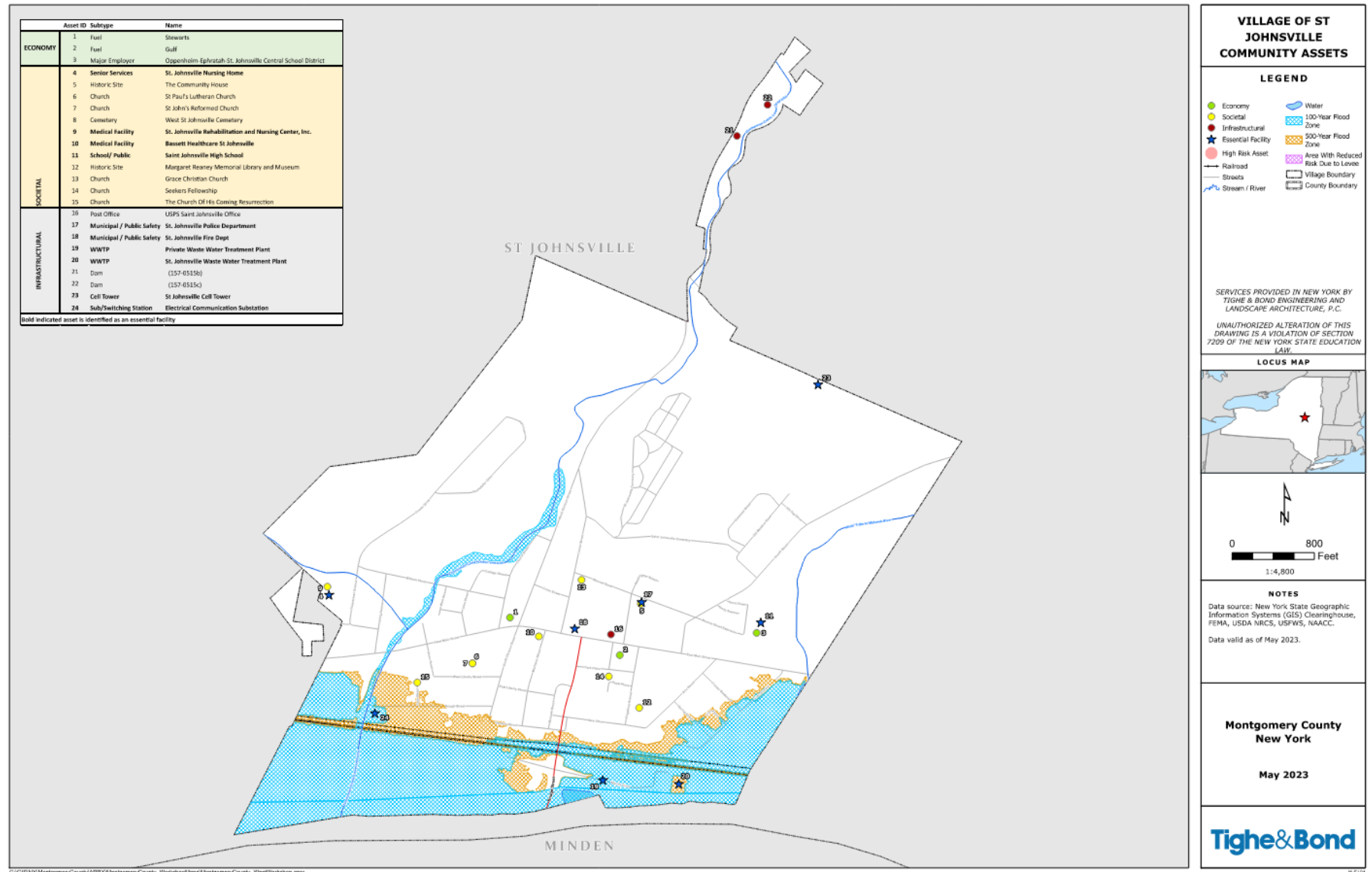


Figure 1. Village of St. Johnsville FEMA Flood Zones, Community Assets and Essential Facilities

2.4 Repetitive Loss and Severe Repetitive Loss Properties

There were no repetitive loss properties in the Village of St. Johnsville in the 2016 HMP. As of 2022, according to FEMA records there was one repetitive loss property identified as a non-residential structure. As of December 31, 2022, 10 policies were in force. The Village of St. Johnsville had a total of 20 claims totaling \$382,014 in losses for all NFIP-insured structures³. It should be noted that according to FEMA data there are 117 structures within the 100-year flood plain (including the Villages of St. Johnsville).

2.5 Vulnerable Assets: Exposure Analysis

Vulnerable assets were identified by intersecting GIS-based asset inventories with known hazard boundaries to determine the numbers of parcels and critical facilities. This results in an estimation of vulnerable assets for the Village, by hazard as shown in Table 4. The estimated value of at risk assets is based on the Village's latest property tax values. Scenarios are not cumulative, i.e., the 0.2% annual chance estimates also do not include the values and numbers of the 1% annual chance event.

Table 4. Village of St. Johnsville Vulnerable Assets Exposure Analysis.⁴

| Hazard | At-Risk All Properties ⁵ | | At-Risk Essential Facilities | | At-Risk Historic Assets | |
|--------------------------|-------------------------------------|--------|------------------------------|--------|-------------------------|--------|
| | Value | Number | Value | Number | Value | Number |
| Hurricane/Tropical Storm | \$121,656,159 | 1,068 | \$9,685,938 | 10 | \$111,563 | 1 |
| Severe Thunderstorm | \$121,656,159 | 1,068 | \$9,685,938 | 10 | \$111,563 | 1 |
| Severe Winter Storm | \$121,656,159 | 1,068 | \$9,685,938 | 10 | \$111,563 | 1 |
| Tornado | \$121,656,159 | 1,068 | \$9,685,938 | 10 | \$111,563 | 1 |
| Flood | | | | | | |
| 1% Annual Chance | \$17,714,773 | 117 | - | 0 | - | 0 |
| 0.2% Annual Chance | \$17,906,222 | 124 | - | 0 | - | 0 |

³ FEMA data does not separate out Village versus Town on NFIP claims

⁴ Values are based on 50% of the assessor's full market value

⁵ Includes Town of St. Johnsville

2.6 Townwide Earthquake Hazus Analysis

The earthquake Hazus 6.0 module uses two earthquake scenarios: an earthquake with a 5.0 magnitude and 500 and 2,500 Mean Year Return periods. Table 5 below presents estimated direct economic loss for damages from earthquakes for the Village of St. Johnsville. The totals include capital stock and economic loss estimates.

Table 5 Village of St. Johnsville Earthquake Vulnerability Analysis*

| Damage Categories | 500-MRP | 2,500-MRP |
|-------------------------------------|-----------|-------------|
| Estimated total number of buildings | 1,068 | 1,068 |
| Total direct building economic loss | \$333,000 | \$4,796,000 |

- Hazus combines the Town and Village of St. Johnsville, values above are for both communities

3. Problem Statements

Problem statements were developed upon the completion and review of all risk assessment tasks. These statements are designed to briefly summarize the key hazard risks and vulnerabilities to the municipality based on potential impacts and losses from future events. They are among the issues of greatest concern and were used to assist in the identification and analysis of potential mitigation actions.

These problem statements will be reviewed and revised as needed during future plan updates to reflect the most current information resulting from the risk assessment.

Table 6. Village of St. Johnsville Problem Statements.

| Problem Area | Description |
|-----------------------------|---|
| Primary Hazards of Concern | |
| Trees | Tree related hazards are widespread during hurricane/tropical storm and severe winter storm events, particularly downing electrical lines, and when falling and blocking roads that isolate many rural areas throughout town and pose life/safety threat due to a lack of emergency access. Hazardous trees on Town-owned property are also a significant and costly concern. |
| Geographic Areas of Concern | |
| Zimmerman Creek | Local Areas of Flooding- Low-lying Areas, Route 5 Bridge on Main Street and bank retaining walls at both bridges over Zimmerman Creek. And along the northern shore of the Mohawk River flood. |
| Mohawk River- North Shore | |
| Vulnerable Community Assets | |
| Shelters | OESJ High School and the Community Center can be used for shelter |
| Bridges | |
| Emergency Service | |

4. Capabilities

The Village of St. Johnsville is a small, sparsely populated community with limited capabilities and resources to support the implementation of hazard mitigation actions. This jurisdictional annex provides some additional documentation on the existing local authorities, policies, programs, and resources to support mitigation and the Town's ability to enhance or build upon these existing capabilities. This includes more detailed information on the updated capability findings for the community as highlighted in Section 7 (Capability Assessment), as well as the identification of some specific opportunities to expand and improve local mitigation capabilities for consideration as potential new actions for Section 8 (Mitigation Strategy). The Village of St. Johnsville completed a FEMA Capabilities Assessment Worksheet detailing information pertaining to capabilities surroundings local and regulatory plans, building codes, permitting, inspections, land use permitting, ordinances, administration, staff, technical resources, funding resources, and programs/organizations which is included in Appendix E and summarized below.

Summary of Local Findings

4.1.1 Planning and Regulatory Capabilities

Planning and regulatory capabilities include the local plans, policies, codes, and ordinances that are relevant to reducing the potential impacts of hazards. The following planning and regulatory capabilities are currently in place for The Village of St. Johnsville:

- Comprehensive/Master Plan – *Updated 2007*
- Local Emergency Response Plan – *County OEM*
- Transportation Plan – *County Transportation Plan*
- Watershed Management Plan – *Mohawk River Watershed Management Plan, 2015*
- Building Codes – *State and local building codes in place and being followed*
- Zoning Ordinance – *Local ZBA, Chapter 275 Zoning.*
- NFIP Flood Damage Prevention Ordinance- *Adopted 1/19/21 as Local Law#1*
- Real Estate Disclosure Requirements – *NYS mandate, Property Condition Disclosure Act, NY Code – Article 14 §460-467.*

Given their direct relevance and significance to long-term hazard risk reduction, all current versions of formally adopted local comprehensive plans, master and environmental planning, environmental resource plans, and open space and recreation plans for participating jurisdictions were reviewed during the plan update process to ensure general consistency and integration as appropriate.

The Village of St. Johnsville has important mitigation capabilities in place that work to reduce hazard risk. This includes the adoption and enforcement of building codes and land use and development ordinances/regulations that support mitigation by ensuring new or substantially improved development projects meet specific standards for public safety and protection from natural hazards. The administration and enforcement of these codes and development regulations are considered

among the most effective and cost-beneficial measures to protect people and future development from the impact of natural hazard events.

4.1.2 Administrative and Technical Capabilities

Administrative and technical capabilities include the local human resources and their skills/tools that can be used to support mitigation activities. The following administrative and technical capabilities are in place for The Village of St. Johnsville:

- Planning Board
- Chief Building Official
- Floodplain Administrator

The Village of St. Johnsville is governed by a Mayor and Village Board. Assisting in governmental operations are, a Zoning Board of Appeals and Planning Board. Also administrative offices. The Village has limited full-time (or in-house) staff resources to support mitigation activities, but these capabilities are considered sufficient given the community's size and relatively lower vulnerability to natural hazards. Village staff are supported by the Town of St. Johnsville and numerous local boards and commissions in addition to auxiliary support staff who are under contract for additional support services. The Emergency Management Office is the managerial function charged with creating the framework within which the community will reduce its vulnerability to hazards and cope with disasters. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

4.1.3 Financial Capabilities

Financial capabilities include the fiscal resources the community has access to for helping to fund the implementation of hazard mitigation projects and related risk reduction activities. The following financial capabilities are in place for The Village of St. Johnsville:

- Capital improvement project funding
- Community Development Block Grant
- Federal Funding
- State Funding

The Village of St. Johnsville has limited financial capabilities due to its size and relatively small income-generating tax base. With no special fees or other local capabilities to raise funds, the community is more reliant on external grant funding and debt financing mechanisms. Limited local funding may be a major constraint as many outside funding sources have local cost-share (cash match) requirements which may be difficult to meet. This lack of financial resources is a concern with regard to the implementation of mitigation projects and related risk reduction activities.

The Village Clerk/Treasurer is responsible for the accounting of all Village funds, maintaining financial records and preparing financial reports. Other responsibilities include assisting with the budget process, assisting with the year-end audit, long term financial planning, handling insurance related

matters, insurance, and the issuance of bonds. The Clerk/Treasurer provides budget monitoring and financial reports to the “Mayor and the Board of Trustees” throughout the fiscal year

4.1.4 Education and Outreach Capabilities

Education and outreach capabilities include the local programs and methods already in place that can be used to support mitigation activities. The following education and outreach capabilities are in place for The Village of St. Johnsville through Montgomery County.

- CERT Team
- Public Education Program
- Natural Disaster Program in Schools
- Citizen Group or Nonprofit Focused on Emergency Preparedness
- Human Services (*outreach/activities for seniors etc.*)
- CodeRed
- Website
- Email Listserv
- Social Media

4.2 NFIP Participation and Compliance

The Village of St. Johnsville has actively participated in the National Flood Insurance Program (NFIP) since 1987. The current effective Flood Insurance Rate Map (FIRM) is dated January 19, 2018. As of December 31, 2022, there are a total of 10 NFIP policies in force. The total annual premium is \$11,912 for a total of \$2,022,600 in coverage. A total of 20 claims amounting to approximately \$382,014 have been paid to NFIP policyholders in the Village of St. Johnsville since joining the program¹³ More information on NFIP-insured structures, including those that have been repetitively damaged by floods, is provided in Section 4 (Risk Analysis) of the HMP and Section 2.4 of this Annex. Table 8 describes the Village of St. Johnsville’s participation and continued compliance in accordance with NFIP requirements and as specified in FEMA’s 2022 Local Mitigation Planning Policy Guide.¹⁴

Table 7. NFIP Participation and Compliance, Village of St. Johnsville.

| REQUIRED INFORMATION | RESPONSE |
|--|---|
| Adoption of NFIP minimum floodplain management criteria via local regulation. | Adopted 2021 via Village of St. Johnsville Local Law #1 Flood Damage Prevention. |
| Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable. | Adopted via the above cited Local Law (Section 3.2 Basis for establishing the area of Special Flood Hazard). The latest effective FIRM is dated January 19, 2018. |

¹³ FEMA NFIP, HUDEX Report, Policy and Loss Data by Community: <https://nfipservices.floodsmart.gov/reports-flood-insurance-data>

¹⁴ Local Mitigation Planning Policy Guide. FEMA. April 2022. P. 26.

| REQUIRED INFORMATION | RESPONSE |
|--|---|
| Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs. | Per the above regulations, the Building Code Enforces of the Village of St. Johnsville administers the provisions of the Floodplain District. The Building Code Enforcer shall have the responsibility and authority to grant or deny flood hazard area permit applications for development in Special Flood Hazard Areas in accordance with this regulation. |
| Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP. | Per the above regulations, the Building Code Enforcer of the Village of St. Johnsville has been formally appointed to implement the requirements of the NFIP through administration of the provisions of the Floodplain District. |
| Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event. | The Town follows the same local permitting process as described above for implementing and enforcing floodplain management regulations following a flood event. Section 2 of the Town's Local Law #1 define substantial improvement/substantial damage as 50% of market value of the structure. |

Minimum standards set forth by FEMA and New York State have been adopted by the Village of St. Johnsville.

The Village of St. Johnsville requires two (2) feet of freeboard for new construction or substantial improvements in special flood hazard areas and prohibits any floodway encroachments that result in any increase in flood levels during occurrence of the base flood.

The Village of St. Johnsville does not participate in the Community Rating System (CRS), however, the Town has considered joining and would attend a CRS seminar if offered locally. CRS participation may not be cost effective based on the Town's limited administrative capabilities and the low number of NFIP policies currently in force.

Additional information on each jurisdiction's floodplain management program and participation in the NFIP is provided in Section 7 (Capability Assessment).

4.2.1 Improvement Opportunities

Despite the limitations and constraints faced by the Village of St. Johnsville when it comes to current hazard mitigation capabilities, it can expand and improve on the capabilities described in Section 7 (Capability Assessment) and this annex. The Town is aware of its strengths and challenges in terms of

mitigating risk. Specific opportunities to address existing gaps or limitations in local capabilities to reduce risk have been identified for each capability type and are further described below. Each of these opportunities were then considered by the Town during the plan update process as potential new mitigation actions to be included in the updated Mitigation Strategy.

Planning and Regulatory Capabilities

- Be opportunistic with further incorporating hazard mitigation and resilience into future or updated versions of the Town's plans, especially as they relate to transportation and environmental policies that can reduce risk and/or provide incentives to infrastructure and development that is located outside of hazard areas or protective ecosystems.

Administrative and Technical Capabilities

- Develop systems or practices that can help the Village to cope with potential unforeseen challenges in the future such as staff turnover or other disruptions to routine government functions and duties that support risk reduction.
- Seek and implement more capacity building initiatives for Village staff as appropriate, including but not limited to continuing education and professional development opportunities.
- Seek more assistance from utility companies to support tree pruning along major roadways throughout town.

Financial Capabilities

- Maximize opportunities through the Village's budgeting and CDBG process to help fund priority hazard mitigation and climate adaptation projects, particularly when combined with alternative/external grant funding sources when a local cost-share increases the Village's chances for a grant award.
- Continue to build and support the capacity of local staff and volunteers to identify and pursue funding made available through external funding programs, particularly those routinely made available to smaller communities through recurring state-level grant programs.
- Continue to coordinate with Montgomery County and neighboring communities in the region as it relates to positioning the Village to pursue and capture future grant funding for regional hazard risk reduction projects.

Education and Outreach Capabilities

- Increase use of the Village's website to support low-cost public education and outreach initiatives on building community resilience to hazards as well as individual mitigation actions for homeowners, business owners, etc.

Possible New Actions Related to NFIP Participation and Compliance

- Formally designate a community Floodplain Administrator (FPA). Current Regulations indicate the Town Code Enforcement Official is responsible for administering the provisions of the Floodplain District.
- The Village should coordinate with the State NFIP Coordinator on possible updates or revisions

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to local floodplain management regulations based on NY DEC's most current Model Floodplain Management Regulations (which are routinely being updated as needed).

- To assist with implementing substantial damage provisions of the NFIP following a destructive hazard event, develop a local post-disaster substantial damage plan.
- St. Johnsville's local Flood Damage Prevention regulations and building code enforcement procedures could be further strengthened to include the following requirements that exceed minimum NFIP standards:
 - Require freeboard (elevation requirements higher than the base flood- currently it is just at or above the base flood)
 - Prohibit or minimize new development in floodplain areas.
 - Prohibit or enforce higher standards for critical facilities subject to flood hazards.
 - Add provisions that protect natural and beneficial functions of floodplains.

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5. Mitigation Actions

Mitigation actions are projects or activities identified to reduce current and future vulnerabilities identified through the process of developing this 2023 Montgomery County HMP Update. The first table in this section identifies the status of the mitigation actions included in the 2016 version of this plan. Besides current status (i.e. completed, in-progress, deferred or deleted), actions brought forward to this 2023 plan are identified in the Keep for Plan Update? column. The second table includes all the actions, and their essential details, for this 2023 Montgomery County HMP Update. These actions were prioritized by the Municipality according to the criteria detailed in the main body of the plan.

Table 8 Status of Previous Mitigation Actions – Village of St. Johnsville.

| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|--|--|--------------------|---|-----------------------|
| 1 | Collect Plastics Bulkhead Restoration on New Street | Bulkhead restoration near the Collect Plastics Company on New Street along the Mohawk River. | Deleted | Collect Plastics has been vacant for many years. It has been purchased and some of the building is being demolished. | NO |
| 2 | Cemetery to Mohawk River Stormwater Management Projects | Stormwater Management System Projects in the Village near the cemetery to the Mohawk River. | Partially Complete | One project completed was the rebuild the storm drain box on New Street with new storm drainpipe. | YES |
| 3 | Zimmerman Creek Channel Restoration Study and Implementation | Zimmerman Creek Channel Restoration – study and incorporation of findings. | Partially Complete | The only work ever done at Zimmerman Creek is anytime there are ice jams. A study was done in 2006 by McDonald Engineering but not sure if any work was completed of the study. | YES |
| 4 | Hazard-Prone Area Retrofitting and Mitigation Initiative | Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Assure that any mitigation addresses the 500-year flood event or “worst damage scenario”. | Deleted | The Village DPW is in the Floodplain, but we do not have anywhere reasonable owned by the Village to move it. | NO |

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| Action # | Action Title | Action Description | Current Status | Status Description/Explanation | Keep for Plan Update? |
|----------|---|---|----------------|--|-----------------------|
| 5 | Mutual Aid Agreements with Neighboring Communities | Create/enhance/maintain mutual aid agreements with neighboring communities. | Deferred | This is currently being tended to through the Multijurisdictional Hazard Mitigation Plan | YES |
| 6 | Hough Street Substation Flood Study and Remediation | Conduct a study of the substation at the end of Hough Street to address why it floods. Identify flood-proofing options and incorporate. | Completed | The flooding occurs on Hough Street due to the snowmobile bridge that needs to be dug out which is owned by the Railroad. | NO |
| 7 | Storm Drainage Upgrade Plan for Rainfall Management | Develop improvement plan for the upgrade of storm drainpipes in areas of concern to handle rainfall, especially in the areas of Lion Avenue, Averill Street, East Main Street, Main Hwy 5. | Deferred | The flooding occurred on Averill due to the runoff from the High school. There is a storm drain from the Highschool that travels down Averill, to Main Street, then to Lion Ave. The drain is too small to handle the amount of water. This would be a very high dollar cost to correct. | YES |
| 8 | St. Johnsville WWTP Flood Vulnerability Assessment and Mitigation Support | The Village of St. Johnsville has evaluated its flood vulnerability and identified feasible mitigation options. Assuring that any mitigation addresses the 500-year flood event or "worst damage scenario." | In Progress | The Village is currently working with Delaware Engineer to correct the current issue of the WWTP being in the floodplain. | YES |
| 9 | Critical Facility Flood Vulnerability Assessment and Mitigation Support | Encourage the owners of the critical facilities identified in Table 9.22-6 to assess the flood vulnerabilities of these facilities and identify feasible mitigation options. Assure that any mitigation addresses the 500- year flood event or "worst damage scenario." | Deferred | Under new administration, this is something we would like to get back on the list of items to complete. | YES |

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Table 9. Updated Mitigation Actions (2023-2028) – Village of St. Johnsville.

| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|--|--|--|----------------------|----------------|---|---|-------------------------|----------|
| 1 | Cemetery to Mohawk River Stormwater Management Projects | Stormwater Management System Projects in the Village near the cemetery to the Mohawk River. | Structural Project | Flood, Severe Storms | High | Potential funding source from NYS Department of State Office of Planning and Development, CDBG Infrastructure Grants, NYSDEC, NYS Canal Corporation | Village of St. Johnsville | 2023-2028 | High |
| 2 | Zimmerman Creek Channel Restoration Study and Implementation | Zimmerman Creek Channel Restoration – study and incorporation of findings. | Natural Resource Protection and Green Infrastructure | Flood, Severe Storms | High | Potential funding source from NYS Department of State Office of Planning and Development, CDBG Infrastructure Grants, NYSDEC, Montgomery County Soil and Water Conservation Service | Village of St. Johnsville | 2023-2028 | High |
| 3 | Mutual Aid Agreements with Neighboring Communities | Enhance and maintain mutual aid agreements with Montgomery County and neighboring communities. | Prevention | All Hazards | Low | Local budget | Village Emergency Management, DPW and Roads | 2023-2028 | Medium |
| 4 | Storm Drainage Upgrade Plan for Rainfall Management | Develop improvement plan for the upgrade of storm drainpipes in areas of concern to handle rainfall, especially in the areas of Lion Avenue, Averill Street, East Main Street, Main Hwy 5. | Property Protection | Flood, Severe Storms | High | Village operating budget, and NYS and Federal Grant Programs | Village DPW | 2023-2028 | High |

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| Action # | Action Title | Action Description | Category of Action | Hazard Addressed | Estimated Cost | Potential Funding Source | Lead Department | Implementation Schedule | Priority |
|----------|---|---|---|----------------------|----------------|---|--------------------|-------------------------|----------|
| 5 | Critical Facility Flood Vulnerability Assessment and Mitigation Support | Village owned WWTP has been evaluated by Delaware Engineering, and a project has been awarded to the Village to begin the needed work | Awareness / Prevention | Flood, Severe Storms | High | Staff Time, FEMA, NYS DHSES | Municipal NFIP FPA | 2023-2028 | High |
| 6 | Critical Facility Flood Vulnerability Assessment and Mitigation Support | Encourage the owners of the critical facilities identified in Table 9.22-6 to assess the flood vulnerabilities of these facilities and identify feasible mitigation options. Assure that any mitigation addresses the 500- year flood event or “worst damage scenario.” | Public Education and Awareness / Prevention | Flood, Severe Storms | Low | Staff Time, FEMA, NYS DHSES, County, Municipality | Municipal NFIP FPA | 2023-2028 | Low |

Capability Assessment Worksheet- Village of St. Johnsville

Planning and Regulatory

| COUNTY TO WORK WITH JURISDICTIONS TO ANSWER | | T&B TO REVIEW OLD ANNEX |
|---|----------------|---|
| Plans | Yes/No Year | Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions? |
| Comprehensive/Master Plan | Yes | |
| Capital Improvements Plan | No | |
| Economic Development Plan | No | |
| Local Emergency Response Plan | Yes | |
| Continuity of Operations Plan | No | |
| Transportation Plan | Yes | |
| Stormwater Management Plan | No | |
| Watershed Management Plan | Yes | |
| Floodplain Management Basin Plan | No | |
| Open Space and Recreation Plan | No | |
| Building Code, Permitting, and Inspections | Yes/No | Are codes adequately enforced? |
| Building Code | Yes | |
| Building Code Effectiveness Grading Schedule (BCEGS) Score | No | |
| Fire department ISO rating | No | |
| Site plan review requirements | No | |
| Land Use Planning and Ordinances | Yes/No | Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced? |
| Zoning ordinance | Yes | |
| Subdivision ordinance | No | |
| NFIP Flood Damage Prevention Ordinance | Yes | Adopted 1/19/21 as Local Law #1 |
| Natural hazard specific ordinance (stormwater, steep slope, wildfire) | No | |
| Flood insurance rate maps | Yes | Effective 1/19/2018 |
| Acquisition of land for open space and public recreation uses | No | |
| Stormwater Management Ordinance | No | |
| Growth Management Ordinance | No | |
| Real Estate Disclosure Requirements | Yes | |

Comprehensive plan, 2007

Via county OEM, Emergency Manager

Not listed in annex

County Transpo Plan

Mohawk Rover Watershed Management Plan, 2015

NOTES FROM 2016 Annex

Via state and local code enforcement, Accept minimum NYS code; have to adopt state building code and can enhance if wanted

NOTES FROM 2016 Annex

Via local ZBA, Chapter 275 Zoning

Via State, realtor - NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467

Administrative and Technical

| Administration | Yes/No | Describe capability Is coordination effective? |
|--|-----------------|--|
| Planning Commission | Yes | |
| Mitigation Planning Committee | No | |
| Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems) | No | |
| Mutual aid agreements | No | |
| Staff | Yes/No FT/PT | Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? |
| Chief Building Official | Yes | |
| Floodplain Administrator | Yes | |
| Emergency Manager | No | |
| Community Planner | No | |
| Civil Engineer | No | |
| GIS Coordinator | No | |
| Other | | |
| Technical | Yes/No | Describe capability Has capability been used to assess/mitigate risk in the past? |
| Warning systems/services (Reverse 911, outdoor warning signals) | No | |
| Hazard data and information | No | |
| Grant writing | No | |
| Hazus analysis | No | |
| Other | | |

NOTES FROM 2016 Annex

NOTES FROM 2016 Annex

Not listed in annex

External consultant?

External consultant?

NOTES FROM 2016 Annex

Not indicated

Financial

| Funding Resource | Access/ Eligibility (Yes/No) | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? | NOTES FROM 2016 Annex |
|--|------------------------------------|--|-----------------------|
| Capital improvements project funding | Yes | | |
| Authority to levy taxes for specific purposes | No | | |
| Fees for water, sewer, gas, or electric services | No | | |
| Impact fees for new development | No | | |
| Storm water utility fee | No | | Not listed |
| Incur debt through general obligation bonds and/or special tax bonds | obligation yes, special no | | |
| Incur debt through private activities | No | | |
| Community Development Block Grant | Yes | | |
| Other federal funding programs | Yes | | |
| State funding programs | Yes | | |
| Hazard Mitigation Grant Programs | No | | |

Education and Outreach

| Program/Organization | Yes/No | Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities? | NOT ADDRESSED IN 2016 ANNEX |
|---|--------|---|-----------------------------|
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | No | | |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | No | | |
| Natural disaster or safety related school programs | No | | |
| StormReady certification | No | | |
| Firewise Communities certification | No | | |
| Public-private partnership initiatives addressing disaster-related issues | No | | |
| Other | | | |