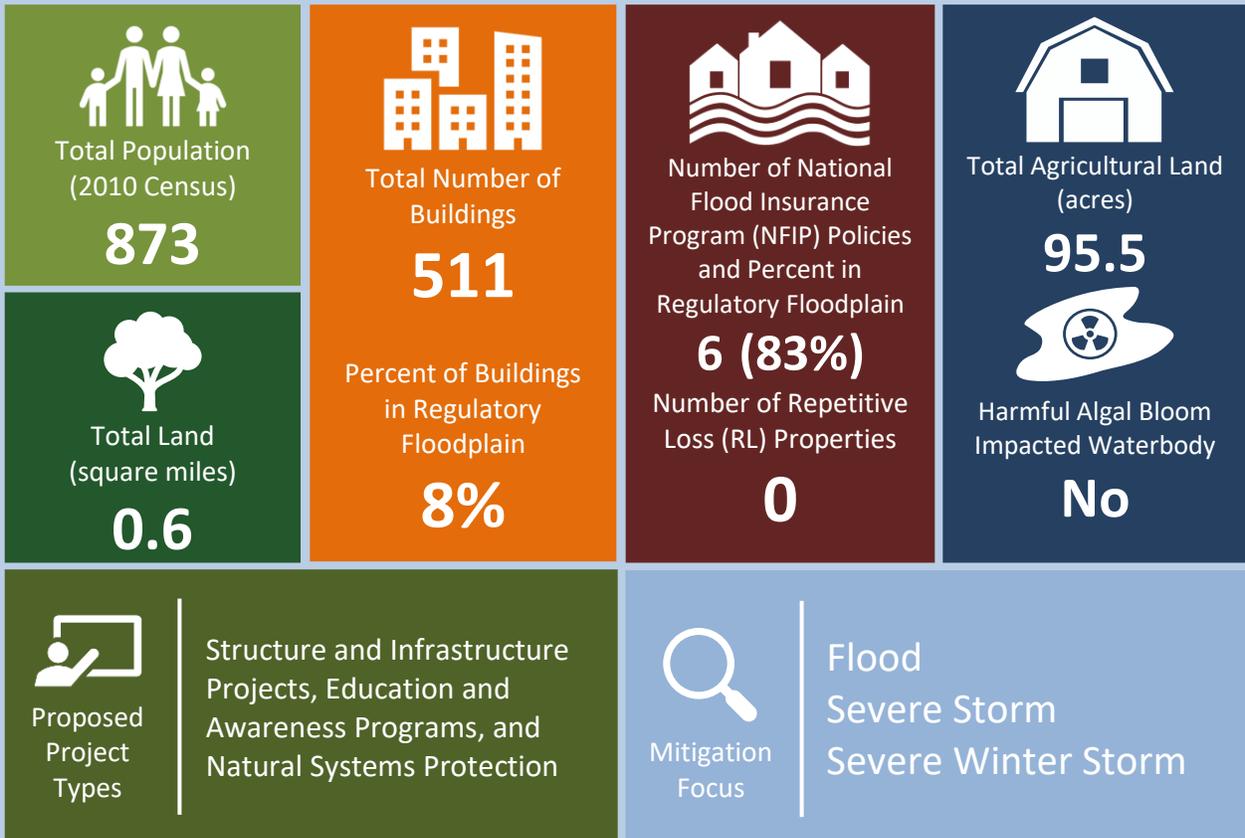
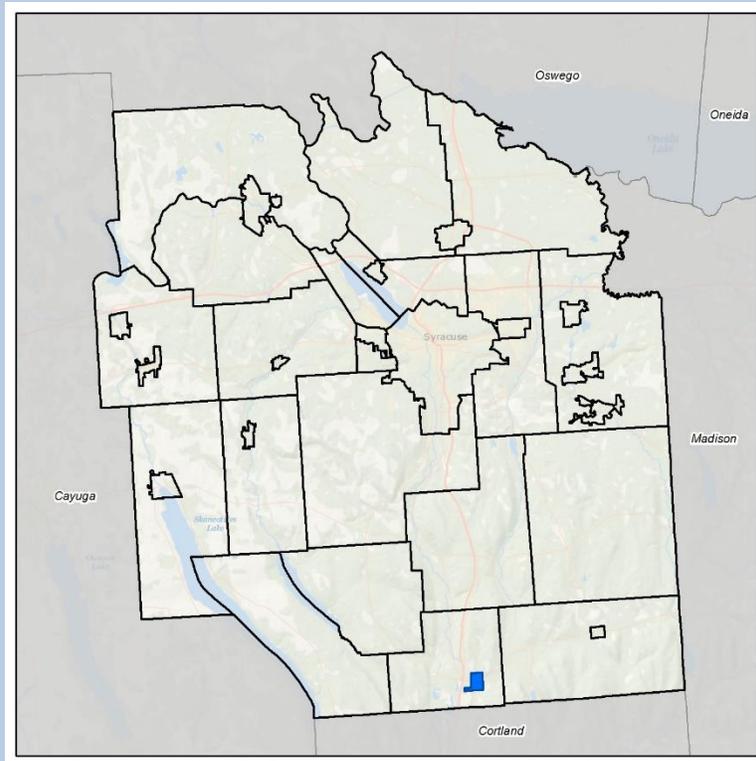




# MUNICIPAL ANNEX | Village of Tully





## 9.35 VILLAGE OF TULLY

This section presents the jurisdictional annex for the Village of Tully. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Tully’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

### 9.35.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Tully’s hazard mitigation plan primary and alternate points of contact.

| Primary Point of Contact   | Alternate Point of Contact   |
|--|--|
| Name: Ralph Lamson<br>Title: Codes Enforcement Officer<br>Phone Number: 315-696-4693 X19<br>Address: P.O. Box 1028 Tully, NY 13159<br>Email: Tully_Codes@yahoo.com | Name: Harold Kiehl<br>Title: Head of Department of Public Works<br>Phone Number: 315-399-0109<br>Address: P.O. Box 1028 Tully, NY 13159<br>Email: tullydpw@outlook.com |
| Floodplain Administrator   |  |
| Name: Ralph Lamson<br>Title: Codes Enforcement Officer<br>Phone Number: 315-696-4693 X19<br>Address: P.O. Box 1028 Tully, NY 13159<br>Email: Tully_Codes@yahoo.com |  |

### 9.35.2 Municipal Profile

The Village of Tully lies within the Town of Tully on the southern border of Onondaga County in western New York State. The Village of Tully has a total area of 0.6 square miles. The village is found within the Town of Tully and is located approximately 14 miles south of the City of Syracuse and 15 miles north of Cortland, New York. It is situated on the Syracuse, Binghamton and New York Railway. Tully is on US 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-percent of the village has been developed with the remainder of the land vacant or wooded.

The Village of Tully is located within the Town of Tully on U.S. Route 11 at the intersection of New York State Route 80. Refer to Section 9.34 (Town of Tully) for their individual annex. The estimated 2016 population was 1,068, a 22.3 percent increase from the 2010 Census (873).

Data from the 2016 U.S. Census American Community Survey estimates that 7.7 percent of the town population is five years of age or younger, and 14.3 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

### 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.





### Growth/Development Trends

The Village of Tully did not note any residential/commercial development that has occurred since 2013 or any planned major residential or commercial development, or major infrastructure development anticipated in the next five years.

**Table 9.35-1. Growth and Development**

| Property or Development Name                                       | Type (e.g. Res., / Comm.) | # of Units / Structures | Location (address and/or Parcel ID) | Known Hazard Zone(s) | Description/Status of Development |
|--|---------------------------|-------------------------|-------------------------------------|----------------------|-----------------------------------|
| <b>Recent Development from 2013 to present</b>                     |                           |                         |                                     |                      |                                   |
| None   |                           |                         |                                     |                      |                                   |
| <b>Known or Anticipated Development in the Next Five (5) Years</b> |                           |                         |                                     |                      |                                   |
| None Anticipated   |                           |                         |                                     |                      |                                   |

*\* Only location-specific hazard zones or vulnerabilities identified.*

### 9.35.3 Hazard Event History Specific to the Village of Tully

Onondaga County has a history of natural hazard events as detailed in Volume I, Section 5.0 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 Village of Tully’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Onondaga County. Table 9.35-2 provides details regarding municipal-specific loss and damages the village experienced during hazard events. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

**Table 9.35-2. Hazard Event History**

| Dates of Event        | Event Type (Disaster Declaration if applicable)                            | Onondaga County Designated? | Summary of Event  | Municipal Summary of Damages and Losses                               |
|-----------------------|--|-----------------------------|---|---|
| April – May 2011      | Severe Storms, Flooding, Tornadoes, and Straight-Line Winds (FEMA-DR-1993) | Yes                         | <p>A slow moving warm front pushed northward across central New York late in the afternoon on April 25th. Severe weather developed, and in addition to reports of severe wind damage and hail, plenty of wind shear in the vicinity of the warm front allowed for a few super-cell thunderstorms and tornadoes to develop. In addition, areas of heavy rain caused significant flash flooding in several locations of central New York.</p> <p>On May 26, a deep upper level low pressure system shifted east from the mid-Mississippi Valley region through the afternoon and evening, allowing numerous showers and thunderstorms to develop. Many reports of large hail and damaging winds occurred in central New York.</p> | Although the county was impacted, the village did not report damages. |
| June 30- July 1, 2015 | Flash Flood  | No                          | An unseasonably strong storm system tapping into above normal moisture sources across the Great Lakes and Northeast triggered multiple heavy rain   | Although the county was impacted, the village did not report damages. |





| Dates of Event | Event Type (Disaster Declaration if applicable) | Onondaga County Designated? | Summary of Event  | Municipal Summary of Damages and Losses   |
|----------------|---|-----------------------------|---|---|
|                |   |                             | producing thunderstorms across the region. Localized torrential rainfall in central New York caused serious urban flash flooding in the Syracuse, NY metropolitan area. Damages are estimated between three and five million dollars.   |   |
| July 1, 2017   | Flash Flood                                     | No                          | A tropical moisture laden air mass produced numerous showers and thunderstorms which traveled repeatedly over the same areas of the Finger Lakes Region and Upper Mohawk Valley. Widespread flash and urban flooding developed in portions of Cayuga, Onondaga, Madison and Oneida counties. Hardest hit areas were the villages and towns of Moravia, Chittenango, Oneida, and Utica to name a few. Total rainfall amounts along a narrow corridor from Moravia to Utica generally ranged from 2.5 to 5 inches, most of which fell in less than 1 to 2 hours. Total damages from this event range from \$10-\$15 million dollars Countywide. | Pumphouses for the water treatment plant needed water pumped out. Flooding in Cummins Park caused approximately \$1,000 worth of extra DPW overtime to deal with the flooding. Trees and tree limbs that came down in storm took three weeks of labor and equipment for cleanup, totaling \$8,000-\$10,000. |

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

### 9.35.4 Hazard Ranking and Jurisdiction-Specific Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the hazards of greatest concern and risk to the Village of Tully. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

#### Hazard Risk Ranking

This section includes the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 of the 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 as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating town or village may have differing degrees of risk exposure and vulnerability compared to Onondaga County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Tully. The Village of Tully has reviewed the County hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Town indicated the following:





- The village has a reservoir not prone to algae bloom. As a result, harmful algal bloom was kept as a low hazard.
- The village indicated that the calculated hazard rankings are accurate.

Table 9.35-3. Village of Tully Municipal Hazard Ranking Input

| HAZARD               | Drought | Earthquake | Flood | Geologic | Harmful Algal Bloom | Invasive Species | Severe Storm | Severe Winter Storm |
|----------------------|---------|------------|-------|----------|---------------------|------------------|--------------|---------------------|
| RELATIVE RISK FACTOR | Low     | Low        | High  | Low      | Low                 | Low              | High         | High                |

Notes: The scale is based on the following hazard rankings as established in Section 5.3.

High = Total hazard priority risk ranking score of 5 and above

Medium = Total hazard priority risk ranking of 3.9 – 4.9

Low = Total hazard risk ranking below 3.8

\*The municipality changed the initial ranking of this hazard based on event history, municipal experience, and feedback from the municipality

### Critical Facilities Flood Risk

New York Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in 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 constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 500-year flood event, or worst damage scenario. For those that do not meet this criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.



**Table 9.35-4. Potential Flood Losses to Critical Facilities**

| Name                             | Type                         | Exposure |            | Potential Loss from 1% Flood Event |                        | Addressed by Proposed Action |
|----------------------------------|------------------------------|----------|------------|------------------------------------|------------------------|------------------------------|
|                                  |                              | 1% Event | 0.2% Event | Percent Structure Damage           | Percent Content Damage |                              |
| Verizon Facility                 | Major Communication Facility | X        | X          | -                                  | -                      | V. Tully-4                   |
| WEP Tully Sewage Treatment Plant | Waste Water Treatment Plant  | X        | X          | 0%                                 | 0%                     | -                            |

Source: FEMA 2016, SOCPA 2018

The village noted that the Sewage Treatment Plant is protected from flooding.

**Identified Issues**

The municipality has identified the following vulnerabilities within their community:

- The village recently received new floodplain maps from FEMA which place almost all of the homes on both sides of the creek which runs north-south through the center of the village into the floodplain. This inaccurate label does not take into consideration that all of these homes are at least 10 feet above the creek as the creek is in a ravine.
- Some homes are on the west side of the creek. The Fire Department is on the east side of the creek. This means that some homes may have delayed or no response due to high water or washouts.
- The Waste Water Treatment Plant is in a flood prone area that has been flooded three times in the past 50 years. The backup generator is in poor condition.
- Two pumphouses and tank site lack backup generators. The town and village share the same building and can share a generator.
- Sanitary sewer lift station lacks a backup generator.
- Train tracks that run through the southeast side of the village could create issues if train or tracks had a problem
- Bridge on Onondaga Street is in poor condition and could be damaged in a flood.

**9.35.5 Capability Assessment**

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of mitigation planning into existing and future planning mechanisms

**Planning and Regulatory Capability**

The table below summarizes the regulatory tools that are available to the Village of Tully.



Table 9.35-5. Planning and Regulatory Tools

| Tool / Program<br>(code, ordinance, plan)   | Do you have this?<br>(Yes/No)<br>If Yes, date of adoption or update | Authority<br>(local, county, state, federal) | Dept. /Agency Responsible | Code Citation and Comments<br>(Code Chapter, name of plan, explanation of authority, etc.) |
|---|---|--|---------------------------|--|
| <b>Planning Capability</b>                  |   |  |                           |  |
| Comprehensive Plan                          | Yes   | Local  | Planning                  | Comprehensive Plan   |
| Capital Improvements Plan                   | No  | -  | -                         | -  |
| Floodplain Management / Basin Plan          | No  | -  | -                         | -  |
| Stormwater Management Plan                  | No  | -  | -                         | -  |
| Open Space Plan                             | No  | -  | -                         | -  |
| Stream Corridor Management Plan             | No  | -  | -                         | -  |
| Watershed Management or Protection Plan     | No  | -  | -                         | -  |
| Economic Development Plan                   | Yes   | Local  | Planning                  | Comprehensive Plan   |
| Comprehensive Emergency Management Plan     | Yes   | Local/County                                 | Onondaga County           | Section 9.35   |
| Emergency Operation Plan                    | Yes   | Local  | Planning                  | Emergency Operation Plan   |
| Evacuation Plan                             | No  | -  | -                         | -  |
| Post-Disaster Recovery Plan                 | No  | -  | -                         | -  |
| Transportation Plan                         | No  | -  | -                         | -  |
| Strategic Recovery Planning Report          | No  | -  | -                         | -  |
| Climate Adaptation Plan                     | No  | -  | -                         | -  |
| Resilience Plan                             | No  | -  | -                         | -  |
| Other Plans:                                | Yes, Wellhead Protection  | Local/County                                 | Local                     | Wellhead Protection Plan   |
| <b>Regulatory Capability</b>                |   |  |                           |  |
| Building Code                               | Yes   | State & Local                                | Codes                     | Chapter 56 of the municipal code   |
| Zoning Ordinance                            | Yes   | Local  | Codes                     | Chapter 112 of the municipal code  |
| Subdivision Ordinance                       | Yes   | Local  | Codes                     | Chapter 95 of the municipal code   |
| NFIP Flood Damage Prevention Ordinance      | Yes   | Federal, State, Local                        | Codes                     | Chapter 59 of the municipal code   |
| NFIP: Cumulative Substantial Damages        | No  | -  | -                         | -  |
| NFIP: Freeboard                             | Yes   | State, Local                                 | Codes                     | State mandated BFE+2 for all construction, both residential and non-residential            |
| Growth Management Ordinances                | No  | -  | -                         | -  |
| Site Plan Review Requirements               | Yes   | Local  | Codes                     | -  |
| Stormwater Management Ordinance             | Yes   | Local  | Codes/DPW                 | Code citation unavailable  |
| Municipal Separate Storm Sewer System (MS4) | Yes   | Local/State                                  | Codes/DPW                 | -  |
| Natural Hazard Ordinance                    | No  | -  | -                         | -  |



| Tool / Program<br>(code, ordinance, plan)                               | Do you have this?<br>(Yes/No)<br>If Yes, date of adoption or update | Authority<br>(local, county, state, federal) | Dept. /Agency Responsible                  | Code Citation and Comments<br>(Code Chapter, name of plan, explanation of authority, etc.) |
|---|---|--|--|--|
| Post-Disaster Recovery Ordinance  | No  | -  | -  | -  |
| Real Estate Disclosure Requirement                                      | Yes   | State  | NYS Department of State, Real Estate Agent | NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467              |
| Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope]) | No  | -  | -  | -  |

### Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Tully.

**Table 9.35-6. Administrative and Technical Capabilities**

| Resources   | Is this in place?<br>(Yes or No) | Department/ Agency/Position       |
|---|----------------------------------|-----------------------------------|
| <b>Administrative Capability</b>  |                                  |                                   |
| Planning Board  | Yes                              | Planning Board with Town of Tully |
| Mitigation Planning Committee   | No                               | -                                 |
| Environmental Board/Commission  | No                               | -                                 |
| Open Space Board/Committee  | No                               | -                                 |
| Economic Development Commission/Committee   | No                               | -                                 |
| Maintenance programs to reduce risk   | Yes                              | DPW                               |
| Mutual aid agreements   | No                               | -                                 |
| <b>Technical/Staffing Capability</b>  |                                  |                                   |
| Planner(s) or engineer(s) with knowledge of land development and land management practices                  | Yes                              | Engineer/contractual              |
| Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure | Yes                              | Engineer/contractual              |
| Planners or engineers with an understanding of natural hazards  | Yes                              | Contracted Engineer               |
| NFIP Floodplain Administrator (FPA)   | Yes                              | Code Enforcement Officer          |
| Surveyor(s)   | No                               | -                                 |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications  | No                               | -                                 |
| Scientist familiar with natural hazards   | No                               | -                                 |
| Warning systems/services  | No                               | -                                 |
| Emergency Manager   | No                               | -                                 |
| Grant writer(s)   | No                               | -                                 |
| Staff with expertise or training in benefit/cost analysis   | No                               | -                                 |
| Professionals trained in conducting damage assessments  | No                               | -                                 |



### Fiscal Capability

The table below summarizes financial resources available to the Village of Tully.

**Table 9.35-7. Fiscal Capabilities**

| Financial Resources   | Accessible or Eligible to Use (Yes/No)            |
|---|---|
| Community development Block Grants (CDBG, CDBG-DR)                | Yes   |
| Capital improvements project funding                              | Yes   |
| Authority to levy taxes for specific purposes                     | Yes – Annual budget, funded through village taxes |
| User fees for water, sewer, gas or electric service               | Yes – Water and Sewerage fees billed              |
| Impact fees for homebuyers or developers of new development/homes | No  |
| Stormwater utility fee  | No  |
| Incur debt through general obligation bonds                       | Yes – have used for capital improvements          |
| 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                           | Unsure  |
| Open Space Acquisition funding programs                           | Unsure  |
| Other   | No  |

### Community Classifications

The table below summarizes classifications for community programs available to the Village of Tully.

**Table 9.35-8. Community Classifications**

| Program   | Do you have this? (Yes/No)   | Classification (if applicable) | Date Classified (if applicable) |
|---|------------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS)   | No                           | -                              | -                               |
| Building Code Effectiveness Grading Schedule (BCEGS)                      | No                           | -                              | -                               |
| Public Protection (ISO Fire Protection Classes 1 to 10)                   | No                           | -                              | -                               |
| NYSDEC Climate Smart Community  | No                           | -                              | -                               |
| Storm Ready Certification   | No                           | -                              | -                               |
| Firewise Communities classification                                       | No                           | -                              | -                               |
| Natural disaster/safety programs in/for schools                           | No                           | -                              | -                               |
| Organizations with mitigation focus (advocacy group, non-government)      | Yes, Tully Lakes Association | -                              | -                               |
| Public education program/outreach (through website, social media)         | No                           | -                              | -                               |
| Public-private partnership initiatives addressing disaster-related issues | No                           | -                              | -                               |
| Other   | No                           | -                              | -                               |

Note:

- N/A Not applicable
- NP Not participating
- Unavailable





The classifications listed above relate 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 (preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule (<https://www.isomitigation.com/bcegs/>)
- The ISO Mitigation online ISO’s Public Protection website at <https://www.isomitigation.com/ppc/>
- New York State Climate Smart Communities (<http://www.dec.ny.gov/energy/56876.html>)
- The National Weather Service Storm Ready website at <https://www.weather.gov/stormready/communities>
- The National Firewise Communities website at <http://firewise.org/>

### Self-Assessment of Capability

The table below provides an approximate measure of the Village of Tully’s capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

**Table 9.35-9. Self-Assessment Capability for the Municipality**

| Area   | Degree of Hazard Mitigation Capability            |          |      |
|--|---|----------|------|
|  | Limited<br>(If limited, what are your obstacles?) | Moderate | High |
| Planning and regulatory capability   |   | X        |      |
| Administrative and technical capability                                    | X – Training                                      |          |      |
| Fiscal capability  | X – Small budget, limited staff                   |          |      |
| Community political capability   |   | X        |      |
| Community resiliency capability  |   | X        |      |
| Capability to integrate mitigation into municipal processes and activities |   | X        |      |

### National Flood Insurance Program

This section provides specific information on the management and regulation of the regulatory floodplain.

#### NFIP Floodplain Administrator (FPA)

Ralph Lamson, CEO

#### National Flood Insurance Program (NFIP) Summary

The Village of Tully maintains lists/inventories of properties that have been flood damaged and identifies property owners that are interested in mitigation. The village has not had to make substantial damage estimates



in the past. The FPA noted that two or three village owned buildings at the Sewer Treatment Plant have recently been flooded.

The following table summarizes the NFIP statistics for the Village of Tully.

Table 9.35-10. NFIP Summary

| Municipality     | # Policies | # Claims (Losses) | Total Loss Payments | # RL Properties | # SRL Properties | # Policies in the 1% Flood Boundary |
|------------------|------------|-------------------|---------------------|-----------------|------------------|-------------------------------------|
| Village of Tully | 6          | 1                 | \$0                 | 0               | 0                | 5                                   |

Source: FEMA Region 2 2018.

(1) Policies, claims, RL, and SRL statistics provided by FEMA Region 2, and are current as of June 30, 2018. Total number of RL properties does not include SRL properties. Number of claims represents claims closed by July 31, 2018.

(2) Total building and content losses from the claims file provided by FEMA Region 2.

(3) Number of policies inside and outside of flood zones is based on latitude and longitude coordinates provided by FEMA Region 2 in the policy file. FEMA noted that for a property with more than one entry, more than one policy may have been in force or more than one Geographic Information System (GIS) specification was possible. Number of policies and claims, and claims total, exclude properties outside Otsego County boundary, based on provided latitude and longitude coordinates.

RL Repetitive Loss  
SRL Severe Repetitive Loss

### Resources

The FPA is the sole person responsible for floodplain administration. NFIP administration services and functions include permit review, inspections, damage assessments, record-keeping, and GIS. The village website is used to provide education and outreach to the community regarding flood hazards/risk and flood risk reduction. The FPA noted that they have access to online resources to determine possible future flooding conditions from climate change. The FPA feels adequately supported but feel that funding limitations present barriers to running an effective floodplain management program. The FPA noted they would consider attending continuing education and/or certification training on floodplain management if it were offered in the County for all local floodplain administrators.

### Compliance History

The Village of Tully is in good-standing in the NFIP. According to data from NYSDEC, the village has not received a compliance audit [e.g. Community Assistance Visit (CAV)]. The village works to maintain compliance with and good-standing in the NFIP including 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.

### Regulatory

The Flood Damage Prevention Ordinance (Chapter 59) requirements for development within areas of special flood hazard, including base flood elevation survey and building elevation requirements for new construction and substantial improvements. The Ordinance meets FEMA and State minimum standards. The FPA noted that there are other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements. The FPA stated that the village has not considered joining the Community Rating System (CRS) program to reduce flood insurance premiums for their insured but would attend a CRS seminar if offered locally.



## Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, each community was surveyed to obtain a better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures, which is also indicated below.

### Planning

#### Existing Integration

**Comprehensive Plan:** Currently, the village and the town are in the beginning stages of developing a Joint Comprehensive Plan. The Plan includes information on natural hazard risk and refers to the Countywide Hazard Mitigation Plan.

**Onondaga County Hazard Mitigation Plan:** The Village of Tully supports the implementation, monitoring, maintenance, and updating of this Plan. The Village supports County-wide initiatives identified in Section 9.1 of the County Annex.

**Emergency Plans:** The Village of Tully follows the Onondaga Comprehensive Emergency Management Plan. The village continues to develop, enhance, and implement existing emergency plans.

The village follows the Onondaga Comprehensive Emergency Management Plan. The Village of Tully is not an MS4 Regulated Community and does not have a formal Stormwater Management Plan. The village does not have a Re-Development Plan, Growth Plan, Economic Development Plan, Open Space Plan, Watershed or Stream Corridor Management Plan, Local Waterfront Revitalization Plan, a Continuity of Operations/Continuity of Government (COOP/COG) plan(s), Post-Disaster Recovery Plan/Strategic Recovery Plan, resilience plan/strategy, or Climate Adaptation Plan/strategy.

#### Opportunities for Future Integration

Updates to existing plans or new plans could include information on natural hazard risk and refer to the Countywide Hazard Mitigation Plan.

### Regulatory and Enforcement (Ordinances)

#### Existing Integration

The village has multiple ordinances pertaining to the mitigation of hazards. These ordinances include the Establishment of Boards (see Operational and Administration below), Flood Damage Prevention Ordinance, Zoning Ordinance, and Subdivision of Land Ordinance. The Town also adheres to the New York State Fire Prevention and Building Code. The municipal Code and ordinances are available on the Village of Tully's website (<https://villagetully.digitaltowpath.org:10070/content/Boards/View/1>).

**Zoning Ordinance:** The Zoning Ordinance (Chapter 112), promotes the health, safety and general welfare of the community. Regarding hazard mitigation, the Zoning Ordinance restricts development within a radius of 200 linear feet from municipal water supply areas, and regulates and restricts hazardous or toxic materials as defined by New York Environmental Conservation Law to the Industrial Zone.

The Village of Tully's municipal zoning, subdivision regulations, and site plan review process consider natural hazard risk and require developers to take additional actions to mitigate natural hazard risk. The Planning



Board/ZBA are provide with surveys, site plans, and floodplain maps to guide their decisions with respect to natural hazard risk management.

### Opportunities for Future Integration

The village will consider natural hazards and resilience when updating the village's ordinances.

### Operational and Administration

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#### Existing Integration

**Joint Planning Board:** The Joint Planning Board is a seven person Board serving both the Town of Tully and the Village of Tully. Three members shall be appointed by the Town Board of the Town of Tully and three members shall be appointed by the Village Board of Trustees of the Village of Tully and one member shall be appointed jointly by both the Board of Trustees of the village and the Town Board of the town. The Board supports land use decisions, public health and safety and assure compliance with regulations and ordinances. The Joint Planning Board meets on the fourth Wednesday of the month as necessary.

**Zoning Board of Appeals:** The Village of Tully Zoning Board of Appeals is a four person board. The Board supports land use decisions, public health and safety and assure compliance with regulations and ordinances.

**Mutual Aid Agreements:** The Village of Tully works to create/enhance/ maintain mutual aid agreements with neighboring communities.

**Stream Team Program:** The Village of Tully supports/participates in the Stream Team program offered by the Onondaga County SWCD, to assist in the removal of debris, log jams, etc. in flood vulnerable stream sections.

The Village of Tully does not have a municipal planner or contract planning firm. NFIP Floodplain Management functions are performed by the Code Enforcement Officer. Stormwater Management functions are performed by the Code Enforcement Officer and the Department of Public Works. The village relies on the Town Engineer for developing Benefit-Cost Analysis, performing Substantial Damage Estimates, and preparing grant applications for mitigation projects. No village staff have job descriptions that involve natural hazard risk, staff do not receive training or continuing professional education which supports natural hazard risk reduction, and no staff participate in associations, organizations, groups or other committees that support natural hazard risk reduction and build hazard management capabilities. The village has stream cleaning and stormwater management programs in place.

### Opportunities for Future Integration

Staff could receive training regarding natural hazard mitigation and natural hazard risk.

### Funding

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#### Existing Integration

The Village of Tully does not have a line items for preventative maintenance in the municipal budget which are mitigation related. The village has a Capital Improvements Budget. The village has been awarded grant funds for mitigation-related projects including approximately \$400,000 for an upgrade of the water system from the DASNY Grant program (no local match required). The village does not have any other mechanisms to fiscally support hazard mitigation projects.

Pre-disaster mitigation funds will be available upon FEMA approval of this plan, along with other funding available through the state and federal sources, such as the NYS Department of Conservation (Climate Smart



Communities Grants, Water Quality Improvements Program, Trees for Tribes), NYS Environmental Facilities Corporation (Wastewater Infrastructure Engineering Planning, Clean Water Revolving Loan Fund, Green Innovation Grant Program), New York State Energy Research and Development Authority (Clean Energy Communities Program), and Empire State Development.

### Opportunities for Future Integration

The village could continue to apply for grants and allocate funding from the municipal budget funding to support hazard mitigation projects.

### Education and Outreach

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#### Existing Integration

The Village of Tully currently uses the Tully Newsletter to inform citizens on natural hazards. The Newsletter goes out to all village residents. The village also operates a municipal website (<https://villagetully.digitaltowpath.org:10070/content/>) which posts information regarding upcoming community events and important municipal decisions. The website provides information related to safety and hazard mitigation including local emergency response contact information, current project information, links to the hazard mitigation planning efforts, annual drinking water quality reports, and links to the related ordinances (see Regulatory and Enforcement).

#### Opportunities for Future Integration

The village could include information on natural hazards on the village website and expand on existing outreach programs.

### Sheltering, Evacuation, and Temporary Housing

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Temporary housing, evacuation routes, and sheltering measures must be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

#### Temporary and Permanent Housing

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The Village of Tully has not identified potential sites for the placement of temporary housing for residents displaced by a disaster or potential sites suitable for relocating houses of the floodplain and/or building new homes once properties in the floodplain are acquired. For temporary housing locations, the county identified potential locations throughout the county, as shown in Section 4 (County Profile), Table 4-3 and Figure 4-18. To accommodate longer term housing needs of permanently displaced residents, there is an existing supply of vacant housing units within the county which may be able to satisfy and absorb those housing needs. The county also has ample buildable land availability throughout its communities to satisfy construction of new housing units if needed, as mapped in Section 4, figure 4-20 in Volume I of this plan. Of note, given the nature of the hazards of concern to Onondaga County, the extent of housing need is also not likely to exceed currently available housing stock for all but the most extreme and widespread hazard events.

#### Evacuation and Sheltering Needs

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The Village of Tully has not established emergency shelters, they did identify the following as potential shelter locations and investigating using both facilities as an emergency shelter:

- Firehouse: 2 Pollard Street. The site conforms with NYS Uniform Fire Prevention and Building Codes.



- School: State Route 80 and State Street. The site conforms with NYS Uniform Fire Prevention and Building Codes.

The village has not identified evacuation routes, or evacuation procedures. Per the County Emergency Management Plan, in the event of a hazard occurrence, the Department of Emergency Management is tasked with coordinating evacuation procedures with the Sheriff’s Department, the On-Scene Commander, the Transportation Coordinator, the ARC, hospitals, special facilities, the fire service and the Health Department. The Sheriff’s Department is responsible for implementing traffic control procedures including coordination of vehicular traffic and protection of resources, facilities and services in the affected areas. As noted in Section 4, Figure 4-19 in Volume I of this plan, the primary roads and highways are the evacuation routes for Onondaga County; the county is fortunate to have a variety of well-connected arterial and collector roadways to provide a variety of routing options during times of large-scale evacuation.

The American Red Cross (ARC) has primary contractual responsibility to provide sheltering, including short term housing, for Onondaga County individuals and families during an emergency occurring in Onondaga County. Services of the ARC include emergency sheltering needs, mass care, feeding, information and referral, and special population assistance. A confidential shelters list is maintained by the Department of Emergency Management and the ARC which identifies capacity for 15,000+ residents across Onondaga County. The ARC is responsible for maintaining shelter and temporary housing agreements with selected facilities.

### 9.35.6 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

#### Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2013 Plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.35-11. Status of Previous Mitigation Actions

| Project # | Project  | Hazard(s) Addressed | Brief Summary of the Original Problem | Responsible Party                   | Status (In Progress, Ongoing, No Progress, Complete) | Evaluation of Success (if project status is complete) |                     | Next Steps<br>1. Project to be included in 2019 HMP or Discontinue<br>2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate).<br>3. If discontinue, explain why. |
|-----------|--|---------------------|---------------------------------------|-------------------------------------|--|---|---------------------|--|
|           |  |                     |                                       |                                     |  | Cost  | Level of Protection |  |
| VT-1a     | Where appropriate, support retrofitting of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Identify facilities that are viable candidates for retrofitting based on cost-effectiveness versus relocation. Where retrofitting is determined to be a viable option, consider implementation of that action based on available funding.  |                     |                                       |                                     | No Progress  |   |                     | 1. Discontinue<br>2.<br>3. Low funds and low flood risk  |
| VT-1b     | Where appropriate, support 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. Identify facilities that are viable candidates for relocation based on cost-effectiveness versus retrofitting. Where relocation is determined to be a viable option, consider implementation of that action based on available funding.   |                     |                                       |                                     | No Progress  |   |                     | 1. Discontinue<br>2.<br>3. Low funds and low flood risk  |
| VT-2      | 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: <ul style="list-style-type: none"> <li>• Provide and maintain links to the Onondaga County HMP website, and regularly post notices on the municipal homepage referencing the Onondaga County HMP webpages.</li> <li>• 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.</li> <li>• Use the village email 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.</li> <li>• Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.</li> </ul> Municipal outreach activities to be supported by the County, as identified at County initiative OC-0. |                     |                                       |                                     |  |   |                     |  |
|           | See Above  | All                 | Outreach                              | Municipal officials, FPA, supported | In Progress  |   |                     | 1. Include in 2019 HMP.<br>2. Floodplain Administrator will write article for the village Newsletter advising residents.   |



| Project # | Project  | Hazard(s) Addressed | Brief Summary of the Original Problem | Responsible Party              | Status (In Progress, Ongoing, No Progress, Complete) | Evaluation of Success (if project status is complete) |  | Next Steps<br>1. Project to be included in 2019 HMP or Discontinue<br>2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate).<br>3. If discontinue, explain why. |
|-----------|--|---------------------|---------------------------------------|--------------------------------|--|---|--|--|
|           |  |                     |                                       | by the County via SOCPA and EM |  | Damages Avoided; Evidence of Success                  |  | 3.   |
| VT-3      | Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0  | All                 |                                       |                                | Ongoing capability                                   | Cost  |  | 1. Discontinue   |
|           |  |                     |                                       |                                |  | Level of Protection                                   |  | 2.   |
|           |  |                     |                                       |                                |  | Damages Avoided; Evidence of Success                  |  | 3. Ongoing capability  |
| VT-4      | Maintain compliance with and good-standing in the NFIP including 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. Further meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified as Initiatives VT-1a, 1b, 2, 8 and 9. |                     |                                       |                                | Ongoing capability                                   | Cost  |  | 1. Discontinue   |
|           |  |                     |                                       |                                |  | Level of Protection                                   |  | 2.   |
|           |  |                     |                                       |                                |  | Damages Avoided; Evidence of Success                  |  | 3. Ongoing capability  |
| VT-5      | Continue to develop, enhance, and implement existing emergency plans.  |                     |                                       |                                | Ongoing capability                                   | Cost  |  | 1. Discontinue   |
|           |  |                     |                                       |                                |  | Level of Protection                                   |  | 2.   |
|           |  |                     |                                       |                                |  | Damages Avoided; Evidence of Success                  |  | 3. Ongoing capability  |
| VT-6      | Create/enhance/ maintain mutual aid agreements with neighboring communities.   |                     |                                       |                                | Ongoing capability                                   | Cost  |  | 1. Discontinue   |
|           |  |                     |                                       |                                |  | Level of Protection                                   |  | 2.   |
|           |  |                     |                                       |                                |  | Damages Avoided; Evidence of Success                  |  | 3. Ongoing capability  |



| Project # | Project   | Hazard(s) Addressed | Brief Summary of the Original Problem | Responsible Party | Status (In Progress, Ongoing, No Progress, Complete) | Evaluation of Success (if project status is complete) |  | Next Steps<br>1. Project to be included in 2019 HMP or Discontinue<br>2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate).<br>3. If discontinue, explain why. |
|-----------|---|---------------------|---------------------------------------|-------------------|--|---|--|--|
|           |   |                     |                                       |                   |  | Cost  | Level of Protection<br>Damages Avoided;<br>Evidence of Success |  |
| VT-7      | Support County-wide initiatives identified in Section 9.1 of the County Annex.  |                     |                                       |                   | Ongoing capability                                   | Cost  |  | 1. Discontinue<br>2.<br>3. Ongoing capability  |
|           |   |                     |                                       |                   |  | Level of Protection                                   |  |  |
|           |   |                     |                                       |                   |  | Damages Avoided;<br>Evidence of Success               |  |  |
| VT-8      | Support/Participate in the Stream Team program offered by the Onondaga County SWCD, to assist in the removal of debris, log jams, etc. in flood vulnerable stream sections. |                     |                                       |                   | Ongoing capability                                   | Cost  |  | 1. Discontinue<br>2.<br>3. Ongoing capability  |
|           |   |                     |                                       |                   |  | Level of Protection                                   |  |  |
|           |   |                     |                                       |                   |  | Damages Avoided;<br>Evidence of Success               |  |  |
| VT-8      | Prominently display the village's NFIP Floodplain mapping in the Town/Village Hall, and post on the village website, along with available information on the NFIP program.  |                     |                                       |                   | Complete   | Cost  |  | 1. Discontinue<br>2.<br>3. Complete  |
|           |   |                     |                                       |                   |  | Level of Protection                                   | Accessible to residents when needed                            |  |
|           |   |                     |                                       |                   |  | Damages Avoided;<br>Evidence of Success               |  |  |



### **Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy**

The Village of Tully has performed ongoing maintenance projects to reduce the impact of flooding but has not identified specific mitigation projects/activities that have been completed but were not identified in the previous mitigation strategy in the 2013 Plan.

### **Proposed Hazard Mitigation Initiatives for the Plan Update**

The Village of Tully participated in a mitigation action workshop on January 14, 2019 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

Table 9.35-12 summarizes the comprehensive-range of specific mitigation initiatives the Village of Tully would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.35-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.35-12. Proposed Hazard Mitigation Initiatives

| Project Number | Project Name   | Goals Met | Hazard(s) to be Mitigated | Description of Problem   | Description of Solution?   | Critical Facility (Yes/No) | Environmental and Historic Preservation (EHP) Issues | Estimated Timeline | Lead Agency | Estimated Costs  | Estimated Benefits                                       | Potential Funding Sources | Priority | Mitigation Category | CRS Category |
|----------------|--|-----------|---------------------------|--|--|----------------------------|--|--------------------|-------------|--|--|---------------------------|----------|---------------------|--------------|
| V. Tully-1     | Increase culvert capacity near the wastewater treatment plant  | 1, 3      | Flood                     | <b>Problem:</b> The culvert near the village's wastewater treatment plant (18 Community Dr., Tully) is too small to handle the amount of water during heavy rainfall events or ice jams. This can lead to possible flooding of the plant, impacting the wastewater system for the village. | <b>Solution:</b> The village will conduct a hydrology study to determine the necessary size of a replacement culvert. The village will then replace the culvert with the necessary upsized version as well as any recommended solutions. | No                         | Possible permitting                                  | 6 months           | Village DPW | \$10,000   | Reduction in stormwater flooding risk to Treatment Plant | HMGP, PDM, FHWA, bonding  | High     | SIP                 | SP           |
| V. Tully-2     | Increase capacity of drainage system in the area of Onondaga Street, State Street, and Railroad Road | 1, 3      | Flood, Severe Storm       | <b>Problem:</b> Flooding on Onondaga Street from State St. to Railroad St. floods because of poor drainage system. The eastern part of Douglas St. near the village highway garage also floods due to poor drainage system.  | <b>Solution:</b> The village will conduct a study to determine what changes are necessary for increasing the capacity of the stormwater system. Once the study is completed, the village will conduct the necessary upgrades.            | No                         | None   | 1 year             | Village DPW | \$71,000   | Keep street open, reduce or prevent flooding             | PDM, HMGP, DOT/FHWA       | Medium   | SIP                 | SP           |
| V. Tully-3     | Stabilize creekbank in the area of Onondaga  | 1, 3      | Flood                     | <b>Problem:</b> The Onondaga Street Bridge has heavy truck traffic. The creek is washing out around the footers of the bridge, making it weak. This is impacting the integrity of  |  | No                         | Yes, permitting                                      | 1-2 years          | Village DPW | Dependent on results of study and selected mitigation. | Road remains open  | HMGP, PDM, FHWA, bonding  | Medium   | SIP, NSP            | PP, NR       |





Table 9.35-12. Proposed Hazard Mitigation Initiatives

| Project Number | Project Name  | Goals Met | Hazard(s) to be Mitigated | Description of Problem   | Description of Solution? | Critical Facility (Yes/No) | Environmental and Historic Preservation (EHP) Issues | Estimated Timeline | Lead Agency   | Estimated Costs      | Estimated Benefits   | Potential Funding Sources | Priority | Mitigation Category | CRS Category |
|----------------|---|-----------|---------------------------|--|--------------------------|----------------------------|--|--------------------|---|----------------------|--|---------------------------|----------|---------------------|--------------|
|                | Street Bridge   |           |                           | the bridge and increases the risk of a bridge failure.   |                          |                            |  |                    |   | Expected to be high. |  |                           |          |                     |              |
|                |   |           |                           | <b>Solution:</b> The village will conduct a feasibility study to determine the impact of stream bank armoring, stream bank restoration, and the replacement of the bridge. The village will then conduct the selected action.  |                          |                            |  |                    |   |                      |  |                           |          |                     |              |
| V. Tully-4     | Protect the Verizon Facility to the 500-year flood level. | 1, 2      | Flood                     | <b>Problem:</b> The Verizon facility is located in the 100-year floodplain. The village does not have jurisdiction over the facility and cannot mitigate themselves.<br><b>Solution:</b> The village will contact the facilities manager and discuss options for protecting the facility to the 500-year flood level |                          | Yes                        | None   | Within 6 months    | Village Floodplain Administrator working with facility operators / owners | <\$100               | Provide outreach to the property owner and informing them of potential flood damage and possible solutions | Municipal budget          | Medium   | EAP                 | PI           |

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- PDM Pre-Disaster Mitigation Grant Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.





OEM Office of Emergency Management

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Critical Facility:

Yes  Critical Facility located in 1% floodplain





**Table 9.35-13. Summary of Prioritization of Actions**

| Project Number | Project Name   | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community | Total | High / Medium / Low |
|----------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|-----------------|-------|---------------------|
| V. Tully-1     | Increase culvert capacity near the wastewater treatment plant  | 0           | 1                   | 1                  | 1         | 1         | 1     | 0      | 1             | 1      | 1              | 0            | 1        | 1               | 1               | 11    | High                |
| V. Tully-2     | Increase capacity of drainage system in the area of Onondaga Street, State Street, and Railroad Road | 0           | 1                   | 1                  | 0         | 0         | 1     | 0      | 1             | 1      | 0              | 1            | 1        | 1               | 0               | 8     | Medium              |
| V. Tully-3     | Stabilize creekbank in the area of Onondaga Street Bridge  | 0           | 1                   | 0                  | 0         | 1         | 1     | 0      | 1             | 1      | 0              | 0            | 1        | 1               | 0               | 7     | Medium              |
| V. Tully-4     | Protect the Verizon Facility to the 500-year flood level.  | 0           | 1                   | 0                  | 1         | 1         | 0     | 1      | 1             | 1      | 0              | 0            | 0        | 1               | 1               | 8     | Medium              |

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



### **9.35.7 Future Needs to Better Understand Risk/Vulnerability**

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None at this time.

### **9.35.8 Staff and Local Stakeholder Involvement in Annex Development**

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The Village of Tully followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: Codes Enforcement Officer, Public Works Department, and Mayor. The Codes Enforcement Officer represented the community on the Onondaga County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meetings).

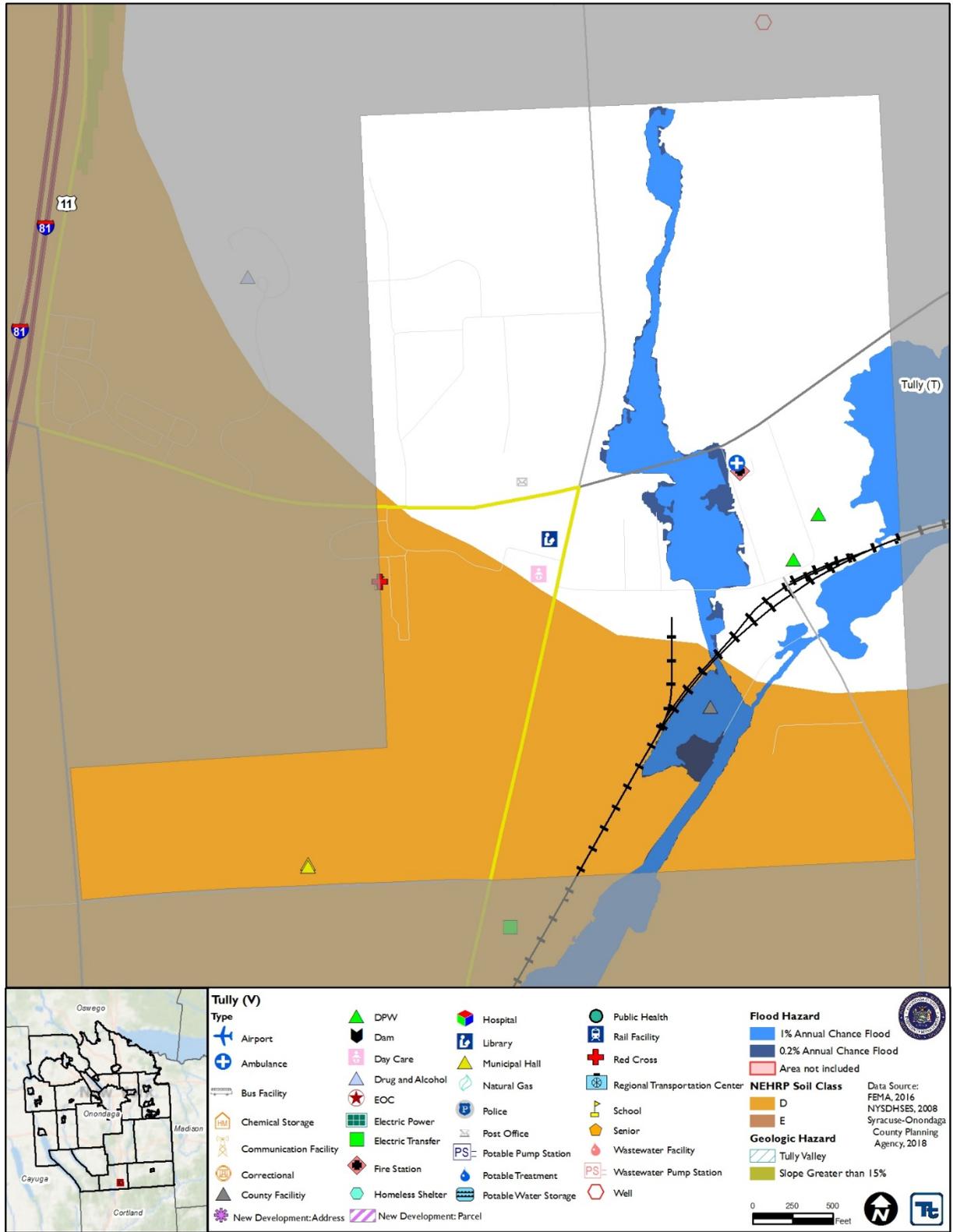
### **9.35.9 Hazard Area Extent and Location**

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Hazard area extent and location maps have been generated for the Village of Tully that illustrate the probable areas impacted within the municipality. 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 exposure. A map of the Village of Tully hazard area extent and location is provided on the following page. This map indicates the location of the regulatory floodplain as well as identified critical facilities within the municipality.



Figure 9.35-1. Village of Tully Hazard Area Extent and Location Map





| Action Worksheet  |  |   |  |
|---|--|---|--|
| <b>Project Name:</b>  | Increase culvert capacity near the wastewater treatment plant  |   |  |
| <b>Project Number:</b>  | V. Tully-1   |   |  |
| Risk / Vulnerability  |  |   |  |
| <b>Hazard(s) of Concern:</b>  | Flood  |   |  |
| <b>Description of the Problem:</b>  | The culvert near the village's wastewater treatment plant (18 Community Dr., Tully) is too small to handle the amount of water during heavy rainfall events or ice jams. This can lead to possible flooding of the plant, impacting the wastewater system for the village. |   |  |
| Action or Project Intended for Implementation   |  |   |  |
| <b>Description of the Solution:</b>   | The village will conduct a hydrology study to determine the necessary size of a replacement culvert. The village will then replace the culvert with the necessary upsized version as well as any recommended solutions.  |   |  |
| <b>Is this project related to a Critical Facility?</b>  | Yes <input type="checkbox"/>   | No <input checked="" type="checkbox"/>                                |  |
| <b>Is this project related to a Critical Facility located within the 100-year floodplain?</b>   | Yes <input type="checkbox"/>   | No <input checked="" type="checkbox"/>                                |  |
| (If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater) |  |   |  |
| <b>Level of Protection:</b>   | 500-year flood event   | <b>Estimated Benefits (losses avoided):</b>                           | Reduction in stormwater flooding risk to Treatment Plant |
| <b>Useful Life:</b>   | 30 years   | <b>Goals Met:</b>   | 1, 3   |
| <b>Estimated Cost:</b>  | \$10,000   | <b>Mitigation Action Type:</b>  | Structure and Infrastructure Project.                    |
| Plan for Implementation   |  |   |  |
| <b>Prioritization:</b>  | High   | <b>Desired Timeframe for Implementation:</b>                          | 6 months   |
| <b>Estimated Time Required for Project Implementation:</b>  | 6 months   | <b>Potential Funding Sources:</b>                                     | HMGP, PDM, FHWA, bonding                                 |
| <b>Responsible Organization:</b>  | Village of Tully DPW   | <b>Local Planning Mechanisms to be Used in Implementation if any:</b> | Village Plan   |
| Three Alternatives Considered (including No Action)   |  |   |  |
| <b>Alternatives:</b>  | <b>Action</b>  | <b>Estimated Cost</b>   | <b>Evaluation</b>  |
|   | No Action  | \$0   | Problem continues  |
|   | Ice dividers   | \$20,000  | May solve problem but further study needed               |
|   | Stream channel resolution  | High  | Requires study, environmental issues                     |
| Progress Report (for plan maintenance)  |  |   |  |
| <b>Date of Status Report:</b>   |  |   |  |
| <b>Report of Progress:</b>  |  |   |  |
| <b>Update Evaluation of the Problem and/or Solution:</b>  |  |   |  |



Figure 9.35-2. The map below highlights the undersized culvert at the village's water treatment plant.



Source: Syracuse-Onondaga County Planning Agency, New York DHSES



Figure 9.35-3. The FEMA Floodplain was added to the map to highlight the risk that the water treatment plant is in and that the culvert being to small can cause major flooding issue.



Source: Syracuse-Onondaga County Planning Agency, New York DHSES, FEMA 2016



| Action Worksheet               |   |   |
|--------------------------------|---|---|
| <b>Project Name:</b>           | Increase culvert capacity near the wastewater treatment plant |   |
| <b>Project Number:</b>         | V. Tully-1  |   |
| Criteria                       | Numeric Rank<br>(-1, 0, 1)                                    | Provide brief rationale for numeric rank when appropriate   |
| Life Safety                    | 0   |   |
| Property Protection            | 1   | Treatment Plant protected from flooding                     |
| Cost-Effectiveness             | 1   |   |
| Technical                      | 1   |   |
| Political                      | 1   |   |
| Legal                          | 1   | The village has the legal authority to complete the project |
| Fiscal                         | 0   | The project requires grant funding support                  |
| Environmental                  | 1   |   |
| Social                         | 1   |   |
| Administrative                 | 1   |   |
| Multi-Hazard                   | 0   | Flood   |
| Timeline                       | 1   | 6 months  |
| Agency Champion                | 1   | Village of Tully DPW  |
| Other Community Objectives     | 1   | Protection of critical facilities                           |
| <b>Total</b>                   | 11  |   |
| <b>Priority (High/Med/Low)</b> | High  |   |



| Action Worksheet  |  |   |   |
|---|--|---|---|
| <b>Project Name:</b>  | Increase capacity of drainage system in the area of Onondaga Street, State Street, and Railroad Road   |   |   |
| <b>Project Number:</b>  | V. Tully-2   |   |   |
| Risk / Vulnerability  |  |   |   |
| <b>Hazard(s) of Concern:</b>  | Flood, Severe Storm  |   |   |
| <b>Description of the Problem:</b>  | Flooding on Onondaga Street from State St. to Railroad St. floods because of poor drainage system. The eastern part of Douglas St. near the village highway garage also floods due to poor drainage system.  |   |   |
| Action or Project Intended for Implementation   |  |   |   |
| <b>Description of the Solution:</b>   | The village will conduct a study to determine what changes are necessary for increasing the capacity of the stormwater system. Once the study is completed, the village will conduct the necessary upgrades. |   |   |
| <b>Is this project related to a Critical Facility?</b>  | Yes <input type="checkbox"/>   | No <input checked="" type="checkbox"/>                                |   |
| <b>Is this project related to a Critical Facility located within the 100-year floodplain?</b>   | Yes <input type="checkbox"/>   | No <input checked="" type="checkbox"/>                                |   |
| (If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater) |  |   |   |
| <b>Level of Protection:</b>   | 100-year event   | <b>Estimated Benefits (losses avoided):</b>                           | Keep street open, reduce or prevent flooding      |
| <b>Useful Life:</b>   | 50 years   | <b>Goals Met:</b>   | 1, 3  |
| <b>Estimated Cost:</b>  | \$71,000   | <b>Mitigation Action Type:</b>  | Structure and Infrastructure Project              |
| Plan for Implementation   |  |   |   |
| <b>Prioritization:</b>  | Medium   | <b>Desired Timeframe for Implementation:</b>                          | 1 year  |
| <b>Estimated Time Required for Project Implementation:</b>  | 1 year   | <b>Potential Funding Sources:</b>                                     | PDM, HMGP, DOT/FHWA                               |
| <b>Responsible Organization:</b>  | Village DPW  | <b>Local Planning Mechanisms to be Used in Implementation if any:</b> | Town Engineer study                               |
| Three Alternatives Considered (including No Action)   |  |   |   |
| Alternatives:   | Action   | Estimated Cost  | Evaluation  |
|   | No Action  | \$0   | Problem continues                                 |
|   | Retention basin  | Medium  | Collect stormwater. May not handle full capacity. |
|   | Rain gardens   | Medium  | Prevent runoff. Cannot handle full capacity.      |
| Progress Report (for plan maintenance)  |  |   |   |
| <b>Date of Status Report:</b>   |  |   |   |
| <b>Report of Progress:</b>  |  |   |   |
| <b>Update Evaluation of the Problem and/or Solution:</b>  |  |   |   |



Figure 9.35-4. The map below shows Onondaga Street and Douglas Street near the village highway garage which are prone to flooding due to poor drainage systems.



Source: Syracuse-Onondaga County Planning Agency, New York DHSES, FEMA 2016



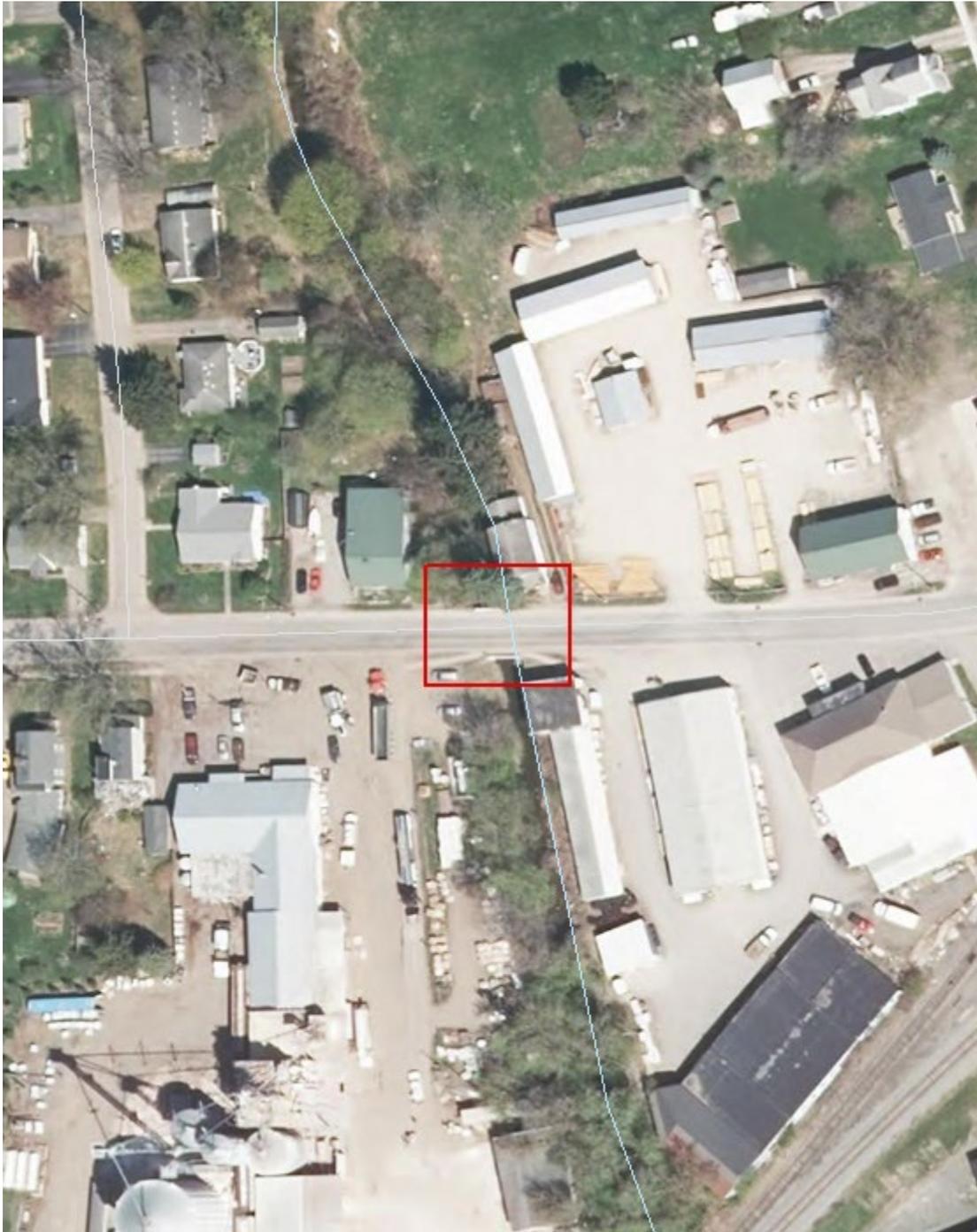
| Action Worksheet               |  |  |
|--------------------------------|--|--|
| <b>Project Name:</b>           | Increase capacity of drainage system in the area of Onondaga Street, State Street, and Railroad Road |  |
| <b>Project Number:</b>         | V. Tully-2   |  |
| Criteria                       | Numeric Rank (-1, 0, 1)  | Provide brief rationale for numeric rank when appropriate    |
| Life Safety                    | 0  |  |
| Property Protection            | 1  | Reduction in stormwater flooding                             |
| Cost-Effectiveness             | 1  |  |
| Technical                      | 0  |  |
| Political                      | 0  |  |
| Legal                          | 1  | The village has the legal authority to complete the project. |
| Fiscal                         | 0  | The project requires grant funding assistance                |
| Environmental                  | 1  |  |
| Social                         | 1  |  |
| Administrative                 | 0  |  |
| Multi-Hazard                   | 1  | Flood, Severe Storm  |
| Timeline                       | 1  | 1 year   |
| Agency Champion                | 1  | Village DPW  |
| Other Community Objectives     | 0  |  |
| <b>Total</b>                   | 8  |  |
| <b>Priority (High/Med/Low)</b> | Medium   |  |



| Action Worksheet  |  |   |   |
|---|--|---|---|
| <b>Project Name:</b>  | Stabilize creekbank in the area of Onondaga Street Bridge  |   |   |
| <b>Project Number:</b>  | V. Tully-3   |   |   |
| Risk / Vulnerability  |  |   |   |
| <b>Hazard(s) of Concern:</b>  | Flood  |   |   |
| <b>Description of the Problem:</b>  | The Onondaga Street Bridge has heavy truck traffic. The creek is washing out around the footers of the bridge, making it weak. This is impacting the integrity of the bridge and increases the risk of a bridge failure. |   |   |
| Action or Project Intended for Implementation   |  |   |   |
| <b>Description of the Solution:</b>   | The village will conduct a feasibility study to determine the impact of stream bank armoring, stream bank restoration, and the replacement of the bridge. The village will then conduct the selected action.             |   |   |
| <b>Is this project related to a Critical Facility?</b>  | Yes <input type="checkbox"/>   | No <input checked="" type="checkbox"/>                                |   |
| <b>Is this project related to a Critical Facility located within the 100-year floodplain?</b>   | Yes <input type="checkbox"/>   | No <input checked="" type="checkbox"/>                                |   |
| (If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater) |  |   |   |
| <b>Level of Protection:</b>   | To be determined after study completion.   | <b>Estimated Benefits (losses avoided):</b>                           | Road remains open   |
| <b>Useful Life:</b>   | 20-50 years  | <b>Goals Met:</b>   | 1, 3  |
| <b>Estimated Cost:</b>  | Dependent on results of study and selected mitigation. Expected to be high.  | <b>Mitigation Action Type:</b>  | Structure and Infrastructure Project, Natural Systems Protection  |
| Plan for Implementation   |  |   |   |
| <b>Prioritization:</b>  | Medium   | <b>Desired Timeframe for Implementation:</b>                          | 1 year  |
| <b>Estimated Time Required for Project Implementation:</b>  | 1-2 years  | <b>Potential Funding Sources:</b>                                     | HMGP, PDM, FHWA, bonding  |
| <b>Responsible Organization:</b>  | Village DPW  | <b>Local Planning Mechanisms to be Used in Implementation if any:</b> |   |
| Three Alternatives Considered (including No Action)   |  |   |   |
| <b>Alternatives:</b>  | <b>Action</b>  | <b>Estimated Cost</b>   | <b>Evaluation</b>   |
|   | No Action  | \$0   |   |
|   | Bank armoring  | Medium  | Needs study to determine if effective and what scale is necessary |
|   | Stream restoration   | Medium  | Needs study to determine if effective and what scale is necessary |
| Progress Report (for plan maintenance)  |  |   |   |
| <b>Date of Status Report:</b>   |  |   |   |
| <b>Report of Progress:</b>  |  |   |   |
| <b>Update Evaluation of the Problem and/or Solution:</b>  |  |   |   |



Figure 9.35-5. Below is an image of the Onondaga Street Bridge which is becoming weak as the base is washing out.



Source: Syracuse-Onondaga County Planning Agency, New York DHSES



Figure 9.35-6. The map shows where the bridge is in relation to the floodplain.



Source: Syracuse-Onondaga County Planning Agency, New York DHSES, FEMA 2016



| Action Worksheet               |   |   |
|--------------------------------|---|---|
| <b>Project Name:</b>           | Stabilize creekbank in the area of Onondaga Street Bridge |   |
| <b>Project Number:</b>         | V. Tully-3  |   |
| Criteria                       | Numeric Rank<br>(-1, 0, 1)                                | Provide brief rationale for numeric rank when appropriate   |
| Life Safety                    | 0   |   |
| Property Protection            | 1   | Protects bridge from failure                                |
| Cost-Effectiveness             | 0   |   |
| Technical                      | 0   |   |
| Political                      | 1   | There is political support for the project                  |
| Legal                          | 1   | The village has the legal authority to complete the project |
| Fiscal                         | 0   | The project requires grant funding assistance               |
| Environmental                  | 1   |   |
| Social                         | 1   |   |
| Administrative                 | 0   |   |
| Multi-Hazard                   | 0   | Flood   |
| Timeline                       | 1   | 1-2 years   |
| Agency Champion                | 1   | Town DPW  |
| Other Community Objectives     | 0   |   |
| <b>Total</b>                   | 7   |   |
| <b>Priority (High/Med/Low)</b> | Medium  |   |