# 2025 Hazard Mitigation Plan

DRAFT

Onondaga County, New York

## Village of Tully Annex

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This Annex details the hazard mitigation elements specific to the Village of Tully, a participating jurisdiction to the 2025 Onondaga County Hazard Mitigation Plan update. This Annex is not intended to be a standalone document but supplements the information contained in **Volume 1 (Countywide Planning Elements)**. Therefore, all sections of **Volume 1** including the planning process, hazard identification and risk assessment, mitigation strategy (includes mitigation goals and objectives), and plan maintenance apply to and were met by the Village of Tully. This Annex provides additional information specific to the Village, with a focus on providing additional details on the hazard risk assessment and mitigation strategy (i.e., mitigation actions) for this community.

# 1. HAZARD MITIGATION LOCAL PLANNING TEAM

The following individuals have been identified as the Village of Tully Local Planning Team for the 2025 Onondaga County Hazard Mitigation Plan. These individuals participated in all aspects of the planning process and developed a risk and vulnerability assessment, capability assessment, and mitigation strategy (including mitigation actions) specific to the jurisdiction.

| Name | Title | Department |
|---|---|---|
| Benjamin Vincent | Code Enforcement Officer | Zoning & Planning Department |
| Mike Hoke | Head | Department of Public Works |

# 2. MUNICIPAL PROFILE

The Village of Tully lies within the Town of Tully on the southern border of Onondaga, approximately 14 miles south of the City of Syracuse, and has a total area of 0.6 square miles. Additionally, the Village is located on the Syracuse, Binghamton, and New York Railway. Tully is on United States Route 11 at the intersection of New York State Route 80. The West Branch Tioughnioga River flows through the Village, further extending to the Tioughnioga River. Approximately 70% of the village has been developed with the remainder of the land vacant or wooded. *The Town of Tully has developed its own dedicated annex as part of this Plan.*

## 2.1. Population

In 2023, the Village of Tully had a population of 990, a 6.3% decrease from the estimated 2018 population of 1,057. **Table 1** summarizes population distribution between 2010 and 2023, and percentage of the 2023 population that is under five (5) years old, over 65 years old, and living below poverty level.

**Table 1. Population Trends**

| Population | | | | Underserved Population | | |
|---|---|---|---|---|---|---|
| **2010[1]** | **2018[2]** | **2023[3]** | **Population Change** *(2018 – 2023)* | **Youth[3]** *(Under 5 years old)* | **Elderly[3]** *(Over 65 years old)* | **Below Poverty Level[4]** |
| 856 | 1,057 | 990 | -6.3% | 6.5% | 20.8% | 16.9% |

[1] United States Census Bureau. (2010). DP05: ACS Demographic and Housing Estimates (2010: 5-Year Estimates Data Profiles). Retrieved from https://data.census.gov/table/ACSDP5Y2010.DP05?g=160XX00US3675627.
[2] United States Census Bureau. (2018). DP05: ACS Demographic and Housing Estimates (2018: 5-Year Estimates Data Profiles). Retrieved from https://data.census.gov/table/ACSDP5Y2018.DP05?g=160XX00US3675627.
[3] United States Census Bureau. (2023). DP05: ACS Demographic and Housing Estimates (2023: 5-Year Estimates Data Profiles). Retrieved from https://data.census.gov/table/ACSDP5Y2023.DP05?g=160XX00US3675627.
[4] United States Census Bureau. (2023). S1701: Poverty Status in the Past 12 Months. Retrieved from https://data.census.gov/table/ACSST5Y2023.S1701?g=160XX00US3675627.

## 2.2. History and Cultural Resources

The Village of Tully was in the former Central New York Military Tract. The community was first settled by outsiders around 1795, and the Village was incorporated in 1875.

# 3. GROWTH/DEVELOPMENT TRENDS

Understanding development trends can help evaluate whether the jurisdiction's vulnerability has increased, decreased, or remained the same. **Table 2** summarizes the total housing units built in the Village of Tully between 2019 and 2023.[5]

**Table 2. Housing Units Built (2019 – 2023)**

| Type | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| Single-Family Units | 1 | 0 | 0 | 1 | 0 |
| Multi-Family Units | 0 | 0 | 0 | 0 | 0 |
| *2-Family Units* | *0* | *0* | *0* | *0* | *0* |
| *3-Family Units* | *0* | *0* | *0* | *0* | *0* |
| *Apartment Units* | *0* | *0* | *4* | *0* | *0* |
| **Total Units** | **1** | **0** | **0** | **1** | **0** |

The Onondaga County Housing Needs Assessment, a component of the County's Comprehensive Plan, explores the County's housing market and its challenges in greater depth and argues that one of the County's greatest housing needs is an improved approach to land use planning. In the Assessment, it is stated that there are similarities and affinities between certain groups of municipalities. Therefore, the County was sub-divided into seven (7) sub-regions, each of which covers multiple municipalities. The municipalities within each sub-region, share sufficient geographic and market characteristics to be treated as a single place for purposes of further understanding the county housing market.

The Village of Tully is under the Rural Countryside sub-region. This sub-region has a greater proportion of married couple families, both elderly (17%) and non-elderly (65%), and relatively fewer single parent families and people living alone. Total household growth between 2000 and 2020 was 8.8% (the average of all the County towns/villages was 12.0%). Growing demand in the County would likely support continued large-lot homebuilding within the towns. Villages, without a clear market for aging housing in mostly remote locations, would slowly continue on their early 20th Century trajectory. If household growth in the towns within this sub-region grew sufficiently, it could encourage development of some additional commercial uses. Under a low-growth scenario, it is likely that the towns within Rural Countryside could continue to add large-lot houses in a rural setting, though construction would likely slow. Market changes would happen gradually, with strong areas remaining strong for a period of time.

**Table 3** summarizes major recent residential/commercial development (in the past five (5) years), and any known or anticipated major residential/commercial development and major infrastructure development, as of December 2024, that is likely to occur within hazard prone areas in the next five (5) years.

[5] Data provided by the Onondaga County Department of Planning based on Real Property Data (2024).

**Table 3. Growth and Development**

| Property or Development Name | Location | Type *(e.g., residential, commercial)* | # of Units/ Structures | Known Hazard Zone(s) | Status of Development |
|---|---|---|---|---|---|
| **Recent Development in the Past Five (5) Years (2019 – 2024)** | | | | | |
| The Town has not experienced significant development in hazard prone areas over the past five (5) years. | | | | | |
| **Known or Anticipated Development in the Next Five (5) Years (2024 – 2029)** | | | | | |
| The Town does not anticipate significant development in hazard prone areas over the next five (5) years. | | | | | |

## 3.1. Changes in Priority

The overall hazard mitigation priorities have not significantly changed for the Village of Tully since the last Plan update. However, mitigation actions from the previous Plan were updated, and a more concerted effort on achieving equitable outcomes for all communities, including underserved communities and socially vulnerable populations, has been implemented.

# 4. CAPABILITY ASSESSMENT

Federal regulations require hazard mitigation plans to identify goals for reducing long-term vulnerabilities to the identified hazards in the planning area (Section 201.6(c)(3)(i)). A critical step in the development of specific hazard mitigation actions and projects is assessing existing authorities, policies, programs, and resources and capabilities to use or modify local tools to reduce losses and vulnerability from profiled hazards.

A capability assessment was conducted for the Village of Tully's authorities, policies, programs, and resources. Goals and mitigation actions were developed using input from this assessment. Information regarding the Village's implementation of and continued participation in the National Flood Insurance Program (NFIP) can be found in Section 5 of this Annex.

The Local Planning Team assessed the Village's capabilities that can contribute to the reduction of long-term vulnerabilities to hazards. The capabilities include the following categories:

- Planning and Regulatory Capabilities
- Administrative and Technical Capabilities
- Fiscal Capabilities
- Education and Outreach Capabilities

Additionally, ways to expand on and improve these existing policies and programs to integrate hazard mitigation into the day-to-day activities and programs of the Village were considered.

## 4.1. Planning and Regulatory Capabilities

**Table 4** includes local ordinances, policies, and laws to manage growth and development (e.g., land use plans, capital improvement plans, transportation plans, emergency preparedness and response plans, building codes, and zoning ordinances).

## Table 4. Planning and Regulatory Tools

| Capability Category | Yes/No | Authority *(local, county, state, federal)* | Responsible Department/ Agency | Code Citation and Comments *(e.g., Code Chapter, name of plan, explanation of authority, etc.)* |
|---|---|---|---|---|
| **Planning Capability** | | | | |
| Comprehensive Plan | Yes | Local | Planning Board | Adopted in July 2023<br><br>Joint Comprehensive Plan with the Town of Tully |
| Capital Improvements Plan | No | N/A | N/A | N/A |
| Floodplain Management / Basin Plan | No | N/A | N/A | N/A |
| Stormwater Management Plan | No | N/A | N/A | N/A |
| Open Space Plan | No | N/A | N/A | N/A |
| Stream Corridor Management Plan | No | N/A | N/A | N/A |
| Watershed Management or Protection Plan | No | N/A | N/A | N/A |
| Economic Development Plan | Yes | Local | Planning Board | Adopted in July 2023<br><br>Joint Comprehensive Plan with the Town of Tully |
| Comprehensive Emergency Management Plan | No | N/A | N/A | N/A |
| Emergency Operation Plan | No | N/A | N/A | N/A |
| Evacuation Plan | No | N/A | N/A | N/A |
| Post-Disaster Recovery Plan | No | N/A | N/A | N/A |
| Transportation Plan | No | N/A | N/A | N/A |
| Strategic Recovery Planning Report | No | N/A | N/A | N/A |
| Climate Adaptation Plan | No | N/A | N/A | N/A |
| Resilience Plan | No | N/A | N/A | N/A |
| **Regulatory Capability** | | | | |
| Building Code | Yes | State, Local | Zoning & Planning Department | Chapter 16 of the New York State Building Code |
| Zoning Ordinance | Yes | Local | Zoning & Planning Department | Chapter 112 of the Village Code |

| Capability Category | Yes/No | Authority *(local, county, state, federal)* | Responsible Department/ Agency | Code Citation and Comments *(e.g., Code Chapter, name of plan, explanation of authority, etc.)* |
|---|---|---|---|---|
| Subdivision Ordinance | Yes | Local | Zoning & Planning Department | Chapter 95 of the Village Code |
| NFIP Flood Damage Prevention Ordinance | Yes | Local | Zoning & Planning Department | Chapter 59 of the Village Code |
| NFIP: Cumulative Substantial Damages | Yes | Local | Zoning & Planning Department | Chapter 59 of the Village Code |
| NFIP: Freeboard | Yes | State, Local | Zoning & Planning Department | Chapter 16 of the New York State Building Code<br><br>State mandated two (2) feet above the BFE for all construction, both residential and non-residential. |
| Growth Management Ordinances | No | N/A | N/A | N/A |
| Site Plan Review Requirements | Yes | Local | Joint Planning Board | Chapter 112-18 of the Village Code |
| Stormwater Management Ordinance | No | N/A | N/A | N/A |
| Municipal Separate Storm Sewer System (MS4) | No | N/A | N/A | N/A |
| Natural Hazard Ordinance | No | N/A | N/A | N/A |
| Post-Disaster Recovery Ordinance | No | N/A | N/A | N/A |
| Real Estate Disclosure Requirement | Yes | State | New York State Department of State, Real Estate Agent | New York Code – Article 14 §460-467 (Property Condition Disclosure Act) |
| Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope]) | No | N/A | N/A | N/A |

## 4.2. Administrative and Technical Capabilities

The administrative and technical capabilities, listed in **Table 5**, include community (i.e., public and private) staff and their skills and tools, which can be used for mitigation planning and implementation. This capability includes engineers, planners, emergency managers, Geographic Information System (GIS) analysts, building inspectors, grant writers, and floodplain managers. Small communities may rely on other government entities, such as counties or special districts, for resources.

**Table 5. Administrative and Technical Capabilities**

| Capability | Yes/No | Position/Department/Agency |
|---|---|---|
| **Administrative Capability** | | |
| Planning Board | Yes | Joint Planning Board with the Town of Tully |
| Mitigation Planning Committee | No | N/A |
| Environmental Board/Commission | No | N/A |
| Open Space Board/Committee | No | N/A |
| Economic Development Commission/Committee | No | N/A |
| Maintenance programs to reduce risk | Yes | Department of Public Works |
| Mutual aid agreements | No | N/A |
| **Technical/Staffing Capability** | | |
| Planner(s) or engineer(s) with knowledge of land development and land management practices | Yes | Consultant |
| Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure | Yes | Consultant |
| Planners or engineers with an understanding of natural hazards | Yes | Consultant |
| NFIP Floodplain Administrator | Yes | Code Enforcement Officer, Zoning & Planning Department |
| Surveyor(s) | No | N/A |
| Personnel skilled or trained in GIS applications | No | N/A |
| Scientist familiar with natural hazards | No | N/A |
| Warning systems/services | Yes | Onondaga County Emergency Communications (911) |
| Emergency Manager | No | N/A |
| Grant writer(s) | No | N/A |
| Staff with expertise or training in benefit/cost analysis | No | N/A |
| Professionals trained in conducting damage assessments | No | N/A |

## 4.3. Fiscal Capabilities

**Table 6** contains a list of fiscal capabilities available to the Village that may be used to implement mitigation activities to reduce risk and enhance resiliency. This capability includes available funding sources from local budgets, state and federal grants, potential cost-sharing arrangements with private entities, existing insurance policies, and the ability to generate additional revenue through fees and bonds related to mitigation.

**Table 6. Fiscal Capabilities**

| Financial Resources | Accessible or Eligible to Use |
|---|---|
| Community Development Block Grants (CDBG, CDBG-DR) | Yes |

| Financial Resources | Accessible or Eligible to Use |
|---|---|
| Federal Hazard Mitigation Assistance Program *(i.e., Hazard Mitigation Grant Program (HMGP), HMGP Post Fire, Building Resilient Infrastructure and Communities (BRIC), Flood Mitigation Assistance (FMA) Program)* | Yes |
| Capital Improvements Project Funding | Yes |
| Authority to Levy Taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater Utility Fee | No |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state funding programs | Yes |
| Open Space Acquisition funding programs | No |

## 4.4. Education and Outreach Capabilities

**Table 7** lists the Village's education and public outreach capabilities that can be used to inform residents about potential hazards, educate on mitigation strategies, and encourage proactive actions to reduce the community's impacts to disasters. These capabilities include fire safety programs, hazard awareness campaigns, public information, and communications offices.

**Table 7. Education and Outreach Resources**

| Resource | Yes/No | Position/Department/Agency |
|---|---|---|
| Public Information Officer | No | N/A |
| Personnel skilled or trained in website development | Yes | Supervisor Department |
| Hazard mitigation information available on the jurisdiction's website | No | N/A |
| Utilize social media for hazard mitigation education | No | N/A |
| Citizen boards or commissions that address issues related to hazard mitigation | No | N/A |
| Other programs already in place that could be used to communicate hazard-related information | Yes | *Monthly newsletter (mailed to residents), Town Website* |
| An established warning system for hazard events | Yes | Fire Department *(via message boards)*<br>Onondaga County Emergency Communications (911) |

## 4.5. Community Classifications

The community classification relates to the community's ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community's

capabilities in all phases of emergency management (i.e., preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. **Table 8** summarizes classifications for community programs available to the Village of Tully.

**Table 8. Community Classifications**

| Program | Yes/No | Classification *(if applicable)* | Date Classified *(if applicable)* |
|---|---|---|---|
| Community Rating System (CRS) | No | N/A | N/A |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | N/A | N/A |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | N/A | N/A |
| New York State Department of Environmental Conservation Climate Smart Community | No | N/A | N/A |
| Storm Ready Certification | No | N/A | N/A |
| Firewise Communities classification | No | N/A | N/A |
| Natural disaster/safety programs in/for schools | No | N/A | N/A |
| Organizations with mitigation focus (advocacy group, non-government) | Yes | - | - |
| Public private partnership initiatives addressing disaster-related issues | No | N/A | N/A |

## 4.6. Self-Assessment of Capability

The community classification relates to the community's ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as an indicator of the community's capabilities in all phases of emergency management (i.e., preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. **Table 9** summarizes classifications for community programs available to the Village of Tully.

**Table 9. Self-Assessment Capability for the Municipality**

| Capability Area | Degree of Hazard Mitigation Capability | | |
|---|---|---|---|
| | ***Limited*** *(If limited, what are your obstacles?)* | ***Moderate*** | ***High*** |
| Planning and Regulatory Capabilities | | **X** | |
| Administrative and Technical Capabilities | **X** *(Limited training)* | | |
| Fiscal Capabilities | **X** *(Limited staff and funding)* | | |
| Education and Outreach Capabilities | **X** *(Limited staff and funding)* | | |
| Community Political Capabilities | | **X** | |
| Community Resiliency Capabilities | | **X** | |
| Capability to integrate mitigation into municipal processes and activities | | **X** | |

## 4.7. Needs to Expand/Improve Capabilities

Based on the capability self-assessment in Section 4.6, the Village of Tully identified existing authorities, policies, programs, funding, and/or resources that need to be expanded and/or improved in order to support the implementation of the hazard mitigation initiatives identified in this Plan (e.g., mitigation actions).

- In order to increase the Village's capability to implement hazard mitigation, apply for hazard mitigation grants, and fund the local match for hazard mitigation grants, the Village needs to expand its grant writing capabilities by potentially hiring more grant writers.
- Village codes and ordinances (e.g., building, zoning, protecting steep slopes, wetlands) should be reviewed based on developing trends in identified hazards and mitigation measures that can make them more effective at preventing losses.

# 5. NATIONAL FLOOD INSURANCE PROGRAM

The Village of Tully is a member of the National Flood Insurance Program (NFIP) but has chosen to not participate in the NFIP Community Rating System (CRS) Program. The Village is in good standing with the NFIP through adoption and enforcement of floodplain management requirements (e.g., regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community. The Village's NFIP participation information is listed in **Table 10**.

**Table 10. NFIP Participation Information**

| CID | NFIP Participation Date | Current Effective FIRM Date | CRS Entry Date | CRS Current Effective Date | CRS Rating |
|---|---|---|---|---|---|
| 361552 | 10/18/1974 | 11/4/2016 | N/A | N/A | N/A |

## 5.1. NFIP Floodplain Administrator

All NFIP participating jurisdictions have a designated Floodplain Administrator that is charged with enforcing floodplain regulations, routinely monitoring the floodplains, and providing community assistance such as encouraging owners to maintain flood insurance. The Village of Tully Floodplain Administrator information is listed in **Table 11**.

**Table 11. Floodplain Administrator**

| Name | Title | Department | Phone Number |
|---|---|---|---|
| Benjamin Vincent | Code Enforcement Officer | Zoning & Planning Department | (315) 696-4693 (Ext. 19) |

## 5.2. Repetitive Loss and Severe Repetitive Loss Property

FEMA defines a Repetitive Loss property as an NFIP-insured property meeting at least one (1) of the following paid loss criteria since 1978, regardless of any changes in ownership:

- Four (4) or more separate claims payments greater than $5,000 each (including building and contents payment).
- Two (2) or more separate flood insurance claims payments (building payments only), where the total of the payments is greater than the property's current value.

Additionally, to receive a designation, at least two (2) of the claim payments must occur within 10 years of one another.[6]

A Severe Repetitive Loss property is defined by FEMA as any NFIP-insured single-family or multi-family residential building meeting at least one (1) of the following paid loss criteria since 1978 or from building constructed after 1978, regardless of any changes in ownership:[7]

- That has incurred flood-related damage for which four (4) or more separate claims payments have been made, with the amount of each claim (including building and contents payments) exceeding $5,000, and with the cumulative amount of such claims payments exceeding $20,000.
- For which at least two (2) separate claims payments (building payments only) have been made under such coverage, with the cumulative amount of such claims exceeding the market value of the building.

**Table 12** summarizes FEMA Repetitive Loss and Severe Repetitive Loss properties within the Village of Tully.

**Table 12. Repetitive Loss and Severe Repetitive Loss Properties**

| Repetitive Loss Properties | | Severe Repetitive Loss Properties | |
|---|---|---|---|
| *Total* | *Occupancy* | *Total* | *Occupancy* |
| 0 | -- | 0 | -- |

***Occupancy Type:*** *Single Family = Single family residence • Two (2)-Four (4) Unit Residential Building = Two (2)-four (4) unit residential building • More Than Four (4) Units Residential Building = Residential building with more than four (4) units • Non-Residential Building = Non-residential building • Non-Residential Business = Non-residential business • Single Family Residential Building = Single-family residential building with the exception of a mobile home or a single residential unit within a multi-unit building • Residential (2, 3, or 4 units) Non-Condo Building = Residential non-condo building with two (2), three (3), or four (4) units seeking insurance on all units • Residential (5 or more units) Non-Condo Building = Residential non-condo building with 5 or more units seeking insurance on all units • Residential Mobile/Manufactured Home = Residential mobile/manufactured home • Residential Condo Association = Residential condo association seeking coverage on a building with one (1) or more units • Single Residential Unit = Single residential unit within a multi-unit building • Non-Residential Mobile/manufactured Home = Non-residential mobile/manufactured home • Non-Residential Building = Non-residential building • Non-Residential Unit = Non-residential unit within a multi-unit building*

**Table 13** summarizes the NFIP active policies and coverage in force data for the Village of Tully.

**Table 13. NFIP Policies**

| NFIP Policies | Insurance in Force | Total Claims Paid | Sum of Claims Paid |
|---|---|---|---|
| 1 | $1,069 | 0 | $0 |

## 5.3. Participation Activities

The Village of Tully NFIP participation over the last five (5) years includes the following:

- Provides the following services – permit review, GIS, inspections, and engineering capability.
- Enforces local floodplain regulations and monitors compliance.

[6] Federal Emergency Management Agency, National Flood Insurance Program. (2023). A Policyholder's Guide to Severe Repetitive Loss. Retrieved from https://agents.floodsmart.gov/sites/default/files/fema_nfip-policyholders-guide-severe-repetitive-loss_brochure_07-2023.pdf.

[7] Federal Emergency Management Agency, National Flood Insurance Program. (2021). National Flood Insurance Program: Flood Insurance Manual. Retrieved from https://www.fema.gov/sites/default/files/documents/fema_nfip-all-flood-insurance-manual-apr-2021.pdf.

- Floodplain management regulations meet or exceed FEMA or State minimum requirements.

### 5.3.1. Regulatory

#### Flood Damage Prevention Ordinance

The Village of Tully's Flood Damage Prevention Chapter *(Chapter 59 of the Village Code)* was adopted to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities.
- Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
- Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters.
- Control filling, grading, dredging and other development which may increase erosion or flood damages.
- Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.
- Qualify for and maintain participation in the NFIP.

The objectives of this Chapter are to:

- Protect human life and health.
- Minimize expenditure of public money for costly flood control projects.
- Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.
- Minimize prolonged business interruptions.
- Minimize damage to public facilities and utilities, such as water and gas mains, electric, telephone, and sewer lines, streets and bridges located in areas of special flood hazard.
- Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas.
- Provide that developers are notified that property is in an area of special flood hazard.
- Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

#### Substantial Damage

*Substantial damage* means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred. *Substantial damage* also means flood related damages sustained by a structure on two (2) separate occasions during a 10 year period for which the cost of repairs at the time of such flood event, on the average, equals or exceeds 25% of the market value of the structure before the damage occurred. *(Chapter 59 of the Village Code)*

### Substantial Improvement

*Substantial improvement* means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the "start of construction" of the improvement. The term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either:

A. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or

B. Any alteration of an "historic structure," provided that the alteration will not preclude the structure's continued designation as an "historic structure." *(Chapter 59 of the Village Code)*

### Cumulative Substantial Improvement

*Cumulative substantial improvement* means any reconstruction, rehabilitation, addition, or other improvement of a structure that equals or exceeds 50% of the market value of the structure at the time of the improvement or repair when counted cumulatively for 10 years. *(Chapter 59 of the Village Code)*

There are other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements.

# 6. HAZARD MITIGATION PLAN INTEGRATION

In order for a community to successfully reduce long term risk, hazard mitigation must be integrated into day-to-day planning mechanisms and initiatives. Plan integration is the process by which communities critically assess the existing planning framework and align efforts with the goal of reducing long term risks and building a more resilient community. It involves a two (2) way exchange of information and incorporation of ideas and concepts between hazard mitigation plans and other community plans. In particular, plan integration involves the incorporation of hazard mitigation principles and actions into other plans, and planning mechanisms into hazard mitigation plans. Plan integration involves community plans, policies, codes, and programs that guide development, roles, and responsibilities in implementing these capabilities. Additionally, plan integration is achieved through the involvement of key staff and community officials in collaborative hazard mitigation planning.

## 6.1. Existing Plan Integration

A hazard mitigation plan must explain how the jurisdiction incorporated the previous Plan update over the last five (5) years to demonstrate progress in local mitigation efforts. In the performance period since the adoption of the previous Hazard Mitigation Plan, the Village of Tully made progress on integrating components of the hazard mitigation strategy (e.g., goals, objectives, and actions) into planning initiatives and mechanisms. **Table 14** highlights the planning mechanisms/initiatives where the previous Plan was integrated and what information was integrated.

**Table 14. Current Plan Integration**

| Planning Initiative | Current Integration Description |
|---|---|
| Comprehensive Plan | The Village's Comprehensive Plan (joint Plan with the Town of Tully), last updated in 2023, integrates hazard mitigation by aligning the mitigation actions from the Hazard Mitigation Plan with the vision and goals of the Comprehensive Plan. Recommended hazard mitigation projects mentioned in the Comprehensive Plan include increasing the capacity of drainage systems, increasing coordination between the Town and Village of Tully, creating a drought outreach program, updating local emergency plans, and others. Furthermore, the Hazard Mitigation Plan is referenced throughout the Comprehensive Plan. |
| Ordinances | The Village has multiple local ordinances pertaining to the mitigation of hazards. These ordinances include the establishment of the Joint Planning Board (joint Board between the Town of Tully) and Zoning Board of Appeals, Flood Damage Prevention Ordinance (Chapter 59 of the Village Code), Zoning Ordinance (Chapter 112 of the Village Code), and the Subdivision Regulations (Chapter 95 of the Village Code). |
| Public Outreach | The Village's website provides information related to safety and hazard mitigation including local emergency response contact information, current project information, links to hazard mitigation planning efforts, annual drinking water quality reports, and links to related ordinances and plans. The Village also utilizes the *Tully Newsletter* to inform residents of natural hazards. |

## 6.2. Potential Future Integration

A hazard mitigation plan must explain how the jurisdiction intends to incorporate this Plan update into planning mechanisms over the next five (5) years. The capability assessment presented in Section 4 of this Annex identifies codes, plans, and programs that provide opportunities for integration. **Table 15** outlines planning mechanisms/initiatives that do not currently integrate goals and recommendations of this Plan but provide opportunities to do so in the future.

**Table 15. Potential Future Integration**

| Planning Initiative | Potential Integration Description |
|---|---|
| Emergency Plan | Updates to existing plans and development of new plans could include information on natural hazard risk and refer to the Hazard Mitigation Plan, as applicable. |
| Ordinances | Hazard mitigation could be integrated into future updates of the zoning, building, and subdivision ordinances to inform appropriate use of property within the Village. Portions of this Hazard Mitigation Plan should be reviewed to consider any future improvements of the codes, if appropriate. |
| Local Budget | The Village could add a line item for mitigation projects/activities in the municipal budget and/or capital improvement budget. |
| Public Outreach | The Village could develop outreach and education programs, and include information on natural hazards and hazard mitigation on the Village's website. *Refer to mitigation actions VT-1 and VT-10.* |

The Village's Local Planning Team will identify all relevant planning initiatives that are scheduled to be updated in the next year and during the annual update process of the Hazard Mitigation Plan. Additionally, opportunities to integrate key elements of the Hazard Mitigation Plan, specifically any relevant strategies, into the planning initiatives will be identified by the Local Planning Team. Mitigation actions were identified to promote plan integration in future revisions of this Plan.

## 7. SIGNIFICANT HAZARD PAST EVENTS

A complete risk assessment, including past incidents, for each identified hazard of concern can be found in **Volume 1** of this Plan. A summary of past events is provided under each hazard profiles and includes a chronology of events that have affected the County and its municipalities.

## 8. HAZARD VULNERABILITY AND IMPACT ASSESSMENT

Exposure and vulnerability to certain hazards affect the entire County and others are geographically defined. Although the entire County may be vulnerable to these hazards, their impacts may vary based on existing community conditions (e.g., underserved, or functional access needs populations may be more susceptible based on certain conditions, vulnerabilities, or needs).

**Table 16** outlines the ***unique vulnerabilities and impacts*** for the Village of Tully and only addresses the hazards that are relevant and unique to the jurisdiction. A complete risk assessment for each identified hazard of concern is in **Volume 1** of this Plan. Hazard mapping can be found in **Appendix A** of this Annex.

**Table 16. Hazard Vulnerability and Impact Assessment**

| Hazard | Vulnerabilities and Impacts |
|---|---|
| **Drought** | The Village's water supply relies on the local aquifer, the sole source of water for the entire community. Aquifers are extremely vulnerable to drought events because water levels can decrease due to lack of rainfall and the water quality can be impacted. |
| **Earthquake** | The Local Planning Team determined that the Village does not have unique vulnerabilities and impacts to earthquake events; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County. |
| **Heat Wave/Extreme Heat** | Heat wave/extreme heat events could lead to drought which in turn impacts the local aquifer which is the sole source of water for the Village. Furthermore, the elderly population within the Village (20.8%) is uniquely vulnerable to heat wave/extreme heat events because of their reduced ability to regulate body temperature. Many elderly individuals have pre-existing conditions that can exacerbate the impacts of extreme heat and/or are taking medication that interferes with their body's temperature control. |
| **Flood** *(riverine, flash/urban, ice jam, dam and levee failure)* | The Local Planning Team determined that the Village does not have unique vulnerabilities and impacts to flooding; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County. |
| **Geological Hazards** *(landslides, land subsidence, mudboils)* | The Local Planning Team determined that the Village does not have unique vulnerabilities and impacts to geological hazards; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County. |
| **Harmful Algal Bloom** | The Local Planning Team determined that the Village does not have unique vulnerabilities and impacts to harmful algal bloom; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County. |
| **Invasive Species and Infestation** *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)* | The Local Planning Team determined that the Village does not have unique vulnerabilities and impacts to invasive species and infestation; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County. |

| Hazard | Vulnerabilities and Impacts |
|---|---|
| **Severe Weather** *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)* | The Local Planning Team determined that the Village does not have unique vulnerabilities and impacts to severe weather; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County. |
| **Winter Weather** *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)* | The Village of Tully is at a higher elevation with areas of steep slope; therefore, white out conditions can occur and damage to trees and utility lines is possible during winter weather events. Damage to utility lines can cause power outages which can uniquely impact the vulnerable population (e.g., elderly, children, electrically dependent). Furthermore, if downed power lines and trees are blocking a road, emergency services may not be able to access the community in a timely manner. |
| **Wildfire** *(wildfire smoke)* | The Local Planning Team determined that the Village does not have unique vulnerabilities and impacts to wildfire; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County. |

The Village evaluated whether vulnerability in hazard prone areas had increased, decreased, or remained the same for each natural hazard identified in this Hazard Mitigation Plan. Climate change, changes in population, infrastructure expansion, and economic shifts that can affect vulnerability were considered. For example, if planned development is in an identified hazard areas or is not built to the updated building codes, it may increase the community's vulnerability to future hazards and disasters. On the other hand, if development occurred with mitigation practices in place, the vulnerability may have remained the same or decreased. Additionally, shifting demographics (e.g., underserved population) were taken into consideration.

**Table 17** outlines if climate change has increased or decreased the Village's vulnerability (i.e., exposure) and impact to each natural hazard over the past five (5) years, and the effect of climate change in the future probability of occurrence and impacts from each natural hazard.

**Table 17. Climate Change Current and Future Vulnerability and Impact**

| Hazard | Vulnerability and Impact |
|---|---|
| ***Current Vulnerability and Impact*** | |
| Drought | Increased |
| Earthquake | Remained the Same |
| Heat Wave/Extreme Heat | Increased |
| Flood *(riverine, flash/urban, ice jam, dam and levee failure)* | Remained the Same |
| Geological Hazards *(landslides, land subsidence, mudboils)* | Remained the Same |
| Harmful Algal Bloom | Remained the Same |
| Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)* | Remained the Same |
| Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)* | Increased |
| Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)* | Remained the Same |
| Wildfire *(wildfire smoke)* | Remained the Same |
| ***Future Vulnerability and Impact*** | |
| Drought | Increase |
| Earthquake | No Change Anticipated |

| Hazard | Vulnerability and Impact |
|---|---|
| Heat Wave/Extreme Heat | No Change Anticipated |
| Flood *(riverine, flash/urban, ice jam, dam and levee failure)* | No Change Anticipated |
| Geological Hazards *(landslides, land subsidence, mudboils)* | No Change Anticipated |
| Harmful Algal Bloom | No Change Anticipated |
| Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)* | No Change Anticipated |
| Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)* | Increase |
| Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)* | No Change Anticipated |
| Wildfire *(wildfire smoke)* | No Change Anticipated |

**Table 18** outlines if changes in population within the Village over the past five (5) years have increased or decreased the vulnerability (i.e., exposure) and impact to these natural hazards, and the anticipated effects changes in population may have on the future probability of occurrence and impacts from these natural hazards.

**Table 18. Changes in Population Current and Future Vulnerability and Impact**

| Hazard | Vulnerability and Impact |
|---|---|
| ***Current Vulnerability and Impact*** | |
| Drought | Remained the Same |
| Earthquake | Remained the Same |
| Heat Wave/Extreme Heat | Remained the Same |
| Flood *(riverine, flash/urban, ice jam, dam and levee failure)* | Remained the Same |
| Geological Hazards *(landslides, land subsidence, mudboils)* | Remained the Same |
| Harmful Algal Bloom | Remained the Same |
| Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)* | Remained the Same |
| Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)* | Remained the Same |
| Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)* | Remained the Same |
| Wildfire *(wildfire smoke)* | Remained the Same |
| ***Future Vulnerability and Impact*** | |
| Drought | No Change Anticipated |
| Earthquake | No Change Anticipated |
| Heat Wave/Extreme Heat | No Change Anticipated |
| Flood *(riverine, flash/urban, ice jam, dam and levee failure)* | No Change Anticipated |
| Geological Hazards *(landslides, land subsidence, mudboils)* | No Change Anticipated |
| Harmful Algal Bloom | No Change Anticipated |
| Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)* | No Change Anticipated |

| Hazard | Vulnerability and Impact |
|---|---|
| Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)* | No Change Anticipated |
| Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)* | No Change Anticipated |
| Wildfire *(wildfire smoke)* | No Change Anticipated |

**Table 19** outlines if development over the past five (5) years has increased or decreased the Village's vulnerability (i.e., exposure) and impact to these natural hazards, and the anticipated effects changes in development may have on the future probability of occurrence and impacts from these natural hazards.

**Table 19. Changes in Development Current and Future Vulnerability and Impact**

| Hazard | Vulnerability and Impact |
|---|---|
| ***Current Vulnerability and Impact*** | |
| Drought | Remained the Same |
| Earthquake | Remained the Same |
| Heat Wave/Extreme Heat | Remained the Same |
| Flood *(riverine, flash/urban, ice jam, dam and levee failure)* | Remained the Same |
| Geological Hazards *(landslides, land subsidence, mudboils)* | Remained the same |
| Harmful Algal Bloom | Remained the Same |
| Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)* | Remained the Same |
| Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)* | Remained the Same |
| Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)* | Remained the Same |
| Wildfire *(wildfire smoke)* | Remained the Same |
| ***Future Vulnerability and Impact*** | |
| Drought | No Change Anticipated |
| Earthquake | No Change Anticipated |
| Heat Wave/Extreme Heat | No Change Anticipated |
| Flood *(riverine, flash/urban, ice jam, dam and levee failure)* | No Change Anticipated |
| Geological Hazards *(landslides, land subsidence, mudboils)* | No Change Anticipated |
| Harmful Algal Bloom | No Change Anticipated |
| Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)* | No Change Anticipated |
| Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)* | No Change Anticipated |
| Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)* | No Change Anticipated |
| Wildfire *(wildfire smoke)* | No Change Anticipated |

## 8.1. Future Major Assets

Community assets should include anything that is important to the character and function of a community. Assets include people (i.e., underserved population); structures (i.e., new and existing buildings); community lifelines and other critical facilities; natural, historic, and cultural resources; and the economy and other activities that have value to the community. Although all assets may be affected by the hazards identified in this Hazard Mitigation Plan, the jurisdiction identified future major assets that may be more vulnerable and impacted by these hazards.

- The Village anticipates that the new Tractor Supply store may be exposed or vulnerable to future erosion, and potential geological hazards and earthquakes due to the hill being cut into for the building's location.
- Any new assets (e.g., new construction in hazard prone areas) will be constructed to adhere to the latest building codes and standards, and mitigation to protect them from identified and anticipated hazards, especially those that are expected to increase due to climate change.

# 9. CRITICAL FACILITIES FLOOD RISK

New York State Department of Environmental Conservation (NYSDEC) Title 6, Chapter V, Subchapter A, Part 502 sets forth local floodplain management criteria for State projects located within flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless built according to certain mitigation specifications, including being raised two (2) feet above the Base Flood Elevation (BFE).[8] While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding.

Jurisdictions must identify all critical facilities, assess their vulnerabilities, and evaluate and ensure they are protected to a 0.2% chance (500-year) flood event. Critical facilities that are located in an SFHA and/or have been previously flooded, must be protected against a repeat of that flood or to the 0.2% chance flood event, which ever provides the greater protection. The Plan must document those critical facilities are protected to a 0.2% flood event, or previous worst case flood event. For those that do not meet this level of protection, the Plan must include a mitigation action to meet or go beyond this criterion or explain why it is not feasible to do so.[9]

**Table 20** identifies critical facilities in the community located in the 100-year and 500-year floodplain.

[8] New York State Department of Environmental Conservation. (n.d.). Chapter V – Resource Management Services. Retrieved from https://dec.ny.gov/regulatory/regulations/chapter-v.
[9] New York State Division of Homeland Security and Emergency Services. (2022). 2022 New York State Hazard Mitigation Planning Standards. Retrieved from https://www.dhses.ny.gov/system/files/documents/2023/11/2022-nys-mitigation-planning-standards-final.pdf

**Table 20. Potential Flood Losses to Critical Facilities**

| Name | Type | Exposure | | Potential Loss from 100-Year Flood Event | | Addressed by Proposed Action |
|---|---|---|---|---|---|---|
| | | *100-Year* | *500-Year* | *% Structure Damage* | *% Content Damage* | |
| Verizon Facility | Major Communication Facility | X | X | - | - | VT-9 |
| Tully Sewage Treatment Plant *(owned by Onondaga County Department of Water Environment Protection)** | Wastewater Treatment Plant | X | X | 0% | 0% | - |
| ** **NOTE:** The Tully Sewage Treatment Plant has already been mitigated for flooding; therefore, no mitigation action has been identified for this critical facility in this Plan.* | | | | | | |

## 10. HAZARD RISK RANKING

**Table 21** presents the local hazard ranking for the Village of Tully of all hazards of concern listed in **Volume 1** of this Plan. This ranking summarizes how hazards vary for this jurisdiction. As thoroughly described in **Volume 1** of this Plan, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy. For further details on how the probability, extent, vulnerability, and impact factors in **Table 21** were calculated, please refer to Section 4.3 in **Volume 1** of this Plan.

It is important to note that the sub hazards for severe weather (i.e., strong winds/damaging winds, severe thunderstorms, tropical storm/hurricane, hail, and tornado), geological hazards (i.e., landslide, land subsidence, and mudboils), flood (i.e., riverine/creek flooding and ice jam, and urban/flash flooding), and winter weather (i.e., blizzards, lake effect snow, nor'easter, and ice storm, and cold wave/extreme cold) were individually ranked in the hazard risk ranking; however, severe weather, geological hazards, flood, and winter weather are each considered as the main hazard throughout this Annex and **Volume 1**.

**Table 21. Village of Tully Hazard Risk Ranking**

| Hazard Event | Probability Factor | Sum of Weighted Extent Factors | Sum of Weighted Vulnerability Factors | Sum of Weighted Impact Factors | Consequence Score | Total Risk Score *(Probability x Consequence)* |
|---|---|---|---|---|---|---|
| Winter Weather (Blizzards, Lake Effect Snow, Nor'easter, Ice Storm) | 3 | 12 | 14 | 21 | 47 | 67 |
| Severe Thunderstorm *(Severe Weather)* | 3 | 12 | 16 | 14 | 42 | 61 |
| Strong Winds/ Damaging Winds *(Severe Weather)* | 3 | 12 | 11 | 16 | 39 | 57 |
| Drought | 2 | 15 | 12 | 22 | 49 | 49 |
| Cold Wave/Extreme Cold *(Winter Weather)* | 2 | 12 | 14 | 21 | 47 | 48 |

| Hazard Event | Probability Factor | Sum of Weighted Extent Factors | Sum of Weighted Vulnerability Factors | Sum of Weighted Impact Factors | Consequence Score | Total Risk Score *(Probability x Consequence)* |
|---|---|---|---|---|---|---|
| Flood (Riverine/Creek, Ice Jam) | 2 | 9 | 6 | 24 | 39 | 41 |
| Landslide *(Geological Hazards)* | 2 | 9 | 6 | 23 | 38 | 40 |
| Flood (Urban/Flash Flood) | 2 | 9 | 6 | 23 | 38 | 40 |
| Heat Wave/Extreme Heat | 2 | 6 | 11 | 18 | 35 | 37 |
| Harmful Algal Bloom | 2 | 9 | 6 | 16 | 31 | 33 |
| Mudboils *(Geological Hazards)* | 2 | 9 | 6 | 16 | 31 | 33 |
| Invasive Species and Infestation | 2 | 6 | 6 | 17 | 29 | 32 |
| Land Subsidence *(Geological Hazards)* | 2 | 9 | 6 | 14 | 29 | 32 |
| Tropical Storm/Hurricane *(Severe Weather)* | 1 | 9 | 16 | 24 | 49 | 27 |
| Dam and Levee Failure *(Flood)* | 1 | 12 | 6 | 27 | 45 | 25 |
| Hail *(Severe Weather)* | 1 | 6 | 16 | 14 | 36 | 21 |
| Earthquake | 1 | 6 | 16 | 12 | 34 | 20 |
| Tornado *(Severe Weather)* | 1 | 6 | 6 | 22 | 34 | 20 |
| Wildfire (Wildfire Smoke) | 1 | 3 | 6 | 11 | 20 | 13 |

***Consequence:*** *Sum of all weighted factors.*
***Extent:*** *Sum of the weighted Extent factors.*
***Vulnerability:*** *Sum of the weighted Vulnerability factors.*
***Impact:*** *Sum of the weighted Impact factors.*
***Total Risk Score**** *= Probability x Consequence*
** Normalized to 100*

## Total Risk Score Legend

| Classification | Probability Factor | Extent | Vulnerability | Impact | Consequence Score | Total Risk Score |
|---|---|---|---|---|---|---|
| Low (L) | 1 | 0 – 6 | 0 – 6 | 0 – 12 | 0 – 24 | 0 – 24 |
| Medium (M) | 2 | 7 – 12 | 7 – 12 | 13 – 26 | 25 – 50 | 25 – 54 |
| High (H) | 3 | 13 – 18 | 13 – 18 | 27 – 39 | 51 – 75 | 55 and above |

*The **legend**—specifically the assignment of low, medium, and high—provides an additional means to qualitatively assess the probability factor, sum of weighted factors, and the total risk scores for each hazard. The **Consequence Score** represents the sum of the Extent, Vulnerability, and Impact Factors. The **Total Risk Score** is a measure of Probability and Consequence.*

# 11. MITIGATION ACTIONS

This section includes the mitigation actions that were developed to address identified risks and vulnerabilities to hazards identified in this Plan. This Plan serves only to recommend mitigation measures based on the potential for risk reduction and available funding. Implementation of mitigation actions is dependent on risk reduction priorities, feasibility, and available funding. It is also dependent on the cooperation and support of the jurisdiction and/or department responsible for each action item. Additionally, all mitigation actions identified in the 2019 update or before were updated accordingly. Any new mitigation actions are listed as *New* (under Project Status).

The Village of Tully agreed upon **nine (9)** mitigation actions that apply to the jurisdiction's properties where they have jurisdictional responsibility and authority. One (1) mitigation action has been completed. A summary of the Village's mitigation actions status is listed in **Table 22**.

**Table 22. Village of Tully Mitigation Action Summary**

| Status | Mitigation Action Total |
|---|---|
| Continuous | 5 |
| In Progress/Not Yet Completed | 2 |
| No Progress/Not Yet Started | 1 |
| New | 1 |
| **TOTAL** | **9** |
| Complete | 1 |
| Discontinued | 0 |

| Mitigation Actions per Hazard | | | |
|---|---|---|---|
| Drought | 5 | Harmful Algal Bloom | 5 |
| Earthquake | 5 | Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)* | 5 |
| Heat Wave/Extreme Heat | 5 | Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm, nor'easter)* | 9 |
| Flood *(riverine, flash/urban, ice jam, dam and levee failure)* | 9 | Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold)* | 5 |
| Geological Hazards *(landslides, land subsidence, mudboils)* | 5 | Wildfire *(wildfire smoke)* | 5 |

A detailed explanation of the Mitigation Strategy can be found in Section 5 of **Volume 1**.

| | | | | | |
|---|---|---|---|---|---|
| **Mitigation Action** | Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction:<br>• Provide and maintain links to the Onondaga County Hazard Mitigation Plan website, and regularly post notices on the municipal homepage referencing the Onondaga County Hazard Mitigation Plan webpages.<br>• Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation.<br>• Use the Village's e-mail notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures.<br>• Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding. | | | | |
| **Action Number** | VT-1 | **Goal(s) Addressed** | 1, 2, 3, 4, 5, 6 | **Prioritization Score** | 15/15 |
| **Year Added to Plan** | 2013 | **Timeline** *(estimated)* | Ongoing | **Implementation Priority** | High |
| **Hazard(s) Mitigated** | Drought, Earthquake, Heat Wave/Extreme Heat, Flood, Geological Hazards, Harmful Algal Bloom, Invasive Species and Infestation, Severe Weather, Winter Weather, Wildfire | | | | |
| **Project Status** | Continuous | If *Discontinued*, provide reason. | N/A | | |
| **Benefits** *(Loss Avoided)* | Low | | | | |
| **Lead Agency / Organization** | Village of Tully Zoning & Planning Department (Floodplain Administrator) | **Supporting Agency / Organization** *(If applicable)* | Onondaga County Department of Planning | | |
| **Additional Participating Jurisdictions** *(If applicable)* | N/A | | | | |
| **Estimated Cost** | Low | **Potential Funding Source** | General Fund (Staff Time) | | |
| **Critical Facility** *(Critical Facility located in 1% floodplain?)* | No | **Additional Details** *(optional)* | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Mitigation Action** | Actively support and participate in the implementation, monitoring, maintenance, and updating of this Hazard Mitigation Plan, as outlined, and defined in Volume 1. | | | | |
| **Action Number** | VT-2 | **Goal(s) Addressed** | 1, 2, 3, 4, 5, 6 | **Prioritization Score** | 15/15 |
| **Year Added to Plan** | 2013 | **Timeline** *(estimated)* | Ongoing | **Implementation Priority** | High |
| **Hazard(s) Mitigated** | Drought, Earthquake, Heat Wave/Extreme Heat, Flood, Geological Hazards, Harmful Algal Bloom, Invasive Species and Infestation, Severe Weather, Winter Weather, Wildfire | | | | |
| **Project Status** | Continuous | If *Discontinued*, provide reason. | N/A | | |
| **Benefits** *(Loss Avoided)* | High | | | | |
| **Lead Agency / Organization** | Village of Tully Zoning & Planning Department | **Supporting Agency / Organization** *(If applicable)* | N/A | | |
| **Additional Participating Jurisdictions** *(If applicable)* | N/A | | | | |
| **Estimated Cost** | Low | **Potential Funding Source** | General Fund (Staff Time) | | |
| **Critical Facility** *(Critical Facility located in 1% floodplain?)* | No | **Additional Details** *(optional)* | | | |

<table>
<tr><td>Mitigation Action</td><td colspan="5">Continue to maintain good standing and compliance under the National Flood Insurance Program (NFIP) through implementation and enforcement of floodplain management requirements that, at a minimum, meet the NFIP requirements. These include:<br>• Enforce the flood damage prevention ordinance (e.g., regulating all new and substantially improved construction in Special Hazard Flood Areas).<br>• Participate in floodplain identification and mapping updates.<br>• Provide public assistance/outreach on floodplain requirements and impacts.</td></tr>
<tr><td>Action Number</td><td>VT-3</td><td>Goal(s) Addressed</td><td>1, 2, 3, 4, 5, 6</td><td>Prioritization Score</td><td>15/15</td></tr>
<tr><td>Year Added to Plan</td><td>2013</td><td>Timeline<br>(estimated)</td><td>Ongoing</td><td>Implementation Priority</td><td>High</td></tr>
<tr><td colspan="2">Hazard(s) Mitigated</td><td colspan="4">Flood, Severe Weather</td></tr>
<tr><td colspan="2">Project Status</td><td>Continuous</td><td>If Discontinued, provide reason.</td><td colspan="2">N/A</td></tr>
<tr><td colspan="2">Benefits<br>(Loss Avoided)</td><td colspan="4">Medium</td></tr>
<tr><td colspan="2">Lead Agency / Organization</td><td colspan="2">Village of Tully Zoning & Planning Department (Floodplain Administrator)</td><td>Supporting Agency / Organization<br>(If applicable)</td><td>N/A</td></tr>
<tr><td colspan="2">Additional Participating Jurisdictions (If applicable)</td><td colspan="4">N/A</td></tr>
<tr><td colspan="2">Estimated Cost</td><td>Low</td><td>Potential Funding Source</td><td colspan="2">General Fund (Staff Time)</td></tr>
<tr><td colspan="2">Critical Facility<br>(Critical Facility located in 1% floodplain?)</td><td>No</td><td>Additional Details<br>(optional)</td><td colspan="2"></td></tr>
</table>

| | | | | | |
|---|---|---|---|---|---|
| **Mitigation Action** | Develop, enhance, and implement existing Village emergency plans. | | | | |
| **Action Number** | VT-4 | **Goal(s) Addressed** | 1, 6 | **Prioritization Score** | 15/15 |
| **Year Added to Plan** | 2013 | **Timeline** *(estimated)* | Ongoing | **Implementation Priority** | High |
| **Hazard(s) Mitigated** | Drought, Earthquake, Heat Wave/Extreme Heat, Flood, Geological Hazards, Harmful Algal Bloom, Invasive Species and Infestation, Severe Weather, Winter Weather, Wildfire | | | | |
| **Project Status** | Continuous | If *Discontinued*, provide reason. | N/A | | |
| **Benefits** *(Loss Avoided)* | High | | | | |
| **Lead Agency / Organization** | Village of Tully Zoning & Planning Department | **Supporting Agency / Organization** *(If applicable)* | N/A | | |
| **Additional Participating Jurisdictions** *(If applicable)* | N/A | | | | |
| **Estimated Cost** | Low | **Potential Funding Source** | General Fund (Staff Time) | | |
| **Critical Facility** *(Critical Facility located in 1% floodplain?)* | No | **Additional Details** *(optional)* | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Mitigation Action** | Develop, enhance, and maintain mutual aid agreements with surrounding municipalities and counties. | | | | |
| **Action Number** | VT-5 | **Goal(s) Addressed** | 1, 5, 6 | **Prioritization Score** | 15/15 |
| **Year Added to Plan** | 2013 | **Timeline** *(estimated)* | Ongoing | **Implementation Priority** | High |
| **Hazard(s) Mitigated** | Drought, Earthquake, Heat Wave/Extreme Heat, Flood, Geological Hazards, Harmful Algal Bloom, Invasive Species and Infestation, Severe Weather, Winter Weather, Wildfire | | | | |
| **Project Status** | Continuous | If *Discontinued*, provide reason. | N/A | | |
| **Benefits** *(Loss Avoided)* | High | | | | |
| **Lead Agency / Organization** | Village of Tully Village Board | **Supporting Agency / Organization** *(If applicable)* | N/A | | |
| **Additional Participating Jurisdictions** *(If applicable)* | N/A | | | | |
| **Estimated Cost** | Low | **Potential Funding Source** | General Fund (Staff Time) | | |
| **Critical Facility** *(Critical Facility located in 1% floodplain?)* | No | **Additional Details** *(optional)* | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Mitigation Action** | Conduct a hydrology study to determine the necessary replacement size for the culvert located near the Village's Wastewater Treatment Plant and subsequently replace the culvert with the appropriate size. | | | | |
| **Action Number** | VT-6 | **Goal(s) Addressed** | 1, 3 | **Prioritization Score** | 12/15 |
| **Year Added to Plan** | 2019 | **Timeline** *(estimated)* | 3 to 6 Months | **Implementation Priority** | High |
| **Hazard(s) Mitigated** | | Flood, Severe Weather | | | |
| **Project Status** | | In Progress/Not Yet Completed | If *Discontinued*, provide reason. | N/A | |
| **Benefits** *(Loss Avoided)* | | High | | | |
| **Lead Agency / Organization** | Village of Tully Department of Public Works | | **Supporting Agency / Organization** *(If applicable)* | N/A | |
| **Additional Participating Jurisdictions** *(If applicable)* | N/A | | | | |
| **Estimated Cost** | Medium | **Potential Funding Source** | General Fund (Staff Time), HMGP, BRIC, Federal Highway Administration New York Division Funds | | |
| **Critical Facility** *(Critical Facility located in 1% floodplain?)* | No | **Additional Details** *(optional)* | The current culvert is too small to handle significant amounts of water during heavy rainfall events or ice jams. Flooding in this area can lead to possible flooding of the plant, impacting the wastewater system for the Village. | | |

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| **Mitigation Action** | Conduct study to determine upgrades necessary to increase the capacity of the stormwater system on Onondaga Street (from State Street to Railroad Street) and the eastern part of Douglas Street near the Village highway garage and subsequently conduct the necessary upgrades. | | | | |
| **Action Number** | VT-7 | **Goal(s) Addressed** | 1, 3 | **Prioritization Score** | 9/15 |
| **Year Added to Plan** | 2019 | **Timeline** *(estimated)* | 1 to 2 Years | **Implementation Priority** | Medium |
| **Hazard(s) Mitigated** | Flood, Severe Weather | | | | |
| **Project Status** | In Progress/Not Yet Completed | If *Discontinued*, provide reason. | N/A | | |
| **Benefits** *(Loss Avoided)* | High | | | | |
| **Lead Agency / Organization** | Village of Tully Department of Public Works | **Supporting Agency / Organization** *(If applicable)* | N/A | | |
| **Additional Participating Jurisdictions** *(If applicable)* | N/A | | | | |
| **Estimated Cost** | High | **Potential Funding Source** | General Fund (Staff Time), New York State Department of Transportation Funds, HMGP, BRIC | | |
| **Critical Facility** *(Critical Facility located in 1% floodplain?)* | No | **Additional Details** *(optional)* | | | |

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| **Mitigation Action** | Conduct a feasibility study to determine the impact of stream bank armoring, stream bank restoration, and the replacement of the Onondaga Street Bridge, and subsequently complete the study recommendations. | | | | |
| **Action Number** | VT-8 | **Goal(s) Addressed** | 1, 3 | **Prioritization Score** | N/A |
| **Year Added to Plan** | 2019 | **Timeline** *(estimated)* | N/A | **Implementation Priority** | N/A |
| **Hazard(s) Mitigated** | Flood, Severe Weather | | | | |
| **Project Status** | Complete | If *Discontinued*, provide reason. | N/A | | |
| **Benefits** *(Loss Avoided)* | N/A | | | | |
| **Lead Agency / Organization** | Village of Tully Department of Public Works | **Supporting Agency / Organization** *(If applicable)* | N/A | | |
| **Additional Participating Jurisdictions** *(If applicable)* | N/A | | | | |
| **Estimated Cost** | N/A | **Potential Funding Source** | N/A | | |
| **Critical Facility** *(Critical Facility located in 1% floodplain?)* | N/A | **Additional Details** *(optional)* | N/A | | |

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| **Mitigation Action** | Encourage and support the retrofit of the Verizon Facility (major communications facility) to the 500-year flood level by discussion mitigation options with the facility owner/operator. | | | | |
| **Action Number** | VT-9 | **Goal(s) Addressed** | 1, 2 | **Prioritization Score** | 10/15 |
| **Year Added to Plan** | 2019 | **Timeline** *(estimated)* | 3 to 6 Months | **Implementation Priority** | High |
| **Hazard(s) Mitigated** | Flood, Severe Weather | | | | |
| **Project Status** | No Progress/Not Yet Started | If *Discontinued*, provide reason. | N/A | | |
| **Benefits** *(Loss Avoided)* | Low | | | | |
| **Lead Agency / Organization** | Village of Tully Zoning & Planning Department (Floodplain Administrator) | **Supporting Agency / Organization** *(If applicable)* | N/A | | |
| **Additional Participating Jurisdictions** *(If applicable)* | N/A | | | | |
| **Estimated Cost** | Low | **Potential Funding Source** | General Fund (Staff Time) | | |
| **Critical Facility** *(Critical Facility located in 1% floodplain?)* | Yes | **Additional Details** *(optional)* | The Village does not have jurisdiction over the facility; therefore, the Village will contact the facilities manager and discuss options for retrofitting the facility. | | |

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| **Mitigation Action** | Develop and implement a community outreach campaign utilizing social media to notify residents about upcoming extreme weather events and impacts, along with preparedness information. | | | | |
| **Action Number** | VT-10 | **Goal(s) Addressed** | 1, 2, 6 | **Prioritization Score** | 9/15 |
| **Year Added to Plan** | 2025 | **Timeline** *(estimated)* | Ongoing | **Implementation Priority** | Medium |
| **Hazard(s) Mitigated** | Drought, Earthquake, Heat Wave/Extreme Heat, Flood, Geological Hazards, Harmful Algal Bloom, Invasive Species and Infestation, Severe Weather, Winter Weather, Wildfire | | | | |
| **Project Status** | New | If *Discontinued*, provide reason. | N/A | | |
| **Benefits** *(Loss Avoided)* | Low | | | | |
| **Lead Agency / Organization** | Village of Tully Village Board | **Supporting Agency / Organization** *(If applicable)* | N/A | | |
| **Additional Participating Jurisdictions** *(If applicable)* | N/A | | | | |
| **Estimated Cost** | Low | **Potential Funding Source** | General Fun (Staff Time) | | |
| **Critical Facility** *(Critical Facility located in 1% floodplain?)* | No | **Additional Details** *(optional)* | | | |

# APPENDIX A. HAZARD MAPS

The following hazard maps have been generated for the Village of Tully – [enter hazards here]. These maps are based on the best available data at the time of the preparation of this Plan and are considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Village of Tully has significant vulnerability.

| | |
|---|---|
| **Figure #** | [Enter map name and description, if applicable] |
| **Figure #** | [Enter map name and description, if applicable] |
| **Figure #** | [Enter map name and description, if applicable] |
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| **Figure #** | [Enter map name and description, if applicable] |
| **Figure #** | [Enter map name and description, if applicable] |

# APPENDIX B. LETTER OF INTENT

**Statement of Intent to Participate in the**
**2024 Onondaga County Multi-Jurisdictional Hazard Mitigation Plan**

The purpose of this letter is to establish commitment from, and a cooperative working relationship between, all participating jurisdictions in the development and implementation of the 2024 Onondaga County Multi-Jurisdictional Hazard Mitigation Plan (HMP). In addition, the intent of this form is to ensure that the Plan update is developed in accordance with Title 44 of the Federal Code of Regulations Part 201.6; that the planning process is conducted in an open manner involving community stakeholders; that it is consistent with each participating jurisdiction's policies, programs, and authorities; and that it is an accurate reflection of the community's values.

To meet this requirement and to help reduce the loss of life and damage to property in the event of a natural disaster, our municipality intends to participate in a federally funded grant initiative to update the 2024 Onondaga County Multi-Jurisdictional Hazard Mitigation Plan.

We understand that the planning process will include a limited number of meetings and/or calls between Planning Team representatives and representatives from participating municipalities and agencies. The subject of the meeting(s) will be to:

- Inform participants on the needs and methods for identifying and prioritizing hazards;
- Share information on hazards affecting local jurisdictions;
- Provide information related to local assets, plans/ordinances, hazard events and damages, new development, etc. within the jurisdiction; and
- Determine possible projects to reduce the impact of future incidents involving hazards which are prerequisites to municipalities later applying for hazard mitigation grant funds.

We recognize the importance of having an updated multi-jurisdictional hazard mitigation plan to help safeguard the lives and property of our citizens and commit to participating in this process with Onondaga County.

**Name of Jurisdiction:** Village of Tully

**Name of Authorized Representative:**
Benjamin Vincent

**Signature of Authorized Representative:**
Benjamin T. Vincent

**Primary Point-of-Contact (POC):**

**Name:** Benjamin Vincent
**Title:** Code Enforcement Officer
**Department:** Building Code Dept.
**Phone Number:** 315 696-4693 Ext 19
**Email:** Tullycodes@outlook.com

**Secondary Point-of-Contact (POC):**

**Name:** Benjamin Bibik
**Title:** Deputy Mayor
**Department:** Board Official
**Phone Number:** 315 696-5041
**Email:** boardmember1@villageoftully.us

Please return this form to jefferyharrop@ongov.net, or mail to the Onondaga County Dept. of Planning, 335 Montgomery St, Syracuse, NY 13202. Questions, call Jeff at (315)435-2673.

# APPENDIX C. PLAN ADOPTION

*[Placeholder for adoption documentation after State and FEMA Approval]*