

Jurisdictional Annex

Village of DeRuyter

1. Contacts

The contact for the Village of DeRuyter regarding this plan are identified as follows:

- Travis Marshall – Mayor
Address: 1663 Cortland St. DeRuyter, NY 13052
Phone: 315-852-9625
Email: mayormarshall@deruyternygov.us
- Ardene Tiffany – Village Clerk
Address: 1663 Cortland St. DeRuyter, NY 13052
Phone: 315-852-9625
Email: deruytervillage@frontiernet.net

Village Website: <https://www.deruyternygov.us/>

2. Municipal Profile

2.1 Population

The 2020 Census estimated that 408 people live in the Village of DeRuyter. The Village's population has decreased by 26.9% since the 2010 Census (558) (U.S. Census Bureau, 2020). The median age in the Village is 32 years and 15.6% of the population is over the age of 65. The Village covers approximately 0.4 square miles. The Village has an equalized assessed value of approximately 268 million dollars spread across a variety of property classes.

2.2 Location

The Village of DeRuyter is located on the western edge of the Town of DeRuyter. The Village of DeRuyter is shown in Figure 1 (Attachment A).

2.3 Governing Body

The Village of DeRuyter is governed by a three-member Village Board, which includes the Mayor and two trustees.

2.4 Recent and Anticipated Future Development

Since the last County HMP (2017), several warehouses were constructed on Albany Street in 2017 and 2018. No new development has occurred in the Special Flood Hazard Area, and the reported developments have not changed the Village's vulnerability to natural hazards.

3. Capability Assessment

3.1 Planning and Regulatory Capability

The Village has considered the 2017 HMP when implementing their existing plans and regulations and progressing projects. The Village's HMP update will be incorporated into and referenced by future updates of the plans, policies, ordinances, programs, studies, and reports listed in Table 1, below.

| Table 1. Planning Mechanisms and Capabilities | | |
|---|---------------------|-----------------|
| Planning Mechanism | Village of DeRuyter | Notes |
| Administration | | |
| Maintenance Programs | Yes | |
| Mitigation Planning Committee | Yes | |
| Mutual Aid or Shared Services Agreements | Yes | |
| Planning Board | No | |
| Zoning Board | No | |
| Development Approvals | | |
| Building Code | Yes | |
| Building Code Effectiveness Grading Schedule (BCEGS) Evaluation | No | |
| Fire Department ISO Rating | | |
| Site Plan Review Requirements | No | |
| Special Use Permits | No | |
| Funding Resources | | |
| Authority to Levy Taxes | Yes | |
| Capital Improvement Project Funds | Yes | |
| Federal Funding Programs (i.e., USDA, FEMA, others) | Yes | |
| General Obligation Bonds and/or Special Tax Bonds | Yes | |
| Impact Fees for New Development | No | |
| State Funding Programs (i.e., NYSEFC, NYSOER, NYSDEC, others) | Yes | |
| Utility Fees (i.e., water, sewer, stormwater, gas, electric) | Yes | Municipal water |
| Land Use Regulations | | |
| Density Controls | No | |

| Table 1. Planning Mechanisms and Capabilities | | |
|---|----------------------------|---|
| Planning Mechanism | Village of DeRuyter | Notes |
| Flood Insurance Rate Maps | Yes | |
| Floodplain Ordinance | Yes | |
| Hillside Development Regulations | No | |
| Open Space Preservation | No | |
| Stormwater Management Regulations | Yes | State regulations apply |
| Streambank Setback Regulations | No | |
| Subdivision Regulations | No | |
| Transfer of Development Rights | Yes | State and Federal Programs Available for Agriculture |
| Zoning Ordinance | No | |
| Natural Resources | | |
| Forest/Vegetation Management | No | |
| Stream Corridor Management | No | |
| Stream Dumping Regulations | Yes | State regulations apply |
| Urban Forestry and Landscape Management | Yes | Tree maintenance budget |
| Watershed Management | No | |
| Wetland Regulations | Yes | State and Federal rules apply |
| Plans | | |
| Capital Improvement Plan | No | |
| Comprehensive Emergency Management Plan | No | County has this plan in place |
| Comprehensive Plan | No | |
| Continuity of Operations Plan | No | County has this plan in place |
| Economic Development Plan | No | |
| Other Plans (specify) | Yes | Adopted Public Health Plan in response to COVID-19 pandemic (required by NYS) |
| Programs/Organizations | | |
| Climate Smart Community | No | |
| Local Emergency Preparedness/Disaster Response Organizations | Yes | Fire Department |
| Local Environmental Protection Organizations | No | |
| National Weather Service StormReady Certification | No | County is certified |
| Outreach Programs | Yes | Education of Elected to NIMS Standards |
| Partnerships with private entities addressing mitigation or disaster response | No | |
| School Programs or Adult Educational Programs | Yes | Fire Safety Education |
| Staff Positions | | |
| Civil Engineer | No | |
| Code Enforcement Officer | Yes | |
| Emergency Manager | Yes | |

| Table 1. Planning Mechanisms and Capabilities | | |
|---|---------------------|--------------------------|
| Planning Mechanism | Village of DeRuyter | Notes |
| Floodplain Administrator | Yes | Code Enforcement Officer |
| Planner/GIS Coordinator | No | County assists |
| Technical Abilities | | |
| Grant Writing | No | Contract out |
| Hazard Information Centers | No | |
| Hazard Warning Systems | Yes | |

3.2 Emergency Communications, Routes, and Shelters

The Village of DeRuyter utilizes the Village website, Village Facebook page, and the Fire Department's electronic message board for emergency communications. The Village is also covered by Madison County's emergency notification system. The major transportation route within the Village is State Route 13. The Village's emergency shelter locations are summarized in Table 2, below.

| Table 2. Emergency Shelters | | | | | | |
|-----------------------------|--------------------------------------|----------------------------------|------------------------------|-------------------|-------------------|------------------------|
| Facility | Address | Owner/ Occupant | Support medical needs? | ADA Compliant? | Pets accepted? | Notes |
| DeRuyter Central School | 711 Railroad St, DeRuyter, NY 13052 | DeRuyter Central School District | Yes | Yes | No | Backup power available |
| DeRuyter Town Hall | 735 Utica Street, DeRuyter, NY 13052 | Town of DeRuyter | Yes | Yes | No | Backup power available |
| DeRuyter Village Office | 1663 Cortland St, DeRuyter, NY 13052 | Village of DeRuyter | Yes | Yes | No | Backup power available |

3.3 Temporary and Permanent Housing Locations

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

- **Potential Temporary Housing Locations**
 - DeRuyter Fairgrounds - Mechanic Street

- **Potential Permanent Housing Locations**
 - Privately owned vacant land throughout the Town and Village of DeRuyter (coordination required with landowners for potential property purchase or subdivisions)

4. Hazard Vulnerabilities and Ranking

4.1 Risk Assessment

The Village reviewed multiple natural hazards to include in the HMP update. The hazard analysis criteria is summarized in Table 3. The Village's natural hazard analysis results are provided in Table 4.

| Score | Extent | Onset | Impact | Frequency | Total Score | Overall Vulnerability |
|-------|-------------------|------------------|---------------------------|------------|-------------|-----------------------|
| 1 | One location | Days of warning | Minor damages/injuries | Rare | 4 to 5 | Low |
| 2 | Several locations | Hours of warning | Moderate damages/injuries | Infrequent | 6 to 8 | Moderate |
| 3 | Large area | No warning | Severe damages/injuries | Regular | 9 to 12 | High |

| Hazard Event | Extent | Onset | Impact (Damages and Injury) | Frequency | Total Score and Overall Vulnerability | Jurisdiction Rank |
|-------------------------------|--------|-------|-----------------------------|-----------|---------------------------------------|-------------------|
| Earthquake | 3 | 3 | 3 | 1 | 10 - High | 1 |
| Severe Thunderstorm/Wind/Hail | 3 | 2 | 2.5 | 2 | 9.5 - High | 2 |
| Tornado | 3 | 2.5 | 3 | 1 | 9.5 - High | 3 |
| Severe Winter Storm | 3 | 1 | 3 | 2 | 9 - High | 4 |
| Ice Storm | 3 | 1 | 3 | 2 | 9 - High | 5 |
| Wildfire | 2 | 3 | 3 | 1 | 9 - High | 6 |
| Flood | 2 | 2 | 3 | 1 | 8 - Moderate | 7 |
| Extreme Temperatures | 3 | 1 | 2 | 2 | 8 - Moderate | 8 |
| Ice Jam | 2 | 2 | 3 | 1 | 8 - Moderate | 9 |
| Drought | 3 | 1 | 2 | 1 | 7 - Moderate | 10 |

4.2 Critical Facilities

Critical facilities include any facility that is critical for emergency response or that requires special emergency response in the event of hazardous incidents as identified by the Village of DeRuyter. Table 5, below, denotes the types and locations of critical facilities within the Village.

| Table 5. Critical Infrastructure in the Village of DeRuyter | | |
|--|------------------|---|
| Facility Name | Address | Located in Floodplain |
| Cell Tower | Railroad St | No |
| DeRuyter Central School | 711 Railroad St | No |
| DeRuyter Fire Dept. | 1663 Cortland St | No |
| DeRuyter Town Highway Garage | 807 Utica St | No |
| DeRuyter Town Offices and Library | 735 Utica St | No |
| DeRuyter Village DPW and Fairgrounds | 1579 Mechanic St | 100-year (small portion of fairgrounds) |
| Smith Ambulance | 1713 Albany St | 100-year |

5. Priority Hazard Events

The following sections detail the priority hazard events identified by the jurisdiction. Additional information about each hazard including frequency, history, and severity within Madison County is included within Section 5.0 of the main body of the Hazard Mitigation Plan. Historical tornado and earthquake records are reported for the last ten years (2012-2022). All other hazard profiles report events that have occurred in the last five years (2017-2022).

The probability of climate-related hazard events is expected to increase in the future within the Village of DeRuyter. Climate change is expected to cause an increase in weather volatility, rising sea level, and greater temperature extremes.

Past occurrences of hazard events are indicated in their respective profiles below. Some hazards do not have historical records, but they were profiled for future mitigation planning consideration. The Village of DeRuyter chose not to profile landslide in their annex even though this hazard was profiled for the County. The Village does not have a history of nor do they have any significant concerns regarding landslides.

5.1 Earthquake

5.1.1 *Description*

For a description of this hazard, please see Section 5.5 of the main body of the plan.

5.1.2 *Hazard Vulnerability*

The Village's overall vulnerability for an earthquake is high, as documented in their hazard analysis in Section 4.1. According to Figure 5.8 of the main body plan, the Village of DeRuyter has a peak ground acceleration (PGA) Hazard rating of 8-10%g. An earthquake could impact any location within the Village, though historically, the Village has not experienced significant earthquake damages. Earthquakes that damage the Village's critical infrastructure or emergency evacuation routes (State Route 13) would result in the most significant impacts to the Village and its residents.

5.1.3 *Historical Hazard Occurrences and Damage Estimates*

According to the USGS Earthquake Catalog, there are no historical records of earthquakes occurring specifically in the Village of DeRuyter. An earthquake has the potential to cause hundreds of thousands of dollars in damages.

5.1.4 *Future Potential Impacts*

The Village's overall vulnerability for an earthquake remains high due to the large potential extent, fast onset, and high potential for injuries or damages. However, the Village is within an area of light seismic activity and is not likely to experience a damaging earthquake.

5.2 **Severe Thunderstorm, Windstorm, or Hail**

5.2.1 *Description*

For a description of these hazards, please see Section 5.1 of the main body of the plan.

5.2.2 *Hazard Vulnerability*

The Village's overall vulnerability for a severe thunderstorm, windstorm, or hail event is high, as documented in their hazard analysis in Section 4.1. The entire Village is susceptible to damages from a severe thunderstorm, windstorm, or hail event. Fallen trees from severe winds can damage overhead utility lines, resulting in power outages. In addition, these events are likely to result in damages to private and public infrastructure and property. Damages to the Village's critical infrastructure or primary evacuation routes (State Route 13) would be most impactful to Village residents.

5.2.3 *Historical Hazard Occurrences and Damage Estimates*

The NCDC reports three severe storm events that occurred in the Village of DeRuyter within the past five years. One of these records was a hail event, and two were thunderstorm winds. Estimated damages for the Village of DeRuyter ranged from \$0 to \$7,000 per event (Table 6). Actual damages were likely greater than those estimated by the NCDC.

| Table 6. Severe Storm Event Records for the Village of DeRuyter | | | | |
|---|-----------|-----------|---------------------------|-----------------------|
| Event Type | Date | Magnitude | Estimated Property Damage | Estimated Crop Damage |
| Thunderstorm Wind | 5/18/2017 | 55 knots | \$7,000.00 | - |
| Hail | 6/21/2021 | 1 in | \$0.00 | - |
| Thunderstorm Wind | 7/22/2022 | 50 knots | \$5,000.00 | - |
| Total | | | \$12,000.00 | None reported |

5.2.4 Future Potential Impacts

The Village's overall vulnerability for a severe thunderstorm, windstorm, or hail event remains high. The frequency and magnitude of severe storm events may increase due to climate change.

5.3 Tornado

5.3.1 Description

For a description of this hazard, please see Section 5.8 of the main body of the plan.

5.3.2 Hazard Vulnerability

The Village's overall vulnerability for a tornado is moderate, as documented in their hazard analysis in Section 4.1. The entire Village of DeRuyter is susceptible to damages from a tornado. Topography in the Village is generally flat to gently sloping, but the Village is surrounded by multiple hills in the Town of DeRuyter. Tornadoes often touch down along topographic high points in this region and affect more localized areas at one time, rather than longer swaths of damage experienced in flatter areas. Even if only a small area is affected, a tornado could result in severe damage to homes, over-turned automobiles and leveling of utility lines.

5.3.3 Historical Hazard Occurrences and Damage Estimates

Three tornadoes have occurred in Madison County within the past ten years, but none of these records occurred in the Village of DeRuyter. There are no specific damage estimates related to tornadoes for the Village.

5.3.4 *Future Potential Impacts*

The Village's overall vulnerability for a tornado remains moderate. The entire Village of DeRuyter is susceptible to this hazard, but a tornado would likely only impact a small area. Regardless, damages can be devastating. The frequency and magnitude of tornado events may increase due to climate change.

5.4 **Severe Winter Storm**

5.4.1 *Description*

For a description of this hazard, please see Section 5.3 of the main body of the plan.

5.4.2 *Hazard Vulnerability*

The Village's overall vulnerability for a severe winter storm is high, as documented in their hazard analysis in Section 4.1. These storms typically affect more than one area within the County. The entire Village of DeRuyter is susceptible to damages from a severe winter storm event. The Village Department of Public Works (DPW) clears Village streets during heavy snow events. Roadway safety is a major concern during severe winter storm events. Damages to the Village's critical infrastructure or primary transportation route (State Route 13) would be most impactful to Village residents. Development in the Village is primarily concentrated along State Route 13 (Utica Street) and Albany Street.

5.4.3 *Historical Hazard Occurrences and Damage Estimates*

The Village of DeRuyter has been affected by a number of severe winter storm events reported for Madison County, which are described in Section 5.3 of the main body of the plan. The NCDRC does not report any winter storm damage estimates specific to the Village of DeRuyter.

5.4.4 *Future Potential Impacts*

The Village's overall vulnerability for a severe winter storm remains high. The severity and frequency of severe winter storms may increase due to climate change.

5.5 Ice Storm

5.5.1 *Description*

For a description of this hazard, please see Section 5.7 of the main body of the plan.

5.5.2 *Hazard Vulnerability*

The Village's overall vulnerability for an ice storm is high, as documented in their hazard analysis in Section 4.1. The entire Village of DeRuyter is susceptible to damages from an ice storm event. Damages to the Village's critical infrastructure or primary transportation route (State Route 13) would be most impactful to Village residents. Development in the Village is primarily concentrated along State Route 13 (Utica Street) and Albany Street. The Village of DeRuyter DPW completes tree maintenance within Village road right of ways to minimize potential damages to overhead utility lines during storm events. Private utility right of ways are generally maintained by the individual utility companies.

5.5.3 *Historical Hazard Occurrences and Damage Estimates*

The NCDC reports one ice storm in Madison County within the past five years, which was reported for the entire County. The reported ice storm on February 10, 2021 and is described in Section 5.7 of the main body of the plan. No damage estimates related to ice storms are reported specific to the Village of DeRuyter.

5.5.4 *Future Potential Impacts*

The Village's overall vulnerability for an ice storm remains high. The Village DPW and private utility companies will continue to maintain right of ways to

mitigate infrastructure damages from fallen trees and debris to the extent possible.

5.6 Wildfire

5.6.1 Description

For a description of this hazard, please see Section 5.10 of the main body of the plan.

5.6.2 Hazard Vulnerability

The Village's overall vulnerability for a wildfire is high, as documented in their hazard analysis in Section 4.1. Undeveloped lands such as forest and open fields and brush lands within the Village are susceptible to wildfires. Based on a review of aerial mapping, the outskirts of the Village of DeRuyter consists of forested lands or open fields. The Village is located in a NYS Forest Fire District designated under 6 NYCRR Part 191.1.

5.6.3 Historical Hazard Occurrences and Damage Estimates

According to Figure 5.14 (Appendix A of the main body of the plan), the Village of DeRuyter experienced 0.4-0.8 wildfires per square mile from 2003 to 2017 according to reports from the NYSDEC. A wildfire has the potential to cause hundreds of thousands of dollars in damages.

5.6.4 Future Potential Impacts

The Village's overall vulnerability for a wildfire remains high. The undeveloped portions of the Village are most likely to be impacted in the future. Wildfires are likely to increase in frequency and magnitude in the future due to climate change.

5.7 Flood

5.7.1 *Description*

For a description of this hazard, please see Section 5.2 of the main body of the plan.

5.7.2 *Hazard Vulnerability*

The Village's overall vulnerability for a flood is moderate, as documented in their hazard analysis in Section 4.1. The Village is drained by Tioughnioga Creek. FEMA provides flood insurance rate maps for the Village of DeRuyter. The 100-year floodplain corresponds with areas that are at high risk for flooding (1% likely to flood any given year), and areas within a 500-year floodplain are at moderate flood risk (0.2% likely to flood in any given year). Figure 1 (Attachment A) shows FEMA mapped 100-year floodplains within the Village. Table 7 summarizes the amount of land within the Village of DeRuyter that is located within 100-year floodplain, as mapped by FEMA.

| Table 7. Summary of Areas in Floodplains (Source: FEMA Q3 Digital Floodplain Data, 1996) | | |
|--|------------------------------|----------------------------|
| Village of DeRuyter Total Area | Percent of Total Area | |
| | 100-Year Floodplain | 500-Year Floodplain |
| 240 acres | 5.3% | 0% |

The northeastern edge of the Village DPW and Fairgrounds property intersects the 100-year floodplain of Tioughnioga Creek. The floodplain area consists of an open field and a portion of the access drive around the perimeter of the site. Smith Ambulance is also located in the mapped 100-year floodplain.

5.7.3 *Historical Hazard Occurrences and Damage Estimates*

According to the NCDC, no flood records were noted to specifically impact the Village of DeRuyter in the past five years. The Village reports local records of past flooding along Tioughnioga Creek. The potential exists for State Route 13 to be inaccessible due to flooding. There is a history of flooding at the Village DPW and Fairgrounds property, but significant flood issues have not occurred here in the last five years. Smith Ambulance

experienced stream bank erosion along the ambulance bay driveway during a flash flood event in July 2013. No other flood damages have occurred at this facility. As described in Section 6.0 of this annex, NFIP loss claims data were requested from FEMA and a response is pending. According to the County's 2017 HMP, there are no repetitive loss properties in the Village.

5.7.4 Future Potential Impacts

The Village's overall vulnerability for a flood remains moderate. Properties along Tioughnioga Creek will remain most vulnerable to flooding in the future. The Village proposed one flood-related mitigation action, a streambank stabilization project on Utica Street. Once implemented, this project will reduce the risk of flood damages in this location. The frequency and magnitude of flood events may increase due to climate change.

5.8 Extreme Temperatures

5.8.1 Description

For a description of this hazard, please see Section 5.6 of the main body of the plan.

5.8.2 Hazard Vulnerability

The Village's overall vulnerability for an extreme temperature event is moderate, as documented in their hazard analysis in Section 4.1. Extreme temperatures typically affect most or all of the County, and the entire Village of DeRuyter is susceptible to this hazard. Extreme temperature events tend to have greater impacts on vulnerable populations, including older adults (over 65 years), young children (under 5 years), people with health problems, or people who cannot afford to sufficiently heat or cool their homes. Approximately 13.9% of the population in the Village is under 5 years old, and 15.6% of the population is over 65 years old. Approximately 11.8% of the Village's population is below the poverty level. These populations are at a higher risk of being impacted by extreme temperature events.

5.8.3 *Historical Hazard Occurrences and Damage Estimates*

The NCDC reports three extreme temperatures in Madison County within the past five years. Each of these events was an extreme cold/wind chill reported Countywide. Details of these events are described in Section 5.5 of the main body of the plan. No damage estimates related to extreme temperatures are reported specific to the Village of DeRuyter.

5.8.4 *Future Potential Impacts*

The Village's overall vulnerability for an extreme temperature event remains moderate. Extreme temperatures are likely to increase in frequency and extremity in the future due to climate change.

5.9 **Drought**

5.9.1 *Description*

For a description of this hazard, please see Section 5.9 of the main body of the plan.

5.9.2 *Hazard Vulnerability*

The Village's overall vulnerability for drought is moderate, as documented in their hazard analysis in Section 4.1. Agricultural areas and properties served by private wells would experience the most significant impacts. The Village has a municipal water system, and therefore developed properties are less susceptible to a drought. Agricultural properties (located in the outskirts of the Village) would be most susceptible to a drought.

5.9.3 *Historical Hazard Occurrences and Damage Estimates*

The NCDC reports no specific drought events for the Village of DeRuyter. The Village also did not note any local records of drought events. The Village's water system is supplied by wells, but they have not experienced supply problems in the past.

5.9.4 Future Potential Impacts

The Village's overall vulnerability for drought remains moderate. Agricultural areas (generally in the outskirts of the Village) are most likely to be impacted by this event. Drought events are likely to increase in frequency and magnitude in the future due to climate change.

5.10 Ice Jam

5.10.1 Description

For a description of this hazard, please see Section 5.11 of the main body of the plan.

5.10.2 Hazard Vulnerability

The Village's overall vulnerability for an ice jam is low, as documented in their hazard analysis in Section 4.1. Properties along the Tioughnioga Creek are most vulnerable to ice jams.

5.10.3 Historical Hazard Occurrences and Damage Estimates

The U.S. Army Corps of Engineers (USACE) Cold Regions Research and Engineering Laboratory (CRREL) reports no specific ice jam events for the Village of DeRuyter. The Village reports one ice jam along the Tioughnioga Creek in 1996, but no ice jams have impacted the Village in the last five years. No damage estimates are available for this event.

5.10.4 Future Potential Impacts

The Village's overall vulnerability for an ice jam remains low. Properties along Tioughnioga Creek remain vulnerable to ice jams, but the Village is not likely to experience significant damages from an ice jam given their history with this hazard. The frequency and magnitude of ice jam events may increase due to climate change.

6. National Flood Insurance Program

Long-term mitigation of potential flood impacts can be best achieved through comprehensive floodplain management regulations and enforcement at a local level. The National Flood Insurance Program (NFIP), regulated by FEMA, aims to reduce the impact of flooding on private and public structures by providing affordable insurance for property owners. The program encourages local jurisdictions to adopt and enforce floodplain management regulations in order to mitigate the potential effects of flooding on new and existing infrastructure (FEMA, 2015).

Communities that participate in the NFIP adopt floodplain ordinances. If an insured structure incurs damage costs that are over 50% of its market value, the owner must comply with the local floodplain regulations when repairing or rebuilding the structure. A structure could be rebuilt at a higher elevation, or it could be acquired and demolished by the municipality or relocated outside of the floodplain. Insured structures that are located within floodplains identified on FEMA's Flood Insurance Rate Maps (FIRMs) may receive payments for structure and content losses if impacted by a flood event.

The NFIP and other flood mitigation actions are important for the protection of public and private property and public safety. Flood mitigation is valuable to communities because it:

- Creates safer environments by reducing loss of life and decreasing property damage;
- Allows individuals to minimize post-flood disaster disruptions and to recover quicker (homes built to NFIP standards generally experience less damage from flood events, and when damage does occur, the flood insurance program protects the homeowner's investment); and
- Lessens the financial impacts on individuals, communities, and other involved parties (FEMA, 2015).

The Village of DeRuyter currently participates in the NFIP (community ID 360396), and its FIRM(s) became effective on 8/24/1984. The Village joined the NFIP on this same date. NFIP loss claims data were requested from FEMA and a response is pending. According to the County's 2017 HMP, there are no repetitive loss properties in the Town. More current repetitive loss data from FEMA is pending. The Village will continue to comply with the NFIP by enforcing floodplain management requirements and regulating new development in Special Flood Hazard Areas, among other required duties.

7. Mitigation Strategy and Prioritization

7.1 Past, Completed, and Ongoing Initiatives

The Village proposed two mitigation actions in the 2017 Madison County HMP, and the status of each action is summarized in Table 8, below. None of the Village's 2017 mitigation actions were re-included for the 2022 update.

| Table 8. Status of 2017 Mitigation Actions <i>Village of DeRuyter</i> | | | | |
|--|---|---------------------|---------------------|--|
| Project Name | Description | Hazard(s) Mitigated | Lead Agency | Status |
| Supplemental Culvert under Cemetery Street | Install a 3' by 60' plastic pipe at this location to enhance the flow capacity of the existing 5' by 2' concrete box culvert. | Flood | Village of DeRuyter | Completed by the Town of DeRuyter (at the northern end of the Village/Town boundary) |
| Streambank Stabilization Program | Develop a stream maintenance program to inspect and remove obstructions from stream channels, as needed. | Flood, Landslide | Village of DeRuyter | Ongoing- the Village is actively working with the Madison County SWCD to implement stream maintenance. This action is ongoing but it is adequately addressed through routine DPW and SWCD responsibilities. This action was not re-included as a mitigation action for the HMP update. |

7.2 Proposed Mitigation Actions

The Village proposed two new mitigation actions to be included in the HMP update. These actions are described in Table 9, below and on worksheets included in Attachment A.

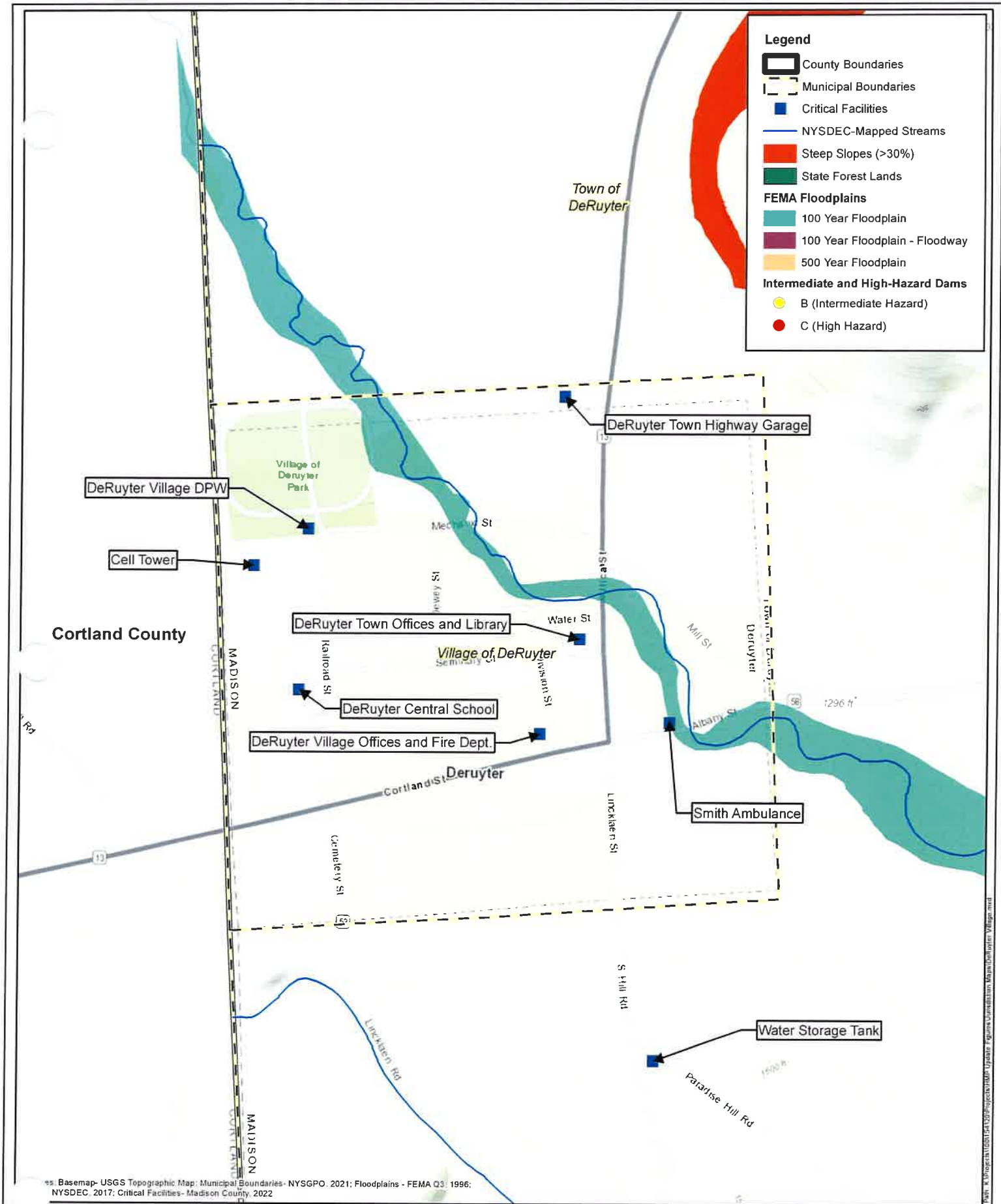
| Table 9. Proposed Hazard Mitigation Actions Village of DeRuyter | | | | | | | | | |
|--|--|------------------------|--|-----------------------|-----------|-----------------------------------|-------------------|---|----------|
| Action ID | Mitigation Action | Hazard(s) Mitigated | Implementing Agencies (Lead* & Support) | Planning Mechanism | Timeframe | New or Existing Development | Estimated Cost | Funding Source(s) | Priority |
| DeRuyter V1 | Backup Power for Pump House | All | DeRuyter Village Board | None | 1 year | Existing | \$50,000 | NYSEFC - DWSRF, USDA RD, NYSOCR - CDBG, Village Budget | 1 |
| DeRuyter V2 | Streambank Protection at 734 Utica Street | Flood | DeRuyter Village DPW*, Madison County SWCD, NYSDEC | None | 1 year | New | \$20,000 | SWCD, Village Budget | 2 |

7.3 Cost-Benefit Analysis

Each of the Village's proposed mitigation actions were evaluated and prioritized using the STAPLEE cost-benefit analysis described in Section 7.2.3 of the main body of the plan. The Village's STAPLEE worksheet is provided in Attachment A. The STAPLEE analysis considers the following lenses of evaluation: social, technological, administrative, political, legal, economic, and environmental. It also considers the level of overall costs and benefits of the action.

Attachment A

Figure 1, Mitigation Action Worksheets, and STAPLEE Worksheet



Madison County HMP Update Mitigation Action Worksheet

Jurisdiction: Village of DeRuyter

| Mitigation Action | |
|-------------------------------------|---|
| Project ID: | DeRuyter V1 |
| Project Name: | Backup Power for Pump House |
| Risk/Vulnerability | |
| Hazard of Concern: | All |
| Description of the Problem: | The Village's water system pump house lacks backup power. The pump house provides critical community services that could be interrupted during a power outage. |
| Proposed Action | |
| Description of the Solution: | Purchase and install a 3 phase generator at the pump house so operations will not be interrupted during a power outage. This will be implemented as part of a larger water system improvements project that the Village is undertaking. |

Is this project related to a Critical Facility? ☒ Yes ☐ No
(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater)

| | | | |
|----------------------|----------|---|-----------------------------------|
| Level of Protection: | High | Estimated Benefits (losses avoided): | Improved continuity of operations |
| Useful Life: | 30 years | | |
| Estimated Cost: | \$50,000 | | |

| Plan for Implementation | | | |
|---------------------------------------|--------|---|--|
| Priority (High, Medium, Low): | High | Responsible Organization: | DeRuyter Village Board |
| Desired Timeframe for Implementation: | 1 year | Potential Funding Sources: | NYSEFC - DWSRF, USDA RD - Water & Waste Disposal, NYSOCR- CDBG, Village Budget |
| Estimated Time Required to Implement: | 1 year | Local Planning Mechanisms to be used in Implementation, if any: | None |

| Three Alternatives Considered (Including No Action) | | | |
|---|--|----------------|--|
| | Action | Estimated Cost | Evaluation |
| Alternatives: | No Action | \$0 | No change from existing conditions |
| | Purchase a portable generator for critical infrastructure. | \$20,000 | More flexible options for use but requires additional coordination for use and may not power entire facility/limitations |
| | Install standby generator at pump house | \$50,000 | Best protection for pump house operations. |

| Progress Report (for Plan Maintenance) | |
|---|--|
| Date of Status Report: | |
| Summary of Progress: | |
| Valuation of the Problem and/or Solution: | |

Madison County HMP Update Mitigation Action Worksheet

Jurisdiction: Village of Cazenovia

| Mitigation Action | |
|-------------------------------------|--|
| Project ID: | Cazenovia V 2 |
| Project Name: | Review and update the Village building code and land use regulations |
| Risk/Vulnerability | |
| Hazard of Concern: | Flood |
| Description of the Problem: | The Village solely has control over land use and development standards within their municipal limits, even though developments in neighboring municipalities can affect the Village. The Village's building code and land use regulations are in need of a review and update to ensure that all vulnerable locations in the Village are protected (protection of existing development or prevention of future development) |
| Proposed Action | |
| Description of the Solution: | During the Village's next comprehensive plan update, the building code and land use regulations will be reviewed to identify necessary updates and improvements that could be made to better protect Village properties in areas that are vulnerable to flooding and other natural hazards. The Village will update their regulations accordingly. |

Is this project related to a Critical Facility? ☐ Yes ☒ No

(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater)

| | | | |
|----------------------|------------------------|---|---|
| Level of Protection: | Medium | Estimated Benefits (losses avoided): | Prevention of flood/other natural hazard related damages to future developments |
| Useful Life: | Long-term (100+ years) | | |
| Estimated Cost: | \$20-30K | | |

| Plan for Implementation | | | |
|---------------------------------------|--------------------|---|-------------------------|
| Priority (High, Medium, Low): | High | Responsible Organization: | Cazenovia Village Board |
| Desired Timeframe for Implementation: | 1 year (2022-2023) | Potential Funding Sources: | CACDA; Village Budget |
| Estimated Time Required to Implement: | 1 year | Local Planning Mechanisms to be used in Implementation, if any: | Comprehensive Plan |

| Three Alternatives Considered (Including No Action) | | | |
|---|--|----------------|--|
| | Action | Estimated Cost | Evaluation |
| Alternatives: | No Action | \$0 | No improvements from current conditions |
| | Coordinate directly with neighboring Towns when they review site plans | Low | May help inform neighboring communities of Village's concerns, but Village does not have control over decisions. |
| | Review and update Village building code and land use regulations | \$20-30K | Under Village's jurisdiction, long-term solution to protecting properties. |

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