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JURISDICTION PROFILE

OVERVIEW

The Town of Bristol is in Ontario County, New York, with a population just under 2.200. The town is in the western half of the county, southwest of the City Canandaigua. According to the United State Census Bureau, the town has a total of 36.8 square miles of which 36.7 square miles is land and 0.04 square miles is water. U.S. Route 20A passes through the town. New York State Route 64 is a north-south highway in the southeastern part of the town. Mud Creek is an important stream in the Town of Bristol. Figure C-1 shows the general location of the Town of Bristol.

TOWN OF BRISTOL CONTACT INFORMATION

Name: Bob Green

Title: Town Supervisor

Phone: (585) 229-2400, ext. 6

Address: 6740 County Road 32,

Canandaigua, NY 14424

Email: supervisor@townofbristol.org

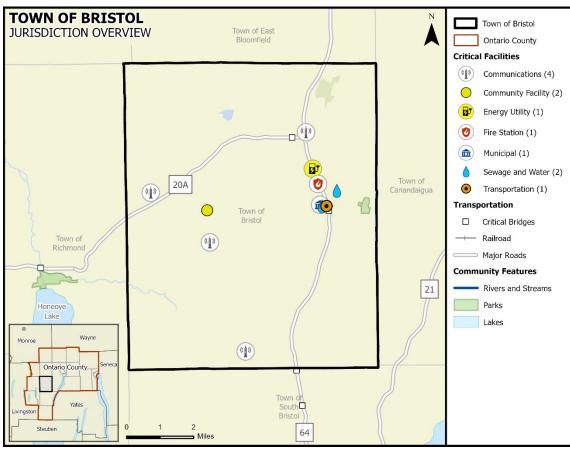


Figure C-1. Town of Bristol Planning Area¹

¹ Map sources: ESRI OpenStreetMap (Custom: no labels), Census TIGER/LINE (2022), Ontario County Information Technology Department (2023)

POPULATION AND DEMOGRAPHICS

According to the 2020 Census population count, the Town of Bristol has an official population of 2,284 residents, a 1.3 percent decrease since the 2010 census. Table C-1 summarizes select characteristics of vulnerable or sensitive populations in the Town of Bristol using data from the U.S. Census Bureau 2021 American Community Survey (ACS) five-year estimates. Note that in some cases the 2021 ACS estimates may differ from the 2020 Census count; the ACS estimates are used throughout this section for consistency.²

Between official U.S. Census population counts, the estimate uses a formula based on new residential building permits and household size. It is simply an estimate and there are many variables involved in achieving an accurate estimation of people living in a given area at a given time.

ESTIMATED VULNERABLE OR SENSITIVE POPULATIONS³ **TOTAL 2010 TOTAL 2021 PERCENTAGE JURISDICTION** Youth **Below POPULATION POPULATION CHANGE Elderly** (Under **Poverty** (Over 65) 5) Level Town of Bristol 2,315 2,195 -5.18% 60 490 156

Table C-1. Population Distribution for the Town of Bristol

POPULATION GROWTH

The official 2020 Town of Bristol population is 2,284. Overall, the Town of Bristol experienced an increase in population between 1990 and 2020 of 10.3 percent, or an increase by 244 residents. Between 2010 and 2020, the Town of Bristol experienced a population decline. Table C-2 provides historic change rates in the Town of Bristol.

JURISDICTION	1990⁵	2000 ⁶	2010	2020	POP CHANGE 1990- 2020	PERCENT OF CHANGE	POP CHANGE 2010- 2020	PERCENT OF CHANGE
Town of Bristol	2,071	2,421	2,315	2,284	244	10.3	-31	-1.3

Table C-2. Population Growth for the Town of Bristol, 1990-20204

FUTURE DEVELOPMENT

To better understand how future growth and development in the Town of Bristol might affect hazard vulnerability, it is useful to consider population growth, occupied and vacant land, the potential for future development in hazard areas, and current planning and growth management

² Source: https://demographics.texas.gov/Data/Decennial/2010/, https://www.census.gov/en.html and https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/2021/

³ The Estimated Vulnerable or Sensitive Populations are based off the 2021 American Community Survey 5-Year Estimates Data Profiles.

⁴ U.S. Census Bureau

⁵ Source: https://www2.census.gov/library/publications/decennial/1990/cp-1/cp-1-34-2.pdf?#

⁶ Source: https://www2.census.gov/library/publications/2003/dec/phc-3-34.pdf

efforts. This section includes an analysis of the projected population change, and economic impacts.

Population projections from 2010 to 2040 are listed in Table C-3, as provided by Cornell University's Program on Applied Demographics⁷. **This information is only available at the County level**; however, the population projection shows an increase in population density for the County, which would mean overall increase for the planning area.

2010 2020 2030 2040 **LAND Population** AREA (SQ **Density Density Density Density** MI) Total Total Total Total (Land Area, (Land Area, (Land Area, (Land Area, Number Number Number Number SQ MI) SQ MI) SQ MI) SQ MI) 644 107,931 167.59 172.90 114.374 177.60 114,770 178.21 111.349

Table C-3. Ontario County Population Projections

PLAN MAINTENANCE

The Ontario County Hazard Mitigation Plan Update provides explanation on how each participating jurisdiction will be involved in implementing, evaluating, and enhancing the Plan over time. Please see Section 27 of this Plan for additional information regarding plan maintenance for the entire planning area.

Periodic revisions of the Plan are required to ensure that goals, objectives, and mitigation actions are kept current. When the plan is discussed in these sections it includes the risk assessment and mitigation actions as a part of the monitoring, evaluating, updating and review process. Revisions may be required to ensure the Plan remains in compliance with federal and state statutes and regulations. Table C-4 indicates the department and title of the party responsible for Plan monitoring, evaluating, updating, and review of the Plan.

Table C-4. Team Member Responsible for Plan Monitoring, Evaluating, Updating, and Review of the Plan

JURISDICTION	TITLE
Town of Bristol	Town Supervisor

PUBLIC PARTICIPATION

A series of public meetings were held throughout the Ontario County planning area to collect public and stakeholder input. Topics of discussion included the purpose of hazard mitigation, discussion of the planning process, and types of natural hazards. In addition, a public survey was developed to solicit public input during the planning process from citizens and stakeholders and to obtain data regarding the identification of any potential hazard mitigation actions or problem areas. The survey was promoted by local officials and a link to the survey was posted on the Town of Bristol's website. A total of 8 surveys were completed for the Town of Bristol. Additional

⁷ Source: https://pad.human.cornell.edu/counties/projections.cfm

meeting documentation and survey results can be viewed in Appendix E and Appendix B, respectively.

The draft Plan was made available to the general public for review and comment on Ontario County's website for 30 days. To ensure opportunities are given to all citizens including those without internet access, a paper copy of the draft plan annexes was also available at municipal offices and public library locations with a comment form that included an email and phone number for the public to provide feedback. Refer to Section 2 for additional information on public involvement in the planning process.

Public input was an integral part of the preparation of this Plan and will continue to be essential for Plan updates. The public will be directly involved in the annual evaluation, monitoring, reviews and cyclical updates. Changes or suggestions to improve or update the Plan will provide opportunities for additional public input. The public can review the Plan on the Town of Bristol's website, where officials and the public are invited to provide ongoing feedback, via email.

The Planning team is responsible for notifying stakeholders and community members on an annual basis and maintaining the Plan. Media, including local newspaper and radio stations, will be used to notify the public of any maintenance or periodic review activities during the implementation, monitoring, and evaluation phases. Additionally, local news media will be contacted to cover information regarding Plan updates, status of grant applications, and project implementation. Local and social media outlets, such as Facebook and X (formerly known as Twitter), will keep the public and stakeholders apprised of potential opportunities to fund and implement mitigation projects identified in the Plan.

HAZARD PROFILES

DAM FAILURE

The Town of Bristol is not profiling dam failure. The Town of Bristol does not own any dams and is not located in any estimated dam inundation zones. Dam failure has not impacted the community in the past and is not anticipated to impact the community in the future. Any localized flooding the community may experience due to a dam breach is addressed in the flood hazard profile. Therefore, this hazard does not require further analysis.

DROUGHT

HAZARD DESCRIPTION. LOCATION. EXTENT. & HISTORICAL OCCURRENCES

The Ontario County Hazard Mitigation Plan Update provides a hazard description, location, and extent of the drought hazard for each participating jurisdiction (Section 6). Drought conditions are not confined to specific geographic boundaries and are considered similar for all participating jurisdictions throughout the planning area. Historical drought data for the County, including the Town of Bristol, are provided on a county-wide basis per the NCEI database. Therefore, all historical events are listed in Section 6 of the Plan Update.

PROBABILITY OF FUTURE EVENTS

According to historical records for the Ontario County planning area, the Town of Bristol can expect to experience a drought event approximately once every one to two years. This frequency supports a "Highly Likely" probability of future events.

VULNERABILITY AND IMPACT

While the entirety of the Ontario County planning area, including the Town of Bristol, is exposed to drought events, existing buildings, infrastructure, and critical facilities are not likely to sustain significant damage from these events. However, drought impacts are mostly experienced in water shortages, breaks in water lines, or crop and livestock losses on agricultural lands and typically have minimal impact on buildings.

The Town of Bristol planning team members identified critical facilities as assets that are considered the most important to the planning area and are susceptible to a range of potential hazard impacts caused by drought events. Drought impacts to critical facilities are similar across the entire planning area and are listed in detail in the drought hazard profile (Section 6). The following critical facilities would be vulnerable to drought events in the Town of Bristol:

Table C-5. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES
Town of Bristol	4 Communication Facilities, 2 Community Facilities, 1 Recreation/Park Community Facility, 1 Energy utility Facility, 1 Fire Station, 1 Municipal Building, 2 Sewage and Water Facilities, 1 Bridge, 1 Fuel Facility

The population over 65 in the Town of Bristol is estimated at 22 percent of the Town's total population and children under the age of 5 are estimated at 3 percent, or an estimated total of 550 potentially vulnerable residents in the Town of Bristol based on age. In addition, an estimated 7 percent of the Town of Bristol's population live below the poverty level (Table C-6).

Table C-6. Populations at Greater Risk

JURISDICTION	POPULATION 65 AND OLDER	POPULATION UNDER 5	POPULATION BELOW POVERTY LEVEL
Town of Bristol	490	60	156

Historic losses are reported on a county-wide basis. Please see Section 6 of this Plan for additional information on historical and annualized losses for the entire planning area.

EXTREME COLD

HAZARD DESCRIPTION. LOCATION. EXTENT. & HISTORICAL OCCURRENCES

The Ontario County Hazard Mitigation Plan Update provides a hazard description, location, and extent of the extreme cold hazard for each participating jurisdiction (Section 7). Extreme cold events are not confined to specific geographic boundaries and are considered similar for all participating jurisdictions throughout the planning area. For the purposes of evaluating this hazard, the following NCEI reporting categories are included under extreme cold: cold/wind chill, extreme cold, frost/freeze, and winter weather. Historical extreme cold data for the County, including the Town of Bristol, are provided on a county-wide basis per the NCEI database. Therefore, all historical events are listed in Section 7 of the Plan Update.

PROBABILITY OF FUTURE EVENTS

According to historical records for the Ontario County planning area, the Town of Bristol can expect to experience an extreme cold event approximately once every year. This frequency supports a "Highly Likely" probability of future events.

VULNERABILITY AND IMPACT

While the entirety of the Ontario County planning area, including the Town of Bristol, is exposed to extreme cold events, existing buildings, infrastructure, and critical facilities are not likely to sustain significant damage from these events. However, the Town of Bristol planning team members identified the following critical facilities (Table C-7) as assets that are considered the most important to the planning area. These facilities are susceptible to a range of impacts caused by this hazard. Extreme cold impacts to critical facilities are similar across the entire planning area and are listed in detail in the extreme cold hazard profile (Section 7). The following critical facilities would be vulnerable to extreme cold events in the Town of Bristol.

Table C-7. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES
Town of Bristol	4 Communication Facilities, 2 Community Facilities, 1 Recreation/Park Community Facility, 1 Energy utility Facility, 1 Fire Station, 1 Municipal Building, 2 Sewage and Water Facilities, 1 Bridge, 1 Fuel Facility

The population over 65 in the Town of Bristol is estimated at 22 percent of the Town's total population and children under the age of 5 are estimated at 3 percent, or an estimated total of 550 potentially vulnerable residents in the Town of Bristol based on age. In addition, an estimated 7 percent of the Town of Bristol's population live below the poverty level (Table C-8).

Table C-8. Populations at Greater Risk

JURISDICTION	POPULATION 65 AND OLDER	POPULATION UNDER 5	POPULATION BELOW POVERTY LEVEL
Town of Bristol	490	60	156

Historic losses are reported on a county-wide basis. Please see Section 7 of this Plan for additional information on historical and annualized losses for the entire planning area.

EXTREME HEAT

HAZARD DESCRIPTION. LOCATION. EXTENT. & HISTORICAL OCCURRENCES

The Ontario County Hazard Mitigation Plan Update provides a hazard description, location, and extent of the extreme heat hazard for each participating jurisdiction (Section 8). Extreme heat events are not confined to specific geographic boundaries and are considered similar for all participating jurisdictions throughout the planning area. Historical extreme heat data for the County, including the Town of Bristol, are provided on a county-wide basis per the NCEI database. Therefore, all historical events are listed in Section 8 of the Plan Update.

PROBABILITY OF FUTURE EVENTS

According to historical records for the Ontario County planning area, the Town of Bristol can expect to experience an extreme heat event approximately once every year. This frequency supports a "Highly Likely" probability of future events.

VULNERABILITY AND IMPACT

While the entirety of the Ontario County planning area, including the Town of Bristol, is exposed to extreme heat events, existing buildings, infrastructure, and critical facilities are not likely to sustain significant damage from these events. However, the Town of Bristol planning team members identified the following critical facilities (Table C-9) as assets that are considered the most important to the planning area. These facilities are susceptible to a range of impacts caused by this hazard. Extreme heat impacts to critical facilities are similar across the entire planning area and are listed in detail in the extreme heat hazard profile (Section 8). The following critical facilities would be vulnerable to extreme heat events in the Town of Bristol:

Table C-9. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES
Town of Bristol	4 Communication Facilities, 2 Community Facilities, 1 Recreation/Park Community Facility, 1 Energy utility Facility, 1 Fire Station, 1 Municipal Building, 2 Sewage and Water Facilities, 1 Bridge, 1 Fuel Facility

The population over 65 in the Town of Bristol is estimated at 22 percent of the Town's total population and children under the age of 5 are estimated at 3 percent, or an estimated total of 550 potentially vulnerable residents in the Town of Bristol based on age. In addition, an estimated 7 percent of the Town of Bristol's population live below the poverty level (Table C-10).

Table C-10. Populations at Greater Risk

JURISDICTION	POPULATION 65 AND OLDER	POPULATION UNDER 5	POPULATION BELOW POVERTY LEVEL
Town of Bristol	490	60	156

Historic losses are reported on a county-wide basis. Please see Section 8 of this Plan for additional information on historical and annualized losses for the entire planning area.

FLOOD

HAZARD DESCRIPTION. LOCATION. & EXTENT

The Ontario County Hazard Mitigation Plan Update provides a hazard description and extent of the flood hazard for the entire Ontario County planning area in Section 9. Flood hazard delineations with elevations are available in portions of the Town of Bristol, some areas feature flood hazard boundary maps only with no flood elevations. The location of estimated flood zones for the Town of Bristol, based on the Digital Flood Insurance Rate Maps (DFIRM) from FEMA is illustrated in Figure C-2.

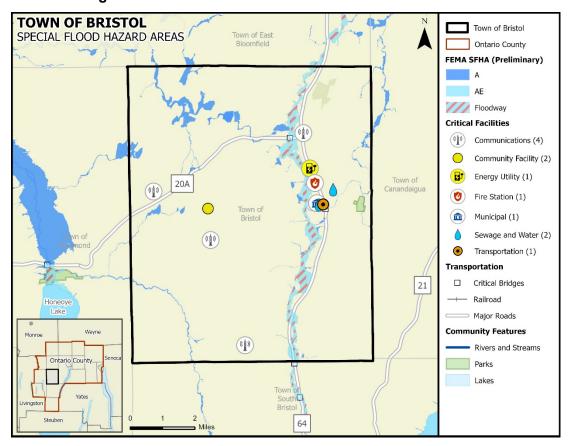


Figure C-2. Estimated Flood Zones in the Town of Bristol⁸

HISTORICAL OCCURRENCES

Table C-11 provides the historical occurrences of flood events for the Town of Bristol according to the Storm Prediction Center (NOAA), National Centers for Environmental Information (NCEI) database for Ontario County. From January 1996 through to August 2023, four flood events were known to have impacted the Town of Bristol, based upon NCEI records. Flood events are often reported on a county-wide basis, or under-reported for individual municipalities, particularly in smaller communities.

⁸ Map sources: ESRI OpenStreetMap (Custom: no labels), Census TIGER/LINE (2022), Ontario County Information Technology Department (2023), Ontario County Preliminary Flood Data (2023)

Table C-11. Historical Flood Ev	vents, 1996-2023 ⁹
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JURISDICTION	DATE	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
	6/3/2007	0	0	\$106,612	\$0
Town of Bristol	7/13/2010	0	0	\$20,378	\$0
Town of Briston	5/16/2014	0	0	\$186,741	\$0
	8/19/2021	0	0	\$0	\$0
Tota	ls	0	0	\$313,731	

Based on the list of historical flood events for the Town of Bristol, one of the reported events has occurred since the 2018 Plan.

PROBABILITY OF FUTURE EVENTS

While some incidents may be reported at the local municipal level, as indicated above, county level events provide a more robust risk assessment for each participating jurisdiction. According to historical records for the Ontario County planning area, the Town of Bristol can expect to experience approximately one to two flood events every year. This frequency supports a "Highly Likely" probability of future events.

VULNERABILITY AND IMPACT

The Town of Bristol planning team members identified critical facilities as assets that are considered the most important to the planning area and are susceptible to a range of potential impacts from a variety of natural hazards, including those facilities located in the regulatory floodplain. There are no critical facilities in the Town of Bristol located in the floodplain. Historic loss estimates due to flood are presented in Table C-12 below.

Table C-12. Potential Annualized Losses, 1996-2023¹⁰

JURISDICTION	NUMBER OF EVENTS	PROPERTY & CROP LOSS	ANNUAL LOSS ESTIMATES
Town of Bristol	4	\$313,731	\$11,408

While all citizens are at risk of the impacts of a flood, forced relocation and disaster recovery drastically impacts low-income residents who lack the financial means to travel, afford a long-term stay away from home, and to rebuild or repair their homes. An estimated 7 percent of the Town of Bristol's population live below the poverty level (Table C-13). While warning times for these type of hazard events should be substantial enough for individuals to seek shelter, individuals who work and recreate outside are also vulnerable to potential impacts of a flood event.

Table C-13. Populations at Greatest Risk

JURISDICTION	POPULATION BELOW POVERTY LEVEL
Town of Bristol	156

⁹ Events are reported from January 1996 through August 2023; values are in 2023 dollars.

¹⁰ Historical events are reported from January 1996 through August 2023; values are in 2023 dollars.

The severity of a flooding event varies depending on the relative risk to citizens and structures located within each jurisdiction. Table C-14 depicts the level of impact for the Town of Bristol.

Table C-14. Town of Bristol Impact

JURISDICTION	IMPACT	DESCRIPTION
Town of Bristol	Limited	The Town of Bristol could have limited property damage with critical facilities typically shut down for 24 hours or less, and less than 10 percent of property would be destroyed or damaged.

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) PARTICIPATION

The Town of Bristol currently participates in the National Flood Insurance Program and is in good standing. The community has adopted a flood damage prevention ordinance that includes the minimum requirements for development in special flood hazard areas.

NFIP COMPLIANCE AND MAINTENANCE

The Town of Bristol has developed mitigation actions that relate to NFIP participation, maintenance or compliance. Compliance and maintenance actions can be found in Section 26. Flooding was identified by the Town of Bristol as a moderate hazard during hazard ranking activities at the Risk Assessment Workshop. Many of the mitigation actions for the jurisdiction were developed with flood mitigation in mind.

The Town of Bristol Code Zoning Officer is designated as the local floodplain administrator and is responsible for maintaining compliance in the NFIP through development regulations as outlines in the community flood damage prevention ordinance. The floodplain administrator is responsible for

- Permitting and inspecting construction activity in the floodplain
- Ensuring conformance with floodplain permit requirements
- Enforcing floodplain regulations
- Identifying Substantially Damaged structures and ensuring compliance during reconstruction
- Identifying Substantial Improvements in proposed development permit applications and ensuring compliance during construction
- o Providing floodplain map and flood insurance information to the public
- Coordinating with FEMA to maintain the community's participation in the NFIP
- Keeping records of construction in the floodplain

Table C-15 provides the most recent CAC/CAV dates along with the current status for the jurisdiction.

Table C-15. Compliance History

JURISDICTION	DATE OF LAST	DATE OF LAST	CURRENT NFIP	POLICIES IN
	CAC	CAV	STATUS	FORCE
Town of Bristol	1/14/2016	7/7/2004	Good Standing	0

REPETITIVE LOSS

The Town of Bristol currently has no repetitive loss or severe repetitive loss properties.

HAIL

HAZARD DESCRIPTION, LOCATION, & EXTENT

The Ontario County Hazard Mitigation Plan Update provides a hazard description, location and extent of the hail hazard for each participating jurisdiction (Section 10). Hail events are not confined to specific geographic boundaries and are considered similar for all participating jurisdictions throughout the planning area.

HISTORICAL OCCURRENCES

Historical evidence shown in Figure C-3 demonstrates that the Town of Bristol is vulnerable to hail events overall. Historical events with reported damages, injuries, or fatalities are shown in Table C-16. A total of two reported historical hail events impacted the Town of Bristol between January 1956 through August 2023; these events were reported to NCEI and NOAA databases and may not represent all hail events to have occurred during the past 67.5 years. Only those events for the Town of Bristol with latitude and longitude available were plotted (Figure C-3).

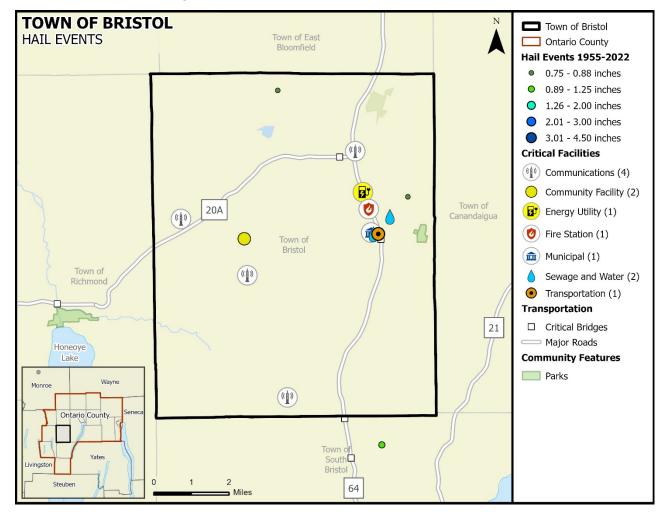


Figure C-3. Historical Hail Events, 1956-2023¹¹

¹¹ Map sources: ESRI OpenStreetMap (Custom: no labels), Census TIGER/LINE (2022), Ontario County Information Technology Department (2023), NOAA Storm Events Database (2023)

Table C-16	Historical	Hail Events	1956-2023 ¹²
I able C-10.	HIISLUHGAL	Hall Evelits.	1330-2023

JURISDICTION	DATE	MAGNITUDE (Inches)	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
T (Deleta)	9/11/2011	0.75	0	0	\$0	\$0
Town of Bristol	8/01/2011	0.88	0	0	\$0	\$0
TOTALS		(Max Extent)	0	0	\$0	\$0

Based on the list of historical hail events for the Town of Bristol, no reported events have occurred since the 2018 Plan.

PROBABILITY OF FUTURE EVENTS

Historical hail events are often reported on a county-wide basis. While some incidents may be reported at the local municipal level, as indicated above, county level events provide a more robust risk assessment for each participating jurisdiction According to historical records for the Ontario County planning area, the Town of Bristol can expect a hail event approximately every one to two years. This frequency supports a "Highly Likely" probability of future events.

VULNERABILITY AND IMPACT

The Town of Bristol planning team members identified the following critical facilities as assets that are considered the most important to the planning area. These facilities are susceptible to a range of impacts caused by hailstorm events. Hail impacts to critical facilities are similar across the entire planning area and are listed in detail in the hail hazard profile (Section 10).

Table C-17. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES
Town of Bristol	4 Communication Facilities, 2 Community Facilities, 1 Recreation/Park Community Facility, 1 Energy utility Facility, 1 Fire Station, 1 Municipal Building, 2 Sewage and Water Facilities, 1 Bridge, 1 Fuel Facility

The U.S. Census data indicates a total of 83 (7 percent of total housing stock) manufactured homes located in the Town of Bristol. In addition, 44 percent (approximately 486 structures) of the housing structures in the Town of Bristol were built before 1980. These structures would typically be built to lower or less stringent construction standards than newer construction and may be more susceptible to damages during significant hail events.

Table C-18. Structures at Greater Risk

JURISDICTION	MANUFACTURED HOMES	SFR STRUCTURES BUILT BEFORE 1980
Town of Bristol	83	486

While all citizens are at risk of the impacts of hail, forced relocation and disaster recovery drastically impacts low-income residents who lack the financial means to travel, afford a long-term

¹² Historical events are reported from January 1956 through August 2023. Only recorded events with fatalities, injuries, and/or damages are listed; values are in 2023 dollars.

stay away from home, and to rebuild or repair their homes. An estimated 7 percent of the Town of Bristol's population live below the poverty level (Table C-19).

Table C-19. Populations at Greatest Risk

JURISDICTION	POPULATION BELOW POVERTY LEVEL
Town of Bristol	156

Overall, the total loss estimate of property and crops in the Town of Bristol is \$0 with an average annualized loss of \$0. Based on historic loss and damages, the impact of hail damages on the Town of Bristol can be considered "Limited" severity of impact, meaning minor quality of life lost, critical facilities and services shut down for 24 hours or less, and less than 10 percent of property destroyed or with major damage.

Table C-20. Estimated Annualized Losses

JURISDICTION	TOTAL PROPERTY & CROP LOSS	ANNUAL LOSS ESTIMATE
Town of Bristol	\$0	\$0

ICE STORM

HAZARD DESCRIPTION. LOCATION. EXTENT. & HISTORICAL OCCURRENCES

The Ontario County Hazard Mitigation Plan Update provides a hazard description, location, and extent of the ice storm hazard for each participating jurisdiction (Section 11). Ice storm events are not confined to specific geographic boundaries and are considered similar for all participating jurisdictions throughout the planning area. For the purposes of evaluating this hazard, the following NCEI reporting categories are included under ice storm: sleet, freezing fog, and ice storm. Historical ice storm data for the county, including the Town of Bristol, are provided on a county-wide basis per the NCEI database. Therefore, all historical events are listed in Section 11 of the Plan Update.

PROBABILITY OF FUTURE EVENTS

According to historical records for the Ontario County planning area, the Town of Bristol can expect to experience an ice storm event approximately once every five years. This frequency supports an "Occasional" probability of future events.

VULNERABILITY AND IMPACT

While the entirety of the Ontario County planning area, including the Town of Bristol, is exposed to ice storm events, existing buildings, infrastructure, and critical facilities are not likely to sustain significant damage from these events. However, the Town of Bristol planning team members identified the following critical facilities (Table C-21) as assets that are considered the most important to the planning area. These facilities are susceptible to a range of impacts caused by this hazard. Ice storm impacts to critical facilities are similar across the entire planning area and are listed in detail in the ice storm hazard profile (Section 11). The following critical facilities would be vulnerable to ice storm events in the Town of Bristol:

Table C-21. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES
Town of Bristol	4 Communication Facilities, 2 Community Facilities, 1 Recreation/Park Community Facility, 1 Energy utility Facility, 1 Fire Station, 1 Municipal Building, 2 Sewage and Water Facilities, 1 Bridge, 1 Fuel Facility

The population over 65 in the Town of Bristol is estimated at 22 percent of the Town's total population and children under the age of 5 are estimated at 3 percent, or an estimated total of 550 potentially vulnerable residents in the Town of Bristol based on age. In addition, an estimated 7 percent of the Town of Bristol's population live below the poverty level (Table C-22).

Table C-22. Populations at Greater Risk

JURISDICTION	POPULATION 65 AND OLDER	POPULATION UNDER 5	POPULATION BELOW POVERTY LEVEL
Town of Bristol	490	60	156

Historic losses are reported on a county-wide basis. Please see Section 11 of this Plan for additional information on historical and annualized losses for the entire planning area.

LANDSLIDE

HAZARD DESCRIPTION. LOCATION. EXTENT. & HISTORICAL OCCURRENCES

The Ontario County Hazard Mitigation Plan Update provides a hazard description, location, and extent of the landslide hazard for all participating jurisdictions prone to landslides (Section 12). The entire planning area is primarily at low risk for potential landslides. However, the areas surrounding Honeoye Lake are at a slightly greater risk for landslides.

According to the New York State Hazard Mitigation Plan, the entire population in the Town of Bristol is at a low risk of incidence and low risk for landslide susceptibility (0-1.5%). Since 1996, the entire Ontario County planning area has had two reported incidents and no known damages due to landslides. Both landslide incident reports (Section 12) are located outside of the Town of Bristol.

PROBABILITY OF FUTURE EVENTS

Based on available records of historic events there are no known historic events of landslide in the Town of Bristol over the 27.5-year reporting period which provides a probability of one event every ten years or more. This frequency supports an "Unlikely" probability of future events for the Town of Bristol.

VULNERABILITY AND IMPACT

According to the New York State Hazard Mitigation Plan, the entire population in the Ontario County planning area is at a low risk of incidence. The only known area slightly susceptible to landslide within the planning area is along the banks of the Honeoye Lake. There have been no known impacts to structures or infrastructure in the area due to landslide and there are no critical facilities located in the areas considered at slightly greater risk. The lack of historical events or impacts supports a "Limited" severity of impact meaning injuries and/or illnesses are treatable with first aid, shutdown of facilities and services for 24 hours or less, and less than 10 percent of property is destroyed or with major damage.

LIGHTNING

HAZARD DESCRIPTION. LOCATION. & EXTENT

The Ontario County Hazard Mitigation Plan Update provides a hazard description, location and extent of the lightning hazard for each participating jurisdiction (Section 13). Lightning events are not confined to specific geographic boundaries and are considered similar for all participating jurisdictions throughout the planning area.

HISTORICAL OCCURRENCES

There have been no recorded lightning events in the Town of Bristol from January 1996 through August 2023. The NCEI is a national data source organized under the National Oceanic and Atmospheric Administration and considered a reliable resource for hazards. However, historical lightning events have only been reported as independent events to the NCEI in recent years and remain widely underreported. The flash density for the planning area along with input from local team members was utilized in evaluating the jurisdiction's risk. The flash density for the entire planning area indicates regular occurrences of lightning events that simply are not being reported.

PROBABILITY OF FUTURE EVENTS

Based on historical records and input from the planning team the probability of occurrence for future lightning events in the Town of Bristol is considered "Highly Likely", or an event probable in the next year. The planning team indicated that lightning occurs regularly in the area.

VULNERABILITY AND IMPACT

The Town of Bristol planning team members identified the following critical facilities as assets that are considered the most important to the planning area. These facilities are susceptible to a range of impacts caused by lightning events. Lightning impacts to critical facilities are similar across the entire planning area and are listed in detail in the lightning hazard profile (Section 13).

Table C-23. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES
Town of Bristol	4 Communication Facilities, 2 Community Facilities, 1 Recreation/Park Community Facility, 1 Energy utility Facility, 1 Fire Station, 1 Municipal Building, 2 Sewage and Water Facilities, 1 Bridge, 1 Fuel Facility

While all citizens are at risk to the impacts of lightning, forced relocation and disaster recovery drastically impacts low-income residents who lack the financial means to travel, afford a long-term stay away from home, and to rebuild or repair their homes. An estimated 7 percent of the Town of Bristol's population live below the poverty level (Table C-24).

Table C-24. Populations at Greatest Risk

JURISDICTION	POPULATION BELOW POVERTY LEVEL
Town of Bristol	156

With no historical lightning events or losses, the impacts of lightning events can be considered "Limited" with injuries or illness treatable with first aid, critical facilities and services shut down for 24 hours or less, and less than 10 percent of property destroyed. Overall, the average losses anticipated for the Town of Bristol due to lightning are considered negligible.

Table C-25. Potential Annualized Losses

JURISDICTION	TOTAL PROPERTY & CROP LOSS	ANNUAL LOSS ESTIMATE
Town of Bristol	\$0	\$0

SNOW STORM

HAZARD DESCRIPTION. LOCATION. EXTENT. & HISTORICAL OCCURRENCES

The Ontario County Hazard Mitigation Plan Update provides a hazard description, location, and extent of the snow storm hazard for each participating jurisdiction (Section 14). Snow storm events are not confined to specific geographic boundaries and are considered similar for all participating jurisdictions throughout the planning area. For the purposes of evaluating this hazard, the following NCEI reporting categories are included under snow storm: blizzard, heavy snow, winter storm, and lake effect snow. Historical snow storm data for the county, including the Town of Bristol, are provided on a county-wide basis per the NCEI database. Therefore, all historical events are listed in Section 14 of the Plan Update.

PROBABILITY OF FUTURE EVENTS

According to historical records for the Ontario County planning area, the Town of Bristol can expect to experience a snow storm event approximately once every year. This frequency supports a "Highly Likely" probability of future events.

VULNERABILITY AND IMPACT

While the entirety of the Ontario County planning area, including the Town of Bristol, is exposed to snow storm events, existing buildings, infrastructure, and critical facilities are not likely to sustain significant damage from these events. However, the Town of Bristol planning team members identified the following critical facilities (Table C-26) as assets that are considered the most important to the planning area. These facilities are susceptible to a range of impacts caused by this hazard. Snow storm impacts to critical facilities are similar across the entire planning area and are listed in detail in the snow storm hazard profile (Section 14). The following critical facilities would be vulnerable to snow storm events in the Town of Bristol:

Table C-26. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES
Town of Bristol	4 Communication Facilities, 2 Community Facilities, 1 Recreation/Park Community Facility, 1 Energy utility Facility, 1 Fire Station, 1 Municipal Building, 2 Sewage and Water Facilities, 1 Bridge, 1 Fuel Facility

The population over 65 in the Town of Bristol is estimated at 22 percent of the Town's total population and children under the age of 5 are estimated at 3 percent, or an estimated total of 550 potentially vulnerable residents in the Town of Bristol based on age. In addition, an estimated 7 percent of the Town of Bristol's population live below the poverty level (Table C-27).

Table C-27. Populations at Greater Risk

JURISDICTION	POPULATION 65 AND OLDER	POPULATION UNDER 5	POPULATION BELOW POVERTY LEVEL
Town of Bristol	490	60	156

Historic losses are reported on a county-wide basis. Please see Section 14 of this Plan for additional information on historical and annualized losses for the entire planning area.

TORNADO

HAZARD DESCRIPTION. LOCATION. & EXTENT

The Ontario County Hazard Mitigation Plan Update provides a hazard description, location and extent of the tornado hazard for each participating jurisdiction (Section 15). The risk of a tornado is not confined to specific geographic boundaries and the risk of an event is considered similar for all participating jurisdictions throughout the planning area.

HISTORICAL OCCURRENCES

Table C-28 provides the historical occurrences of tornado events for the Town of Bristol according to the National Centers for Environmental Information (NCEI) Storm Events database. From January 1994 through August 2023, 1 tornado event is known to have impacted the Town of Bristol, based upon NCEI records.

Table C-28. Historical Tornado Events, 1994-2023¹³

JURISDICTION	DATE	MAGNITUDE	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
Town of Bristol	8/29/2009	EF0	0	0	\$686,108	\$0
TOTALS		(MAX EXTENT)	0	0	\$686,108	\$0

Based on the list of historical tornado events for the Town of Bristol, there have been no recorded events since the 2018 Plan.

PROBABILITY OF FUTURE EVENTS

Historical tornado events are often reported on a county-wide basis, particularly when multiple smaller jurisdictions are impacted. While some incidents may be reported at the local municipal level, county level events provide a more robust risk assessment for each participating jurisdiction due to their similar geographic locations. According to historical records for the Ontario County planning area, the Town of Bristol can expect to experience a tornado event once every five years. This frequency supports an "Occasional" probability of future events.

VULNERABILITY AND IMPACT

The Town of Bristol planning team members identified the following critical facilities as assets that are considered the most important to the planning area. These facilities are susceptible to a range of impacts caused by tornado events. Tornado impacts to critical facilities are similar across the entire planning area and are listed in detail in the tornado hazard profile (Section 15).

Table C-29. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES
Town of Bristol	4 Communication Facilities, 2 Community Facilities, 1 Recreation/Park Community Facility, 1 Energy utility Facility, 1 Fire Station, 1 Municipal Building, 2 Sewage and Water Facilities, 1 Bridge, 1 Fuel Facility

According to the American Community Survey (ACS) five-year estimates for 2021, a total of 83 manufactured homes are in the Town of Bristol (7 percent of total housing stock). In addition, 44

¹³ Historical events are reported from January 1994 through August 2023. Magnitude is listed when available. Damage values are in 2023 dollars.

percent (approximately 486 structures) of the housing units were built before 1980. These structures would typically be built to lower or less stringent construction standards than newer construction and may be more susceptible to damage during tornado events.

Table C-30. Structures at Greater Risk

JURISDICTION	SFR STRUCTURES BUILT BEFORE 1980	MANUFACTURED HOMES
Town of Bristol	486	83

While all citizens are at risk to the impacts of a tornado event, forced relocation and disaster recovery drastically impacts low-income residents who lack the financial means to travel, afford a long-term stay away from home, and to rebuild or repair their homes. An estimated 7 percent of the Town of Bristol's population live below the poverty level (Table C-31).

Table C-31. Populations at Greatest Risk

JURISDICTION	POPULATION BELOW POVERTY LEVEL
Town of Bristol	156

The total loss estimate due to tornado events is \$686,108 (in 2023 dollars), having an approximate annual loss estimate of \$23,659. Based on historic damages and best available data the impact of a tornado event on the Town of Bristol would be considered "Limited", with injuries and illness treatable with first aid, critical facilities and services shutdown for 24-hours or less and less than 10 percent of properties destroyed or with major damage.

Table C-32. Estimated Average Annual Losses

JURISDICTION	TOTAL PROPERTY & CROP LOSS	AVERAGE ANNUAL LOSS ESTIMATES
Town of Bristol	\$686,108	\$23,659

WILDFIRE

HAZARD DESCRIPTION. & LOCATION

The Ontario County Hazard Mitigation Plan Update provides a hazard description of the wildfire hazard for each participating jurisdiction (Section 16). A wildfire event can be a potentially damaging consequence of drought conditions, lightning, or wind event, if the conditions allow. Wildfires can vary greatly in terms of size, location, intensity, and duration. While wildfires are not confined to any specific geographic location, they are most likely to occur in open grasslands, highly vegetative areas, or along the forest floor, when conditions are favorable. The threat to people and property from a wildfire event is greater in the fringe areas where developed areas meet open grass lands, such as the Wildland Urban Interface (WUI). (Figure C-4). The Town of Bristol planning area is considered at low risk for wildfires with limited WUI areas.

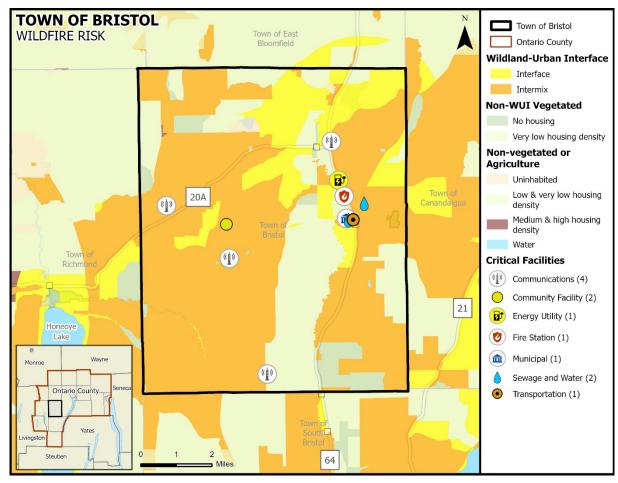


Figure C-4. Town of Bristol Wildland Urban Interface Map¹⁴

The New York State Department of Environmental Conservation (NYS DEC), Division of Forest Protection regularly identifies Fire Danger Rating Area (FDRA) Risk across the state. Reviewing a combination of temperature, wind, relative humidity, fuel and/or drought conditions, the Division

¹⁴ Map sources: ESRI OpenStreetMap (Custom: no labels), Census TIGER/LINE (2022), Ontario County Information Technology Department (2023), USGS ScienceBase Catalog (2022)

of Forest Protection issues color coded danger alerts. The entire planning area, including the Town of Bristol, had a "Low" FDRA Risk rating as of October 2023 (Section 16, Figure 16-2).

EXTENT

Risk for a wildfire event is measured in terms of magnitude and intensity using the Keetch Byram Drought Index (KBDI), a mathematical system for relating current and recent weather conditions to potential or expected fire behavior. The KBDI is available at the county level. The Ontario County Hazard Mitigation Plan Update provides KBDI levels and descriptions along with the range of historical KBDI levels for the planning area (Section 16).

The average extent to be mitigated for the planning area is a KBDI of 200-300. At this level fires more readily burn and will carry across an area with no gaps. Heavier fuels will not readily ignite and burn. Expect smoldering and the resulting smoke to carry into and possibly through the night. Based on historical records and readily available fuel, the planning area can anticipate a KBDI range from 0 to 500. At the high end of this range fire intensity begins to significantly increase. Fires will readily burn in all directions exposing mineral soils in some locations. Larger fuels may burn or smolder for several days creating possible smoke and control problems.

The NYS DEC provides historical wildfire statistics from 2003 through 2017 (Figure C-5). Detailed data on historic wildfires in the planning area, including damages, acres burned, fatalities, or injuries, was not available. There were no wildfires greater than 100 acres in Ontario County during that same period, but the southern portions of County have experienced incidents greater than 10 acres. The Ontario County planning area can anticipate limited future wildfire events, burning less than 10 acres.

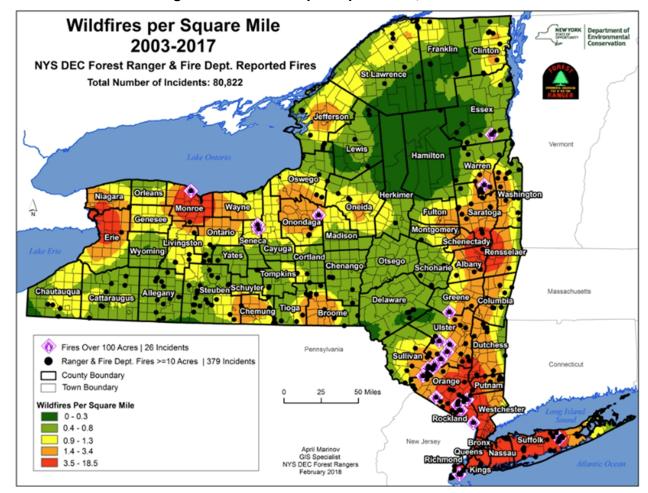


Figure C-5. Wildfires per Square Mile, 2003-2017

HISTORICAL OCCURRENCES

Between 2003 and 2022 there were 1,553 wildfire events in Ontario County. These incidents are reported countywide. Most of the incidents (877) were brush or brush and grass mixture fires followed by natural vegetation (309), and grass fires (240). Based on data provided for historical wildfire events for the Ontario County planning area, 235 events have occurred since the 2018 Plan.

PROBABILITY OF FUTURE EVENTS

With 1,553 events in a 19-year period, a wildfire event within the Ontario County planning area, including the Town of Bristol, is "Highly Likely" meaning an event is probable within the next year.

VULNERABILITY AND IMPACT

The Town of Bristol planning team members identified the following critical facilities as assets that are considered the most important to the planning area. These facilities are susceptible to a range of impacts caused by wildfire events. Wildfire impacts to critical facilities are similar across the entire planning area and are listed in detail in the wildfire hazard profile (Section 16).

Table C-33. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES
Town of Bristol	4 Communication Facilities, 2 Community Facilities, 1 Recreation/Park Community Facility, 1 Energy utility Facility, 1 Fire Station, 1 Municipal Building, 2 Sewage and Water Facilities, 1 Bridge, 1 Fuel Facility

For the Town of Bristol, the impact from a wildfire event can be considered "Limited," meaning injuries and/or illnesses are treatable with first aid, complete shutdown of facilities and services for 24-hours or less and less than 10 percent of property is destroyed or with major damage. Severity of impact is gauged by acreage burned, homes and structures lost, injuries and fatalities.

WIND

HAZARD DESCRIPTION, LOCATION, & EXTENT

The Ontario County Hazard Mitigation Plan Update provides a hazard description, location and extent of the wind hazard for each participating jurisdiction (Section 17). Wind events are not confined to specific geographic boundaries and is considered similar for all participating jurisdictions throughout the planning area.

HISTORICAL OCCURRENCES

Since 1956, 10 wind events are known to have occurred in the Town of Bristol. Table C-34 presents information on known historical events impacting the Town of Bristol.

PROPERTY CROP MAGNITUDE DEATHS INJURIES JURISDICTION DATE **DAMAGE DAMAGE** (knots) 0 Unknown 0 \$29.132 \$0 7/15/1995 8/16/2007 50 0 0 \$11,396 \$0 0 \$20,303 \$0 6/13/2008 50 0 5/3/2012 50 0 0 \$0 \$19,331 6/23/2013 50 0 0 \$12,684 \$0 Town of Bristol 6/12/2015 50 0 0 \$18,616 \$0 5/29/2016 50 0 0 \$22,192 \$0 5/29/2016 50 0 0 \$18,493 \$0 10/15/2017 50 0 0 \$14,409 \$0

Table C-34. Historical Wind Events, 1956-2023¹⁵

Based on the list of historical wind events for the Town of Bristol, one of the reported events has occurred since the 2018 Plan.

0

0

0

0

\$2.170

\$168,726

\$0

\$0

51

(MAX

EXTENT)

PROBABILITY OF FUTURE EVENTS

TOTALS

7/6/2021

Historical wind events are often reported on a county-wide basis. While some incidents may be reported at the local municipal level, as indicated above, county level events provide a more robust risk assessment for each participating jurisdiction. According to historical records for the Ontario County planning area, the Town of Bristol can expect to experience a wind event every year. This frequency supports a "Highly Likely" probability of future events.

VULNERABILITY AND IMPACT

The Town of Bristol planning team members identified the following critical facilities as assets that are considered the most important to the planning area. These facilities are susceptible to a range

¹⁵ Historical events are reported from January 1956 through August 2023. Magnitude is listed when available. Damage values are in 2023 dollars.

of impacts caused by wind events. Wind impacts to critical facilities are similar across the entire planning area and are listed in detail in the wind hazard profile (Section 17).

Table C-35. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES
Town of Bristol	4 Communication Facilities, 2 Community Facilities, 1 Recreation/Park Community Facility, 1 Energy utility Facility, 1 Fire Station, 1 Municipal Building, 2 Sewage and Water Facilities, 1 Bridge, 1 Fuel Facility

According to the American Community Survey (ACS) five-year estimates for 2021, a total of 83 manufactured homes are located in the Town of Bristol 7 percent of total housing stock). In addition, 44 percent (approximately 486 structures) of the housing units were built before 1980. These structures would typically be built to lower or less stringent construction standards than newer construction and may be more susceptible to damage during significant wind events.

Table C-36. Structures at Greater Risk

JURISDICTION	SFR STRUCTURES BUILT BEFORE 1980	MANUFACTURED HOMES
Town of Bristol	486	83

While all citizens are vulnerable to the impacts of wind events, forced relocation and disaster recovery drastically impacts low-income residents who lack the financial means to travel, afford a long-term stay away from home, and to rebuild or repair their homes. An estimated 7 percent of the Town of Bristol's population live below the poverty level (Table C-37).

Table C-37 Populations at Greatest Risk

JURISDICTION	POPULATION BELOW POVERTY LEVEL
Town of Bristol	156

Impact of wind events experienced in the Town of Bristol would be considered "Limited," with injuries or illness treatable with first aid, less than 10 percent of property destroyed and critical facilities shut down for less than 24-hours. Over the 67.5-year reporting period there has been a total of \$168,726 damages (in 2023 dollars) in the Town of Bristol due to wind events. The estimated average annual loss from a wind event is \$2,500.

Table C-38. Estimated Annualized Losses

JURISDICTION	TOTAL PROPERTY & CROP LOSS	ANNUAL LOSS ESTIMATES
Town of Bristol	\$168,726	\$2,500

CLIMATE CHANGE CONSIDERATIONS

The Ontario County Hazard Mitigation Plan Update provides climate change considerations for all natural hazards for the entire planning area as climate change impacts are considered similar across all participating jurisdictions in Ontario County unless otherwise stated. Please see

Sections 5 through 17 of this Plan Update for additional information on climate change considerations by hazard.

HUMAN-CAUSED HAZARDS

The Ontario County Hazard Mitigation Plan Update provides a detailed hazard profile for human-caused hazards including fire, hazardous materials, infestation, terrorism, utility failure, and water supply contamination. Information for these hazards is limited and typically reported at the county level. As such, the evaluation of human-caused hazards is considered similar for all jurisdictions in the Ontario County planning area. Please see Sections 18 through 23 of this Plan Update for additional information on human-caused hazards evaluated for this plan.

PREVIOUS MITIGATION ACTIONS

Previous Action Worksheet										
TB-1: Storm Water	Management – culvert replacement and ditch cleaning									
Name of Jurisdiction:	Town of Bristol									
Name of Haz. Mit. Plan:	Ontario County Multi-Jurisdictional Hazard Mitigation Plan – 2015									
	Risk / Vulnerability Flooding/severe storm concerns and risk - significant flooding in									
	the past.									
Problem being Mitigated:	Drainage Issues - May/2014 Flooding stormwater concerns; roads									
	have flooded; needed culvert replacement, ditch cleaning, removal of tree and brush debris.									
Potential Acti	ons/Projects (not being Implemented at this time)									
Actions/Projects	Culvert Replacement									
Considered with Summary	Ditching Tree and Brush Barrayal									
Evaluation of Each:	Tree and Brush Removal									
Actio	on or Project Intended for Implementation									
Action/Project Number:	TB-1: Stormwater management – culvert replacement and ditch									
Name of Action or Project:	cleaning									
Action or Project	Culvert replacement with larger culverts									
Description:	Ditch cleaning and tree and brush removal by culverts o help them accommodate flows from a 500yr flood event.									
Summary of Evaluation	•									
Benefits (losses	Road and culvert damage avoided.									
avoided):	Potential cost associated with culvert									
Estimated Cost:	replacement= \$8K-10K									
Other Factors Considered:	Other factors include outreach to impacted property owners.									
Considered.	Plan for Implementation									
Responsible	Highway Department									
Organization:	- , .									
Action/Project Priority:	High / Ongoing									
Timeline for Completion:	Ongoing									
Potential Fund Sources:	Highway budget and FHWA grants if available									
Local Planning										
Mechanisms to be Used in	Highway Maintenance Schedule.									
Implementation, if any:	2024 Analysis									
Date of Status Report:	2024 Alialysis									
Report of Progress:	Defer to Plan Undate									
Evaluation of	Defer to Plan Update.									
Effectiveness:										

Previous Action Worksheet TB-2: Flood Damage Prevention Law Peview/Undate											
	ood Damage Prevention Law Review/Update										
Name of Jurisdiction:	Town of Bristol										
Name of Haz. Mit. Plan:	Ontario County Multi-Jurisdictional Hazard Mitigation Plan – 2015										
	Risk / Vulnerability										
Problem being Mitigated:	Flooding - old flood prevention law (1987), not recently updated										
Potential Acti	ons/Projects (not being Implemented at this time)										
Actions/Projects Considered with Summary Evaluation of Each:	Flood Prevention										
	on or Project Intended for Implementation										
Action/Project Number: Name of Action or Project:	TB-2: Flood prevention law review/update										
Action or Project Description:	Review and update Flood Prevention Law (1987)										
Summary of Evaluation Benefits (losses avoided): Estimated Cost: Other Factors Considered:	Erosion and Property Loss Potential Town Attorney involvement = \$175/hour Outside legal review = cost unknown										
	Plan for Implementation										
Responsible Organization:	Town Board										
Action/Project Priority:	Low										
Timeline for Completion:	2020										
Potential Fund Sources:	Town staffing										
Local Planning Mechanisms to be Used in Implementation, if any:	J 1										
Data of Otatus Dament	2024 Analysis										
Date of Status Report: Report of Progress: Evaluation of Effectiveness:	Defer to Plan Update.										

	Previous Action Worksheet										
TB-3: Stormwater	controls with sediment and erosion control measures										
Name of Jurisdiction:	Town of Bristol										
Name of Haz. Mit. Plan:	Ontario County Multi-Jurisdictional Hazard Mitigation Plan – 2015										
	Risk / Vulnerability										
Problem being Mitigated:	Severe storm problems - Sediment and erosion control measures are needed										
Potential Acti	ons/Projects (not being Implemented at this time)										
Actions/Projects Considered with Summary Evaluation of Each:	Stormwater controls with sediment and erosion control measures										
Actio	on or Project Intended for Implementation										
Action/Project Number:	TB-3: Stormwater controls with sediment and erosion control										
Name of Action or Project:											
Action or Project Description:	Engineered sediment and erosion plans required. Investigate existing requirements for measures as part of municipal project review. Could be done in conjunction with Task TB-3 and TB-4.										
Summary of Evaluation Benefits (losses avoided): Estimated Cost: Other Factors Considered:	Provided stormwater control helps prevent property and road damage. N/A will need to be engineered. Possible Town Attorney involvement = \$175/hour										
	Plan for Implementation										
Responsible Organization:	Town Board										
Action/Project Priority:	Medium										
Timeline for Completion:	2020										
Potential Fund Sources:	Town Budget and grants if available										
Local Planning Mechanisms to be Used in Implementation, if any:											
D-tf-Ot-t	2024 Analysis										
Date of Status Report: Report of Progress: Evaluation of Effectiveness:	Defer to Plan Update.										

NEW MITIGATION ACTIONS

					TOWN O	FΒ	RISTOL	PROPOSE	D PROJECTS	;				
				*Projects related to Critical	Facilities (CF) will protect	the	facility to	the 500-y	ear event or w	orst damage s	scenario, whichever is	greater.		
Project #	: :::::::::::::::::::::::::::::::::::::	Goal / Objective being Met	Hazard to be Mitigated	Project Name and Description of the Problem	Description of the Solution	CF?*	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Community Lifeline
1		4.3	Flood, Wildfire	Development Restrictions: With the increase in development growth there is a need to restrict building in high-risk areas throughout town. This action protects infrastructure, reduces cost of reparation, and prevents injury to residents.	Town will look to review current zoning and ordinances in an effort to restrict future development in high-risk areas.	No	N/A	12 months	Town Zoning Board	Staff Time	Reduce risk of damages to new structures and infrastructure through building restrictions in high-risk areas.	Local Department Budget; HMGP, BRIC, CDBG, PA 406 (when applicable) local bonds	Н	Communication, Safety/Security
2		1.4	Flood, Hail, Ice Storm, Lightning, Snow Storm Tornado, Wind, Wildfire	and stormwater drainage and a proper maintenance program to reduce the risk of debris should be developed. This	Remove dead trees from right-of way and drainage	No	Further review required		Town Highway Department	\$50,000 (annually)	Reduce damages to infrastructure; Ensure continuity of services during and after event; Reduce damages associated with power outages; Reduce risk of injuries or fatalities to vulnerable populations.	Local Department Budget, Staff time	Н	Safety/Security
3		6.1	Drought		j	No	N/A	24 months	Town Zoning Board	Staff Time	Reduce impact on groundwater; Reduce rainfall runoff volume and risk of flooding; Reduce risk and spread of wildfire.	Local Department Budget; HMGP, BRIC, CDBG, PA 406 (when applicable) local bonds	М	Communication
4		6.1	Extreme Heat, Drought,	"Green Infrastructure" Program: Adopting and implementing long term	Establish, adopt, and implement a "green infrastructure" program	No	N/A	36 months	Park Commissioner	Staff Time	Reduce impacts of flood through expanded greenspace	Local Department	L	Safety/Security

	TOWN OF BRISTOL PROPOSED PROJECTS												
			*Projects related to Critical	Facilities (CF) will protect	the	facility to	the 500-y	ear event or w	orst damage s	scenario, whichever is	greater.		
Project #	Goal / Objective being Met	Hazard to be Mitigated	Project Name and Description of the Problem	Description of the Solution	CF?*	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Community Lifeline
		Flood	nature-based mitigation solutions will assist the Town in sustainable planning, design, environmental management, and engineering practices that weave natural features or processes into the built environment to promote adaptation and resilience. This action protects infrastructure and reduces cost of reparation.	for town parks.						and restoration of floodplains and wetlands; Reduce impacts of drought through green infrastructure that works to replenish groundwater reserves Reduce impacts of Urban Island Heat effect in densely populated areas through tree planting.	HMGP, BRIC, CDBG, PA 406 (when applicable) local bonds		
5	5.4	Flood	roadways and create	Upgrade undersized stormwater drains and culverts with focus on local roads and new development.	No	Further review required	18 months	Town Highway Department	\$1,000,000	By identifying vulnerable high infrastructures and making necessary improvements to expand drainage capability reduces flood risk and risk of damages and injuries. In addition, this would also reduce emergency response demands.	Local Department Budget; HMGP, BRIC, CDBG, PA 406 (when applicable) local bonds		Safety/Security
6	2.1	Wildfire	reduce the potential fuel and increase defensible space will	Work with state and local agencies to determine locations to reduce fuel on public and private lands.	No	Further review required	24 months	Park Commissioner	Staff Time	Reduce risk of wildfires and the spread of wildfire through targeted fuels	Local Department Budget; HMGP, BRIC, CDBG, PA 406 (when applicable) local bonds	М	Safety/Security, Communication

				TOWN O	FΒ	RISTOL I	PROPOSE	D PROJECTS	;				
			*Projects related to Critical	Facilities (CF) will protect	the	facility to	the 500-y	ear event or w	orst damage s	scenario, whichever is	greater.		
Project #	Goal / Objective being Met	Hazard to be Mitigated	Project Name and Description of the Problem	Description of the Solution	CF?*	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Community Lifeline
7	1.3	Wildfire	Developing a program to	Cut firebreaks into public wooded areas within town parks according to risk factors.	No	Further review required	24 months	Park Commissioner	\$200,000 - \$500,000	Reduce risk of wildfires and the spread of wildfire through targeted firebreaks.	Local Department Budget; HMGP, BRIC, CDBG, PA 406 (when applicable) local bonds	M	Safety/Security
8	1.2	Wildfire	Install Burn Ban Signs: The general public may not have a full understanding of the risk associated with hazards impacting the planning area.	Install fire danger rating/burn ban signs through town parks.	No	N/A	12 months	Fire Department	Staff Time \$100 per sign	Reduce risk and spread of wildfires through education and awareness programs; Reduce risk of damages and injuries.	BRIC, CDBG, PA	Н	Communication
9	3.1	Ice Storm, Snow Storm	associated with hazards impacting the planning area. Education programs can provide life safety benefits to	Educate citizens on mitigation measures to prevent frozen pipes; Educate homeowners on carbon monoxide monitors/alarms. Display information at Town Hall, Fire Department and Public Library.	No	N/A	12 months	Town Board, Fire Department	Staff Time	Promote hazard awareness and protect residents from potential injuries and damages.	Local Department Budget, Staff time	M	Communication
10	4.2	Ice Storm, Snow Storm	Winterization of Public		Yes	N/A	24 months	Town Board	\$100,000	Reduce risk of damages at public buildings resulting from freezing temperatures; Ensure	Local Department Budget; HMGP, BRIC,	Н	Safety/Security

	TOWN OF BRISTOL PROPOSED PROJECTS												
			*Projects related to Critical	Facilities (CF) will protect	the	facility to	the 500-y	ear event or w	orst damage s	scenario, whichever is	greater.		
Project #	Goal / Objective being Met	Hazard to be Mitigated	Project Name and Description of the Problem	Description of the Solution	CF?*	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Community Lifeline
			critical infrastructure to ensure continuity of operations during and after an event.							continuity of public services.	CDBG, PA 406 (when applicable) local bonds		
11	1.4	Water Contamin ation	Monitoring of water tanks: There has been an on-going issue with chemicals being prevalent at Day Road water tank.	Continue monitoring and working with MRB Engineering, USDA and Canandaigua Water District to implement a plan to remediate and prevent further potential water contamination.	Yes	s N/A	12 months	Town Board	Staff and Personnel Time	Prevents water contamination and ensures potable water. Reduces risk or injury and fatalities to residents.		н	Communication, Safety/Security
12	3.1	Infestation	Invasive Species and Infestation Notification: The Town of Bristol is a risk of being infested with invasive species which could cause great economic hardship to the community and storm water management.	Town will promote awareness and mitigation measures residents can take to reduce the risk of species that are invasive to the area. Information will be provided through town website, postings in affected areas and in cooperation with local library.	No	N/A	12 months	Town Board	Staff Time	Reduce risk to citizens by educating the public on how to prepare for hazards and disasters.	Local Department Budget, Staff time	L	Communication
13	1.4	Flood	Stormwater Maintenance Program: Flooding/severe storm concerns and risk - significant flooding in the past. Drainage Issues have caused stormwater concerns as roads have flooded. This action protects the community and reduces the risk of flooding.	Implement debris removal (tree and brush) from	No	Further review required	24 months	Town Highway Department	\$15,000	Reduce damages caused by flooding by maintaining or restoring drainage capacity.	BRIC, CDBG, PA 406 (when applicable) local bonds		Safety/Security
14	2.3	Flood	Flood Damage Prevention Law: The current prevention law is outdated and should be	Review and update Flood Prevention Law (1987).	No	N/A	12 months	Town Board	Staff Time \$175/hr. for Town	Reduce flood damages through development	Local Department Budget,	Н	Communication

	TOWN OF BRISTOL PROPOSED PROJECTS												
			*Projects related to Critical	Facilities (CF) will protect	the	facility to	the 500-y	ear event or w	orst damage :	scenario, whichever is	greater.		
Project #	Goal / Objective being Met	Hazard to be Mitigated	Project Name and Description of the Problem	Description of the Solution	CF?*	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Community Lifeline
			reviewed and updated. This action protects infrastructure, reduces cost of reparation, and prevents injury to residents.	I					Attorney involvement)	restrictions and improved construction requirements in flood-prone areas.			
15	5.2	Flood	Stormwater controls with sediment and erosion measures: Extreme rainfall and snowmelt events result in high stormwater flow rates, which can result in significant amounts of debris (including sediment, rubble, and woody debris) being mobilized and directed to downstream portions of streams. The build up of debris can compromise the performance of downstream bridges and culverts, jeopardizing these installations (as well as the associated roadways). This action protects the community and reduces risk of flooding.	Engineered sediment and erosion plans required. Assess existing requirements for measures as part of municipal project review and implement necessary improvements.	No	Further review required	24 months		\$4-6 per square yard for potential improvements	Reduce risk of flood damages due to erosion or scour during flood events.	Local Department Budget; HMGP, BRIC, CDBG, PA 406 (when applicable) local bond	М	Safety/Security
16			Public Awareness Program: The general public may not have a full understanding of the risk associated with hazards impacting the planning area. Education programs can provide life safety benefits to residents in the area and provide information on mitigation measures residents can	Prepare bi-lingual tips for avoiding impacts of extreme cold, ice storms and snowstorms to be disseminated via press release, social media to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages. This can include identifying	No	N/A	12 months	Town Board, Ontario County Ontario County Emergency Management		Reduce risk to citizens by educating the public on how to prepare for hazards and disasters.	Local Department Budget, Staff time	М	Communication

	TOWN OF BRISTOL PROPOSED PROJECTS												
			*Projects related to Critical	Facilities (CF) will protect	t the	facility to	the 500-y	ear event or w	orst damage s	scenario, whichever is	greater.		
Project #	Goal / Objective being Met	Hazard to be Mitigated	Project Name and Description of the Problem	Description of the Solution	CF?*	EHP Issues	Estimated	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Community Lifeline
17	3.1	Hail, Tornado, Wind	Public Awareness Program: The general public may not have a full understanding of the risk associated with hazards impacting the planning area. Education programs can provide life safety benefits to residents in the area and provide information on mitigation measures residents can employ to reduce damages to their property.	warming stations, install warning signs at hazardous bridges and roadways subject to ice, mitigation measures to prevent frozen pipes ways, etc. Prepare bi-lingual tips for avoiding impacts of hail, tornado, and wind to be disseminated via press release, social media to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages. This can include harden/retrofitting structures, tree removal/branch maintenance, covered parking, etc.	No	N/A	12 months	Town Board, Ontario County Ontario County Emergency Management		Reduce risk to citizens by educating the public on how to prepare for hazards and disasters.	Local Department Budget, Staff time	М	Communication
18	3.1	Lightning	Public Awareness Program: The general public may not have a full understanding of the risk associated with hazards impacting the planning area. Education programs can provide life safety benefits to residents in the area and provide information on mitigation measures residents can employ to reduce damages to their property.	Prepare tips for avoiding impacts of lightning to be disseminated via press release, social media to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages. This can include installation of	No	N/A	12 months	Town Board, Ontario County Ontario County Emergency Management		Reduce risk to citizens by educating the public on how to prepare for hazards and disasters.	Local Department Budget, Staff time	М	Communication

	TOWN OF BRISTOL PROPOSED PROJECTS												
			*Projects related to Critical	Facilities (CF) will protect	t the	facility to	the 500-y	ear event or w	orst damage s	scenario, whichever is	greater.		
Project #	Goal / Objective being Met	Hazard to be Mitigated	Project Name and Description of the Problem	Description of the Solution	CF?*	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Community Lifeline
				maintenance, etc.									
19	3.1	Wildfire	Public Awareness Program: The general public may not have a full understanding of the risk associated with hazards impacting the planning area. Education programs can provide life safety benefits to residents in the area and provide information on mitigation measures residents can employ to reduce damages to their property.	Prepare bi-lingual tips for avoiding impacts of wildfire to be disseminated via press release, social media to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages. This can include identification of high-risk areas, creating defensive space, brush/debris maintenance, etc.	No	N/A	12 months	Town Board, Ontario County Emergency Management	Staff Time	Reduce risk to citizens by educating the public on how to prepare for hazards and disasters.	Local Department Budget, Staff time	M	Communication
20	3.1	Landslide	Public Awareness Program: The general public may not have a full understanding of the risk associated with hazards impacting the planning area. Education programs can provide life safety benefits to residents in the area and provide information on mitigation measures residents can employ to reduce damages to their property.	Educate property owners, elected officials, and planning and zoning decision-makers about landslide risks and best management and development practices to minimize risk/damage, which can include: avoid building near steep slopes, close to cliffs, near drainage ways, or stream channels, planting	No	N/A		Town Board, Ontario County Planning in partnership with Soil and Water Conservation district	Staff Time	Reduce risk to citizens by educating the public on how to prepare for hazards and disasters.	Local Department Budget, Staff time	L	Communication

	TOWN OF BRISTOL PROPOSED PROJECTS												
	*Projects related to Critical Facilities (CF) will protect the facility to the 500-year event or worst damage scenario, whichever is greater.												
Project #	Goal / Objective	Hazard to be Mitigated	Project Name and Description of the Problem	Description of the Solution	CF?*	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Community Lifeline
				installation of flexible pipe fittings to avoid gas or water leaks, and/or use of sandbags, retaining walls or k-rails (Jersey barriers).									
21	3.1	Infestation	cause great economic	Secure funding for education and best management practices to reduce damage from invasive species on county-wide own properties and private own properties.	No	N/A	36 months	Town Board, and Ontario County Soil and Water Conservation District and Cooperative Extension	Staff Time	Reduce risk to citizens by educating the public on how to prepare for hazards and disasters.	Local Department Budget, Staff time	L	Communication
22	3.3	Drought, Flood, Landslide Snow Storm Tornado, Wildfire, Wind	Code Enforcement: There is a code enforcement officer shortage throughout the county. and those smaller jurisdictions may need to evaluate and update coding to follow the County (who will potentially take lead if position is vacant)	If applicable, need to evaluate and update coding to follow the County.	No	N/A	As needed	Town Board	Staff Time	Ensures compliance to current code and restrictions. Reduce damages to structures and infrastructure; Reduce risk of injuries or fatalities.	Budget	L	Communication
23	3.1	Fire, HazMat	Public Awareness Program: The general public may not be aware of the risk fire and hazardous material releases as it related to the County.	Work with local fire departments and volunteer fire departments on ways to protect residents and the community from the effects of structural fires and hazardous material releases. This can include monitoring home fire alarms/carbon	No	N/A	36-60 months	Town Board, ir conjunction with Local Fire Departments	Staff Time	Reduce risk to citizens by educating the public on how to prepare for hazards and disasters.	Local Budget	L	Communication

	TOWN OF BRISTOL PROPOSED PROJECTS												
	*Projects related to Critical Facilities (CF) will protect the facility to the 500-year event or worst damage scenario, whichever is greater.												
Project #	Goal / Objective being Met	Hazard to be Mitigated	Project Name and Description of the Problem	Description of the Solution	CF?*	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Community Lifeline
24	3.1	Terrorism	Public Awareness Program: The general public may not be aware of the risk of potential	monoxide alerts, fire extinguishers in home, proper safety tips, etc. Work with county and local departments to better protect critical infrastructure from potential domestic or foreign terrorism. Educate the public on what to do if they have concerns on a potential threat.	No	N/A	36-60 months	Town Board, in conjunction with Local Police Department	Staff Time	Reduce risk to citizens by educating the public on how to prepare for hazards and disasters.	Local Budget	L	Communication
25	3.1	Utility Failure	Public Awareness Program: The effects of utility failure no related to hazard events has caused power outages and inability for critical services to remain operational, effecting operations	Work with local utility providers to educate the public on ways to enhance utility operations through sending out notification to service customers by mail or paperless enrollment.	No	N/A	36-60 months	Town Board, in conjunction with local utility providers	Stoff Time	Reduce risk to citizens by educating the public on how to prepare for hazards and disasters.	Local Budget	L	Communication
26	3.1	Supply Contamin	Public Awareness Program: The effects of water contamination has been experienced throughout the County.	Work with local water districts on educating the public of what they can do to prevent water contamination and/or damage to water infrastructure, such as clearing out drains, better protection of critical infrastructure throughout the community, etc.	No	N/A	36-60 months	Town Board, in conjunction with water districts	Staff Time	Reduce risk to citizens by educating the public on how to prepare for hazards and disasters.	Local Budget	L	Communication

CAPABILITY ASSESSMENT

COMMUNITY CAPABILITY CHECKLIST	Town of Bristol					
PLANS						
Capital Improvements Plan	X					
Climate Change Adaptation Plan						
Comprehensive/Master/Land Use Plan	X					
Community Wildfire Protection Plan	X					
Continuity of Operations	X					
Drought Contingency Plan						
Economic Development Plan	X					
Emergency Management Action Plan	X					
Emergency Operations Plan						
Emergency Response Plan and Pandemic Plan Annex						
Extreme Heat Plan/Protocol						
Evacuation Plan	X					
Floodplain Management Plan	X					
Hazard Mitigation Plan	X					
Local Waterfront Revitalization Plan						
Natural Resource Conservation Plan						
Open Space Plan	X					
Stormwater Management Plan	X					
Transportation Plan						
Watershed Protection Plan	X					
POLICIES/ORDINANCES						
Building Codes	X					
Construction Site Stormwater Runoff Control	X					
Post-Construction Stormwater Management in New Development and Redevelopment	×					
Critical Infrastructure Protection						

COMMUNITY CAPABILITY CHECKLIST	Town of Bristol
Fire Codes	X
Floodplain Ordinance	X
Illicit Discharge Detection and Elimination	
Local Environmental Review	X
Local Wetland Regulations	
Public Maintenance of Streets, Bridges, other	X
Regulation of Invasive Species	X
Regulation for Prevention of Water Contamination	X
Regulation for Unsafe/Defective Structures	X
Sediment and Erosion Control Measures	X
Site Plan Review Requirements	X
Steep Slope Ordinance	X
Stream Buffer Ordinance	X
Stormwater/	X
Drainage Ordinance	^
Subdivision Regulations	X
Timber Harvesting Regulations	X
Tree Protection or Landscaping Ordinance	X
Use of Pollutants: Road Salt Use, Fertilizers, Pesticides, etc.	X
Wildfire Ordinance	
Winter Road Maintenance	Χ
Zoning Ordinance/Land Use Restrictions	Χ
Additional Hazard-Related Regulations or Plans	X
PROGRAMS	
Firewise Communities	
Floodplain Maps/Flood Insurance Studies	X
Hydrologic/ Hydraulic Studies	
Mutual Aid Agreement	X

COMMUNITY CAPABILITY CHECKLIST	Town of Bristol
National Flood Insurance Program Participant	X
NFIP Community Rating System Participant	
Property Acquisition Program	
Public Education/ Awareness Programs	X
Stream Maintenance Program	
Storm Drainage Systems Maintenance Program	X
StormReady Communities	
Warning Systems/ Services	
STAFF / DEPARTMENTS	
Building Code Official	X
Emergency Manager	X
Engineer/Public Works Official	X
Environmental Conservation Specialist	
Floodplain Administrator	X
GIS Specialist	
Personnel with Hazard Knowledge	X
Planners	
Public Information Official	X
Resource Development/ Grant Writer	