# MUNICIPAL ANNEX | Town of Colesville


Total Population (2010 Census)
**5,232**

Total Land (square miles)
**79.2**

Total Number of Buildings
**2,476**

Percent of Buildings in Regulatory Floodplain
**4.4%**

Number of National Flood Insurance Program (NFIP) Policies
**49**

Percent of NFIP Policies in Regulatory Floodplain
**34.7%**

Number of Repetitive Loss (RL) Properties
**13**

Number of Severe Repetitive Loss (SRL) Properties
**0**

Proposed Project Types

Local Plans and Regulations, Education and Awareness Programs, and Structure and Infrastructure Projects

Mitigation Focus

Multi-Hazard

# 9.6 Town of Colesville

This section presents the jurisdictional annex for the Town of Colesville. 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 in order to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the Town participated in the planning process; an assessment of the Town of Colesville's risk and vulnerability; the different capabilities utilized in the Town; and an action plan that will be implemented to achieve a more resilient community.

## 9.6.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Colesville's hazard mitigation plan primary and alternate points of contact.

| Primary Point of Contact | Alternate Point of Contact |
|---|---|
| Name: Bradford McAvoy<br>Title: Enforcement Officer<br>Phone Number: 607-693-1795<br>Address: PO Box 27 Harpursville New York 13787<br>Email: Colesvilleenforcement@echoes.net | Name: Glenn Winsor<br>Title: Supervisor<br>Phone Number: 607-693-1794<br>Address: PO Box 421 Harpursville New York 13787<br>Email: Colesvillesupervisor@echoes.net |
| **Floodplain Administrator** | |
| Name: Bradford McAvoy<br>Title: Enforcement Officer<br>Phone Number: 607-693-1795<br>Address: PO Box 27 Harpursville New York 13787<br>Email: Colesvilleenforcement@echoes.net | |

## 9.6.2 Municipal Profile

The Town of Colesville is located in the northeastern part of Broome County, NY and is northeast of Binghamton. The Town includes the communities and hamlets of Belden, Center Village, Doraville, Harpursville, New Ohio, Nineveh, North Colesville, Ouaquaga, Sanitaria Springs, and West Colesville. The Town of Colesville has a total area of 79.2 square miles. The Town of Colesville is located in the northeastern part of Broome County, NY and is northeast of Binghamton. The north town line is the border of Chenango County and the Susquehanna River flows south through the town.

Interstate 88 passes across the town. New York State Route 7 and New York State Route 79 are important highways in Colesville. New York State Route 235 connects with state route 7 north of Harpursville to State Route 206 in the town of Coventry, Chenango County. The 2016 estimated population was 5,149, a 1.6% decrease from the 2010 Census (5,232).

Home rule is strong in New York State and thus, each town and village has its own governing body. The Town of Colesville is governed by a Supervisor and four council members.

Data from the 2016 U.S. Census American Community Survey estimates that 6.9% of the Town population is five years of age or younger, and 17.3% is 65 years of age or older.

### History and Cultural Resources

The area was first settled around 1785. The Town of Colesville was established in 1821 from the Town of Windsor. Robert Harpur, an early developer, has lent his name to the community of Harpursville. He is believed to be responsible for the many classical names assigned to communities in central New York.

### Growth/Development Trends

The Town of Colesville 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. The Town issues five to ten residential structure permits per year but has had no major subdivisions, variances on flood damage prevention ordinance or special permits or variances requested in the floodplain.

**Table 9.6-1. 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 |
|---|---|---|---|---|---|
| **Recent Development from 2013 to present** | | | | | |
| None | | | | | |
| **Known or Anticipated Development in the Next Five (5) Years** | | | | | |
| None | | | | | |

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

## 9.6.3 Hazard Event History Specific to the Town of Colesville

Broome County has a history of natural 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 Town of Coleville's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Broome County. Table 9.6-2 provides details regarding municipal-specific loss and damages the Town 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 9.6-2. Hazard Event History**

| Dates of Event | Event Type (Disaster Declaration if applicable) | Broome County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|---|---|---|---|---|
| October 27 – November 8, 2012 | Hurricane Sandy (EM-3351) | Yes | The remnants of Hurricane Sandy moved over the area bringing high winds and precipitation | Although the County was impacted, the Town did not report damages. |
| June 26 – July 10, 2013 | Severe Storms and Flooding (DR-4129) | Yes | The County was impacted by a series of severe storms and flash flood events. | The Town experienced infrastructure damages and equipment damages. FEMA assistance with cost reimbursement |
| June 14, 2015 | Flash Flood | Yes | warm front stalled across New York and northern Pennsylvania, providing the focus for repeating clusters of thunderstorms in the Finger Lakes and | The Town experienced road washouts and infrastructure damages |

| Dates of Event | Event Type (Disaster Declaration if applicable) | Broome County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|---|---|---|---|---|
| | | | Southern Tier NY regions. A tropical-like airmass was in place allowing for a stripe of 2-4 inches of very heavy rain to fall in a narrow band extending from near Watkins Glen to areas north of Binghamton. Severe flash flooding was encountered with numerous roads and culverts destroyed by raging water. | |
| March 14-15, 2017 | Severe Winter Storm and Snowstorm (DR-4322) | Yes | A record snowfall of between 25 and 35 inches of snow fell. Snowfall rates reached up to 5 inches per hour especially during the onset of the storm. The Greater Binghamton Airport broke an all-time daily snowfall record with 32.4 inches and a 2-day snowfall record of 34.9 inches. | The Town experienced road closures, equipment damages, clean-up costs. Received FEMA assistance with cost reimbursement about $39,00 damages. |
| July 23-24, 2017 | Flash Flood | Yes | Heavy rain producing thunderstorms developed during the late afternoon and evening hours as an upper level jet stream punched into the area. Widespread thunderstorms produced swaths of 3 to 4 inches of rain in just a few hours' time during the late evening and overnight hours. Rapid rises of area streams and creeks resulted in severe flash flooding. | The Town experienced washouts, infrastructure damages. Lost culvert pipe on Porter Hallow Road. |
| August 13-15, 2018 | Flash Flood DR-4397 | Yes | A slow-moving storm tracked north from New Jersey to northern New York. This system triggered several rounds of heavy rain producing thunderstorms which caused severe flash flooding and major damages in several locations | The Town experienced road washouts (Stioll Road, Welton Street, Hurd Road, Porter Hallow, Pleasant Hill, Clendening Road) totally approximately $12,000-$15,000. |

*Notes:*

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

## 9.6.4 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 Town of Colesville. 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 Broome 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 Town of Colesville. The Town of Colesville 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:

- Drought: The Town agreed drought was a medium hazard based on shallow water tables. Long term drought could be problematic, specifically due to the Town's agricultural properties.
- Earthquake: The Town changed the ranking for Earthquake from a medium to a low hazard due to a low number of structures such as high rises that would be heavily impacted by the rare earthquake event.
- Extreme Temperature: The Town agreed with the medium ranking. The Town currently has no warming or cooling centers. The elderly and low-income population may not have the means to protect against extreme temperature.
- Flood: The Town changed the ranking for flood from a low to a medium hazard. Although there are not many residential properties in the flood zone, the agricultural areas are at risk.
- Invasive species: The Town changed the ranking for invasive species from low to medium as the Town has logging operations that are at risk from emerald ash borer and there are concerns for invasive species such as hogweed spreading into the Town.
- Severe Storm: The Town agreed with the high hazard ranking.
- Severe Winter Storm: The Town changed severe winter storm from a medium to a high hazard as it has the same general rate of occurrence as severe storm.
- Wildfire: The Town changed the ranking for wildfire from medium to low as most wildfires are minor grass brushfires but not true forest fires.

**Table 9.6-3. Town of Colesville Municipal Hazard Ranking Input**

| HAZARD | Drought | Earthquake | Extreme Temperature | Flood | Invasive Species | Severe Storm | Severe Winter Storm | Wildfire |
|---|---|---|---|---|---|---|---|---|
| RELATIVE RISK FACTOR | Medium | Low | Medium | Medium | Medium | High | High | Low |

*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*

## 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 (NYSDHSES 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 9.6-4. 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 | |
| WELL #1 | Potable Well (floodproofed to 500-year elevation) | X | X | 3.27 | - | - |
| Ouaquaga Lenticular Truss Bridge | Historic | X | X | 16.54 | 100 | - |
| Nineveh Public Library | Library | X | X | 0 | 0 | T. Colesville-8 |
| Nineveh Post Office | Post Office | X | X | 0 | 0 | T. Colesville-9 |
| Nineveh Presbyterian Church | Shelter | X | X | 0 | 0 | T. Colesville-10 |

*Source: Hazus 4.2*

The Town of Colesville reviewed the list of critical facilities and noted that Well #1 is protected to the 500-year flood elevation. The town also determined that historic facilities such as the Truss Bridge are not critical for the purpose of essential services. As a result, the town did not develop mitigation actions to protect the Ouquaga Lenticular Truss Bridge to the 500-year flood level.

### Identified Issues

The municipality has identified the following vulnerabilities within their community:

- Nineveh Public Library is located within the floodplain which could lead to vulnerabilities or damage during flood events
- Nineveh Post Office is located within the floodplain which could lead to vulnerabilities or damage during flood events
- Nineveh Presbyterian Church is located within the floodplain which could lead to vulnerabilities or damage during flood events
- Highway Department Facility does not have back-up power.
- There are 13 Repetitive Loss Properties in Colesville
- Many cases in the Town, front of properties are in the floodplain but the structure is not. This is the case for some in Ninova and elsewhere in the Town. Many are in undesignated floodplain because of unnamed creeks and tributaries such as Tradewinds Lake.

Specific areas of concern based on resident response to the Broome County Hazard Mitigation Citizen survey include:

- Parts of NY Route 79 and surrounding area – flash flooding
- Doolittle Road - partially in the floodplain, flash flooding
- Still Road - flash flooding

## 9.6.5 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 Town of Colesville.

### Table 9.6-5. Planning and Regulatory Tools

| Tool / Program (code, ordinance, plan) | Do you have this? (Yes/No) If Yes, date of adoption or update | Authority (local, county, state, federal) | Dept. /Agency Responsible | Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.) |
|---|---|---|---|---|
| **Planning Capability** | | | | |
| Comprehensive Plan | Yes | Local | Town Board | Comprehensive Plan |
| Capital Improvements Plan | No | - | - | - |
| Floodplain Management / Basin Plan | Yes | Local or Watershed | Town Board | Flood Plain Local Law |
| Stormwater Management Plan | No | - | - | - |
| Open Space Plan | No | - | - | - |
| Stream Corridor Management Plan | No | - | - | - |
| Watershed Management or Protection Plan | No | - | - | - |
| Economic Development Plan | No | - | - | - |
| Comprehensive Emergency Management Plan | No | - | - | - |
| Emergency Operation Plan | Yes | Local or County | Town Board | Emergency Operation Plan |
| Evacuation Plan | No | - | - | - |
| Post-Disaster Recovery Plan | No | - | - | - |
| Transportation Plan | No | - | - | - |
| Strategic Recovery Planning Report | No | - | - | - |
| Other Plans: | No | - | - | - |
| **Regulatory Capability** | | | | |
| Building Code | Yes | State & Local | Town Board | LL3-2006 |
| Zoning Ordinance | Yes | Local | Town Board | LULL |
| Subdivision Ordinance | Yes | State | Town Board | Subdivision Regulations |

| Tool / Program (code, ordinance, plan) | Do you have this? (Yes/No) If Yes, date of adoption or update | Authority (local, county, state, federal) | Dept. /Agency Responsible | Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.) |
|---|---|---|---|---|
| NFIP Flood Damage Prevention Ordinance | Yes | Federal, State, Local | Town Board | Local Law #3 of 1992 |
| NFIP: Cumulative Substantial Damages | Yes | Local | Town Board | Local Law #3 of 1992 |
| NFIP: Freeboard | Yes | State, Local | - | State mandated BFE+2 for all construction, both residential and non-residential |
| Growth Management Ordinances | No | - | - | - |
| Site Plan Review Requirements | Yes | Local | Town Board | Land use local law |
| Stormwater Management Ordinance | No | - | - | - |
| Municipal Separate Storm Sewer System (MS4) | No | - | - | - |
| Natural Hazard Ordinance | No | - | - | - |
| Post-Disaster Recovery Ordinance | No | - | - | - |
| Real Estate Disclosure Requirement | Yes | State | - | 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 Town of Colesville.

### Table 9.6-6. Administrative and Technical Capabilities

| Resources | Is this in place? (Yes or No) | Department/ Agency/Position |
|---|---|---|
| **Administrative Capability** | | |
| Planning Board | Yes | Planning Board |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Maintenance programs to reduce risk | Yes | Highway Superintendent |
| Mutual aid agreements | Yes | Town Board |
| Flood Committee | Yes | Town Board |
| **Technical/Staffing Capability** | | |
| Planner(s) or engineer(s) with knowledge of land development and land management practices | No | - |
| Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure | Yes | Town Engineer Richard Bassler |

| Resources | Is this in place? (Yes or No) | Department/ Agency/Position |
|---|---|---|
| Planners or engineers with an understanding of natural hazards | No | - |
| NFIP Floodplain Administrator (FPA) | Yes | Code Enforcement Bradford McAvoy |
| 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 | Broome County Emergency Services |
| 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 Town of Colesville.

### Table 9.6-7. 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 |
| User fees for water, sewer, gas or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | No |
| Other | No |

## Community Classifications

The table below summarizes classifications for community programs available to the Town of Colesville.

### Table 9.6-8. Community Classifications

| Program | Do you have this? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|---|---|---|
| Community Rating System (CRS) | NP | - | - |

| Program | Do you have this? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|---|---|---|
| Building Code Effectiveness Grading Schedule (BCEGS) | Yes | 5 | 9/26/2016 |
| Public Protection (ISO Fire Protection Classes 1 to 10) | NP | State and County | - |
| NYSDEC Climate Smart Community | No | - | - |
| Storm Ready Certification | NP | - | - |
| Firewise Communities classification | NP | - | - |
| Natural disaster/safety programs in/for schools | No | - | - |
| Organizations with mitigation focus (advocacy group, non-government) | No | - | - |
| Public education program/outreach (through website, social media) | Yes | Local | - |
| 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 Town of Colesville's capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

### Table 9.6-9. Self-Assessment Capability for the Municipality

| Area | Degree of Hazard Mitigation Capability | | |
|---|---|---|---|
| | Limited (If limited, what are your obstacles?) | Moderate | High |
| Planning and regulatory capability | | X | |
| Administrative and technical capability | | X | |
| Fiscal capability | | | X |
| 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)

Brad McAvoy, Enforcement Officer

### National Flood Insurance Program (NFIP) Summary

The Town does not maintain lists/inventories of properties that have been flood damaged or are interested in mitigation but the Town documents each flood with a flood event summary. In 2006, at least 24 residential properties were flood damaged. Most of the properties had basement damage but 18 properties had first flood damage. The Town has declared two properties substantially damaged and has acquired one property from the 2006 flood, bought with FEMA funding. There were three elevations of property in the last five years, which were funded by their owners. One elevation project was a repetitive loss property. The Town is unsure how many properties are interested in mitigation and no properties are currently in the process of mitigation.

Although the Town has numerous properties in the floodplain, many times the front of properties are in the floodplain, but structure is not. This is the case for some in Ninova and elsewhere in the Town. Many properties are in the undesignated floodplain because of unnamed creeks and tributaries such as Tradewinds Lake.

The following table summarizes the NFIP statistics for the Town of Colesville.

### Table 9.6-10. NFIP Summary

| Municipality | # Policies | # Claims (Losses) | Total Loss Payments | # RL Properties | # SRL Properties | # Policies in the 1% Flood Boundary |
|---|---|---|---|---|---|---|
| Colesville (T) | 49 | 69 | $1,608,140 | 13 | 0 | 17 |

*Source: FEMA 2018*
*Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of May 31, 2018. The total number of repetitive loss properties does not include severe repetitive loss properties*
*RL Repetitive Loss; SRL Severe Repetitive Loss*

### Resources

The FPA is the sole person responsible for floodplain administration and is trained to perform Substantial Damage estimates and has been to floodplain training. NFIP administration services include sending out pamphlets, articles in the newsletter, and information such as flood maps made available in the town library. The

FPA noted that they have access to federal and state resources to determine future flooding conditions from climate change. The FPA feels the floodplain administration program is efficient but would benefit from having additional staff available after flooding events. The FPA would attend continuing education and/or certification training on floodplain management if it were offered in the County.

The Town of Colesville is assisting in the update of flood plain (FIRM) maps at the Jurisdictional Level. Specific assistance is being provided by attending map update meetings held by FEMA, NYSDEC, and USGS; and by identifying flood-prone areas outside of currently designated flood areas.

### Compliance History

The Town of Colesville maintains compliance with and good-standing in the National Flood Insurance Program (NFIP). The Town's most recent compliance audit (community assistance visit [CAV]) took place in 2016.

### Regulatory

The Town of Coleville's floodplain management regulations meet FEMA and State minimum requirements. The Planning board reviews all development with regard to flood hazard issues. The Town has considered joining the Community Rating System (CRS) program in the past but has seen addressing the paperwork as a challenge and does not see a significant benefit economically (premiums). The Town practices good floodplain management regardless and would be interested in attending a CRS seminar if it were 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 Land Use Plan:** The Town of Colesville's Comprehensive Land Use Plan refers to the Countywide Hazard Mitigation Plan.

**Broome County Hazard Mitigation Plan:** The Town will continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0.

**Comprehensive Emergency Management Plans:** The Town is completing the ongoing updates of Comprehensive Emergency Management Plans.

**Post-Earthquake Disaster Planning:** The Town is developing a post-earthquake management plan to address building safety inspections, gas leaks, and other elements to protect public safety.

The Town of Colesville does not have a Stormwater Management Plan, Re-Development Plan, Growth Plan, Economic Development Plan, Open Space Plan, Watershed or Stream Corridor Management Plan, Local Waterfront Revitalization Plan, Continuity of Operations/Continuity of Government (COOP/COG) plan(s), Comprehensive Emergency Management Plan, Post-Disaster Recovery Plan, Post-Disaster Redevelopment Plan, or Strategic Recovery Plan, resilience plan/strategy, or Climate Adaptation Plan/strategy.

### Opportunities for Future Integration

Continue to include natural hazards and hazard mitigation plan.

## Regulatory and Enforcement (Ordinances)

### Existing Integration

**Land Use Local Law:** The Land Use Local Law of the Town of Colesville is established to promote and protect the public health, safety, and general welfare. The intent of this Local Law is to support the goal of the Town of Colesville to be primarily a rural residential community, in which agricultural and recreational development are encouraged along with planned supporting commercial services and compatible industrial development. The specific objectives are:

- To promote the most appropriate use of land resources.
- To provide appropriate recreational areas, public and private.
- To regulate and discourage uses not compatible with, or detrimental to the safety, health, attractiveness, and general well-being of the Town.

**Land Subdivision Regulations**: The Town of Colesville Land Subdivision Regulations (Effective date December 5, 1991) authorizes and empowers the Planning Board of the Town of Colesville to approve Plats showing lots, blocks or sites, with or without streets or highways, to approve the development of entirely or partially undeveloped plats already filed in the Broome County Clerk's Office and to approve preliminary plats, within the town of Colesville.

**Flood Damage Prevention Local Law:** The Town of Colesville Flood Damage Prevention Law (Local Law #3 of 1992) was adopted to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

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

The Ordinance aims:

- To protect human life and health;
- To minimize expenditure of public money for costly flood control projects;
- To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- To minimize prolonged business interruptions;
- To minimize damage to public facilities and utilities, such as water and gas mains, electric, telephone, and sewer lines, streets and bridges located in areas of special flood hazard;
- To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;

- To provide that developers are notified that property is in an area of special flood hazard; and,
- To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

The Town of Colesville's municipal zoning, subdivision regulations, and site plan review process consider natural hazard risk and require developers to take additional actions to mitigate natural hazards. The Planning Board and/or ZBA are provided with any requested data or maps/plans to guide their decisions with respect to natural hazard risk management.

## Operational and Administration

### Existing Integration

**Planning Board:** The Planning Board of Colesville consists of seven Members who work closely with the Colesville Town Board and Broome County's Economic and Development Department for long range planning matters that are consistent with the Town of Colesville Comprehensive Land Use Plan. Some of their responsibilities include Reviews Site Plan Applications, Issues Special Use Permits, and Land Development and Subdivision Reviews. The Planning Board meets on the third Thursday of the month at 7:00 pm in the Colesville Town Hall, 780 Welton Street, Harpursville, NY. All meetings are open to the public. The Planning Board was established by Local Law # 2 of 1995.

**Zoning Board of Appeals:** The Zoning Board of Appeals of Colesville decides on applications by landowners to permit buildings or land uses which varies from the Town's zoning regulations. The Board meets, as needed, on the second Wednesday of the month at 7:00 p.m. in the Town Hall, 780 Welton Street, Harpursville, NY. All meetings are opened to the public.

**National Incident Management System (NIMS):** The Town conducts training in the National Incident Command System (ICS), under the National Incident Management System (NIMS).

**Vegetation Management:** The Town is continuing and maintaining programs to keep trees from threatening lives, property, and public infrastructure during storm events.

**First Responder Site Plan Review:** The Town continues to encourage fire fighters and emergency service providers to review site plans to ensure that response and capacity exists to support development.

**Retrofitting/Removal of Structures from Hazard Prone Areas**: Where appropriate, the Town of Binghamton supports the retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage with repetitive loss and severe repetitive loss properties as priority. The Town works to identify facilities that are viable candidates for each strategy based on cost-effectiveness. Implementation of these actions are based on available funding.

**Non-Structural Flood Mitigation:** The Town is considering non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, including those that have been identified as repetitive loss properties, such as acquisition/relocation, or elevation depending on feasibility. The parameters for feasibility for this initiative would be: funding, benefits versus costs and willing participation of property owners. In 2018, the Town acquired 126 Riverview Place which is a flood-prone property.

**Archive Elevation Certificates:** The Town will continue to obtain and archive elevation certificates.

**Mutual Aid Agreements:** The Town of Colesville works to create/enhance/ maintain mutual aid agreements with neighboring communities for continuity of operations.

**Post-Disaster Procedures:** The Town is identifying and developing agreements with entities that can provide support with FEMA/SOEM paperwork after disasters; qualified damage assessment personnel – Improve post-disaster capabilities – damage assessment; FEMA/SOEM paperwork compilation, submissions, record-keeping.

**Damage Assessment Training:** The Town of Colesville works with regional agencies (i.e. County and SOEM) to help develop damage assessment capabilities at the local level through such things as training programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers).

**Structure/Facility Inventories/Datasets:** The Town of Colesville participates in regional, county and/or state level projects and programs to develop improved structure and facility inventories and hazard datasets to support enhanced risk assessment efforts. Such programs may include developing a detailed inventory of critical facilities based upon FEMA's Comprehensive Data Management System (CDMS) which could be used for various planning and emergency management purposes including:

- Support the performance of enhanced risk and vulnerability assessments for hazards including flooding, earthquake, wind, and land failure.
- Support state, county and local planning efforts including mitigation (including updates to the State HMP), comprehensive emergency management, debris management, and land use.

**Critical Facilities Assessment:** The Town of Colesville continues to train personnel and conduct rapid screening of critical facilities for earthquake vulnerability.

The Town of Colesville does not have a municipal planner or contract planning firm. The Town does not have any addition boards or committees that have functions with respect to managing natural hazard risk. Stormwater Management functions are performed by the Highway Superintendent. NFIP Floodplain Management functions are performed by the Enforcement Officer. The Town has staff that can perform Substantial Damage Estimates and would contract with firms that have experience with developing Benefit-Cost Analysis and preparing grant applications for mitigation projects. Staff receive continuing professional education which supports natural hazard risk reduction. No staff have job descriptions that specifically include identifying and/or implementing mitigation projects/actions or other efforts to reduce natural hazard risk, but staff participate in associations, organizations, groups or other committees that support natural hazard risk reduction and build hazard management capabilities. The Town has other hazard management programs in place.

### Opportunities for Future Integration

The Town could include staff with job descriptions that include hazard management.

## Funding

### Existing Integration

The Town of Colesville's municipal budget and Capital Improvement Budgets do not include funding or line items for mitigation projects/activities. The Town has received grant funding for Streambank Stabilization through Cooperative Extension Sources. The Town does not have any other mechanisms to fiscally support hazard mitigation projects. The Town is increasing public information dissemination regarding mitigation and preparedness.

### Opportunities for Future Integration

The Town could allocate municipal funding for mitigation projects and continue to apply for grant funding.

## Education and Outreach

### Existing Integration

The Town conducts outreach through local publications, the Town Newsletter, Local Nineveh Library handouts, and access to FIRM Maps and local ordinances. The Town of Colesville operates a municipal website (https://towncolesville.digitaltowpath.org:10004/content). The website hosts various community and emergency information and Town news. The Town conducts and facilitates 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:

- Provide and maintain links to the HMP website, and regularly post notices on the County/municipal homepage(s) referencing the HMP webpages.
- 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.
- Use 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.
- Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding

### Opportunities for Future Integration

The Town could enhance public outreach through service ads on local radio and broadcast facilities.

## Sheltering, Evacuation, and Temporary Housing

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.

Refer to Section 4.6.5 of Volume 1 of this plan for a description of resources identified by the county to support municipalities with the identification of evacuation, sheltering, and temporary and permanent housing.

### Temporary and Permanent Housing

The Town of Colesville has identified the following potential sites for the placement of temporary housing for residents displaced by a disaster:

- Manufactured Home Parks: The Manufactured Home Parks in the Town have a capacity of 12 to 15 units. They would require building permits.

The Town has identified the following locations suitable for relocating houses of the floodplain and/or building new homes once properties in the floodplain are acquired:

- Various Areas: The Town has various areas of unlimited capacity, provided there was installation of private sewer, water, and electrical services.

### Evacuation and Sheltering Needs

The Town of Colesville has designated the following emergency shelters:

- Fire Stations: Each fire station in the Town has a capacity of 10-50. The fire stations can accommodate pets, are ADA compliant, have backup power, and can provide emergency medical services.
- American Legion: Welton Street, Harpursville. The American Legion has a capacity of 24-36, can accommodate pets, and is ADA compliant, but does not have backup power or provide medical services.
- Harpursville Central School: Main Street Harpursville. The School has a capacity of over 100, is ADA compliant, and has backup power.

The Town has established the following evacuation procedures.

- The Town transmits information regarding evacuation routes or road closures via public radio and TV and reverse 911 as well as door to door. The issues are identified by the police and fire departments, the highway department and residents. The highway superintendent or code official provides updated information to the media. If the County emergency operations center is activated for a County-wide event, the information is sent to the County emergency operations center, for transmission to the public.

## 9.6.6 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 9.6-11. 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. |
|---|---|---|---|---|---|---|---|---|
| 1. | Continue training in the National Incident Command System (ICS), under the National Incident Management System (NIMS). | All | | Town of Colesville Board, Emergency Services | Ongoing Capability | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2.<br>3. Ongoing capability |
| 2. | Maintain existing programs to keep trees from threatening lives, property, and public infrastructure during storm events. Enhance these programs by contracting/bidding of work near power lines and for larger trees. | Severe Storm | | Town of Colesville Highway Dept NYSEG | Ongoing Capability | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2.<br>3. Ongoing capability |
| 3. | Assist in the update of flood plain (FIRM) maps – Jurisdictional Level. Specific assistance can be provided in the area of attending map update meetings held by FEMA, NYSDEC and USGS; and identification of flood-prone areas outside of currently designated areas | Flood | | FEMA, Town of Colesville Planning Board | Ongoing Capability | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. In progress. Include in 2018 plan.<br>2.<br>3. |
| 4. | Continue participation in the National Flood Insurance Program (NFIP). | Flood | | FEMA, Town of Colesville Town Board | Ongoing Capability | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2.<br>3. Ongoing capability |
| (5.) | 5. Continue to pursue and finalize buyout of one | Flood | | Town of Colesville | Complete | Cost<br>Level of Protection | | 1. Discontinue.<br>2. |

| 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. |
|---|---|---|---|---|---|---|---|---|
| | flood prone property on Riverview Place. | | | | | Damages Avoided; Evidence of Success | | 3. Complete |
| (6.) | 6. Complete concrete retaining wall and culvert replacement in Penny Hollow area. | Flood | | Town of Colesville DPW | Complete | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2. Replaced concrete retaining wall and culvert – Penny Hollow Road<br>3. Complete |
| 5 (7.) | Encourage review of site plans by firefighting companies to ensure fire-fighting and rescue capacity exists at the local level to support development. | All | | Town of Colesville FD | Ongoing | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2.<br>3. Ongoing capability |
| 6 (8.) | Consider non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, including those that have been identified as repetitive loss properties, such as acquisition/relocation, or elevation depending on feasibility. The parameters for feasibility for this initiative would be: funding, benefits versus costs and willing participation of property owners. | Flood | | Town of Colesville Town Board | Ongoing Capability | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2. Town purchased flood-prone property – 126 Riverview Place (Completed 2008)<br>3. Ongoing capability |
| 7 (9.) | Implement drainage improvements. Various steams and tributaries on Porter Hallow Road, Clendening Road culvert replacement, Dilley Road | Flood | | NYSDOT, County and Municipal DPW | In progress | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | In progress include in 2018 plan.<br>2.<br>3. |

| 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. |
|---|---|---|---|---|---|---|---|---|
| | (NYSDOT and Town replacing culvert pipe). | | | | | | | |
| 8 (10.) | Build larger culvert pipes / continue culvert design and replacement. Various locations | Flood, Severe Storm | | County and Municipal DPW, NYSDOT | Complete | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2.<br>3. Implemented drainage improvements and built larger culverts |
| 9 (11.) | Explore and Increase public information dissemination regarding mitigation and preparedness | All | | Town of Colesville Supervisor's Office | Ongoing Capability | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2.<br>3. Ongoing capability |
| Flood-1 | Purchase, relocate, or elevate structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority.<br><br>Phase 1: Identify appropriate candidates based on cost-effectiveness versus retrofitting.<br><br>Phase 2: Where determined to be a viable option, work with property owners toward implementation of that action based on available funding from FEMA and local match availability. | Flood | | Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from BCPD, NYSOEM, FEMA | Ongoing Capability | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2.<br>3. Ongoing capability |
| Flood-2 | Maintain compliance with and good-standing in the NFIP including adoption | Flood | | Municipality (via Municipal Engineer/NFIP | Ongoing Capability | Cost<br>Level of Protection | | 1. Discontinue<br>2. |

| 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. |
|---|---|---|---|---|---|---|---|---|
| | 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.<br>Further, continue to meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified as Initiatives below. | | | Floodplain Administrator) with support from NYSOEM, FEMA | | Damages Avoided; Evidence of Success | | 3. Ongoing capability |
| Flood-3 | Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction:<br>• Provide and maintain links to the HMP website, and regularly post notices on the County/municipal homepage(s) referencing the HMP webpages.<br>• Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of | Flood | | Municipality with support from Planning Partners, BCPD, NYSOEM, FEMA | Ongoing Capability | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2.<br>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. |
|---|---|---|---|---|---|---|---|---|
| | mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation.<br>• Use 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. Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding. | | | | | | | |
| Flood-4 | Obtain and archive elevation certificates | Flood | | NFIP Floodplain Administrator | Ongoing Capability | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2.<br>3. Ongoing capability |
| Flood-5 | Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0 | Flood | | Municipality with support from Planning Partners, BCPD, NYSOEM, FEMA | Ongoing Capability | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2.<br>3. Ongoing capability |
| Flood-6 | Complete ongoing updates of Comprehensive Emergency Management Plans | Flood | | Municipality with support from NYSOEM | Ongoing Capability | Cost<br>Level of Protection<br>Damages Avoided; | | 1. Discontinue<br>2.<br>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. |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Evidence of Success | | |
| Flood-7 | Create/Enhance/Maintain Mutual Aid agreements with neighboring communities for continuity of operations | All Hazards | | Municipality with support from County, NYSOEM, FEMA and surrounding communities | Ongoing Capability | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2.<br>3. Ongoing capability |
| Flood-8 | Identify and develop agreements with entities that can provide support with FEMA/SOEM paperwork after disasters; qualified damage assessment personnel – Improve post-disaster capabilities – damage assessment; FEMA/SOEM paperwork compilation, submissions, record-keeping | Flood | | Municipality with support from County, NYSOEM and FEMA | Ongoing | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2.<br>3. Ongoing capability |
| Flood-9 | Work with regional agencies (i.e. County and SOEM) to help develop damage assessment capabilities at the local level through such things as training programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers). | Flood | | Municipality with support from County, NYSOEM and FEMA | Ongoing | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2.<br>3. Ongoing capability |
| Flood-10 | Participate in local, county and/or state level projects and programs to develop improved structure and facility inventories and hazard datasets to support enhanced risk assessment | Flood | | Hazard Mitigation Plan Coordinator | Ongoing Capability | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2.<br>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. |
|---|---|---|---|---|---|---|---|
| | efforts. Such programs may include developing a detailed inventory of critical facilities based upon FEMA's Comprehensive Data Management System (CDMS) which could be used for various planning and emergency management purposes including:<br>• Support the performance of enhanced risk and vulnerability assessments for hazards of concern.<br>• Support state, county and local planning efforts including mitigation (including updates to the State HMP), comprehensive emergency management, debris management, and land use.<br>Improved structural and facility inventories could incorporate flood, wind and seismic-specific parameters (e.g. first floor elevations, roof types, structure types based on FEMA-154 "Rapid Visual Screening of Buildings for Potential Seismic Hazards" methodologies). It is recognized that these programs will need to be initiated and supported at the County and/or State level, and will require | | | | | | |

| 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. |
|---|---|---|---|---|---|---|---|---|
| | training, tools and funding provided at the county, state and/or federal level. | | | | | | | |
| Severe Storm-1 | Enhance the County/community resilience to severe storms (incl. severe winter storms) by joining the NOAA "Storm Ready" program and supporting communities in joining the program. "StormReady" communities are better prepared to save lives from the onslaught of severe weather through advanced planning, education and awareness. Participation in the NOAA "StormReady" program shall include providing information on the "StormReady" program, facilitating public outreach and awareness programs, and supporting community storm risk reduction activities as appropriate. Specific actions addressed by "StormReady" participation include establishing a 24-hour Warning Point, increase number of ways EOC receives NWS warnings, increase number of ways to disseminate warnings, monitoring hydrometeorological | Severe Storm | | Municipality with support from County, NYSOEM and FEMA | In progress | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. In progress, include in 2018 plan.<br>2.<br>3. |

| 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. |
|---|---|---|---|---|---|---|---|---|
| | data, providing annual weather safety talks, train weather spotters, create a formal hazardous weather plan, host annual visits by NWS to communities, etc. | | | | | | | |
| Earthquake-1 | Obtain training and conduct rapid screening assessment of critical facilities for earthquake vulnerability. | Earthquake | | Municipal Emergency Management, Fire, PD with support from County, NYSOEM | Discontinue | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue,<br>2.<br>3. No longer a priority |
| Earthquake-2 | Develop a post-earthquake management plan to address building safety inspections, gas leaks, and other elements to protect public safety. | Earthquake | | Municipal Emergency Management, Fire, PD with support from County, NYSOEM | Discontinue | Cost<br>Level of Protection<br>Damages Avoided; Evidence of Success | | 1. Discontinue<br>2.<br>3. No longer a priority |

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

The Town of Colesville has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2013 Plan:

- Upgraded culverts on Hartz Road, Welton Street
- Continuation of stream maintenance projects, removing debris adjacent to bridges and culverts
- Hartz Road streambank stabilization
- Tree trimming of hazardous trees in road right of way

- **Building Resiliency (2016):** The Broome County Department of Planning prepared Building Resiliency to document resiliency projects municipalities have completed. The Town of Colesville identified the following completed projects (as of 2016):

    - Broome County Department of Public Works repaired county-owned bridges and culverts in the Town of Colesville.

## Proposed Hazard Mitigation Initiatives for the Plan Update

The Town of Colesville participated in a mitigation action workshop on October 17, 2018 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 9.6-12 summarizes the comprehensive-range of specific mitigation initiatives the Town of Colesville 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 9.6-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.

## Table 9.6-12. Proposed Hazard Mitigation Initiative

| Project Number | Project Name | Description of Problem | Description of Solution | Hazard(s) to be Mitigated | Goals Met | Critical Facility (Yes/No) | Environmental and Historic Preservation (EHP) Issues | Lead and Support Agencies | Estimated Costs | Estimated Benefits | Estimated Timeline | Potential Funding Sources | Priority | Mitigation Category | CRS Category |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T. Colesville-1 | Town Highway Department Generator | Highway Department lacks backup power source | DPW will install a backup generator | All | 1, 4, 5 | Yes | No | Town DPW | $15,000 | Continuous power at critical facility | 1 year (but on hold for decision regarding new building) | Municipal budget, PDM | High | SIP | ES |
| T. Colesville-2 | Repetitive Loss Properties in Colesville | Repetitive loss properties are at continued risk to flooding | Inform homeowner of the different options to mitigate their home (acquisition or elevation). If homeowner decides to mitigate property, Town will submit a grant application. | Flood | 1, 5 | No | Yes (review) | Town Floodplain Administrator working with homeowners | Dependent on mitigation action and number or properties | Reduce or eliminate flood damages; protect homeowners | Within 5 years | FEMA HMGP or FMA with homeowner local match | High | SIP | PP |
| T. Colesville-3 | Porter Hallow Road Improvements | Porter Hallow Road experiences high water and flash flooding issues impacting the roadway. At least once a year this roadway becomes inundated due to excess surface water runoff which exceeds existing culvert capacity and causes road | Phase 1: Do a design study to determine a viable design to mitigation the flood issues. Phase 2: Implement drainage improvements on Porter Hallow Road. | Flood | 1, 5 | No | Yes (review) | Town DPW | $650,000 | Residential properties and access to public roadway (Fire/EMS) protected. | 2 years | Municipal budget | High | SIP | PR |

| Project Number | Project Name | Description of Problem | Description of Solution | Hazard(s) to be Mitigated | Goals Met | Critical Facility (Yes/No) | Environmental and Historic Preservation (EHP) Issues | Lead and Support Agencies | Estimated Costs | Estimated Benefits | Estimated Timeline | Potential Funding Sources | Priority | Mitigation Category | CRS Category |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | closures and road failure (wash outs) rendering the roadway impassable. Also, homes on Porter Hallow Road are impacted by runoff in that basements are flooded, driveways impassable and houses are not accessible. The water does recede for at least a day and requires a 4-mile detour. | | | | | | | | | | | | | |
| T. Colesville-4 | Town of Colesville Critical Floodprone Road Improvements | Various areas of the Town experience high water and flash flooding issues impacting roadways. Specific areas of concern include Clendening Road and Dilley Road. At least once a year these roadways become inundated due | Implement drainage improvements. Various steams and tributaries on Porter Hallow Road, Clendening Road culvert replacement, Dilley Road (NYSDOT and Town replacing culvert pipe). | Flood | 1, 5 | No | Yes (review) | Colesville DPW | $650,000 | Residential properties and access to public roadway (Fire/EMS) protected. | 2 years | HMPG, PDM, with capital improvement match. | High | SIP | SP, PP |

| Project Number | Project Name | Description of Problem | Description of Solution | Hazard(s) to be Mitigated | Goals Met | Critical Facility (Yes/No) | Environmental and Historic Preservation (EHP) Issues | Lead and Support Agencies | Estimated Costs | Estimated Benefits | Estimated Timeline | Potential Funding Sources | Priority | Mitigation Category | CRS Category |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | to excess surface water runoff which exceeds existing culvert capacity and causes road closures and road failure (wash outs) rendering roadways impassable. | | | | | | | | | | | | | |
| T. Colesville-5 (Former #3) | Assist in the update of flood plain (FIRM) maps – Jurisdictional Level. | FIRMs are in need of updated | Specific assistance can be provided in the area of attending map update meetings held by FEMA, NYDEC and USGS; and identification of flood-prone areas outside of currently designated areas | Flood | 1, 2, 3 | No | No | Town Supervisor | <$100 | FIRM maps are up to date allowing for proper development and construction decisions | Currently waiting for FEMA | Municipal budget | Medium | LPR | PR |
| T. Colesville-6 (Former #7) | Implement drainage improvements. Various steams and tributaries on Porter Hallow Road, Clendening Road culvert replacement, Dilley Road (NYSDOT and Town replacing | Poor drainage exists in many locations | Drainage improvements will be made including culvert replacements. | Flood | 1 | No | None | NYSDOT, County and Municipal DPW | $10,000-100,000 depending on depth and length of project | Improved drainage and reduced flood risk | 1-3 years | HMGP | High | SIP | SP |

| Project Number | Project Name | Description of Problem | Description of Solution | Hazard(s) to be Mitigated | Goals Met | Critical Facility (Yes/No) | Environmental and Historic Preservation (EHP) Issues | Lead and Support Agencies | Estimated Costs | Estimated Benefits | Estimated Timeline | Potential Funding Sources | Priority | Mitigation Category | CRS Category |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | culvert pipe). | | | | | | | | | | | | | | |
| T. Colesville-7 (former Severe Storm-1) | Enhance the County/community resilience to severe storms (incl. severe winter storms) by joining the NOAA "Storm Ready" program and supporting communities in joining the program. | "StormReady" communities are better prepared to save lives from the onslaught of severe weather through advanced planning, education and awareness. | Participation in the NOAA "StormReady" program shall include providing information on the "StormReady" program, facilitating public outreach and awareness programs, and supporting community storm risk reduction activities as appropriate. Specific actions addressed by "StormReady" participation include establishing a 24-hour Warning Point, increase number of ways EOC receives NWS warnings, increase number of ways to disseminate warnings, monitoring hydrometeorological data, providing annual weather safety talks, train weather spotters, create a | Severe Storm | 1, 2, 4 | Yes | No | Town Supervisor | $20,000 | Public better educated and warned about upcoming severe weather events. | 2-3 years | Municipal budget | Medium | EAP, LPR | PI, ES |

| Project Number | Project Name | Description of Problem | Description of Solution | Hazard(s) to be Mitigated | Goals Met | Critical Facility (Yes/No) | Environmental and Historic Preservation (EHP) Issues | Lead and Support Agencies | Estimated Costs | Estimated Benefits | Estimated Timeline | Potential Funding Sources | Priority | Mitigation Category | CRS Category |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | formal hazardous weather plan, host annual visits by NWS to communities, etc. | | | | | | | | | | | | |
| T. Colesville-8 | Protect the Nineveh Public Library to the 500-year flood level. | The facility is in the 100-year floodplain. The structure is already elevated but has a basement. | The Town will fill in the basement at the Library, moving remaining items into elevated portion of building. | Flood | 1, 3, 5 | Yes | None | Town Floodplain Administrator working with homeowner | $20,000-30,000 | Facility protected up to 500-year flood elevation. | Within 6 months | Municipal budget, HMGP | High | SIP | PP |
| T. Colesville-9 | Protect the Nineveh Post Office to the 500-year flood level. | The facility is in the 500-year floodplain. The Town does not have jurisdiction over the facility and cannot mitigate themselves. | The Town will contact the facilities manager and discuss options for protecting the facility to the 500-year level | Flood | 1, 3, 5 | Yes | None | Town Floodplain Administrator working with homeowner | <$100 | Provide outreach to the property owner and informing them of potential flood damage and possible solutions | Within 6 months | Municipal budget | Medium | SIP, EAP | PP, PI |
| T. Colesville-10 | Protect the Nineveh Presbyterian Church to the 500-year flood level. | The facility is in the 100-year floodplain. The Town does not have jurisdiction over the facility and cannot mitigate themselves. | The Town will contact the facilities manager and discuss options for protecting the facility to the 500-year level | Flood | 1, 3, 5 | Yes | None | Town Floodplain Administrator working with homeowner | <$100 | Provide outreach to the property owner and informing them of potential flood damage and possible solutions | Within 6 months | Municipal budget | Medium | SIP, EAP | PP, PI |
| T. Colesville-11 | Update the NFIP Flood Damage | The current flood damage prevention | Flood Damage Prevention | Flood | 1 | No | None | Floodplain Administrator | <$100 | Higher building standards | Waiting for firm | Municipal budget | High | LPR | PR |

| Project Number | Project Name | Description of Problem | Description of Solution | Hazard(s) to be Mitigated | Goals Met | Critical Facility (Yes/No) | Environmental and Historic Preservation (EHP) Issues | Lead and Support Agencies | Estimated Costs | Estimated Benefits | Estimated Timeline | Potential Funding Sources | Priority | Mitigation Category | CRS Category |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Prevention Ordinance | ordinance (1992) does not include NYS freeboard requirements. | Ordinance will be updated to | | | | | | | and lower flood exposure | | | | | |

*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* |
| *OEM* | *Office of Emergency Management* |

*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.*

*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 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 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 9.6-13. 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T. Colesville-1 | Town Highway Department Generator | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| T. Colesville-2 | Repetitive Loss Properties in Colesville | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 11 | High |
| T. Colesville-3 | Porter Hallow Road Improvements | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 12 | High |
| T. Colesville-4 | Town of Colesville Critical Floodprone Road Improvements | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 12 | High |
| T. Colesville-5 (Former #3) | Assist in the update of flood plain (FIRM) maps – Jurisdictional Level. | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | Medium |
| T. Colesville-6 (Former #7) | Implement drainage improvements. Various steams and tributaries on Porter Hallow Road, Clendening Road culvert replacement, Dilley Road (NYSDOT and Town replacing culvert pipe). | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 12 | High |
| T. Colesville-7 (former Severe Storm-1) | Enhance the County/community resilience to severe storms (incl. severe winter storms) by joining the NOAA "Storm Ready" program and supporting communities in joining the program. | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 8 | Medium |
| T. Colesville-8 | Protect the Nineveh Public Library to the 500-year flood level. | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 11 | High |
| T. Colesville-9 | Protect the Nineveh Post Office to the 500-year flood level. | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 8 | Medium |
| T. Colesville-10 | Protect the Nineveh Presbyterian Church to | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 8 | Medium |

**Table 9.6-13. 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | the 500-year flood level. | | | | | | | | | | | | | | | | |
| T. Colesville-11 | Update the NFIP Flood Damage Prevention Ordinance | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 12 | High |

*Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions.*

### 9.6.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

### 9.6.8 Staff and Local Stakeholder Involvement in Annex Development

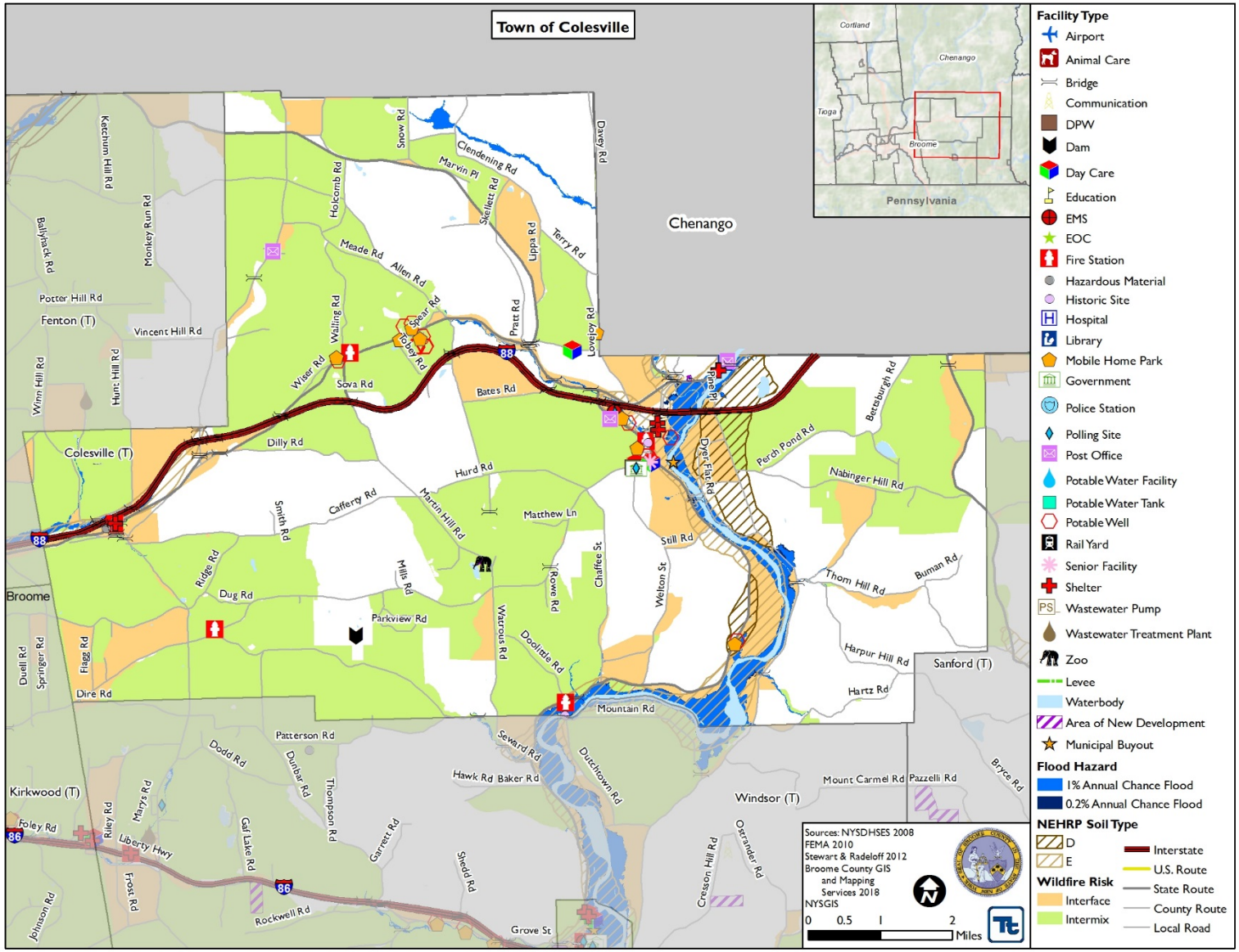
The Town of Colesville followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Town departments, including: Code Enforcement and the Town Supervisor. The Enforcement Officer represented the community on the Broome 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).

### 9.6.9 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Town of Colesville 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 Town of Colesville has significant exposure. These maps are illustrated below.

## Figure 9.6-1. Town of Colesville Hazard Area Extent and Location Map



| Action Worksheet | | | |
|---|---|---|---|
| **Project Name:** | Town Highway Department Generator | | |
| **Project Number:** | T. Colesville-1 | | |
| **Risk / Vulnerability** | | | |
| **Hazard(s) of Concern:** | All hazards | | |
| **Description of the Problem:** | The Town Highway Department facility, located at 789 Welton St., does not have back-up power to run the facility in the event of a power outage. It serves as office space for Highway Department staff and storage for municipal vehicles. When there is a power outage, the building and staff have limited resources to fully function. A generator is needed to power the entire facility and allow continuity of operations for the Highway Department. On the average, the power is interrupted 3 times a year. Other related impacts include inability to refuel emergency vehicles and school busses for evacuation. | | |
| **Action or Project Intended for Implementation** | | | |
| **Description of the Solution:** | Engineering design and procurement of stationary generator to be install at the Municipal Highway Garage to provide and uninterrupted power supply. | | |
| **Is this project related to a Critical Facility?** | Yes ☒ | No ☐ | |
| **Is this project related to a Critical Facility located within the 100-year floodplain?** | Yes ☐ | No ☒ | |
| (If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater) | | | |
| **Level of Protection:** | Not applicable. | **Estimated Benefits (losses avoided):** | Continuity of emergency services. |
| **Useful Life:** | 20 | **Goals Met:** | 1, 4, 5 |
| **Estimated Cost:** | $15,000 | **Mitigation Action Type:** | Structure and Infrastructure Project |
| **Plan for Implementation** | | | |
| **Prioritization:** | High | **Desired Timeframe for Implementation:** | 1 year |
| **Estimated Time Required for Project Implementation:** | 1 year (but on hold for decision regarding new building) | **Potential Funding Sources:** | HMPG, PDM, matching funds from Town capital improvement plan. |
| **Responsible Organization:** | Town Highway Superintendent | **Local Planning Mechanisms to be Used in Implementation if any:** | Hazard mitigation plan, Capital Improvement Plan. |

**Three Alternatives Considered (including No Action)**

| | Action | Estimated Cost | Evaluation |
|---|---|---|---|
| **Alternatives:** | No Action | $0 | Continued emergency and municipal services interruption. |
| | **Mobile Generator-trailer mounted** | **$15,000** | **Need quick wiring connection, may be difficult to deploy during emergency and unreliable fuel supply, not automatic start** |
| | **Permanent Generator** | **$15,000** | **Immediate availability, automatic start. Larger capacity.** |

| Progress Report (for plan maintenance) | |
|---|---|
| **Date of Status Report:** | |
| **Report of Progress:** | |
| **Update Evaluation of the Problem and/or Solution:** | |

| Action Worksheet | | |
|---|---|---|
| **Project Name:** | Town Highway Department Generator | |
| **Project Number:** | T. Colesville-1 | |
| **Criteria** | **Numeric Rank (-1, 0, 1)** | **Provide brief rationale for numeric rank when appropriate** |
| **Life Safety** | 1 | Power will be maintained to continue to provide critical functions which protects lives. |
| **Property Protection** | 1 | Power will be maintained to continue to provide critical functions which protects property and Town infrastructure. |
| **Cost-Effectiveness** | 1 | |
| **Technical** | 1 | |
| **Political** | 1 | The public is supportive of the project. |
| **Legal** | 1 | The Town has the legal jurisdiction to complete the project |
| **Fiscal** | 1 | The Town will be able to complete the project with fiscal resources available. |
| **Environmental** | 0 | |
| **Social** | 1 | |
| **Administrative** | 1 | |
| **Multi-Hazard** | 1 | All Hazards |
| **Timeline** | 1 | |
| **Agency Champion** | 1 | Highway Department. |
| **Other Community Objectives** | 1 | |
| **Total** | 13 | |
| **Priority (High/Med/Low)** | High | |

| Action Worksheet | | | |
|---|---|---|---|
| **Project Name:** | Repetitive Loss Properties in Colesville | | |
| **Project Number:** | T. Colesville-2 | | |
| **Risk / Vulnerability** | | | |
| **Hazard(s) of Concern:** | Flood | | |
| **Description of the Problem:** | There are 13 repetitive loss properties located throughout the Town. The Town has asked if the owners would be interested in mitigating their properties (acquiring their homes) and none of the homeowners showed interest. The properties are still at risk to flood damages and will continue to be damaged by floods. The health and safety of homeowners and emergency personnel are both at risk – homeowners if they don't evacuate or the impacts of after a flooding event; and emergency personnel if they need to rescue homeowners trapped by floods or need to reach this area of town and cannot access the roads because they are flooded. | | |
| **Action or Project Intended for Implementation** | | | |
| **Description of the Solution:** | Provide outreach to residents to determine if they will consider elevating their structures, and, if so, apply for HMA funding to raise the properties. | | |
| **Is this project related to a Critical Facility?** | Yes ☐ | No ☒ | |
| **Is this project related to a Critical Facility located within the 100-year floodplain?** | Yes ☐ | No ☒ | |
| (If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater) | | | |
| **Level of Protection:** | 100 year | **Estimated Benefits (losses avoided):** | Eliminate 100-year impacts of flooding, historical claims have been $1,608,140. |
| **Useful Life:** | 50 years | **Goals Met:** | 1, 5 |
| **Estimated Cost:** | $1, 625,000 | **Mitigation Action Type:** | Structure and Infrastructure Project |
| **Plan for Implementation** | | | |
| **Prioritization:** | High | **Desired Timeframe for Implementation:** | 5 years |
| **Estimated Time Required for Project Implementation:** | 5 years | **Potential Funding Sources:** | HMGP, FMA, PDM with private match or CDBG match |
| **Responsible Organization:** | Town Supervisor with support from the property owners | **Local Planning Mechanisms to be Used in Implementation if any:** | Hazard Mitigation Plan |

| Three Alternatives Considered (including No Action) | | | |
|---|---|---|---|
| **Alternatives:** | **Action** | **Estimated Cost** | **Evaluation** |
| | No Action | $0 | Properties continue to be damaged and life safety issues |
| | Acquisition | Average $125,000 per property times 13=$1, 625,000 | Eliminate the vulnerability and damages and can provide environmental benefits by the stream. |
| | Elevation | Average $100,000 x 13=$1,300,000 | Reduce the vulnerability and reduce potential damages but do not eliminate damages or life safety issues. |

| Progress Report (for plan maintenance) | |
|---|---|
| **Date of Status Report:** | |
| **Report of Progress:** | |
| **Update Evaluation of the Problem and/or Solution:** | |

| Action Worksheet | | |
|---|---|---|
| **Project Name:** | Repetitive Loss Properties in Colesville | |
| **Project Number:** | T. Colesville-2 | |
| **Criteria** | **Numeric Rank (-1, 0, 1)** | **Provide brief rationale for numeric rank when appropriate** |
| **Life Safety** | 1 | Families in impacted homes will be better protected from flooding dangers. |
| **Property Protection** | 1 | Properties will be removed from high risk areas. |
| **Cost-Effectiveness** | 1 | |
| **Technical** | 1 | |
| **Political** | 1 | The public supports the initiative |
| **Legal** | 1 | The Town has the legal authority to complete the project. |
| **Fiscal** | 0 | FEMA HMGP or FMA with homeowner local match |
| **Environmental** | 1 | For homes removed, there will be a positive environmental impact. |
| **Social** | 0 | |
| **Administrative** | 1 | |
| **Multi-Hazard** | 0 | Flood |
| **Timeline** | 1 | |
| **Agency Champion** | 1 | Floodplain Administrator |
| **Other Community Objectives** | 1 | |
| **Total** | 11 | |
| **Priority (High/Med/Low)** | High | |

| Action Worksheet | | | |
|---|---|---|---|
| **Project Name:** | Porter Hallow Road Improvements | | |
| **Project Number:** | T. Colesville-3 | | |
| **Risk / Vulnerability** | | | |
| **Hazard(s) of Concern:** | Flooding | | |
| **Description of the Problem:** | Porter Hallow Road experiences high water and flash flooding issues impacting the roadway. At least once a year this roadway becomes inundated due to excess surface water runoff which exceeds existing culvert capacity and causes road closures and road failure (wash outs) rendering the roadway impassable. Also, homes on Porter Hallow Road are impacted by runoff in that basements are flooded, driveways impassable and houses are not accessible. The water does recede for at least a day and requires a 4-mile detour. | | |
| **Action or Project Intended for Implementation** | | | |
| **Description of the Solution:** | Phase 1: Do a design study to determine a viable design to mitigation the flood issues. Phase 2: Implement drainage improvements on Porter Hallow Road. | | |
| **Is this project related to a Critical Facility?** | Yes ☐ | No ☒ | |
| **Is this project related to a Critical Facility located within the 100-year floodplain?** | Yes ☐ | No ☒ | |
| (If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater) | | | |
| **Level of Protection:** | 25 year | **Estimated Benefits (losses avoided):** | Residential properties and access to public roadway (Fire/EMS) protected. |
| **Useful Life:** | 30 years | **Goals Met:** | 1, 5 |
| **Estimated Cost:** | $650,000 | **Mitigation Action Type:** | Structure and Infrastructure Project |
| **Plan for Implementation** | | | |
| **Prioritization:** | High | **Desired Timeframe for Implementation:** | 1-2 years |
| **Estimated Time Required for Project Implementation:** | 2 years | **Potential Funding Sources:** | HMPG, PDM, with capital improvement match. |
| **Responsible Organization:** | Colesville DPW | **Local Planning Mechanisms to be Used in Implementation if any:** | Hazard mitigation plan; capital improvements plan. |

| Three Alternatives Considered (including No Action) | | | |
|---|---|---|---|
| **Alternatives:** | **Action** | **Estimated Cost** | **Evaluation** |
| | No Action | $0 | Continued road closures and damages. |
| | Upgrade existing culverts | $50,000 | Reduce damages and need for detours up to 25-year event. |
| | Road relocation | $1,000,000 | Reduce damages and need for detours up to 100-year event. |

| Progress Report (for plan maintenance) | |
|---|---|
| **Date of Status Report:** | |
| **Report of Progress:** | |
| **Update Evaluation of the Problem and/or Solution:** | |

| Action Worksheet | | |
|---|---|---|
| **Project Name:** | Porter Hallow Road Improvements | |
| **Project Number:** | T. Colesville-3 | |
| **Criteria** | **Numeric Rank (-1, 0, 1)** | **Provide brief rationale for numeric rank when appropriate** |
| **Life Safety** | 0 | |
| **Property Protection** | 1 | Porter Hollow Road will be protected from future damages. |
| **Cost-Effectiveness** | 1 | |
| **Technical** | 1 | |
| **Political** | 1 | The Town has public support for the project. |
| **Legal** | 1 | The Town has the legal authority to complete the project. |
| **Fiscal** | 1 | HMPG, PDM, with capital improvement match. |
| **Environmental** | 1 | No negative environmental impacts are expected from the project. |
| **Social** | 1 | No negative environmental impacts are expected from the project. |
| **Administrative** | 1 | |
| **Multi-Hazard** | 0 | Flood |
| **Timeline** | 1 | 1-2 years |
| **Agency Champion** | 1 | Colesville DPW |
| **Other Community Objectives** | 1 | |
| **Total** | 12 | |
| **Priority (High/Med/Low)** | High | |

| Action Worksheet | | | |
|---|---|---|---|
| **Project Name:** | Town of Colesville Critical Flood-prone Road Improvements | | |
| **Project Number:** | T. Colesville-4 | | |
| **Risk / Vulnerability** | | | |
| **Hazard(s) of Concern:** | Flooding | | |
| **Description of the Problem:** | Various areas of the Town experience high water and flash flooding issues impacting roadways. Specific areas of concern include Clendening Road and Dilley Road. At least once a year these roadways become inundated due to excess surface water runoff which exceeds existing culvert capacity and causes road closures and road failure (wash outs) rendering roadways impassable. The water does recede for about a day and requires a 15-20-mile detour. | | |
| **Action or Project Intended for Implementation** | | | |
| **Description of the Solution:** | Implement drainage improvements. Various steams and tributaries on Porter Hallow Road, Clendening Road culvert replacement, Dilley Road (NYSDOT and Town replacing culvert pipe). | | |
| **Is this project related to a Critical Facility?** | Yes ☐ | No ☒ | |
| **Is this project related to a Critical Facility located within the 100-year floodplain?** | Yes ☐ | No ☒ | |
| (If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater) | | | |
| **Level of Protection:** | 25 year | **Estimated Benefits (losses avoided):** | Residential properties and access to public roadway (Fire/EMS) protected. |
| **Useful Life:** | 30 years | **Goals Met:** | 1, 5 |
| **Estimated Cost:** | $650,000 | **Mitigation Action Type:** | Structure and Infrastructure Project |
| **Plan for Implementation** | | | |
| **Prioritization:** | High | **Desired Timeframe for Implementation:** | 1-2 years |
| **Estimated Time Required for Project Implementation:** | 2 years | **Potential Funding Sources:** | HMPG, PDM, with capital improvement match. |
| **Responsible Organization:** | Colesville DPW | **Local Planning Mechanisms to be Used in Implementation if any:** | Hazard mitigation plan; capital improvements plan. |

| Three Alternatives Considered (including No Action) | | | |
|---|---|---|---|
| **Alternatives:** | **Action** | **Estimated Cost** | **Evaluation** |
| | No Action | $0 | Continued road closures and damages. |
| | **Upgrade existing culverts** | **$600,000** | **Reduce damages and need for detours up to 25-year event.** |
| | **Decommissioning road and relocating homes and businesses** | **$10,000,00** | **Eliminate all losses but unfortunately eliminate economy in the area.** |

| Progress Report (for plan maintenance) | |
|---|---|
| **Date of Status Report:** | |
| **Report of Progress:** | |
| **Update Evaluation of the Problem and/or Solution:** | |

| Action Worksheet | | |
|---|---|---|
| **Project Name:** | Town of Colesville Critical Flood-prone Road Improvements | |
| **Project Number:** | T. Colesville-4 | |
| **Criteria** | **Numeric Rank (-1, 0, 1)** | **Provide brief rationale for numeric rank when appropriate** |
| **Life Safety** | 0 | |
| **Property Protection** | 1 | Roads will be protected from future damages. |
| **Cost-Effectiveness** | 1 | |
| **Technical** | 1 | |
| **Political** | 1 | The Town has public support for the project. |
| **Legal** | 1 | The Town has the legal authority to complete the project. |
| **Fiscal** | 1 | HMPG, PDM, with capital improvement match. |
| **Environmental** | 1 | No negative environmental impacts are expected from the project. |
| **Social** | 1 | No negative environmental impacts are expected from the project. |
| **Administrative** | 1 | |
| **Multi-Hazard** | 0 | Flood |
| **Timeline** | 1 | 1-2 years |
| **Agency Champion** | 1 | Colesville DPW |
| **Other Community Objectives** | 1 | |
| **Total** | 12 | |
| **Priority (High/Med/Low)** | High | |